Appendix D

Biological Resources Technical Report



Montgomery-Gibbs Executive Airport Master Plan Update

Biological Technical Report

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Prepared for:

C&S Engineers, Inc. 2355 Northside Drive, Suite 350 San Diego, CA 92108

Prepared by:

HELIX Environmental Planning, Inc. 7578 El Cajon Boulevard La Mesa, CA 91942

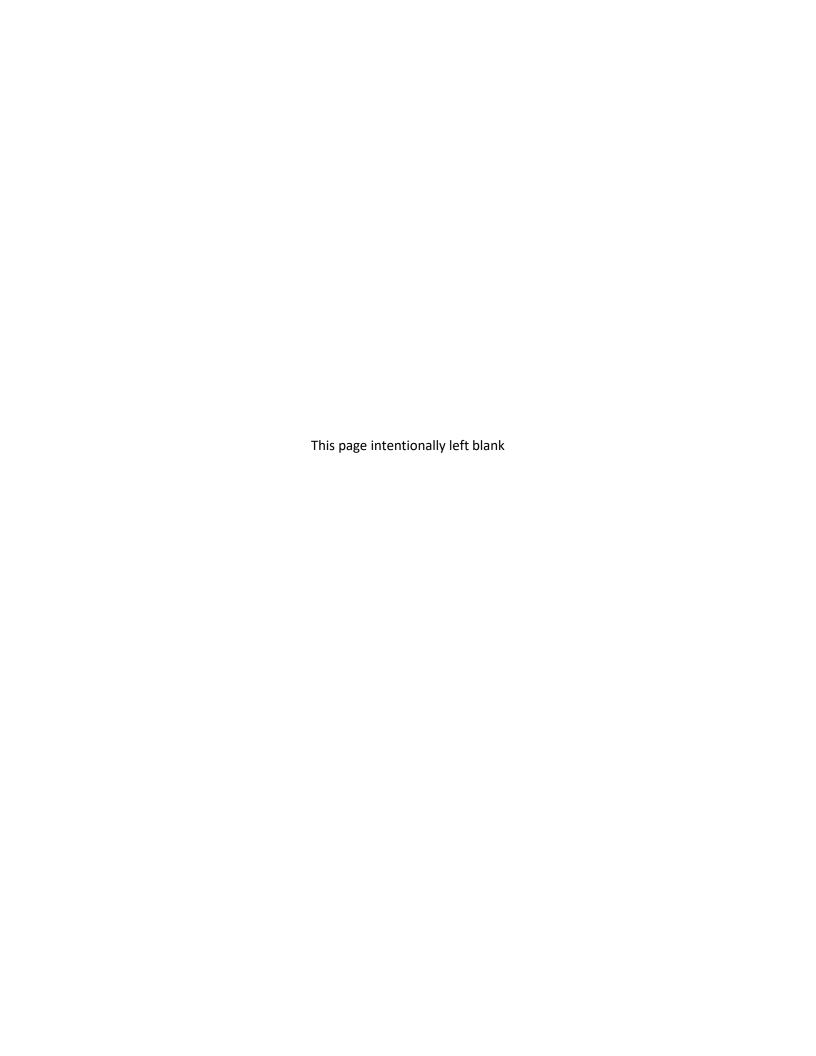


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LIST OF ACRONYMS

ADD Assistant Dep
ALP Airport Layout Plan
AMP Airport Master Plan
AMSL above mean sea level
APN Assessor's Parcel Number

ASLA American Society of Landscape Architects
ASMD Area Specific Management Directives

BCC Bird of Conservation Concern

BCME Biological Construction Mitigation/Monitoring Exhibit

BLA Boundary Line Adjustment
BMP Best Management Practices

Cal-IPC California Invasive Plant Council

CDFW California Department of Fish and Wildlife
CEQA California Environmental Quality Act
CESA California Endangered Species Act
CFG Code California Fish and Game Code

City Of San Diego

CNDDB California Natural Diversity Database

CNPS California Native Plant Society
CRPR California Rare Plant Rank

CWA Clean Water Act

EIR Environmental Impact Report
EPP Essential Public Projects
ESA Endangered Species Act

ESL Environmentally Sensitive Lands

FAA Federal Aviation Administration

FBO Fixed Base Operators
FE Federally endangered

FESA Federal Endangered Species Act

FP Fully Protected

ft Feet

GA General Aviation

HELIX Environmental Planning, Inc.

ITP Incidental Take Permit

LUAG Land Use Adjacency Guidelines

MALSR Medium Intensity Approach Lighting System with Runway Alignment Indicator

Lights

MBTA Migratory Bird Treaty Act MM Mitigation Measure

MMRP Mitigation Monitoring and Reporting Program
MSCP Multiple Species Conservation Program

MYF Montgomery-Gibbs Executive Airport

PAPI Glideslope Equipment and Precision Approach Path Indicator

PAR Property Analysis Record

RWQCB Regional Water Quality Control Board

SAP Subarea Plan

SC State Candidate Species for Listing under CESA

SDP Site Development Permit

SE State Endangered

sf square feet SR State Route

SSC Species of Special Concern

USACE U.S. Army Corps of Engineers
USDA U.S. Department of Agriculture

USEPA U.S. Environmental Protection Agency

USFWS U.S. Fish and Wildlife Service

VPHCP Vernal Pool Habitat Conservation Plan

WL Watch List

1.0 INTRODUCTION

1.1 PURPOSE OF THE REPORT

The purpose of this report is to document the existing biological conditions within the approximately 487-acre Montgomery-Gibbs Executive Airport Master Plan (AMP) Update area ("AMP area") and provide an analysis of potential impacts from implementation of future impacts under the AMP to sensitive biological resources with respect to local, state, and federal policy. This report provides the biological resources technical documentation necessary for project review under the California Environmental Quality Act (CEQA) by describing the proposed AMP, evaluating potential impacts, and identifying mitigation measures.

1.2 PROJECT LOCATION

The Montgomery-Gibbs Executive Airport (MYF; Airport) is situated in San Diego County, California (Figure 1, *Regional Location*). More specifically, it is in the community of Kearny Mesa, north of Aero Drive, east of State Route (SR-) 163, and south of Balboa Avenue (Figure 2, *Project Vicinity [Aerial Photograph])*. The Airport is located on unsectioned portions of the La Mesa and La Jolla U.S. Geological Survey 7.5-minute quadrangle maps (Figure 3, *Project Vicinity [USGS Topography])*. Portions of the AMP area are within the Multi-Habitat Planning Area (MHPA; Figure 4, *MSCP Regional Context*) of the City's Multiple Species Conservation Program (MSCP) Subarea Plan (SAP). The airport wholly or partially occupies areas within the following San Diego County Assessor's Parcel Numbers (APNs) 4210305400, 4210305500, 4210305600, 4210305700, 4210305801, 4210305802, 4210306000, 4210306100, 4212901100, 7601048300, 7602220100, 7602220500, 7602220600, 7602220700, 7602220800, 7602223201-76022232430, 7602223500, 7602223700, 7602222800, 7602224200, 7602223201-7602223243, 7602223500, 7602224700, and 7602224100, 7602224200, 7602224300, 7602224400, 7602224500, 7602224500, 7602224700, and 7602225000.

1.3 PROJECT DESCRIPTION

1.3.1 Project Background

The City of San Diego (City) owns and operates MYF as a General Aviation (GA) airport located within the Kearny Mesa community. Airport planning occurs at the national, state, regional, and local level, and in 2017, the City began developing an update to the AMP to determine the extent, type, and schedule of development needed. An AMP presents the community and airport's vision for a 20-year strategic development plan based on the forecast of activity. It is used as a decision-making tool and is intended to complement other local and regional plans.

The AMP for MYF consists of a report documenting existing conditions of the airport, a forecast of activity, facility requirements (the airport's needs based on the forecast and compliance with Federal Aviation Administration [FAA] Design Standards for airports), development and evaluation of alternatives to meet those needs, and a funding plan for that development (C&S Engineers 2019). The AMP also includes an Airport Layout Plan (ALP) which graphically depicts all planned development at the airport within the 20-year planning period as determined in the AMP. The individual improvements proposed over the 20-year planning horizon of the AMP are broken down into three phases (Phase I Near-Term, Phase II Mid-Term, and Phase III Long-Term). This drawing requires approval by the FAA,



which makes the airport eligible to receive federal funding for airport improvements and maintenance under the FAA's Airport Improvement Program.

The conceptual plan selected by the Airports Advisory Committee to implement the AMP (Preferred Alternative) is shown graphically on Figure 5, *Proposed Airport Plan* and is referred to for the purposes of this CEQA analysis as the proposed project.

1.3.2 Project Description

As shown on Figure 5, the AMP would involve both landside and airside components. Airside components proposed by the AMP include removal of pavement at the end of Runway 5 and Taxiway F, along with reconfigurations of several other taxiways. The main airside improvement proposed is the removal of the Runway 28R displaced threshold, which was put into place by City of San Diego Resolution R-280194 passed in 1992. This would result in the threshold being moved 1,199 feet from approximately the location of Taxiway B, eastward to Taxiway A. This component would move safety areas such as the Runway Protection Zone and approach surfaces, as well as require associated improvements such as relocation of glideslope and related equipment.

The landside components include a hangar site within the westernmost portion of the airport. The project identifies up to 92 new hangars, as well as space for 48 new tie-down areas. A 6,400 square foot (sf) expansion to the existing terminal building is proposed, along with other improvements such as a public viewing area (outside the fence line), and an unleaded fuel tank. The airside and landside components are discussed in greater detail below in Section 1.4.

1.4 PROPOSED AIRPORT PLAN COMPONENTS

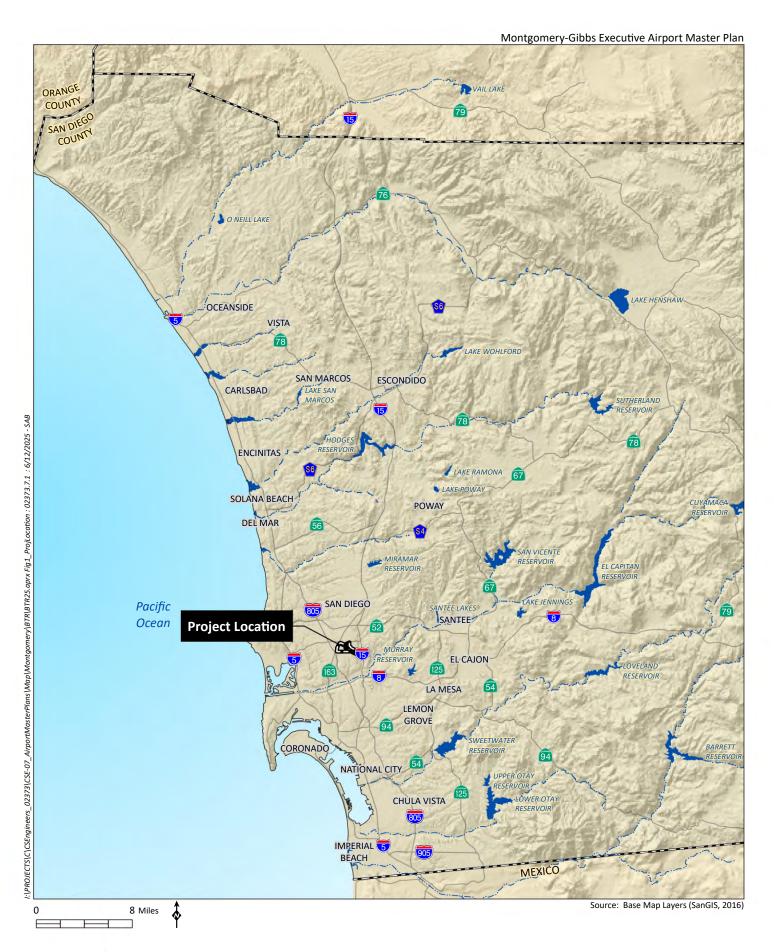
1.4.1 Airside Components

1.4.1.1 Removal of Runway 28R Displaced Threshold

The main airside improvement proposed is the removal of the Runway 28R displaced threshold which was intended to limit the size of aircraft capable of operating at MYF by reducing the amount of runway available when landing to the west. Upon approval of this component by the City and FAA, the threshold would be moved 1,199 feet from approximately the location of Taxiway B, eastward to Taxiway A. Relocating the Runway 28R threshold would have several effects to airport operations that are important to note:

- Runway Protection Zone Relocation The proposed Runway 28R threshold relocation would be
 considered a modification of the existing Runway Protection Zone configuration, and, therefore,
 must be evaluated by the FAA for any risks associated with the new configuration.
- Medium Intensity Approach Lighting System with Runway Alignment Indicator Lights (MALSR) The MALSR for Runway 28R would need to be relocated to accommodate the proposed threshold relocation. MALSR lighting is subject to FAA design standards and a typical MALSR system uses 18 lamps along the runway threshold spaced 10 feet (ft) apart, nine light bars with five lights separated every 200 ft, and five sequenced flashers also separated every 200 ft over a distance of 2,400 ft from the runway threshold. At the 1,000-ft point there are three light bars (15 lamps) for added visual reference for the pilot on final approach.

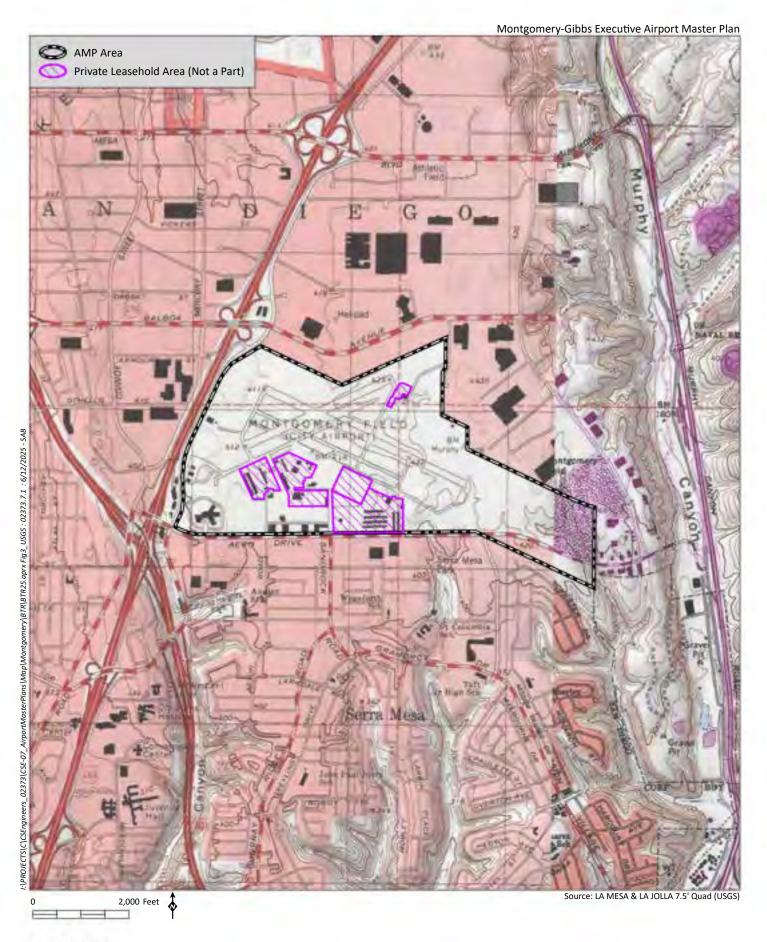






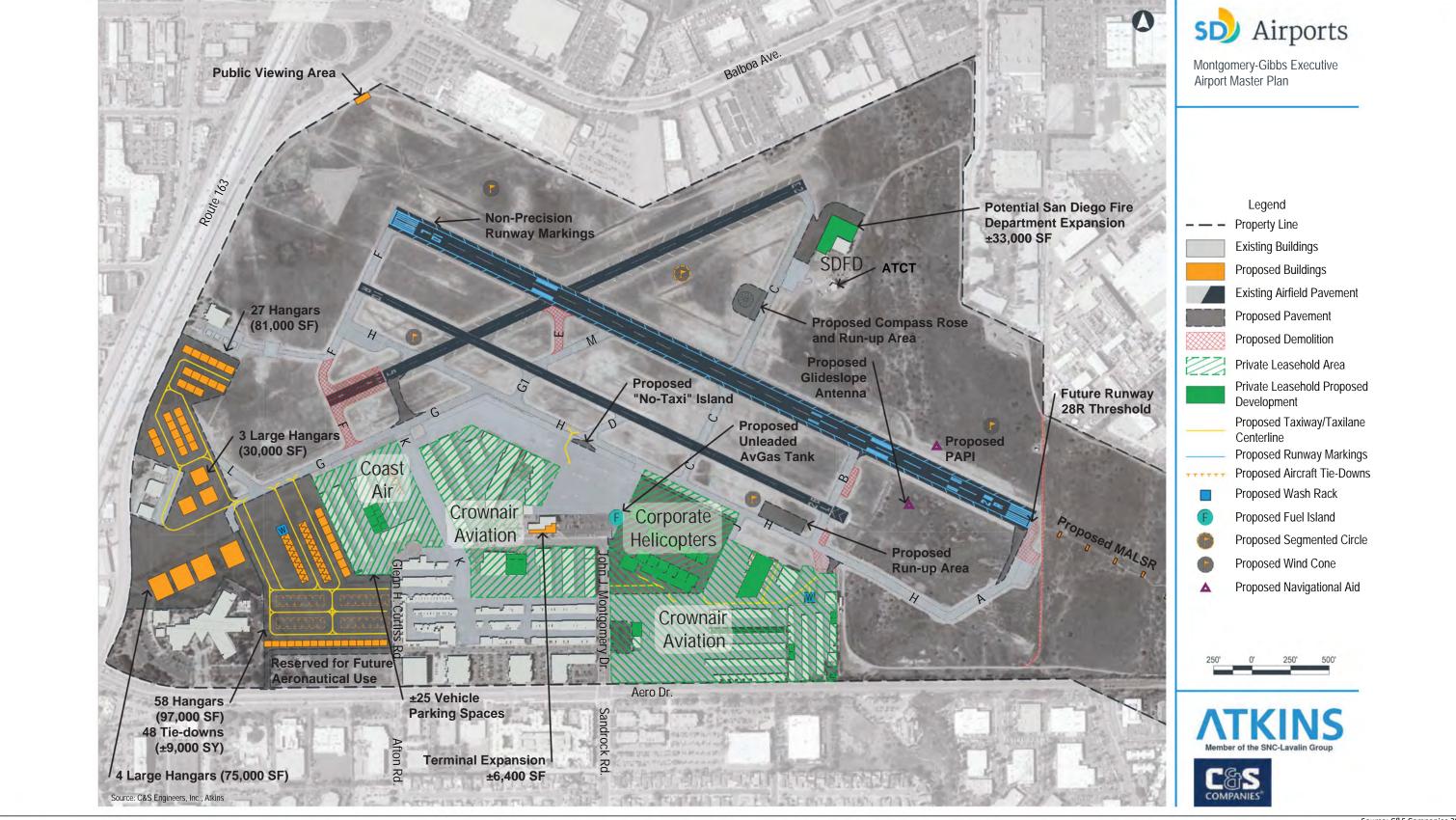








HELIX
Environmental Planning



Source: C&S Companies 2024

 Glideslope Equipment and Precision Approach Path Indicator (PAPI) – Similar to the MALSR, the navigational aids (glideslope antenna and PAPI), which provide instrumented vertical and visual guidance (respectively) to pilots on approach would need to be relocated as part of removing the displaced threshold.

1.4.1.2 Runway 5 Modifications

Airside improvements proposed by the AMP to increase safety at Runway 5/23 include removal of 390 feet of pavement at the end of Runway 5, as well as removal of portions of Taxiway F. This would allow hangar sites west of Runway 5 to become developable with up to 34 hangars. Currently, the areas designated for hangars are too close to the Runway 5 imaginary surfaces; a situation which precludes hangar construction. Due to demolition of the portion of Taxiway F, which provides access to Runway 5 from Taxiway G, a new taxiway is proposed to the east.

1.4.1.3 Taxiway Reconfigurations

Hotspots

There are three existing taxiway "Hotspots" within MYF, which are proposed to be remedied as part of the AMP. A Hotspot is an area with increased risk of collisions or runway incursions due to the layout of taxiways and runways.

- Hotspot 1 is at the intersection of Taxiways E and M. Improvements included as part of the AMP include demolition of Taxiway E. As the existing segmented circle/compass rose would be removed, the AMP proposes to create a new segmented circle at the new runup area along Taxiway C.
- **Hotspot 2** is located on Taxiway F between Runways 10L and 10R. No pavement improvements are proposed for this area as the AMP found that this hotspot can be remedied by adding lighting and pavement markings to provide pilots with cues about the Runway 10L threshold.
- **Hotspot 3** is at the intersection of Taxiway B and Taxiway H. A new 90-degree access from the apron to Taxiway H would be constructed.

Taxiway A

As shown in Figure 5, the AMP would implement partial demolition of the existing hold bay, and new pavement would be constructed to expand the runup area and bring the taxiway geometry to current FAA design criteria, resulting in a new hold bay at Taxiway A with increased capacity.

1.4.1.4 Runup Areas

The lack of pavement and markings on the hold bay located at Taxiway B and Taxiway H is nonstandard. In addition to the aforementioned new hold bay at Taxiway A, the AMP proposes to construct a new hold bay located off of Taxiway H prior to reaching Taxiway B that would meet FAA design standards. The proposed hold bay will improve the safety of the airfield by allowing aircraft to bypass other aircraft that are performing run-ups or waiting for clearance from air traffic control. A new run-up area is also proposed off Taxiway C, southwest of the fire station, which would contain a segmented circle/compass rose.



1.4.2 Landside Components

1.4.2.1 Terminal Building

The terminal facility at MYF is a 10,000-sf footprint multi-functional two-story building that was constructed in 1969. It has undergone several updates since its original construction in 1969; the most recent update occurred in 2021.

In addition to this, there are two fixed based operators (FBOs) on the airfield with an estimated total common space area of 6,600 square feet. Within the terminal demand analysis, this combined space was utilized, along with a modified itinerant design hour to calculate the required terminal space needed over the course of the planning period. Based on current activity at the Airport, approximately 20,700 square feet should be dedicated to the terminal facility, meaning a deficit of just over 4,000 square feet presently exists. Furthermore, the total projected terminal space required in the year 2037 is estimated to be 22,950 square feet. Assuming the two FBO common spaces remain the same size, the City terminal space should be increased by approximately 6,400 square feet, totaling approximately 16,400 square feet.

1.4.2.2 Hangar Sites

The AMP includes construction of up to 92 new hangars, as well as space for 48 new tie-down areas, within the westernmost portion of the airport.

1.4.2.3 Public Viewing Area

The AMP would include a designated viewing area where members of the public could view airport operations and aircraft. The viewing area would be located at a 12,000-sf site along Kearny Villa Road at the northwest portion of MYF. It would be outside of the secure fence line and is anticipated to include greenspace or a landscaped area with seating. The viewing area would be included as part of the planned Airport Loop, which is a pedestrian walkway identified in the Kearny Mesa Community Plan.

1.4.2.4 Unleaded Avgas Fuel Tank

In keeping with the City's commitment to sustainability and safety, unleaded aviation gasoline became available at the airport in 2024. The City recognized the need for a more environmentally friendly fuel option and endeavored to make UL94 available at MYF. This step is in alignment with the FAAs effort to transition away from leaded avgas. The fuel would be kept in a 1,000-gallon towable fuel bowser. A business at the airport would lease the equipment from the City and sell the fuel to aircraft with an approved supplemental type certificate.

1.4.2.5 Other Aeronautical Land Uses

An approximately 4.5-acre area adjacent to Aero Drive and Glenn H. Curtis Road would remain as an "Aeronautical" land use. While the specific land uses for this area have not yet been determined, it is anticipated that the uses would be consistent with the other landside aeronautical support facilities found at the airport and dependent on future aeronautical demand.



1.5 COMPONENTS EXCLUDED FROM THE MASTER PLAN

As denoted by the green hatch on Figure 5, portions of the airfield are subject to private leases; these areas are not a part of the AMP. These currently include areas marked as Coast Flight, Crownair Aviation, and Corporate Helicopters. Examples of existing tenants in these areas include FBOs such as Coast Aircraft, and others. These tenants are private entities that are located within the leased areas that are unaffected by the proposed AMP. Most of these "Not a Part" areas are concentrated in the south-central portion of the airfield. Any future projects that may be proposed within the green-hatched lease areas would be required to complete their own CEQA review as appropriate. In addition, the expansion of the San Diego Fire Department station within airport property is a separate San Diego project that is not a part of the AMP.

1.6 ACCESS, CIRCULATION, AND PARKING

There are no improvements proposed for John J. Montgomery Drive itself, but the proposed expansion of the terminal building southward would cause a reconfiguration of the drop-off area south of the terminal building.

Similarly, no improvements are proposed for the secondary access that is provided via Aero Drive to Glenn H. Curtiss Road, which dead ends in a cul-de-sac at the National Air College building.

2.0 SURVEY METHODS

2.1 LITERATURE REVIEW

Baseline biological resources information for the AMP area was reviewed and compiled from several sources including the City's Revised Final Vernal Pool Habitat Conservation Plan (VPHCP; [City] 2019), the City's MSCP SAP (City 1997a), the California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDB; CDFW 2019), U.S. Fish and Wildlife Service (USFWS) sensitive species database (USFWS 2019), and biological reports for various projects, including the Resource Management Plan for Montgomery Field Airport (P&D Environmental 1998), biological reports for West and Northwest Areas of Montgomery Field Airport (RECON Environmental [RECON] 2008), the Montgomery Field Runway Extension Project (HELIX Environmental Planning, Inc. [HELIX] 2009-2013, and 2016), Montgomery Field Localizer Project (Merkel and Associates 2015), and Montgomery Field Reconstruct 5-23 and Taxiway G Project (Rocks Biological 2013). Soils data were obtained from the U.S. Department of Agriculture Web Soil Service (U.S. Department of Agriculture [USDA] 2019). The working paper for the project (Atkins 2017) was also used as a resource. The City also provided several additional relevant reports (RECON 2022, Hughey 2022, City 2020, USFWS 2014).

2.2 GENERAL BIOLOGICAL SURVEY

The baseline data was supplemented with a single site reconnaissance conducted by HELIX on June 8, 2017, to verify and update previous vegetation mapping, note the presence of any additional sensitive species observed, and conduct habitat assessments for sensitive species. Vegetation communities were mapped on an aerial photograph (1"=100' scale) with overlaid topography. A list of plant and animal species observed or detected within the project area was prepared. Plant species were identified in the field or later in the laboratory with the aid of botanical keys. Animals were identified in the field by



direct visual observation with the aid of binoculars or indirectly by detection of calls, tracks, burrows, or scat. Focused surveys were not conducted as part of the field effort for this AMP, although results of biological surveys from various projects conducted on the airport over the past several years have been incorporated, to the extent available.

2.3 JURISDICTIONAL DELINEATION

Jurisdictional delineations are used to identify and map water and wetland resources potentially subject to U.S. Army Corps of Engineers (USACE) jurisdiction pursuant to Section 404 of the Clean Water Act (CWA; 33 USC 1344), Regional Water Quality Control Board (RWQCB) jurisdiction pursuant to Section 401 of the CWA and/or Porter-Cologne Water Quality Act, and streambed habitats potentially subject to CDFW jurisdiction pursuant to Sections 1600 et seq. of the California Fish and Game Code (CFG Code).

A formal jurisdictional delineation of the AMP area was not conducted as part of HELIX's general biological survey conducted in 2017. Previous studies have been used to depict potential jurisdictional resources on site (RECON 2008; City 2019), in combination with vegetation mapping of wetland habitats. The vernal pool boundaries were obtained from the VPHCP (City 2019) and HELIX (2016), while potential non-wetland waters in the western portion of the site are from RECON (2008). The potential limits of jurisdiction for non-vernal pool wetland habitats in the eastern portion of the site were based on the results of vegetation mapping and input from City airport biologists. It is anticipated that an updated jurisdictional delineation would be needed for future projects with the potential to impact jurisdictional resources.

2.4 SURVEY LIMITATIONS

HELIX's fieldwork conducted for the AMP was limited to a single day general biological survey. Focused plant and animal surveys were not conducted for this project; however, numerous biological surveys have been conducted on the airport for various projects and sensitive species data was compiled from these sources. The lists of species identified in this document are not necessarily comprehensive accounts of all species the utilize the AMP area as species that are nocturnal, secretive, or seasonally restricted may not have been observed. Those species that are of special status and have potential to occur in the AMP area, however, are still addressed in this report. Focused species surveys may be required in the future, as part of the planning process for future projects implemented under the AMP.

2.5 NOMENCLATURE

Nomenclature used in this report follows the conventions used in the City's Biology Guidelines (City 2018) and the MSCP (City 1997a). Vegetation community classifications follow Holland (1986) and Oberbauer (2008); plant names follow the "Jepson Manual" (Baldwin et al. 2012) or Rebman and Simpson (2014). Animal nomenclature is taken from the American Ornithological Society (2023) for birds, Bradley et al. (2014) for mammals, and Collins and Taggart (2006) for reptiles and amphibians. Sensitive plant species status follows the California Native Plant Society (CNPS; 2025) and sensitive animal species status follows the CDFW (2025a-b).



3.0 REGULATORY FRAMEWORK

The AMP is governed by several federal, state, and local policies and regulations and such regulatory act(s) and plan(s) that are discussed below.

3.1 FEDERAL

3.1.1 Endangered Species Act

Administered by the USFWS, the Federal Endangered Species Act (FESA) provides the legal framework for the listing and protection of species (and their habitats) that are identified as being endangered or threatened with extinction. Actions that impact endangered or threatened species and the habitats upon which they rely are considered a "take" under the FESA. Section 9(a) of the FESA 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' behavioral patterns.

The USFWS designates critical habitat for endangered and threatened species. Critical habitat is defined as areas of land that are considered necessary for endangered or threatened species to recover. The ultimate goal is to restore healthy populations of listed species within their native habitats so they can be removed from the list of threatened or endangered species. Once an area is designated as critical habitat pursuant to the FESA, 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.

Sections 7 and 10(a) of the FESA regulate actions that could impact endangered or threatened species. Section 7 generally describes a process of federal interagency consultation and issuance of a biological opinion and incidental take statement when federal actions may adversely affect listed species. Section 10(a) generally describes a process for preparation of a Habitat Conservation Plan and issuance of an Incidental Take Permit (ITP). Pursuant to Section 10(a), the City was issued a take permit for their adopted MSCP SAP and VPHCP (City 2019). Actions consistent with the adopted SAP and VPHCP have authorized take authority for covered species.

3.1.2 Migratory Bird Treaty Act

All migratory bird species that are 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 (H.R. 4114). 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.

3.1.3 Clean Water Act

The federal CWA is legislation (33 U.S. Code §1251 et seq.) that regulates water quality standards and impacts (fills and discharges) to surface waters, including wetlands. The CWA is administered by USACE and RWQCB under the 404 and 401 programs, respectively. Impacts to areas regulated by the CWA require a USACE 404 permit and a 401 Certification from the RWQCB.



3.2 STATE OF CALIFORNIA

3.2.1 Environmental Quality Act

Primary environmental legislation in California is found in CEQA and its implementing guidelines (State CEQA Guidelines), which require that projects with potential adverse effects (or impacts) on the environment undergo environmental review. Adverse environmental impacts are typically mitigated as a result of the environmental review process in accordance with existing laws and regulations.

3.2.2 Endangered Species Act

The California Endangered Species Act (CESA) established that it is state policy to conserve, protect, restore, and enhance state endangered species and their habitats. Under state law, plant and animal species may be formally designated rare, threatened, or endangered by official listing by the California Fish and Game Commission. The CESA authorizes that private entities may "take" plant or wildlife species listed as endangered or threatened under the FESA and CESA, pursuant to a federal Incidental Take Permit if the CDFW certifies that the incidental take is consistent with CESA (CFG Code Section 2080.1[a]). For state-only listed species, Section 2081 of CFG Code authorizes the CDFW to issue an Incidental Take Permit for state listed threatened and endangered species if specific criteria are met. The City was issued a take permit for their adopted MSCP SAP pursuant to Section 2081. Actions consistent with the adopted SAP and VPHCP have authorized take authority for covered species.

3.2.3 Fish and Game Code

The CFG Code provides specific protection and listing for several types of biological resources. Pursuant to CFG Code Section 3503, it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto. Raptors and owls and their active nests are protected by CFG Code Section 3503.5, which states that it is unlawful to take, possess, or destroy any birds of prey or to take, possess, or destroy the nest or eggs of any such bird unless authorized by the CDFW. Section 3513 states that it is unlawful to take or possess any migratory non-game bird as designated in the MBTA. These regulations could require that construction activities (particularly vegetation removal or construction near nests) be reduced or eliminated during critical phases of the nesting cycle unless surveys by a qualified biologist demonstrate that nests, eggs, or nesting birds would not be disturbed, subject to approval by CDFW and/or USFWS.

3.3 CITY OF SAN DIEGO

3.3.1 Environmentally Sensitive Lands

Environmentally Sensitive Lands (ESL) include sensitive biological resources, steep hillsides, coastal beaches, sensitive coastal bluffs, and 100-year floodplains. Mitigation requirements for sensitive biological resources follow the requirements of the City's Biology Guidelines (2018) as outlined in the City's Municipal Code ESL Regulations (Chapter 14, Article 3, Division 1). Impacts to biological resources within and outside the MHPA must comply with the ESL Regulations, which also serve as standards for the determination of biological impacts and mitigation under the CEQA in the City.

The purpose of the ESL Regulations is to, "protect, preserve and, where damaged, restore the ESL of San Diego and the viability of the species supported by those lands." The regulations applicable to the AMP



and discussed in this report require that development avoid impacts to certain sensitive biological resources as much as possible including but not limited to MHPA lands; wetlands and vernal pools in naturally occurring complexes; federal and state listed, non-MSCP Covered Species; and MSCP Narrow Endemic species. Furthermore, the ESL Regulations state that wetlands impacts should be avoided, and unavoidable impacts should be minimized to the maximum extent practicable. Where impacts are unavoidable, deviation findings must be made in accordance with Section 143.0150 of the City Municipal Code. In addition to protecting wetlands, the ESL Regulations require that a buffer be maintained around wetlands, as appropriate, to protect wetland-associated functions and values.

The City's Land Development Code (113.0101) defines wetlands as areas that are characterized by any of the following conditions:

- All areas persistently or periodically containing naturally occurring wetland vegetation communities characteristically dominated by hydrophytic vegetation, including but not limited to, salt marsh, brackish marsh, freshwater marsh, riparian forest, oak riparian forest, riparian woodlands, riparian scrub, and vernal pools;
- 2. Areas that have hydric soils or wetland hydrology and lack naturally occurring wetland vegetation communities because human activities have removed historic wetland vegetation, or catastrophic or recurring natural events or processes have acted to preclude the establishment of wetland vegetation, as in the case of salt pannes and mudflats;
- 3. Areas lacking wetland vegetation communities, hydric soils, and wetland hydrology due to non-permitted filling of previously existing wetlands;
- 4. Areas mapped as wetlands on Map No. C-713 as shown in Chapter 13, Article 2, Division 6 (Sensitive Coastal Overlay Zone).

3.3.2 Multiple Species Conservation Program

The MSCP is a long-term regional conservation plan established to protect sensitive species and habitats within San Diego County. The MSCP is separated into local SAPs that are implemented independently from each other. The entire AMP area is within the City of San Diego SAP. The City's MSCP SAP (1997a) was prepared pursuant to the outline developed by USFWS and CDFW to meet the requirements of the state Natural Communities Conservation Planning Act of 1992. Adopted by the City in March 1997, the SAP forms the basis for the MSCP Implementing Agreement, which is the contract between the City, USFWS, and CDFW (City 1997b). The Implementing Agreement ensures implementation of the SAP and thereby allows the City to issue "take" permits under the federal and state ESAs to address impacts at the local level. Under the FESA, an ITP is required when non-federal activities would result in "take" of a threatened or endangered species. A habitat conservation plan, such as the City's MSCP SAP, must accompany an application for a federal ITP. In July 1997, USFWS, CDFW, and City entered into the 50-year MSCP Implementing Agreement, wherein the City received its FESA Section 10(a) ITP (City 1997b).

The City's MSCP SAP covers the entire 206,124 acres in the City of San Diego. The SAP identifies lands designated as MHPA, which is a "hard-line" preserve developed by the City in cooperation with the Wildlife Agencies, developers, property owners, and various environmental groups. Within the MHPA, biological core resource areas and corridors targeted for conservation are identified and discussed, in which development restrictions may occur (City 1997a).



Pursuant to the MSCP permit issued pursuant to Section 10(a), the City has incidental "take" authority over 85 rare, threatened, and endangered species including regionally sensitive species that it aims to conserve (i.e., "MSCP Covered Species). "MSCP Covered" refers to species that are covered by the City's federal and state ITPs and considered to be adequately protected within the City's Preserve, the MHPA. Special "Conditions of Coverage" apply to MSCP Covered Species that would be potentially impacted by projects including modifying project design to avoid impacts to Covered Species in the MHPA where feasible. Additionally, projects must adhere to MSCP SAP requirements including those for Boundary Line Adjustments (BLAs; MSCP Section 1.1.1); Compatible Land Uses, General Planning Policies/Design Guidelines, and MHPA Land Use Adjacency Guidelines (LUAGs; MSCP Sections 1.4.1-1.4.3), as well as general and specific management policies where applicable). Additional state and federal policy, regulations, and permits may also be required for wetlands and species not covered or fully covered under the MSCP.

The AMP lies within the "Urban Area" of the City MSCP SAP and area of the AMP area are designated as MHPA. Section 1.2 of the MSCP does not identify any area-specific MHPA guidelines for the AMP site. Section 1.4.1 of the MSCP SAP provides guidelines for compatible uses within the MHPA, and Section 1.4.2 provides general planning policies and design guidelines. Section 1.5.2 of the SAP provides general management directives including mitigation, restoration, public access, trails and recreation, litter/trash storage, adjacency management issues, exotics control, and flood control guidance. There are no specific MSCP policies and directives for the Urban Areas in the SAP. AMP consistency with the MSCP guidelines and policies is summarized in Section 6.0 of this report.

3.3.3 Vernal Pool Habitat Conservation Plan

The City's VPHCP is a habitat conservation plan focusing on vernal pools and seven associated threatened and endangered species that do not have federal take coverage under the MSCP SAP. The City and USFWS entered into a Planning Agreement to develop a habitat conservation plan for vernal pool habitats and species in October 2009, and the final VPHCP was completed in October 2017 and the revised Final VPHCP in October 2019. The plan provides coverage for the following seven species (five plant and two crustacean): San Diego button-celery (*Eryngium aristulatum* var. *parishii*), Otay Mesa mint (*Pogogyne nudiuscula*), San Diego mesa mint (*Pogogyne abramsii*), spreading navarretia (*Navarretia fossalis*), California Orcutt grass (*Orcuttia californica*), San Diego fairy shrimp (*Branchinecta sandiegonensis*), and Riverside fairy shrimp (*Streptocephalus woottonii*). The City has state coverage of these seven species under the MSCP SAP; however, no federal coverage was provided for these species.

The VPHCP expands the MHPA established in the MSCP SAP and conserves additional lands containing vernal pools and vernal pool species. The VPHCP provides long-term conservation and management for vernal pool species and was written to comply with the requirements of the FESA Section 10(a)(1)(B), as well as being designed to meet the requirements under California Fish and Game Code Section 2800 for listed and non-listed species conserved under a Natural Community Conservation Plan. The VPHCP provides methods to help ensure minimization and mitigation is adequate for the covered species and is intended to meet all standard requirements of the USFWS to issue permits for incidental take of threatened and endangered plant and animal species.

The goals of the VPHCP are:

1. Provide for the conservation and management of covered species addressed by the VPHCP (covered species).



- 2. Preserve vernal pool resources through conservation partnerships between federal, state, local agencies, and private development partnerships.
- 3. Allow for appropriate and compatible economic growth and development that is consistent with applicable laws.
- 4. Provide a basis for permits necessary for lawful incidental take of vernal pool covered species.
- 5. Provide a comprehensive means to coordinate and standardize mitigation and compensation requirements of FESA, CESA, CEQA, the California Natural Community Conservation Planning Act of 1991, and the National Environmental Policy Act within the VPHCP Area.
- 6. Provide more efficient project review process that results in greater conservation values than project-by-project, species by species review.
- 7. Provide clear expectations and regulatory predictability for persons carrying out covered activities within the VPHCP Plan Area.

Implementation of habitat-based and species-specific objectives to achieve the above goals are outlined in Chapter 5 of the VPHCP. The VPHCP expires in 2047.

As discussed in Section 4.2.7 of the VPHCP, federal aviation regulations require that the airport be maintained and operated in a manner that promotes the health, safety, and welfare of airport users, and the surrounding communities. As part of this mandate, the airport has required operations and standard activities that have the potential to impact covered species and/or vernal pool habitat. Table 4-7 of the VPHCP identifies these covered airport activities. Section 8.4.2 includes a description of how to proceed with BLAs to the MHPA within the VPHCP area. They may be made without a major amendment to the VPHCP when the new boundary results in an area of equivalent or higher biological value in the MHPA. An evaluation would be required in the environmental document for the project. A BLA requires consensus between the City and the Wildlife Agencies. Section 8.4.3 describes minor amendments to the VPHCP and calls out Montgomery-Gibbs Executive Airport specifically. Impacts to vernal pools within the legal boundaries of the airport properties require a minor amendment. A minor amendment requires a consistency determination and must be approved by the City and the Wildlife Agencies.

3.3.4 Multi-Habitat Planning Area

The MHPA is the area within which the permanent MSCP preserve would be assembled and managed for its biological resources. Input from responsible agencies and other interested participants resulted in adoption of the City's MHPA in 1997. The City's MHPA areas are defined by "hard-line" limits, "with limited development permitted based on the development area allowance of the OR-1-2 zone [open space residential zone]" (City 1997a) and MSCP SAP requirements.

The MHPA consists of public and private lands, much of which has been conserved. Conserved lands include lands that have been set aside for mitigation or purchased for conservation. These lands may be owned by the City (i.e., dedicated lands) or other agencies, may have conservation easements, or may have other restrictions (per the City's ESL regulations) that protect the overall quality of the resources and prohibit development.



Boundary line adjustments to the MHPA within the VPHCP Plan Area are described in Section 8.4.2 of the VPHCP. A proposed boundary line adjustment is required to evaluate change to conservation levels and impacts to vernal pools and covered species that would occur because of the adjustment. This evaluation would be provided in a biological technical report and an environmental document. The determination of the biological value of a proposed boundary line adjustment would be made by the City according to the MSCP Plan (Section 5.4.2) and the VPHCP. The change must also receive written concurrence from the Wildlife Agencies, before the release of the environmental document for public review. An adjustment that either Wildlife Agency determines does not meet the equivalency test would require a major amendment to the VPHCP.

For parcels located outside the MHPA, "there is no limit on the encroachment into sensitive biological resources, with the exception of wetlands, and listed non-covered species' habitat (which are regulated by state and federal agencies) and narrow endemic species." However, "impacts to sensitive biological resources must be assessed and mitigation, where necessary, must be provided in conformance" with the City's ESL Ordinance as implemented through compliance with the City's Biology Guidelines (City 2018).

The MSCP includes management priorities to be undertaken by the City as part of its MSCP implementation requirements. Those actions, identified as Priority 1, are required to be implemented by the City as a condition of the MSCP ITP to ensure that MSCP Covered Species are adequately protected. The actions identified as Priority 2 may be undertaken by the City as a resources permit.

3.3.4.1 MHPA Land Use Adjacency Guidelines

To address the integrity of the MHPA and avoid/minimize indirect impacts to the MHPA, guidelines were developed to manage land uses adjacent to the MHPA during construction and implementation of a project. These guidelines address the issues of drainage, toxics, lighting, noise, barriers, invasive species, brush management, and grading/land development. Projects that are within or adjacent to the MHPA must demonstrate compliance with the LUAGs. The LUAGs are in Section 1.4.3 of the MSCP SAP.

4.0 SURVEY RESULTS

4.1 SITE DESCRIPTION

This section describes the physical characteristics of the AMP area, including topography, soils, and land uses, as well as general conservation planning context.

4.1.1 Topography and Soils

Topographically the AMP area is relatively flat. Most of the AMP area is approximately 420 feet above mean sea level (AMSL). The site is slightly lower in evaluation along the eastern and western boundaries at approximately 405 feet AMSL.

The AMP area is mapped as supporting five soil types (USDA 2019): Redding gravelly loam, two to nine percent slopes; Olivenhain cobbly loam, 9 to 30 percent slopes; Olivenhain cobbly loam, 30 to 50 percent slopes; Chesterton-Urban land complex, two to nine percent slopes; and Chesterton fine sandy loam, two to five percent slopes. Redding gravelly loam, two to nine percent slopes is the predominant soil type found throughout most of the AMP area.



4.1.2 Land Uses

Land uses include existing airport facilities, including runways, parking, and buildings. In operation since 1937, the airport has three runways: two parallel runways (10L-28R and 10R-28L) oriented in a northwest/southeast alignment and a crosswind runway (5-23) oriented in a northeast/southwest alignment, in addition to a helipad. General aviation aircraft that operate at Montgomery-Gibbs Executive Airport include private, corporate, charter, air ambulance, law enforcement, fire rescue, flight training, and cargo. The airport does not cater to air carrier or military aviation requirements.

While most of the site is disturbed or developed, the eastern portion of the property still contains native habitat, such as Diegan coastal sage scrub, and an extensive vernal pool complex. The majority of the vernal pools are located within the northern and eastern portions of the AMP area; however, several vernal pools are also present in the western portion of the site. Biological resources on the site are discussed in greater detail below, in Section 4.2.

The AMP area is surrounded by development. Adjacent land uses include industrial and commercial development to the north, south, and east. State Route (SR-) 163 is located immediately west of the site, with commercial and industrial uses west of SR-163.

4.1.3 Regional Conservation Planning Context

The AMP area is within the "Urban Area" of the City's MSCP SAP and portions of the AMP area are designated as MHPA. MHPA lands include portions of the western, northern, and eastern AMP area (Figure 4).

Vernal pools occurring in the AMP area are part of the VPHCP's Central Planning Unit, which is located generally north of SR-94 and south of SR-52. Areas containing pools in this planning unit include Clairemont Mesa, Kearney Mesa, Serra Mesa, and Mission Trails Regional Park. Smaller concentrations of vernal pools also occur near Tecolote Canyon and Lake Murray (City 2019).

4.1.4 Critical Habitat Designations

USFWS-designated critical habitat occurs within the AMP area. Critical habitat for spreading navarretia occurs in the north-central portion of the airport. Critical habitat for the San Diego fairy shrimp also occurs within the north-central portion of the site and wraps around the airport runways to the east (Figure 6, USFWS Critical Habitat).

4.2 BIOLOGICAL RESOURCES

This section describes the existing biological resources within the AMP area, including vegetation communities, general flora and fauna, and rare, threatened, endangered, endemic, sensitive, MSCP-covered species, VPHCP-covered species, and jurisdictional resources. Lists of plant and animal species observed or detected during the general biological survey conducted in June 2017 are provided in Appendices A and B, respectively; the potential for sensitive plant and animal species to occur in the AMP area is analyzed in Appendices C and D, respectively; sensitive species occurring or with high potential to occur in the AMP area are discussed in Section 4.3 of this report.



4.2.1 Botanical Resources

Vegetation Communities

A total of 11 vegetation communities (including land cover types) were recorded within the AMP area, covering approximately 487.3 acres (Table 1, Existing Vegetation Communities and Land Cover Types Within the AMP Area; Figure 7, Vegetation and Sensitive Biological Resources). They include three wetland habitat types (southern willow scrub [including a disturbed phase], disturbed wetland, and vernal pool), and eight upland habitat/land cover types (Diegan coastal sage scrub [including a disturbed phase], baccharis scrub [including a disturbed phase], chamise chaparral, non-native grassland, eucalyptus woodland, disturbed habitat, non-native vegetation, and developed). In this document, "disturbed phase" is used as a subcategory for classification of vegetation communities where more than half of the vegetation normally present is either bare ground and/or consists of weedy or non-native species characteristic of disturbed areas. These vegetation communities and land cover types are discussed in detail below.

Table 1
EXISTING VEGETATION COMMUNITIES AND LAND COVER TYPES WITHIN THE AMP AREA¹

Vegetation Community or Land Cover Type ²	Tier	Inside MHPA	Outside MHPA	Total Area in AMP ³
Southern willow scrub - incl disturbed phase (63320)	Wetland	1.15	0.02	1.17
Disturbed wetland (11200)	Wetland	0.45	0.01	0.46
Vernal pool (44000)	Wetland	8.27	1.01	9.28
Diegan coastal sage scrub (32500) – incl disturbed phase	II	90.4	7.4	97.8
Baccharis scrub (32530) – incl disturbed phase	II	10.7	0.5	11.2
Chamise chaparral (37200)	IIIA	4.2	1.2	5.4
Non-native grassland (42200)	IIIB	67.8	87.7	155.5
Eucalyptus woodland (79100)	IV	0.1	0.4	0.5
Disturbed habitat (11300)	IV	7.3	41.0	48.3
Non-native vegetation (11000)		0.2	0	0.2
Developed (12000)		7.2	150.3	157.5
	TOTAL	197.8	289.5	487.3

¹ Excludes Not a Part areas.

Southern Willow Scrub (including disturbed phase)

Southern willow scrub consists of dense, broad-leaved, winter-deciduous stands of trees dominated by willows (*Salix* sp.) in association with mule fat (*Baccharis salicifolia*). This vegetation community appears as a single layer; it lacks separate shrub and tree layers and generally appears as a mass of short trees or large shrubs. It occurs on loose, sandy or fine gravelly alluvium deposited near stream channels during flood flows. Frequent flooding maintains this early seral community, preventing succession to a riparian woodland or forest (Holland 1986).

Small stands of southern willow scrub, dominated by arroyo willow (*Salix lasiolepis*), occur primarily in association with a single drainage feature in the easternmost portion of the AMP area. A smaller, isolated stand occurs in the northeastern AMP area. A total of 1.17 acres of southern willow scrub (including 1.01 acres of disturbed phase) was mapped within the AMP area.



² Vegetation community codes are from Oberbauer (2008).

³ Totals reflect rounding (0.1 acre for uplands and 0.01 acre for wetlands/riparian).



HELIX Environmental Planni

Montgomery-Gibbs Executive Airport Master Plan AMP Area △ Montgomery-Gibbs Executive Airport Master Plan Burrowing Ow (Athene cunicularia) Not A Part 2019 Final VPHCP MHPA Nuttall's Scrub Oak (Quercus dumosa) City of San Diego (2024) San Diego Fairy Shrimp (Branchinecta sandiegonensis) San Diego Goldenstar (Bloomeria clevelandii) Orcutt's Brodiaea (Brodiaea orcuttii) City of San Diego (2022) Graceful Tarplant (Holocarpha virgata ▲ Burrowing Owl (Athene cunicularia) ssp.elongata) City of San Diego (2020) Vegetation Coastal California Gnatcatcher (Polioptila californica californica) (2017) **Baccharis Scrub** Baccharis Scrub - Disturbed City of San Diego VPHCP (2019) Chamise Chaparral San Diego Fairy Shrimp (Branchinecta sandiegonensis) Diegan Coastal Sage Scrub Orcutt's Brodiaea (Brodiaea orcuttii) Diegan Coastal Sage Scrub - Disturbed San Diego Mesa Mint (Pogogyne abramsii) Developed City of San Diego (2017)³ **Disturbed Habitat** Least Bell's Vireo (Vireo bellii pusillus) Disturbed Wetland **Eucalyptus Woodland** HELIX (2010, 2017) Non-Native Grassland Coastal California Gnatcatcher (Polioptila californica californica) (2010) Non-Native Vegetation Coastal California Gnatcatcher (Polioptila Southern Willow Scrub californica californica) (2017) Southern Willow Scrub - Disturbed HELIX (2009 - 2013) Vernal Pool¹ Orcutt's Brodiaea (Brodiaea orcuttii) Vernal Pool - Restored/Enhanced² San Diego Fairy Shrimp (Branchinecta Source: Final City of San Diego Vernal sandiegonensis) Pool Habitat Conservation Plan (2019) San Diego Mesa Mint (Pogogyne abramsii) ² Source: HELIX 2016 Merkel & Associates (2015) ³ Source: City Airport Biologist Observation Orcutt's Brodiaea (Brodiaea orcuttii) San Diego Goldenstar (Bloomeria clevelandii) GIBBS DR



650 Feet

Disturbed Wetland

This vegetation community is dominated by exotic wetland species that invade areas that have been previously disturbed or undergone periodic disturbances. These non-natives become established more readily following natural or human-induced habitat disturbance than the native wetland flora. Characteristic species of disturbed wetlands include annual beard grass (*Polypogon monspeliensis*), bristly ox tongue (*Helminthotheca echioides*), cocklebur (*Xanthium strumarium*), and curly dock (*Rumex crispus*).

Disturbed wetland within the AMP is composed of tamarisk (*Tamarix* sp.), pampas grass (*Cortaderia selloana*), and castor bean (*Ricinus communis*). It occurs in the eastern portion of the site, totaling 0.46 acre.

Vernal Pool

Vernal pools are ephemeral wetlands that form in small pools and swales as a result of a subsurface hardpan or claypan that inhibits the downward percolation of water. The landscape conditions usually consist of relatively level areas (e.g., mesas) with low hummocks (mima mounds) and shallow basins (vernal pools). If sufficient rainfall occurs during the rainy season, the combination of landscape position, low soil permeability, and climatic conditions results in water ponding in the pools, that then gradually evaporates and becomes completely dry over the summer and fall. Vernal pools may not fill at all with water during dry years. These highly specialized wetland habitats support a unique flora and are identified by having at least one indicator plant species present (USACE 1997).

Vernal pool boundaries for the AMP area were obtained from the City's Vernal Pool Database, as depicted in the City's 2019 VPHCP, and supplemented with boundary data from HELIX (2016) for site-specific vernal pool restoration and enhancement activities (mitigation pools) west of Taxiway A. Vernal pools have been mapped within the western, northern, and eastern portions of the AMP area. The VPHCP lists a total of 333 vernal pools within the airport boundary. Characteristic species present include dwarf woolly-marbles (*Psilocarphus brevissimus*), prairie plantain (*Plantago elongata*), and water pygmyweed (*Crassula aquatica*). Vernal pools total 9.28 acres in the AMP area.

Diegan Coastal Sage Scrub (including disturbed phase)

Coastal sage scrub is one of the two major shrub types that occur in southern California, occupying xeric sites characterized by shallow soils (the other is chaparral). Four distinct coastal sage scrub geographical associations (northern, central, Venturan, and Diegan) are recognized along the California coast. Diegan coastal sage scrub may be dominated by a variety of species depending upon soil type, slope, and aspect. Typical species found within Diegan coastal sage scrub include California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum*), laurel sumac (*Malosma laurina*), lemonadeberry (*Rhus integrifolia*), and black sage (*Salvia mellifera*).

Diegan coastal sage scrub on site is dominated by California sagebrush, California buckwheat, and deerweed (*Acmispon glaber*). It occurs in the eastern and northeastern portions of the site, totaling 97.8 acres (including 37.0 acres of disturbed phase).



Baccharis Scrub (including disturbed phase)

Baccharis scrub is an upland community recognized by resources agencies as a subtype of coastal sage scrub that develops under a variety of circumstances following Diegan coastal sage scrub disturbance. Within the AMP area, this vegetation community is dominated by broom baccharis (*Baccharis sarothroides*) and is confined to the site's southeastern corner. A total of 11.2 acres of baccharis scrub (including 9.4 acres of disturbed phase) is mapped on site.

Chamise Chaparral

Chamise chaparral is the most widely distributed chaparral subtype and is dominated by the species chamise (*Adenostoma fasciculatum*). This vegetation community is found from Baja to northern California in pure or mixed stands. It often dominates at low elevations and on xeric south-facing slopes with 60-90 percent canopy cover. Along its lower elevation limit, chamise chaparral intergrades with coastal sage scrub (Rundel 1986). Mission manzanita and black sage are other plant species often associated within this vegetation community. Characteristic species within this habitat on site include chamise, laurel sumac, and toyon (*Heteromeles arbutifolia*). This habitat occurs as small, scattered stands within and adjacent to sage scrub in the eastern portion of the site, totaling 5.4 acres.

Non-native Grassland

Non-native grassland is a dense to sparse cover of annual grasses, often associated with numerous species of showy-flowered native annual forbs. This association occurs on gradual slopes with deep, fine-textured, usually clay soils. Characteristic species include oats (*Avena* spp.), foxtail chess (*Bromus madritensis* ssp. *rubens*), ripgut grass (*B. diandrus*), ryegrass (*Festuca* sp.), and mustard (*Brassica* spp.). Most of the annual introduced species that make up most species and biomass within the non-native grassland originated from the Mediterranean region, an area with a long history of agriculture and a climate like California.

Characteristic species found in this habitat on site include oats and red brome. Non-native grassland is widespread in the northern, central, and western portions of the site, occupying a total of 155.5 acres of the AMP area.

Eucalyptus Woodland

Eucalyptus woodland is dominated by eucalyptus (*Eucalyptus* spp.), an introduced genus that has often been planted purposely for wind blocking, ornamental, and hardwood production purposes. Most groves are monotypic, with the most common species being either the blue gum (*Eucalyptus globulus*) or river red gum (*E. camaldulensis*). The understory within well-established groves is usually very sparse due to the closed canopy and allelopathic nature of the abundant leaf and bark litter. If enough moisture is available, this species becomes naturalized and can reproduce and expand its range.

Eucalyptus woodland mapped on site consists of two small stands of eucalyptus trees along the perimeter of the AMP area, totaling 0.5 acre.



Non-Native Vegetation

Non-native vegetation is a category describing stands of naturalized trees and shrubs (e.g., acacia [Acacia spp.], peppertree [Schinus spp.]), many of which are also used in landscaping. On site, this habitat consists of a single small stand of acacia in the eastern portion of the site, totaling 0.2 acre.

Disturbed Habitat

Disturbed habitat includes land cleared of vegetation (e.g., dirt roads), land containing a preponderance of non-native plant species such as ornamentals or ruderal exotic species that take advantage of disturbance (previously cleared or abandoned landscaping), or land showing signs of past or present animal usage that removes any capability of providing viable habitat.

Disturbed habitat on site includes such species as garland daisy (*Glebionis coronaria*), telegraph weed (*Heterotheca grandiflora*), filaree (*Erodium* sp.), and Australian saltbush (*Atriplex semibaccata*). It primarily occurs adjacent to existing taxiways, runways, and other developed lands on site. Disturbed habitat totals 48.3 acres in the AMP area.

Developed

Developed land is where permanent structures, pavement, and/or gravel occurs, which prevents the growth of vegetation, or where landscaping is clearly tended and maintained. Developed land within the AMP area includes pavement or hardscape associated with runways, buildings, parking lots, hangars, and additional infrastructure associated with the airport. The developed portion of the AMP area is concentrated primarily in the western and south-central portions of the site, totaling 157.5 acres.

Plant Species Observed

A total of 56 plant species were observed during the general biological survey of the AMP area conducted by HELIX in 2017. Of these, two species are sensitive, and 32 species are non-native (Appendix A).

4.2.2 Zoological Resources – Fauna

Animal species in the AMP area were detected by direct observation, calls, scat, tracks, and sign. A total of 20 animal species were detected during the general biological survey of the AMP area in June of 2017 (Appendix B). One of these is considered sensitive (coastal California gnatcatcher [*Polioptila californica californica*]).

4.3 SENSITIVE BIOLOGICAL RESOURCES

According to City Municipal Code (Chapter 11, Article 3, Division 1) and Appendix I of the City's Biology Guidelines (City 2018), sensitive biological resources refers to upland and/or wetland areas that meet any one of the following criteria:

- (a) Lands that have been included in the MHPA as identified in the City's MSCP SAP and VPHCP;
- (b) Wetlands (as defined by Municipal Code Section 113.0103);



- (c) Lands outside the MHPA that contain Tier I, Tier II, Tier IIIA, or Tier IIIB habitats;
- (d) Lands supporting species or subspecies listed as rare, endangered, or threatened;
- (e) Lands containing habitats with narrow endemic or vernal pool species as listed in the City's Biology Guidelines (City 2018); and
- (f) Lands containing habitats of Covered Species as listed in the City's Biology Guidelines (City 2018).

4.3.1 Sensitive Plant Species

Sensitive plant species are those that are considered federal, state, or CNPS rare, threatened, or endangered, or MSCP or VPHCP Covered Species or MSCP Narrow Endemic species (Appendix C). More specifically, if a species is designated with any of the following statuses (a-c below), it is considered sensitive per City Municipal Code (Chapter 11, Article 3, Division 1):

- (a) A species or subspecies is listed as rare, endangered, or threatened under Section 670.2 or 670.5, Title 14, California Code of Regulations, or the Federal Endangered Species Act, Title 50, Code of Federal Regulations, Section 17.11 or 17.12, or candidate species under the California Code of Regulations;
- (b) A species is a Narrow Endemic as listed in the Biology Guidelines in the Land Development Manual (City 2018); and/or
- (c) A species is an MSCP Covered Species or VPHCP Covered Species as listed in the Biology Guidelines in the Land Development Manual (City 2018).

A plant species is also considered sensitive if it is included in the CNPS Inventory of Rare and Endangered Plants with an assigned California Rare Plant Rank (CRPR) of 2 or lower (CNPS 2018), although species with lower CRPR ranks (i.e., CRPR 3 and 4 species) also may be considered sensitive species by local jurisdictions; however, no CRPR 3 or 4 species are specifically identified as sensitive species in the City's Biology Guidelines, MSCP SAP, or VPHCP. According to the CNPS, CRPR1 and 2 species meet the State CEQA Guidelines definition for Rare and Endangered and, therefore, must be considered in Project CEQA analysis. While CRPR 3 and 4 species do not have this requirement, CNPS recommends that they be disclosed.

Sensitive plant status is often based on one or more of three distributional attributes: geographic range, habitat specificity, and/or population size. A species that exhibits a small or restricted geographic range (such as those endemic to the region) is geographically rare. A species may be abundant but occur only in very specific habitats. Lastly, a species may be widespread but exists naturally in small populations.

A search of CNDDB, USFWS, and MSCP databases returned records of 10 sensitive plant species reported within 1,000 feet of the AMP area (Figure 8, CNDDB/USFWS Sensitive Species Database Records). These species, as well as City Narrow Endemic species, were individually analyzed for potential to occur in the AMP area based on the presence of suitable habitat (e.g., vegetation communities, soils, elevation, and geographic range, lifeform, blooming period, etc.; Appendix C).





The following eight sensitive plant species documented in the AMP area are a compilation of the results of the HELIX general biological survey, prior surveys of the airport property conducted by others, and searches of the USFWS, CNDDB, and MSCP databases. Some species are known to be extant in the AMP area, while others may no longer be present. Refer to Appendix C for additional information.

Federally or State Listed Plant Species

Three federally and/or state listed plant species have been recorded on site; the federally and state listed endangered San Diego button-celery (*Eryngium aristulatum* var. *parishii*) and San Diego mesa mint (*Pogogyne abramsii*), and the federally listed threatened spreading navarretia (*Navarretia fossalis*). However, San Diego button-celery and spreading navarretia may no longer be extant on the airport site. Additional information is provided below.

San Diego Button-celery (Eryngium aristulatum var. parishii)

Listing¹: FE/SE; CNPS List 1B.1; City MSCP Narrow Endemic; VPHCP Covered **Distribution**: San Diego and Riverside counties; Baja California, Mexico

Habitat: Vernal pools or mima mound areas with vernally moist conditions are preferred habitat. **Presence on site:** A single CNDDB record indicates this species was found in a single pool in the eastern portion of the site in 1979, but species has not been observed again. The City's 2019 VPHCP does not show this species as occurring on the airport property, and it may no longer be present at this location.

San Diego Mesa Mint (Pogogyne abramsii)

Listing: (FE/SE: CRPR List 1B.1; City MSCP Narrow Endemic; VPHCP Covered

Distribution: Western San Diego County; Baja California, Mexico

Habitat: This small annual is restricted to vernal pools in grasslands, chamise chaparral, and coastal sage scrub on mesas.

Presence on site: Species has been documented in several vernal pools in the eastern and northeastern portions of the site (HELIX 2009-2013; HELIX 2017 general biological survey; and City VPHCP data).

Spreading Navarretia (Navarretia fossalis)

Listing: FT/--; CRPR 1B.1; City MSCP Narrow Endemic; VPHCP Covered

Distribution: Western Riverside and southwestern San Diego counties as well as northwestern Baja California, Mexico

Habitat: Vernal pools, vernal swales, or roadside depressions. Population size is strongly correlated with rainfall. Depth of pool appears to be a significant factor as this species is rarely found in shallow pools. **Presence on site:** CNDDB records indicate this species was found in the northeast portion of the site in 1979, however, 1986 surveys of the same pools were negative, and successive surveys also have been negative for this species. The City's 2019 VPHCP does not show this species as occurring on site and it may no longer be present at this location.

Listing is as follows: F = Federal; S = State of California; E = Endangered; T = Threatened; CRPR = California Rare Plant Rank: 1A – presumed extinct; 1B – rare, threatened, or endangered in California and elsewhere; 2A – presumed extirpated in California but more common elsewhere; 2B – rare, threatened, or endangered in California but more common elsewhere; 3 – more information needed; 4 – watch list for species of limited distribution. Extension codes: .1 – seriously endangered; .2 – moderately endangered; .3 – not very endangered



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Other Sensitive Plant Species

Five other sensitive plant species have been recorded in the AMP area, including four CRPR designation 1 or 2 species: coast barrel cactus (*Ferocactus viridescens*), Orcutt's brodiaea (*Brodiaea orcuttii*), San Diego goldenstar (*Bloomeria clevelandii*), and Nuttall's scrub oak (*Quercus dumosa*); and one CRPR designation 4 species: graceful tarplant (*Holocarpha virgata* ssp. *elongata*).

San Diego Barrel Cactus (Ferocactus viridescens)

Listing: --/--; CRPR 2B.1; City MCSP Covered

Distribution: San Diego County; Baja California, Mexico

Habitat: Optimal habitat for this cactus appears to be Diegan coastal sage scrub hillsides, often at the crest of slopes and growing among cobbles. Occasionally found on vernal pool periphery and mima mound topography in Otay Mesa.

Presence on site: Fewer than 10 individuals observed in coastal sage scrub in the eastern portion of the site (P&D Environmental 1998). Population is presumed extant.

Graceful Tarplant (Holocarpha virgata ssp. elongata)

Listing: --/--; CRPR 4.2; CA Endemic

Distribution: San Diego, Orange, and Riverside counties **Habitat:** Grasslands on coastal mesas and in foothills.

Presence on site: Species is widespread in non-native grassland habitat on site (estimated to occur in the thousands) and has been noted during several biological surveys (RECON 2008, Rocks Biological Consulting 2013).

Nuttall's Scrub Oak (Quercus dumosa)

Listing: --/--; CRPR 1B.1

Distribution: San Diego, Orange, and Santa Barbara counties in California; Baja California, Mexico

Habitat: Coastal chaparral and coastal scrub with sandy or clay loam soils.

Presence on site: Fewer than ten scattered individuals were observed in Diegan coastal sage scrub and chamise chaparral by HELIX during the June 2017 field reconnaissance, and five individuals were observed in one location in non-native grassland in the western portion of the site (RECON 2008). Individuals occurring in the grassland habitat are subject to mowing from airport maintenance operations.

Orcutt's Brodiaea (Brodiaea orcuttii)

Listing: --/--; CRPR 1B.1; City MSCP Covered

Distribution: Riverside and San Bernardino counties south to Baja California, Mexico

Habitat: Vernally moist grasslands, mima mound topography, and vernal pool periphery are preferred habitat. Occasionally will grow on streamside embankments in clay soils.

Presence on site: A population of several hundreds of individuals was found within an area west of the runway (RECON 2008), and smaller numbers of this species were documented in discrete locations within and adjacent to several on-site vernal pools (HELIX 2010-2013; Merkel and Associates 2015).

San Diego Goldenstar (Bloomeria clevelandii)

Listing: --/--; CRPR 1B.1; City MSCP Covered

Distribution: Southwestern San Diego County; northwestern Baja California, Mexico

Habitat: Valley grasslands, particularly near mima mound topography or in the vicinity of vernal pools. Clay soils on dry mesas and hillsides in coastal sage scrub or chaparral.



Presence on site: Several small populations (one to 15 individuals) were observed within grassland and sage scrub in the eastern portion of the site (RECON 2008). Additionally, a large population was mapped by City biologists north of Aero Drive in 2024.

Apart from those listed above, no other species were determined to have high potential to occur in the AMP area (Appendix C).

4.3.2 Sensitive Wildlife Species

Sensitive wildlife species are those that are considered federal or state threatened or endangered; MSCP Covered Species; or MSCP Narrow Endemic species (Appendix D). More specifically, if a species is designated with any of the following statuses (a-c below), it is considered sensitive per City Municipal Code (Chapter 11, Article 3, Division 1):

- (a) A species or subspecies is listed as endangered or threatened under Section 670.2 or 670.5, Title 14, California Code of Regulations, or the federal Endangered Species Act, Title 50, Code of Federal Regulations, Section 17.11 or 17.12, or candidate species under the California Code of Regulations;
- (b) A species is a Narrow Endemic as listed in the Biology Guidelines in the Land Development Manual (City 2018); and/or
- (c) A species is a MSCP Covered Species or VPHCP Covered Species as listed in the Biology Guidelines in the Land Development Manual (City 2018).

A species would also be considered sensitive if it is included on the CDFW's Special Animals List as a candidate for federal or state listing (FC or SC), a state Species of Special Concern (SSC), state Watch List (WL) species, state Fully Protected (FP) species, or federal Bird of Conservation Concern (BCC; Appendix D). Generally, the principal reason an individual taxon (species or subspecies) is considered sensitive is the documented or perceived decline or limitations of its population size, or geographical extent and/or distribution, resulting in most cases from habitat loss.

In addition, active nests of most bird species, regardless of sensitivity status, are protected by the federal MBTA and California Fish and Game Code. Note: The project is required to adhere to the MBTA and California Fish and Game Code statues regarding protection of avian nesting.

The following 16 sensitive animal species documented in the AMP area are a compilation of the results of the HELIX general biological survey, previous airport surveys by others, and searches of the USFWS listed species database and CNDDB.

Federally or State Listed Animal Species

Four federally listed animal species have been documented in the AMP area: least Bell's vireo (*Vireo bellii pusillus*), coastal California gnatcatcher, San Diego fairy shrimp, and western spadefoot (*Spea hammondii*). Least Bell's vireo is also state listed. Additional information is provided below.



Coastal California Gnatcatcher (Polioptila californica californica)

Status²: FT/SSC; City MSCP Covered

Distribution: In San Diego County, occurs throughout coastal lowlands

Habitat: Coastal sage scrub, coastal bluff scrub, and coastal sage-chaparral scrub.

Presence on site: Species was detected in three locations within Diegan coastal sage scrub and chamise chaparral in the eastern portion of the site during vernal pool restoration field work conducted in 2010 (HELIX 2010), and one individual was detected in Diegan coastal sage scrub in the eastern portion of the site during HELIX's 2017 site reconnaissance. Species was also observed during wildlife hazard assessment surveys conducted between June 2018 and May 2019 (JE Fuller and City 2020) and in 2020 during focused surveys for the Fire-Rescue Parking Pad Expansion Project (City 2020).

Least Bell's Vireo (Vireo bellii pusillus)

Status: FE/SE; BCC; City MSCP Covered

Distribution: San Diego County and throughout coastal California, ranging to Santa Clara County

Habitat: Riparian habitat including dense shrubs and small trees.

Presence on site: A single male was detected in 2017 at one location near Aero Drive, staying on site for three weeks before avoiding further detection (personal communication with City's airport biologist). This species is not expected to nest on site due to the limited acreage of potentially suitable habitat, lack of connectivity to more extensive riparian resources, and overall distance from other potentially suitable habitat off site.

San Diego Fairy Shrimp (Branchinecta sandiegonensis)

Status: FE/--; City VPHCP Covered

Distribution: San Diego County and extreme northern Baja California, Mexico

Habitat: Seasonally astatic pools which occur in tectonic swales or earth slump basins and other areas of shallow, standing water often in patches of grassland and agriculture interspersed in coastal sage scrub and chaparral.

Presence on site: Species has been documented in numerous vernal pools on site from various biological surveys (RECON 2008; HELIX 2010-2016; and City 2019).

Western Spadefoot (Spea hammondii)

Status: FC/SSC

Distribution: Throughout the Central Valley and San Francisco Bay area south along the coast to northwestern Baja California

Habitat: Occurs in open coastal sage scrub, chaparral, and grassland, along sandy or gravelly washes, floodplains, alluvial fans, or playas; require temporary pools for breeding and friable soils for burrowing; generally excluded from areas with bullfrogs (*Rana catesbiana*) or crayfish (*Procambarus* sp.).

Presence on site: Observed in 1994 in the vicinity of vernal pools in the east central portion of the site (P&D Environmental 1998).

Other Sensitive Animal Species

Twelve other sensitive animal species have been documented on site: burrowing owl (*Athene cunicularia*), California horned lark (*Eremophila alpestris actia*), Cooper's hawk (*Astur cooperii*), Coronado skink (*Eumeces skiltonianus interparietalis*), loggerhead shrike (*Lanius ludovicianus*), northern

Status is as follows: F = Federal; S = State of California; E = Endangered; T = Threatened; C = Candidate; R = Rare; FP = Fully Protected; BCC = Bird of Conservation Concern; SSC = State Species of Special Concern; WL = CDFW Watch List; BGEPA = Listed under the Bald and Golden Eagle Protection Act.



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harrier (*Circus cyaneus*), orange-throated whiptail (*Aspidoscelis hyperythra*), San Diego desert woodrat (*Neotoma lepida intermedia*), coast horned lizard (*Phrynosoma coronatum blainvillii*), sharp-shinned hawk (*Accipiter striatus*), southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*), and white-tailed kite (*Elanus leucurus*). Additional information is provided below.

Burrowing Owl (Athene cunicularia)

Listing: BCC/SC (nesting sites and some wintering sites); City MSCP Covered

Distribution: In San Diego County, occurs in a few scattered sites

Habitat: Grassland or open scrub habitats.

Presence on site: There have been multiple observations of this species on the AMP. In 2022, a bird strike involving a burrowing owl occurred in October and a burrowing owl exclusion was conducted within a hangar in January. A single wintering burrowing owl was observed by MYF operations staff and the City's airport biologist in a broken retaining wall along Montgomery Drive during the 2017-2018 winter season and near the windsock on the airfield in the 2018-2019 winter season (personal communication with City's airport biologist). This species was also detected on site three times during the airport's wildlife hazard assessment surveys conducted between June 2018 and May 2019 (JE Fuller and City 2020). In addition, a single burrowing owl individual was observed in the southwest portion of the site by RECON in 2007. The owl was observed repeatedly in and adjacent to a burrow during protocol breeding season surveys in 2007 (RECON 2008). No other owls have been observed on site during various biological surveys conducted in 1994, 1996, 2009, 2010, 2011, 2012, 2013, 2016, and 2017 (P&D Environmental 1998; HELIX 2009-2013, 2016; Rocks Biological 2013; Merkel and Associates 2015).

California Horned Lark (Eremophila alpestris actia)

Status: --/WL

Distribution: Observed year-round scattered throughout San Diego County

Habitat: Coastal strand, arid grasslands, and sandy desert floors.

Presence on site: Multiple observations of this species occurred during wildlife hazard assessment surveys conducted between June 2018 and May 2019 (JE Fuller and City 2020). Species also was observed on site in 1994 (P&D Environmental 1998).

Cooper's Hawk (Astur cooperii)

Status: --/WL; City MSCP Covered

Distribution: Occurs year-round throughout San Diego County's coastal slope where stands of trees are

present

Habitat: Oak groves, mature riparian woodlands, and eucalyptus stands or other mature forests. **Presence on site:** Species was observed in eucalyptus trees in the eastern portion of the site during wildlife hazard assessment surveys conducted between June 2018 and May 2019 (JE Fuller and City 2020). In addition, two individuals were observed in eucalyptus trees in the eastern portion of the site in 1996 (P&D Environmental 1998).

Coronado Skink (Eumeces skiltonianus interparietalis)

Status: --/SSC

Distribution: Southwestern California from Los Angeles County south into northwestern Baja California, Mexico; also occurs on several islands off the Pacific coast including Los Coronados Islands

Habitat: Grasslands, coastal sage scrub, open chaparral, oak woodland, and coniferous forests, usually

under rocks, leaf litter, logs, debris, or in the shallow burrows it digs (Zeiner et al. 1988).

Presence on site: Observed on site in 1994 (P&D Environmental 1998).



Loggerhead Shrike (Lanius Iudovicianus)

Status: BCC/SSC

Distribution: An uncommon year-round resident observed throughout San Diego County but absent

from pinyon woodlands in higher elevations of the Santa Rosa and Vallecito mountains

Habitat: Grassland, open sage scrub, chaparral, and desert scrub.

Presence on site: Observed in chamise chaparral in 1996 (P&D Environmental 1998).

Northern Harrier (Circus cyaneus)

Status: --/SSC; City MSCP Covered

Distribution: In San Diego County, distribution primarily scattered throughout lowlands but can also be

observed in foothills, mountains, and desert

Habitat: Open grassland and marsh.

Status on site: Observed on site in 1994 (P&D Environmental 1998).

Orange-throated Whiptail (Aspidoscelis hyperythra)

Status: --/WL; City MSCP Covered

Distribution: Southern Orange County and southern San Bernardino County, south through Baja

California

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 areas, shaded areas, and abundant insect prey base, particularly termites.

Presence on site: Observed in chamise chaparral in 1996 (P&D Environmental 1998).

San Diego Desert Woodrat (Neotoma lepida intermedia)

Listing: --/SSC

Distribution: Coastal slope of southern California from San Luis Obispo County south into coastal northwestern Baja California, Mexico

Habitat: Open chaparral and coastal sage scrub, often building large, stick nests in rock outcrops or around clumps of cactus or yucca.

Presence on site: Nests were observed in sage scrub and chaparral in 1996 (P&D Environmental 1998).

Coast Horned Lizard (Phrynosoma coronatum blainvillii)

Status: --/SSC; City MSCP Covered

Distribution: Northern California though coastal southern California into northern Baja California **Habitat:** Coastal sage scrub and open areas in chaparral, oak woodlands, and coniferous forests with sufficient basking sites, adequate scrub cover, and areas of loose soil; require native ants, especially harvester ants (*Pogonomyrmex* sp.), and are generally excluded from areas invaded by Argentine ants (*Linepithema humile*).

Presence on site: Observed in coastal sage scrub in the eastern portion of the site in 1996 (P&D Environmental 1998).

Sharp-shinned Hawk (Accipiter striatus)

Status: --/WL

Distribution: In San Diego County, has widespread distribution but occurs in small numbers and only during winter

Habitat: Usually observed in areas with tall trees or other vegetative cover but can be observed in a variety of habitats.

Presence on site: Observed on site in 1994 (P&D Environmental 1998).



Southern California Rufous-crowned Sparrow (Aimophila ruficeps canescens)

Status: --/WL; City MSCP Covered

Distribution: Observed throughout coastal lowlands and foothills of San Diego County

Habitat: Coastal sage scrub and open chaparral as well as shrubby grasslands.

Presence on site: Observed in coastal sage scrub in the eastern portion of the site in 1996 (P&D

Environmental 1998).

White-tailed Kite (Elanus leucurus)

Status: --/FP

Distribution: Primarily occurs throughout coastal slopes of San Diego County **Habitat:** Riparian woodlands and oak or sycamore groves adjacent to grassland.

Presence on site: Observed on site during wildlife hazard assessment surveys conducted between June 2018 and May 2019 (JE Fuller and City 2020). Also observed foraging on site in 1994 (P&D Environmental 1998).

In addition to those species listed above, Crotch's bumble bee (*Bombus crotchii*) has a moderate potential to occur on site and is further discussed below. No other species were determined to have high or moderate potential to occur in the AMP area (Appendix D).

Crotch's Bumble Bee (Bombus crotchii)

Status: --/SC

Distribution: Ranges across much of California, including the Mediterranean region, Pacific coast, western desert, and adjacent foothills throughout much of the state's southwestern region and north to Redding

Habitat: Open grasslands and scrub habitats with suitable nectar and pollen sources. It primarily nests underground and forages on a wide variety of flowers, but a short tongue renders it best suited to open flowers with short corollas. In southern California, it is most commonly observed on flowering species in the *Asclepias*, *Astragalus*, *Chaenactis*, *Eschscholzia*, *Lupinus*, *Phacelia*, and *Salvia* genera.

Presence on site: Surveys for this species have not been conducted in the AMP area, but observations have been reported in the Tierrasanta area east of I-15, with the closest observation located near a finger canyon two miles east of the Airport in 2023, and several observations further east in Mission Trails Regional Park between 2017 and 2024 (iNaturalist 2025; Appendix D). Within the AMP area, this species is most likely to occur in native scrub and grassland habitats within the MHPA, as these areas provide suitable foraging and nesting habitat that is not subject to airfield maintenance activities. The airfield itself has low potential for this species as it comprises suboptimal habitat due to it being dominated by annual grasses and is regularly mowed, which removes the limited nectar resources that may be present (Appendix D).

4.4 JURISDICTIONAL RESOURCES

The AMP area supports areas that could be considered jurisdictional waters or wetlands by the USACE, RWQCB, CDFW, and/or City. Potential jurisdictional waters and wetlands in the AMP area include vernal pools, southern willow scrub (including disturbed), disturbed wetland, and non-wetland waters/channel (Table 2, Potentially Jurisdictional Waters and Wetlands; Figure 9, Potential Jurisdictional Waters and Wetlands). Swale features may also be considered jurisdictional by some agencies. The acreages of jurisdiction by habitat type were not available for this document; an updated jurisdictional delineation would be needed to determine types and amounts of jurisdictional wetlands and waters present by agency. The areas presented below are the currently known cumulative summary of these resources in



the AMP area, and jurisdiction between agencies may overlap. The two non-wetland channels in the western portion of the AMP area may be considered non-wetland waters of the U.S. by the USACE/RWQCB and stream channel by CDFW. An additional channel located north of the Four Points Sheraton where it runs east to west, then turns north and parallels Kearny Villa Road is considered potential waters of the State under RWQCB jurisdiction. Swale features may be considered waters of the State by the RWQCB. Vernal pools are expected to fall under the jurisdiction of the RWQCB and potentially of the USACE, but not CDFW. All portions of southern willow scrub (including disturbed) and disturbed wetland would likely fall under CDFW jurisdiction, and portions of these habitats are expected to fall under USACE and RWQCB jurisdiction. City wetlands are expected to include vernal pools, southern willow scrub (including disturbed), and disturbed wetland, but not non-wetland channels or swales due to the lack of wetland vegetation. Only the USACE, RWQCB, and CDFW can make a final determination of jurisdictional boundaries.

Table 2
POTENTIALLY JURISDICTIONAL WATERS AND WETLANDS

Jurisdictional Areas	Area¹ (Ac.)
Wetland	
Vernal pool	9.28
Southern willow scrub-including disturbed phase	1.17
Disturbed wetland	0.46
Wetland Subtotal	10.91
Non-Wetland Waters	
Channel and/or Swale	xx ²
TOTAL	11.07 ³

¹ Rounded to nearest 0.01 acre.

- Acreage not available. Features were identified as potentially jurisdictional linear features by RECON in 2008 and/or the City's Airport Biologist in 2020 but were not formally delineated.
- Total does not include acreage of potentially jurisdictional non-wetland channels and swales mapped by RECON in 2008 and the City's Airport Biologist in 2020, including an additional channel north of the Four Points Sheraton and parallel to Kearny Villa Road, as the data to calculate acreage was not available/features were not formally delineated or quantified.

4.5 WILDLIFE CORRIDORS AND LINKAGES AND RELATIONSHIPS TO SURROUNDING HABITATS

Wildlife corridors and linkages are linear spaces of undeveloped native habitat that connect both large and small natural open space and provide opportunities for wildlife movement on a local and regional scale. Wildlife corridors contribute to sustainability of populations by providing access to larger areas of suitable habitat for dispersal, foraging, and mating. Linkages between wildlife corridors connect isolated blocks of habitat and allow movement or dispersal species over a large scale and the consequent mixing of genes between populations (i.e., gene pool diversity).

The AMP area contains areas mapped as MHPA under the City's SAP and VPHCP. A total of 197.8 acres of MHPA is mapped in the AMP area and includes lands in the northern, eastern, and western portions of the site (Figure 4). Although the MHPA within the AMP area does not act as a linkage due to its urban surroundings and lack of connectivity to other off-site resources, it does provide islands of habitat in a highly urbanized area. Large concentrations of vernal pools occur within the MHPA on site, as well as







native habitat (such as Diegan coastal sage scrub) that is used by sensitive wildlife (e.g., coastal California gnatcatcher). Sensitive plant species also occur within the MHPA on site.

Land surrounding the airport is almost entirely developed. Within the City, large surface streets and extensive developments (i.e., residential and commercial) constrict and fragment upland habitats in many locations, including at and around MYF. Additionally, the entire AMP area is exposed to constant noise from airport activities and the surrounding existing developments in Kearny Mesa.

The aquatic, riparian, and upland habitats within the AMP area are not contiguous with any off-site sensitive habitats, as the site is surrounded by development on all sides. The AMP area does, however, contain critical habitat for San Diego fairy shrimp and spreading navarretia (Figure 6), due to the extensive concentration of vernal pools on site.

Although much of the land in the AMP area is or has been subject to repeated disturbance over many years and, with the exception of the eastern and northeastern areas, supports a predominance of non-native plant species, these lands continue to provide foraging and breeding habitat for several native species of wildlife. While the site does not function as a regional movement corridor due to its urban surroundings and isolation from other habitat areas, the identification of a transient least Bell's vireo on site in 2017 suggests that birds, who are less constrained by roads and development, can use the site as a stopover location during migration, as well as for foraging and nesting. Coyotes have also been observed on site.

5.0 REGIONAL CONSERVATION PLAN COMPLIANCE

Projects in the City are reviewed for compliance with the MSCP SAP and VPHCP guidelines and policies. Guidelines and policies applicable to the proposed project are described below (Section 5.1 addresses MSCP SAP and Section 5.2 addresses VPHCP).

5.1 MULTIPLE SPECIES CONSERVATION PROGRAM SUBAREA PLAN COMPLIANCE

5.1.1 Compatible Land Uses – MSCP SAP Section 1.4.1

Land uses deemed compatible with the goal and objectives of the MSCP are allowed within the MHPA. Such uses include passive recreation, utility lines and roads, limited water facilities and other essential public facilities, limited low density housing, Brush Management Zone 2, and limited agriculture. Portions of the AMP area are located outside, adjacent to, and within the MHPA (Figure 4).

AMP project components within the MHPA include the installation of MALSR lighting in the southeastern portion of the site. MALSR lighting is an approach lighting system that assists aircraft with runway alignment during landing and is required for airport safety (as previously described in Section 1.4.2 of this report). The majority of the proposed MALSR lighting, as well as access to install the lighting, will occur along existing roads which are maintained as a covered airport activity under the VPHCP. However, due to FAA spacing requirements for the MALSR lighting, some lighting and associated access roads will require construction outside of the existing road network, resulting in new impacts



within the MHPA. The installation of MALSR lighting and associated access roads are land uses that are compatible and consistent with Section 1.4.1 of the MSCP SAP.

Other project components proposed within the MHPA are adjacent to Taxiway A for the new hold bay. These are not compatible land uses within the MHPA. The Alternatives discussion in Section 6.4.1 provides information on why the project cannot be moved outside of the MHPA.

Limited construction staging also is proposed within the northern portion of the MHPA, in association with existing roads and disturbed areas. Such staging is temporary and does not conflict with the MSCP SAP.

5.1.2 General Planning Policies and Design Guidelines – MSCP Subarea Plan Section 1.4.2

The MSCP SAP Planning Policies and Design Guidelines are established for the following actions: roads and utilities; fencing, lighting, and signage; materials storage; mining, extraction, and processing facilities; and flood control. Applicable guidelines are discussed below. The AMP does not include mining, extraction, or flood control activities; thus, no further discussion is provided for these topics.

5.1.2.1 Roads and Utilities – Construction and Maintenance Policies

1) All proposed utility lines (e.g., sewer, water, etc.) should be designed to avoid or minimize intrusion into the MHPA. These facilities should be routed through developed or developing areas rather than the MHPA, where possible. If no other routing is feasible, then the lines should follow previously existing roads, easements, rights-of-way and disturbed areas, minimizing habitat fragmentation.

No utility lines are proposed within the MHPA; therefore, the AMP is consistent with this guideline.

2) All new development for utilities and facilities within or crossing the MHPA shall be planned, designed, located and constructed to minimize environmental impacts. All such activities must avoid disturbing the habitat of MSCP covered species, and wetlands. If avoidance is infeasible, mitigation will be required.

Impacts within the MHPA are associated with runway safety improvements and FAA-required lighting systems. Impacts to biological resources have been minimized by aligning impacts within the existing road network to the extent feasible. Impacts to wetlands and the habitats of MSCP covered species could not be completely avoided due to FAA requirements for these safety improvements. Impacts will be mitigated in accordance with the City's Biology Guidelines, MSCP SAP, and the VPHCP.

3) Temporary construction areas and roads, staging areas, or permanent access roads must not disturb existing habitat unless determined to be unavoidable. All such activities must occur on existing agricultural lands or in other disturbed areas rather than in habitat. If temporary habitat disturbance is unavoidable, then restoration of, and/or mitigation for, the disturbed area after project completion will be required.

Temporary staging areas and access roads have been placed within developed areas to the extent feasible. New components of the MALSR lighting system will be accessible primarily through existing roads in the MHPA, with only minor areas of new permanent access road construction needed due to



FAA-mandated spacing requirements for the MALSR. Road locations were selected based on impacting the smallest areas of sensitive habitat possible while still providing access according to FAA regulations. Temporary impacts within the MHPA will be restored following completion of construction.

4) Construction and maintenance activities in wildlife corridors must avoid significant disruption of corridor usage. Environmental documents and mitigation monitoring and reporting programs covering such development must clearly specify how this will be achieved, and construction plans must contain all the pertinent information and be readily available to crews in the field. Training of construction crews and field workers must be conducted to ensure that all conditions are met. A responsible party must be specified.

The AMP does not include construction or maintenance efforts in wildlife corridors. There are no wildlife corridors within the AMP area, as discussed in Section 4.5 of this report.

5) Roads in the MHPA will be limited to those identified in Community Plan Circulation Elements, collector streets essential for area circulation, and necessary maintenance/emergency access roads. Local streets should not cross the MHPA except where needed to access isolated development areas.

The AMP includes the construction of necessary access/maintenance roads for FAA-required MALSR lighting system within the MHPA. These roads will not be open to the public.

6) Development of roads in canyon bottoms should be avoided whenever feasible. If an alternative location outside the MHPA is not feasible, then the road must be designed to cross the shortest length possible of the MHPA in order to minimize impacts and fragmentation of sensitive species and habitat. If roads cross the MHPA, they should provide for fully-functional wildlife movement capability. Bridges are the preferred method of providing for movement, although culverts in selected locations may be acceptable. Fencing, grading, and plant cover should be provided where needed to protect and shield animals, and guide them away from roads to appropriate crossings.

Canyons are not present on site and the AMP does not propose development of roads in a canyon bottom. Access roads constructed for the MALSR lighting system would be low use, at grade roads that would not interfere with wildlife movement capability.

7) Where possible, roads within the MHPA should be narrowed from existing design standards to minimize habitat fragmentation and disruption of wildlife movement and breeding areas. Roads must be located in lower quality habitat or disturbed areas to the extent possible.

See AMP consistency discussions for numbers 1 through 6 above. New roads within the MHPA are for maintenance access associated with the MALSR lighting system. They will be constructed to the minimum width needed for access.

8) For the most part, existing roads and utility lines are considered a compatible use within the MHPA and therefore will be maintained. Exceptions may occur where underutilized or duplicative road systems are determined not to be necessary as identified in the Framework Management Section 1.5.



Existing access roads are a compatible use and maintenance of such roads are a covered airport activity in the VPHCP.

Overall, the AMP is consistent with the City's policies and guidelines for roads and utilities within or adjacent to the MHPA.

5.1.2.2 Fencing, Lighting, and Signage

1) Fencing or other barriers will be used where it is determined to be the best method to achieve conservation goals and adjacent to land uses incompatible with the MHPA. For example, use chain link or cattle wire to direct wildlife to appropriate corridor crossings, natural rocks/boulders or split rail fencing to direct public access to appropriate locations, and chain link to provide added protection of certain sensitive species or habitats (e.g., vernal pools).

The airport has existing perimeter fencing to prevent public access from neighboring properties. This fencing, portions of which follow the outer edge of the MHPA, is managed and maintained by the City. Additional fencing is not needed as the airfield does not have public access.

2) Lighting shall be designed to avoid intrusion into the MHPA and effects on wildlife. Lighting in areas of wildlife crossings should be of low sodium or similar lighting. Signage will be limited to access and litter control and educational purposes.

Proposed lighting where adjacent to the MHPA would be limited, directed away from the MHPA, and shielded to protect the MHPA from artificial night lighting. MALSR lighting proposed within the MHPA would be the minimum necessary to meet the requirements set forth by the FAA.

The AMP is consistent with the City's policies and guidelines for fencing, lighting, and signage for projects within or adjacent to the MHPA. Additional discussion is provided in Section 5.1.3 of this report, MHPA Land Use Adjacency Guidelines.

5.1.2.3 Materials Storage

1) Prohibit storage of materials (e.g., hazardous or toxic, chemicals, equipment, etc.) within the MHPA and ensure appropriate storage per applicable regulations in any areas that may impact the MHPA, especially due to potential leakage.

The AMP does not include land uses within the MHPA that require storage of hazardous or toxic chemicals, materials, or substances. The AMP design was configured to locate future improvements outside of the MHPA to the extent feasible, and land uses adjacent to the MHPA were selected to be consistent with those prescribed in Section 1.4.1 of the SAP. Furthermore, AMP areas within and adjacent to the MHPA would comply with the City's MHPA LUAGs (Section 5.1.3 below). Thus, the AMP would comply with the City's policies and guidelines on material storage.

5.1.3 Land Use Adjacency Guidelines – MSCP Subarea Plan Section 1.4.3

The City's SAP requires projects in or adjacent to the MHPA to conform with LUAGs addressing drainage, toxics, lighting, noise, barriers, invasive species, brush management, and grading.



Because portions of the AMP area are located within or immediately adjacent to the MHPA, implementation and compliance with the LUAGs is required. Below provides an analysis of the project's consistency with each of the LUAGs. Note that conformance with the MHPA LUAGs (in italics below) is a standard requirement as part of conditions of approval in the City and required to be included as "Environmental Requirements" on future construction plans.

Drainage: All new and proposed parking lots and developed areas in and adjacent to the preserve must not drain directly into the MHPA. All developed and paved areas must prevent the release of toxins, chemicals, petroleum products, exotic plant materials and other elements that might degrade or harm the natural environment or ecosystem processes within the MHPA.

Impervious surfaces and developed areas associated with implementation of the AMP would be designed to avoid drainage into the MHPA. Chemicals (i.e., fuel, oil, etc.) required for the operation of the airport will be handled in a manner that is safe as required by the U.S. Environmental Protection Agency (USEPA). Chemicals, toxins, and petroleum will be prevented from entering the MHPA, and specific measures will be identified during project design for future projects implemented under the AMP. Such measures would conform to applicable city, state, and federal regulations addressing storm water runoff during and after construction.

Toxics: Land uses, such as recreation and agriculture, which use chemicals or generate by-products, such as manure, that are potentially toxic or impactive to wildlife, sensitive species, habitat, or water quality need to incorporate measures to reduce impacts caused by the application and/or drainage of such materials into the MHPA.

The AMP does not include agricultural uses. The only recreation use proposed as part of the AMP is the public viewing area in the northwest corner of the site. This platform would not generate chemicals or other by-products that could be harmful to wildlife, habitat, or water quality.

As stated above, developed areas associated with the AMP would be designed to not drain directly into the MHPA, and would conform to regulations governing runoff.

Lighting: Lighting of all developed areas adjacent to the MHPA should be directed away from the MHPA.

Proposed lighting, where adjacent to the MHPA, would be limited, directed away from the MHPA, and shielded to protect the MHPA from artificial night lighting. MALSR lighting proposed within the MHPA would be the minimum necessary to meet the requirements set forth by the FAA.

Noise: Uses in or adjacent to the MHPA should be designed to minimize noise impacts. Berms or walls should be constructed adjacent to commercial areas, recreational areas, and any other use that may introduce noises that could impact or interfere with wildlife utilization of the MHPA.

A noise study was completed for the AMP and land uses adjacent to the MHPA were also evaluated (HELIX 2025). Various features such as land use placement, constructed topography, walls, and berms will be applied into the project design, where necessary, to achieve compliance with the City noise ordinances and to ensure that noise from the AMP would not interfere with the MHPA.

Construction-generated noise from future projects implemented as part of the AMP could cause a significant impact on coastal California gnatcatcher in the MHPA during the breeding season. To comply with the City's LUAGs and avoid potential indirect impacts to coastal California gnatcatcher in the MHPA,



construction within the MHPA would be implemented outside of the breeding season for this species, which is defined by the City as March 1 to August 15.

If construction activities within the MHPA are unable to avoid the breeding season for California gnatcatcher, USFWS protocol surveys would be conducted in suitable habitat prior to the construction implementation to determine species presence/absence. If protocol surveys are not conducted, presence of the species would be assumed, and the implementation of noise attenuation and biological monitoring would be required during the gnatcatcher breeding season if construction would generate noise levels higher than 60 dBA or ambient (whichever is higher).

Barriers: New development adjacent to the MHPA may be required to provide barriers (e.g., non-invasive vegetation, rocks/boulders, fences, walls, and/or signage) along the MHPA boundaries to direct public access to appropriate locations and reduce domestic animal predation.

Future improvements/projects associated with the AMP are located almost entirely outside of the MHPA. However, some future development areas are near or adjacent to the MHPA. The public viewing platform in the northwest corner of the site is adjacent to the MHPA. This platform will be fenced to preclude public access into the MHPA. Other barriers are not needed, as the airport property is fenced and access to the airfield is restricted and controlled, with no public access to the MHPA.

Invasives: No invasive non-native plant species shall be introduced into areas adjacent to the MHPA.

Any landscaping or revegetation activities within or adjacent to the MHPA would not include invasive species. The LUAG cites the American Society of Landscape Architects Invasive Plant Guide (ASLA) as a reference for plant species considered invasive. This guide is a living document that is periodically updated by the San Diego Chapter of the ASLA. Plant species listed in the California Invasive Plant Council (Cal-IPC) inventory (Cal-IPC 2019) are also considered invasive. Any landscape, mitigation, and/or revegetation plans for the AMP shall not include species listed as invasive by ASLA or Cal-IPC.

Furthermore, the project would conform to the City's Landscape Guidelines prohibiting the planting of invasive species, as well as conforming to standard Best Management Practices (BMPs) during construction to help avoid the introduction of invasive plants into the AMP area and dispersal of invasive plants from the AMP area by equipment.

Brush Management: New residential development located adjacent to and topographically above the MHPA (e.g., along canyon edges) must be set back from slope edges to incorporate Zone 1 brush management areas on the development pad and outside of the MHPA. Zones 2 and 3 will be combined into one zone (Zone 2) and may be located in the MHPA upon granting of an easement to the City (or other acceptable agency) except where narrow wildlife corridors require it to be located outside of the MHPA.

The AMP is not a residential development, nor does it propose brush management adjacent to the MHPA.

Grading/Land Development: Manufactured slopes associated with site development shall be included within the development footprint for projects within or adjacent to the MHPA.

The AMP does not propose construction of manufactured slopes.



5.1.4 General Management Directives – MSCP Subarea Plan Section 1.5.2

The AMP has considered the general MSCP management directives (MSCP SAP Section 1.5.2) in the overall design, and as such, has incorporated components as applicable. Applicable directives are discussed below.

Mitigation

Proposed biological mitigation for the AMP will be conducted in accordance with the City ESL and Biology Guidelines and is discussed further in Section 8.0 below.

Restoration

All temporarily impacted areas will be restored to pre-project conditions, or a level of higher biological value, following completion of construction.

Public Access, Trails, and Recreation

The AMP would include a designated viewing area outside of the MHPA where members of the public could view airport operations and aircraft. This area would be in the northwest corner of the site, outside of a secure fence line. Planning details of this platform are being developed in coordination with the Kearny Mesa Community Plan Update effort. The AMP does not include public access or trails.

Litter/Trash and Materials Storage

The AMP would not produce litter, trash, or store hazardous materials in the MHPA. The AMP was designed to incorporate and adhere to the City LUAGs (see Section 5.1.3 of this report).

Adjacency Management Issues

Although some related issues are addressed above, overall, the AMP would address MHPA adjacency issues through implementation of the LUAGs (see Section 5.1.3 of this report).

Invasive Exotics Control and Removal

Introduction of non-native species into the MHPA is not expected to occur from implementation of future projects under the AMP. As discussed in Section 5.1.3 of this report (i.e., LUAGs), no invasive plants would be installed as part of the AMP, and invasive species observed would be targeted for removal from any mitigation area associated with implementation of the AMP. Lastly, the MHPA is monitored and managed by the City, and as such it is expected that management of invasive exotic species control and removal would be implemented by the City as part of standard MSCP monitoring and maintenance activities. As discussed above, the AMP is consistent with the general management directives of the MSCP SAP.

5.1.5 Area Specific Management Directives

There are no Area Specific Management Directives (ASMDs) for Urban Habitat Lands (MSCP SAP Section 1.5.7), where MYF is located. Therefore, the AMP would not conflict with this SAP section.



5.2 VERNAL POOL HABITAT CONSERVATION PLAN COMPLIANCE

5.2.1 Covered Airport Activities

Section 4.2.7 of the Vernal Pool Habitat Conservation Plan (City 2019) includes discussion of the Montgomery-Gibbs Executive Airport. Federal aviation regulations require the airport be maintained and operated in a manner that promotes the health, safety, and welfare of airport users, and the surrounding community. The following are covered airport activities in the VPHCP: maintenance and inspections of all existing safety areas, runway protection zones, critical areas, infields, runway and taxi shoulders, and storm water conveyances; maintenance, access, inspections, and operation of all existing equipment and infrastructure for public safety and normal airport operations; Capital Improvement Program rehabilitation and/or maintenance of existing airport infrastructure; and maintenance and inspection of existing public right of way access.

The AMP proposes construction of MALSR lighting within the MHPA and access to some of the lighting would be via existing roads. Use and maintenance of these existing roads is a covered airport activity. However, installation of MALSR lighting also would require construction of short reaches of new access road within the MHPA; these new access roads are not a covered activity under the VPHCP but are a compatible land use within the MHPA (as previously discussed in Section 5.1.1). Impacts associated with the MALSR lighting and new access roads are discussed in more detail in the following sections. The alternatives discussion in Section 6.4.1 provides information on why it is not feasible to move the project outside of the MHPA, due to the current airport location and the fact design is guided by FAA requirements.

5.2.2 Avoidance and Minimization Measures

Section 5.2.1 of the VPHCP identifies avoidance and minimization measures to address potential indirect impacts to vernal pools preserved under the VPHCP. Specific avoidance and minimization measures in Section 5.2.1 of the VPHCP and the project's compliance are summarized below:

Development adjacent to the MHPA shall slope away from avoided pools.

Project compliance: All grading will be designed to slope away from avoided pools to the extent feasible. If grading cannot slope away from pools (e.g., in the MHPA BLA deletion area) BMPs and/or other design features will be used to minimize impacts to vernal pools.

• Temporary fencing with silt fencing shall be required.

Project compliance: Construction limits would be demarcated with construction and silt fencing.

• Impacts from fugitive dust would be avoided and minimized through watering and other appropriate measures.



Project compliance: Routine dust control via watering truck would be implemented throughout ground disturbing activities.

• A qualified biologist shall be on site during construction activities to help ensure compliance with all mitigation requirements.

Project compliance: Biological monitoring by a qualified biologist would be implemented throughout project construction.

 Employees shall limit activities to the fenced project footprint, and the site shall be kept free of debris and food-related trash items.

Project compliance: A qualified biologist would be on site to monitor construction, including verification that construction activities do not exceed the authorized work limits and that good housekeeping is adhered to during construction.

• Equipment maintenance, staging, and disposal of fuel, oil coolant shall occur outside of wetlands, and within designated areas in the fenced project impact limits only.

Project compliance: Designated equipment staging/maintenance/fueling/ etc. shall be demarcated on the final construction plans. Additionally, a qualified biologist would monitor project compliance regarding equipment.

 Permanent fencing along the interface with development areas and/or other use other measures approved by the City will be installed to deter human and pet access.

Project compliance: The airport is fenced, and the airfield is not accessible to the public. Vernal pools in the airport are not currently fenced, however, projects implemented under the AMP will incorporate temporary and/or permanent fencing, or other means of demarcation, as necessary, where permissible by FAA safety regulations, to help protect vernal pools within and adjacent to the work area during construction.

• Topsoil shall be salvaged from impacted pools supporting listed fairy shrimp and be consistent with approved restoration plan requirements.

Project compliance: Future projects under the AMP that impact vernal pools occupied by San Diego fairy shrimp will prepare a restoration plan consistent with VPHCP requirements and will include salvage of soil from occupied pools to be impacted.

In summary, future projects implemented under the AMP would implement the avoidance and minimization measures identified in Section 5.2.1 of the City's VPHCP.

5.3 IMPACTS TO VERNAL POOL HABITAT CONSERVATION PLAN-COVERED SPECIES

Section 6.2.2 the VPHCP states two vernal pools occupied by San Diego mesa mint would not be conserved in the MHPA and could be lost due to FAA regulations for Runway Safety Areas. Mitigation is required for any direct impacts to San Diego mesa mint and must include the salvage of seed or plants



to preserve the population genetics. The AMP would impact a single pool supporting San Diego mesa mint and mitigation for this impact would include salvage of seed and/or plants and be consistent with the Mitigation Framework described in Section 5.3 of the VPHCP.

Regarding the take of San Diego fairy shrimp at the MYF airport, the VPHCP describes a total of 21 of 24 occupied pools that may potentially be directly impacted. Mitigation is required for any direct impacts to San Diego fairy shrimp. Where appropriate, the salvage of shrimp cysts may be required to minimize impacts and conserve the potentially unique genetics of impacted populations. The AMP would impact eight pools containing San Diego fairy shrimp and would mitigate in accordance with the Mitigation Framework described in Section 5.3 of the VPHCP.

A total of 48.3 acres of spreading navarretia critical habitat is present within the AMP area. No impacts would occur to spreading navarretia critical habitat from implementation of future projects under the AMP. The only AMP project features that may potentially occur in critical habitat for this species consist of 0.9 acre of temporary staging areas that overlap existing roads and other disturbed lands; no impact to critical habitat containing suitable habitat for the species would occur.

A total of 95.6 acres of San Diego fairy shrimp critical habitat is present within the AMP area. A total of 0.25 acre of permanent impacts would occur within critical habitat for this species, in lands adjacent to Taxiway A. This location, which supports Diegan coastal sage scrub, does not contain vernal pools or other habitats considered suitable for San Diego fairy shrimp. Temporary staging totaling 0.4 acre also may occur within existing roads and other disturbed lands in the limits of critical habitat for this species, which would not result in impacts to suitable habitat. No impact to critical habitat containing suitable habitat for the species would occur.

5.4 MINOR AMENDMENTS

Section 8.4.3 of the VPHCP outlines a process for MYF to impact vernal pools and VPHCP-covered species on the airport property. Minor amendments allow impacts to vernal pool habitats and/or species within the boundary of the airport property. Impacts to vernal pool habitat and VPHCP covered species may be approved when it is necessary to meet the health and safety requirements of the airport. A minor amendment would be prepared, if required, prior to individual AMP improvement implementation.

Changes such as BLAs or other airport actions may be considered for a minor amendment. A minor amendment is granted by the Wildlife Agencies (USFWS Field Office Supervisor and CDFW's Natural Community Conservation Planning Program Manager) after a consistency determination with the VPHCP. If the minor amendment is approved, the Wildlife Agencies will provide a Letter of Concurrence. If the minor amendment is not approved and the project is determined to be not in conformance, the project would not be able to rely on take coverage provided by the VPHCP.

6.0 IMPACT ANALYSIS

This section presents an analysis of anticipated impacts to biological resources associated with the AMP. Overall, cumulative impacts are also addressed. Refer to Section 7.0 for a discussion of impacts considered significant under the City's Significance Determination Thresholds (City 2022).



6.1 DIRECT IMPACTS

Permanent impacts were analyzed and quantified by overlaying the proposed boundaries of future projects associated with AMP improvements onto the baseline biological maps. Temporary impacts were determined by buffering each future project by 25 feet to provide sufficient area to allow for construction equipment to maneuver during buildout of each project and for placement of silt/ESA fencing. Staging areas to be used during construction for equipment and materials staging are also depicted.

6.1.1 Vegetation Communities

Of the 487.3 acres within the AMP area, approximately 64.4 acres (13 percent) would be directly impacted by future implementation of individual projects under the AMP (Table 3, AMP Impacts to Vegetation and Land Cover Types; Figures 10a, Project Impacts/ Vegetation and Sensitive Biological Resources - West, and 10b, Project Impacts/ Vegetation and Sensitive Biological Resources - East), including 19.8 acres of temporary impacts and 44.5 acres of permanent impacts. These impacts include 0.54 acre of wetland habitat (vernal pool; 0.07 acre temporary and 0.47 acre permanent) and 25.2 acres of sensitive uplands (i.e., Tier II, Tier IIIA, and Tier IIIB vegetation [2.4 acres temporary and 22.8 acres permanent]; Table 4, Summary of AMP Impacts to Sensitive Vegetation Communities).

Total impacts (temporary and permanent) to sensitive vegetation communities (wetlands and uplands) is 25.74 acres, composed of 0.54 acre of vernal pool, 0.5 acre of Diegan coastal sage scrub, less than 0.1 acre of baccharis scrub, less than 0.1 acre of chamise chaparral, and 24.7 acres of non-native grassland (Table 4). A total of 38.7 acres (8 percent) of impacts would occur in non-sensitive upland areas. Table 3 provides a breakdown of AMP impacts within and outside the MHPA and temporary vs. permanent. Table 4 provides a condensed summary of AMP impacts to sensitive vegetation communities.



Table 3
AMP IMPACTS TO VEGETATION AND LAND COVER TYPES (acres)¹

Vegetation Community or Land Cover Type		Existing Acreage	Temporary Impacts ³		Permanent Impacts		Total Impacts ⁴		TOTAL
			Inside MHPA	Outside MHPA	Inside MHPA	Outside MHPA	Inside MHPA	Outside MHPA	IMPACTS
Wetland									
Southern willow scrub (63320) ² – incl disturbed	Wetland	1.17							
Disturbed wetland (11200)	Wetland	0.46							
Vernal pool (44000) ⁵	Wetland	9.28	0.07	< 0.01	0.185	0.29	0.25	0.29	0.54
Wetla	nd Subtotal	10.91	0.07	< 0.01	0.18	0.29	0.25	0.29	0.54
Sensitive Upland									
Diegan coastal sage scrub (32500) – incl disturbed	II	97.8	0.3	0.1	0.1	< 0.1	0.4	0.1	0.5
Baccharis scrub (32530) – incl disturbed	П	11.2	< 0.1		< 0.1		< 0.1		< 0.1
Chamise chaparral (37200)	IIIA	5.4		< 0.1				< 0.1	< 0.1
Non-native grassland (42200)	IIIB	155.5	0.3	1.7	0.1	22.6	0.4	24.3	24.7
Sensitive Upla	nd Subtotal	269.9	0.6	1.8	0.2	22.6	0.8	24.4	25.2
Non-Sensitive Upland			•	•	'				
Eucalyptus woodland (79100)	IV	0.5		< 0.1				< 0.1	< 0.1
Disturbed habitat (11300)	IV	48.3	0.1	2.6	0.2	8.7	0.3	11.3	11.6
Non-native vegetation (11000)		0.2							
Developed (12000)		157.5	0.4	14.3	< 0.1	12.4	0.4	26.7	27.1
Non-Sensitive Upla	nd Subtotal	206.5	0.5	16.9	0.2	21.1	0.7	38.0	38.7
	TOTAL	487.3	1.17	18.70	0.58	43.99	1.75	62.69	64.44

¹ Totals reflect rounding (0.1 for uplands and 0.001 for wetlands). If no impacts, shown as "--".

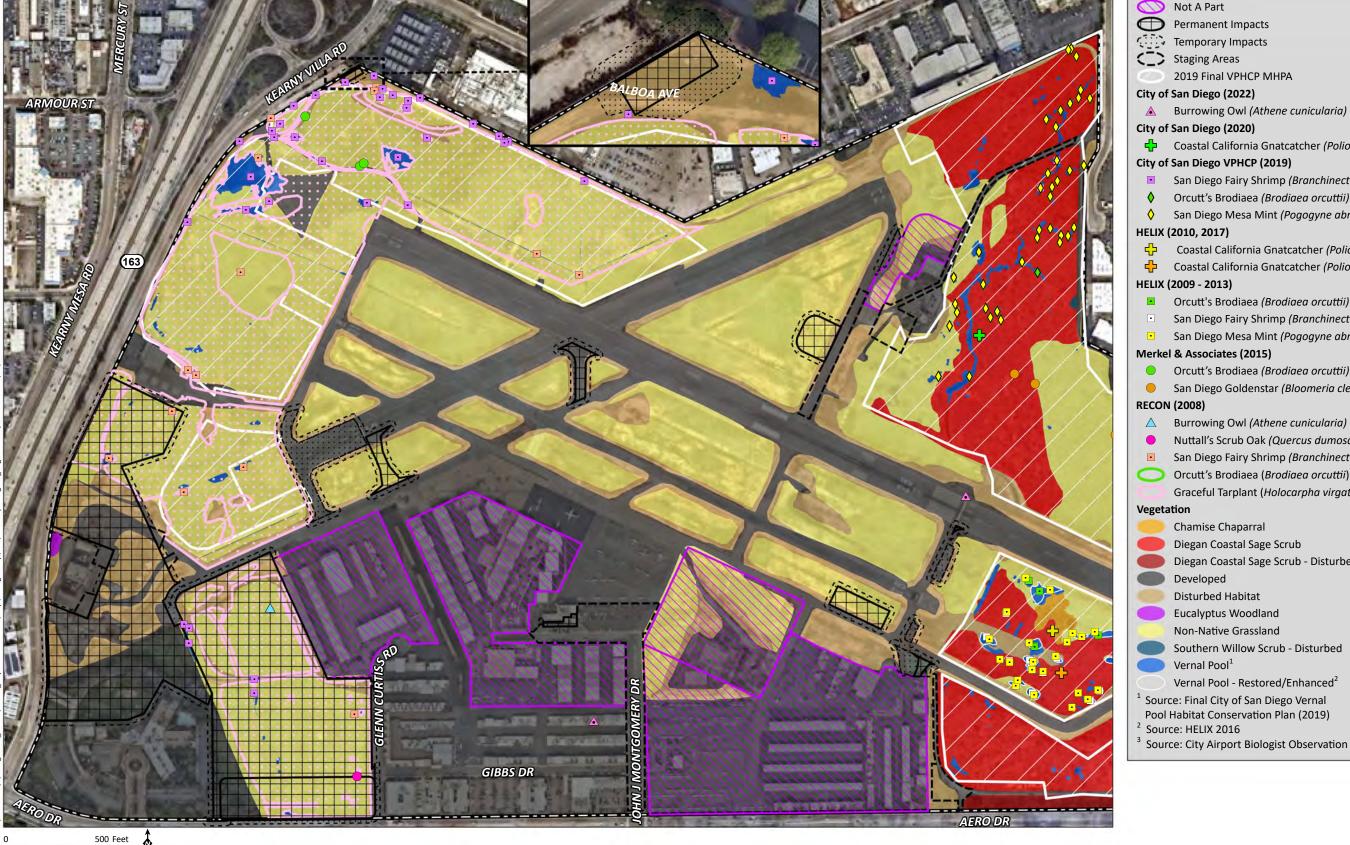


² Codes refer to Oberbauer 2008.

³ Includes temporary construction impacts and construction staging areas. Refer to Table 4 for a summary of project impacts to sensitive vegetation communities.

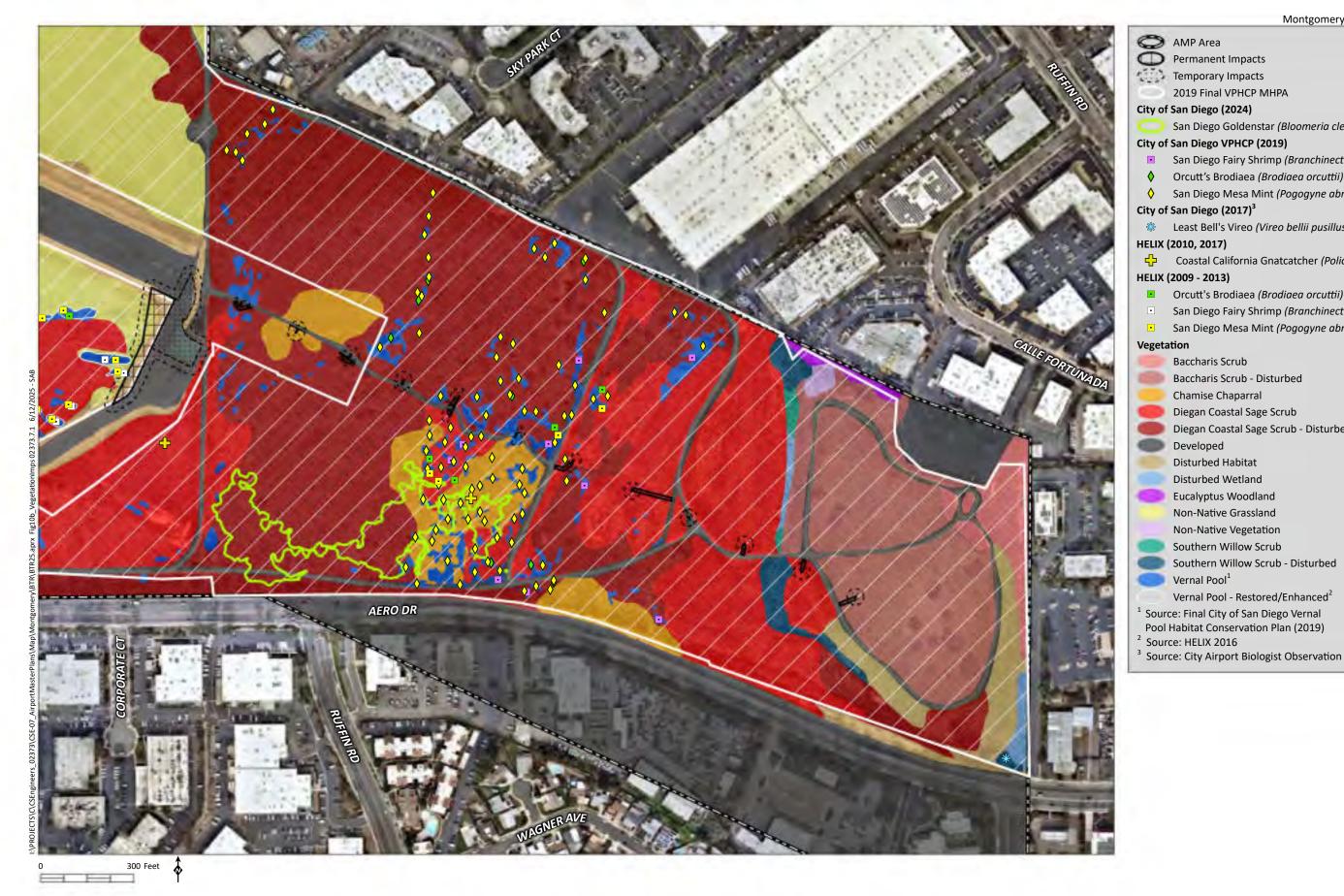
⁴ Permanent and temporary impacts combined.

⁵ If a vernal pool is partially impacted the entire pool is counted as impacted herein.



Source: Aerial (SanGIS, 2023).





Source: Aerial (SanGIS, 2023).

Non-Native Grassland Non-Native Vegetation Southern Willow Scrub

Vernal Pool¹

Southern Willow Scrub - Disturbed

Vernal Pool - Restored/Enhanced²

Table 4	
SUMMARY OF AMP IMPACTS TO SENSITIVE VEGETATION COMMUNITIES (acre	s)1

Vegetation Community	Tier	Existing	Imp	acts	TOTAL
		Acreage	Temporary ³	Permanent	IMPACTS ⁴
Wetland					
Southern willow scrub (63320) ²	Wetland	1.17			
Disturbed wetland (11200)	Wetland	0.46			
Vernal pool (44000)	Wetland	9.28	0.07	0.47	0.54
Wetlar	nd Subtotal	10.91	0.07	0.47	0.54
Sensitive Upland					
Diegan coastal sage scrub	II	97.8	0.4	0.1	0.5
(32500) – including disturbed					
Baccharis scrub (32530)	II	11.2	< 0.1	< 0.1	< 0.1
Chamise chaparral (37200)	IIIA	5.4	< 0.1		< 0.1
Non-native grassland (42200)	IIIB	155.5	2.05	22.7	24.7
Sensitive Uplai	nd Subtotal	269.9	2.4	22.8	25.2
	TOTAL	280.81	2.47	23.27	25.74

¹ Totals reflect rounding (0.1 for uplands and 0.001 for wetlands). If no impacts, shown as "--".

6.1.2 Sensitive Plant Species

Implementation of future projects under the AMP would result in direct impacts to three sensitive plant species: San Diego mesa mint, graceful tarplant, and Nuttall's scrub oak (Figures 10a-10b), and potential impacts to Orcutt's brodiaea and San Diego goldenstar. Populations of graceful tarplant within a 19.8-acre area of non-native grassland would be impacted in the west and southwestern portion of the AMP area. Five individuals of Nuttall's scrub oak would be directly impacted in the southwest portion of the AMP area. San Diego mesa mint occurring in a single vernal pool would be impacted due to the new hold bay at Taxiway A to the west (associated with the Future Runway 28R Threshold). Currently there are no Orcutt's brodiaea or San Diego goldenstar observations within the AMP impact area. However, these species do occur on site and there is the potential for impacts to these species from construction of the MALSR lighting. Other sensitive plant species known from or with high potential to occur in the AMP area are expected to be avoided by project activities.

6.1.3 Sensitive Wildlife Species

Implementation of future projects under the AMP would result in direct impacts to habitats suitable for sensitive wildlife species. These habitats include vernal pool, Diegan coastal sage scrub, and non-native grassland. Such impacts would be a result of vegetation removal associated with clearing, grubbing, and grading for the AMP, which could cause loss of habitat and/or direct injury or mortality to individuals. Future surveys will be performed as individual AMP improvement projects are implemented in accordance with mitigation measure BIO-1.



² Codes refer to Oberbauer 2008.

Includes temporary construction impacts and construction staging areas. Staging would not occur within any sensitive habitat apart from non-native grassland.

⁴ Includes temporary and permanent impacts combined.

⁵ Temporary impacts within non-native grassland include 0.4 acre of staging areas and 1.6 acres of temporary disturbance during construction.

Implementation of the AMP would impact locations where the following three sensitive animal species have been documented on site: San Diego fairy shrimp, coastal California gnatcatcher, and burrowing owl; additional information is provided below.

Impacts would occur in eight locations where San Diego fairy shrimp have been documented on site, consisting of seven locations outside the MHPA in the southwestern portion of the site, and one location in the MHPA in the eastern portion of the site. The impacted pool in the MHPA may be removed from the MHPA by a BLA, as discussed in Section 6.1.6. Additional San Diego fairy shrimp individuals could be impacted as well if the species is found to occupy more locations on site in the future. Surveys would be completed prior to AMP project implementation as outlined in mitigation measure BIO-1.

Impacts would occur to Diegan coastal sage scrub where coastal California gnatcatcher has been observed in the eastern portion of the AMP area. Impacts to suitable habitat total 0.5 acre, composed of 0.1 acre of permanent impact to Diegan coastal sage scrub, less than 0.1 acre permanent impact to baccharis scrub, 0.4 acre of temporary impact to Diegan coastal sage scrub, and less than 0.1 acre temporary impact to baccharis scrub.

Impacts would occur to the single location where burrowing owl was documented on site in 2007. As stated in Section 4.3.2, wintering individuals of this species also were observed on site in 2022, 2017-2018 and 2018-2019, as well as being detected during wildlife hazard assessment surveys in 2018-2019. No other owls have been observed on site during various biological surveys conducted in 1994, 1996, 2009, 2010, 2011, 2012, 2013, 2016, and 2017, and although the species has potential to occur on site, it is not currently known to occupy the site/breed on site. According to mitigation measures BIO-6 and BIO-7 burrowing owl surveys will be completed prior to the implementation of individual improvements as part of the AMP.

Project impacts to sensitive habitats also could impact the following 13 sensitive animal species documented or with high or moderate potential to occur on site: Crotch's bumble bee, orange-throated whiptail, coast horned lizard, Coronado skink, western spadefoot, Cooper's hawk, sharp-shinned hawk, southern California rufous-crowned sparrow, northern harrier, white-tailed kite, horned lark, loggerhead shrike, and San Diego desert woodrat.

The project would not impact habitat suitable for least Bell's vireo and this species is not expected to breed on site given the limited acreage of potentially suitable habitat (southern willow scrub), lack of connectivity to more extensive riparian resources, and overall distance from other potentially suitable habitat off site.

6.1.4 Jurisdictional Resources

Implementation of future projects under the AMP would result in direct impacts to vernal pools and potential non-wetland waters/streambed (Figures 11a, *Project Impacts/ Potential Jurisdictional Waters and Wetlands* and 1b, *Project Impacts/ Potential Jurisdictional Waters and Wetlands* – *East Side/MALSR Detail Sheet*). Vernal pool impacts total 0.541 acre, consisting of 0.47 acre of permanent impact and 0.073 acre of temporary impact. Based on the 2008 delineation by Recon, approximately 133 linear feet of non-wetland waters/streambed in the western portion of the AMP area would be impacted. Acreage for this area was not available but is expected to be minimal (less than 0.05 acre). An additional 1,704 linear feet of potential non-wetland waters/streambed/swales identified by the City's Airport Biologist could also be impacted; these features have not been formally delineated. An updated jurisdictional











delineation would determine the acreage of impact to non-vernal pool waters at the time of future project implementation. Vernal pools may be considered wetland waters of the U.S. by the USACE/RWQCB and wetlands by the City. The non-wetland waters may be considered non-wetland waters of the U.S. by the USACE/RWQCB and stream channel by CDFW.

Vernal pool impacts would occur primarily in the southwestern portion of the site, in areas supporting lower quality pools that are outside of the MHPA. Two pools within the MHPA in the eastern portion of the site would be impacted: one impact would occur from installation of the MALSR lighting and the other from the new hold bay at Taxiway A. The pool to be impacted by the new hold bay at Taxiway A was proposed as a mitigation pool (HELIX 2008) which is part of a larger restoration project undertaken at the airport for previous project impacts. However, this pool was not used as mitigation as it was never signed off and the airport still has outstanding mitigation needs for that previous impact. This pool totals 0.029 acre, of which 0.004 acre would be directly impacted, and the remaining 0.025 acre would be indirectly impacted. The entire pool area is considered permanently impacted herein.

Impacts to the vernal pools and non-wetland waters may require issuance of a CWA Section 404 permit from the USACE, a CWA Section 401 Water Quality Certification or State Porter-Cologne Water Quality Control Act WDRs from the RWQCB, and/or a Streambed Alteration Agreement from CDFW. Only the USACE, RWQCB, and CDFW can make a final determination of jurisdictional boundaries.

6.1.5 Wildlife Corridors

As discussed previously, there are no regionally identified wildlife corridors or habitat linkages in the AMP area, and implementation of the AMP would not substantially alter current baseline conditions for local wildlife movement on site. No impact would occur to wildlife corridors or linkages.

6.1.6 Regional Conservation Plan Compliance

As noted in Section 5.1.1, the project proposes a new hold bay at Taxiway A in the MHPA, which is not a compatible use. These improvements for the new hold bay at Taxiway A would be to meet current FAA design standards. Alternative designs would result in increased impacts within MHPA areas (See Section 6.4.1 for a discussion of project alternatives).

These improvements would result in 0.18 acre of temporary impacts and 0.33 acre of permanent impacts within the MHPA. These areas are immediately adjacent to existing Taxiway A. Disturbed habitat comprises most of this area, although non-native grassland, Diegan coastal sage scrub, and vernal pool also are present in the MHPA impact area (Table 5, *Proposed MHPA Impacts*).



Table 5 PROPOSED MHPA IMPACTS

Baseline Habitat	Tier	Impact (acres) ¹
Vernal pool	Wetland	0.004
Diegan coastal sage scrub	II	0.01
Non-native grassland	IIIB	0.25
Disturbed habitat	IV	0.24
Developed		0.01
	TOTAL	0.51 ²

- Totals reflect rounding to the nearest thousandth acre for vernal pools and hundredth acre for other habitats.
- Deletion area includes 0.33 acre of permanently impacted land, and 0.18 acre of temporarily impacted land.

In accordance with MM BIO-9, a BLA may be required to remove this small portion of the MHPA in the AMP development area that is proposed for development. As part of the BLA, an area of equivalent or higher biological value would be added adjacent to the current MHPA boundary. The MHPA on site currently exists primarily on the western, northern, and eastern portions of the AMP area (Figure 4). The central and southern portions of the AMP area are largely outside of the MHPA.

In order for a BLA to be approved, six findings must be made in accordance with Section 5.4.2 of the MSCP and Section 1.1.1 of the MSCP SAP (County 1998 and City 1997a, respectively). These six findings include:

- 1. Effects on significantly and sufficiently conserved habitats (i.e., the exchange maintains or improves the conservation, configuration, or status of significantly and sufficiently conserved habitats, as defined in Section 4.4.2 [of the MSCP Plan]).
- 2. Effects on covered species (i.e., the exchange maintains or increases the conservation of covered species).
- 3. Effects on habitat linkages and function of preserve areas (i.e., the exchange maintains or improves any habitat linkages or wildlife corridors).
- 4. Effects on preserve configuration and management (i.e., the exchange results in similar or improved management efficiency and/or protection of biological resources).
- 5. Effects on ecotones or other conditions affecting species diversity (i.e., the exchange maintains topographic and structural diversity and habitat interfaces of the preserve).
- 6. Effects on species of concern not on the covered species list (i.e., the exchange does not significantly increase the likelihood that an uncovered species would meet the criteria for listing under either the federal or state Endangered Species Acts).

In addition, to complete a BLA the project proponent must have concurrence from the Wildlife Agencies.

Because it cannot be guaranteed at this point in the planning process whether the BLA would be approved by the Wildlife Agencies, impacts associated with the new hold bay at Taxiway A in the MHPA are considered significant and unavoidable.



A BLA is not required for airport maintenance activities occurring within the existing roadways crossing the eastern portion of the MHPA, as maintenance is a covered airport activity for MYF in the VPHCP (refer to Section 4.27 of the VPHCP). A BLA also is not required for AMP-related impacts associated with construction of MALSR lighting and associated access roads within the MHPA in the eastern portion of the AMP area, as these facilities are compatible land uses within the MHPA (see Section 5.1.1), and the proposed MALSR lighting was previously identified as an element of the AMP during preparation of the VPHCP and is depicted on Figure 8-1 of the VPHCP.

6.2 INDIRECT IMPACTS

Indirect impacts can be short-term or long-term and include areas and activities adjacent to the AMP area (i.e., edge effects). Examples of short-term indirect impacts include construction-related noises, dust, increased human presence, and hydrology modifications. Long-term indirect impacts primarily result from anthropogenic disturbances by humans such as noise, lighting, domesticated animals, spread of non-native ornamental and weedy plant species, and urban run-off (including potentially toxic or hazardous chemicals).

Implementation of the AMP could result in indirect impacts to biological resources in the MHPA due to construction of additional access roads and MALSR lighting.

Indirect impacts also could result from construction-related noise affecting sensitive bird species during the nesting season, including nesting coastal California gnatcatcher, burrowing owl, and northern harrier.

Implementation of standard construction BMPs for erosion and sediment control (e.g., preservation of existing vegetation, mulching, hydroseeding, soil binding, silt fencing, fiber rolls, gravel bag berms, sweeping, sandbag barriers, storm drain inlet protection), conformance with State Construction General Permit requirements, and preparation of Storm Water Quality Management Plans, as applicable, would address potential indirect impacts resulting from dust, hydrology modifications, and stormwater runoff.

6.3 CUMULATIVE IMPACTS

Adverse cumulative impacts are not expected from implementation of the AMP. Projects which adhere to the MSCP SAP and VPHCP are not expected to have significant cumulative impacts to resources regulated and covered by these plans. While the project would result in cumulative impacts to vernal pools, these impacts would be offset through required mitigation and conformance with VPHCP requirements. Other cumulative impacts are not expected from implementation of the AMP, as the project would comply with the MSCP SAP (including Biology Guidelines and ESL Regulations), the MHPA LUAG requirements, and the VPHCP avoidance/minimization measures.

6.4 CITY ENVIRONMENTALLY SENSITIVE LANDS WETLAND DEVIATION

The City Biology Guidelines (City 2018) state that impacts to wetlands can be approved but require a deviation from ESL Regulations. Outside the Coastal Overlay Zone, requests to deviate from the ESL wetland regulations may be considered only if the proposed development falls within one of the three options as defined by City of San Diego Land Development Code (LDC) Section 143.0510 (d): (1) Essential Public Projects Option, (2) Economic Viability Option, or (3) Biologically Superior Option.



It is not feasible for the AMP to completely avoid impacts to City wetlands (approximately 0.54 acre of wetland impacts are anticipated to occur from implementation of future projects associated with the AMP); thus, the AMP would require a deviation from ESL Regulations pertaining to wetlands.

Per Section 8.4.3 of the VPHCP, wetland deviation is not required for wetland impacts outside the MHPA, thus, the 0.29 acre of vernal pool impacts outside the MHPA do not require a deviation. A wetland deviation is required only for the 0.25 acre of vernal pool impacts within the MHPA, of which 0.18 acre is permanent impact and 0.07 acre is temporary impact.

6.4.1 Essential Public Project Option

The AMP falls under the Essential Public Projects (EPP) deviation option. Deviation from ESL regulations on wetlands impacts under the EPP option must include a project design "where no feasible alternative exists that would avoid impacts to wetlands." Further, project classification as an EPP shall include one of the following four criteria: (1) be identified in an adopted land use plan or implementing document and identified on the EPP List adopted by Resolution No. [R-311507] as Appendix III to the City Biology Guidelines, or (2) be linear infrastructure, including but not limited to major roads and land use plan circulation element roads and facilities, or (3) be maintenance of existing public infrastructure, or (4) be a state or federally mandated project.

Impacts to 0.25 acre (0.18 acre permanent impact and 0.071 acre temporary impact) of wetlands (vernal pools) within the MHPA that would result from the AMP are associated with construction of additional pavement for the new hold bay at Taxiway A (impacts to a 0.029-acre vernal pool, composed of 0.004 acre of direct impact and 0.025 indirect impact considered a permanent impact herein) and installation of MALSR lighting (0.021 acre of vernal pool impact). It should be noted that in Section 6.1.1 of the report, for any partial impacts to vernal pools, the entire pool is considered impacted, although the actual project footprint of each project discussed here is much smaller. As shown in Figure 5, the AMP would implement partial demolition of the existing hold bay, and new pavement would be constructed to expand the runup area and bring the taxiway geometry to current FAA design criteria and to increase hold bay capacity. The proposed hold bay will improve the safety of the airfield by allowing aircraft to bypass other aircraft that are performing run-ups or waiting for clearance from air traffic control. As previously discussed, MALSR lighting is an approach lighting system that assists aircraft with runway alignment during landing and is required by the FAA for airport safety. No other AMP components would impact City wetlands within the MHPA.

The proposed hold bay at Taxiway A is mandated by the FAA as this location has been identified as an area of high incidence of runway incursions at MYF, and MALSR lighting is FAA-mandated safety lighting, thus meeting the definition of a federally mandated project, and falling under the EPP option for wetland deviation.

No Project Alternative

Under the No Project Alternative, no action would be taken within MHPA portions of the project site. Under this alternative, the 0.25 acre (0.18 acre permanent impact and 0.07 acre temporary impact) of vernal pool within the MHPA to be impacted by the AMP would not occur and the associated airport improvements would not be completed. The goals of the AMP pertaining to this area would not be achieved.



The planned hold bay at Taxiway A and installation of additional MALSR lighting provides greater safety, would reduce the incidence of runway incursions, and is needed to accommodate the increasing demand for flights in the region. Without the proposed hold bay at Taxiway A and MALSR lighting, the needs of the community would be underserved, and the necessary infrastructure identified in the AMP would not be met. Thus, a No Project Alternative is not feasible.

Wetlands Avoidance Alternative

Under a Wetlands Avoidance Alternative, the hold bay at Taxiway A would not be constructed as the associated impacts have already been reduced to the maximum extent feasible. Reconfiguring the hold bay at Taxiway A to avoid permanent direct impacts to 0.004 acre of vernal pool, thereby avoiding the 0.029-acre pool altogether, would result in a taxiway smaller than needed to meet the FAA requirements for the expansion and would not be wide enough to reduce the incidence of runway incursions. It should be noted that in Section 6.1.1 of the report, for any partial impacts to vernal pools, the entire pool was considered impacted, although the actual project footprint of each project discussed here is much smaller.

Under a Wetlands Avoidance Alternative, the MALSR lighting would not be installed, as the lighting requires specific FAA-mandated spacing, and cannot be reconfigured from the current layout. As such, avoidance of the 0.021 acre of impact (0.001 acre permanent impact and 0.0195 acre temporary impact) is not feasible, as it would require reconfiguration of the MALSR lighting in a manner that would not meet FAA requirements for this component of the AMP.

For the reasons outlined above, the Wetlands Avoidance Alternative was determined to be infeasible.

Proposed Montgomery-Gibbs Executive Airport Master Plan Alternative

Under this alternative, expansion of the paved portion of Taxiway A and construction and relocation of additional MALSR lighting would be implemented along with the other AMP components (i.e., project components as described in Sections 1.3 and 1.4).

Minimization of impacts to wetlands has been undertaken and the paved area along Taxiway A has been reduced by 15 feet to avoid vernal pools to the greatest extent feasible, resulting in complete avoidance of one pool that would have otherwise been impacted, and partial avoidance of a 0.029-acre pool. A total of 0.025 acre (86 percent) of the partially avoided vernal pool adjacent to Taxiway A would remain in place, with only a small portion (0.004 acre [14 percent]) of the pool impacted by future projects under the AMP³. Minimization of impacts to vernal pools from construction of MALSR lighting and associated access was conducted by utilizing existing access roads to the extent feasible. After implementing these avoidance and minimization measures, impacts to 0.051 acre (0.030 acre of permanent impact and 0.021 acre of temporary impact) of vernal pool wetland remain unavoidable; this is the Project Alternative that both meets the FAA requirements for the AMP, as well as having the least impacts to wetlands within the MHPA on site. It should be noted that in Section 6.1.1 of the report, for any partial impacts to vernal pools, the entire pool is considered impacted, although the actual project footprint of each project discussed here is much smaller.

³ Although 0.025 acre of the overall 0.029-acre pool next to Taxiway A would not be directly impacted, the entire pool acreage was included in the impact acreage herein to account for potential losses in pool functions from adjacent development, smaller size, and reduced buffer.



7.0 THRESHOLDS AND DETERMINATION OF SIGNIFICANCE

The following guidance (Appendix I, City Biology Guidelines 2018) is used to determine potential significance of impacts on biological resources pursuant to the City's Significance Determination Thresholds (City 2022). A project would result in a significant or potentially significant biological resource impact if it would result in:

- A substantial adverse impact, either directly or through habitat modifications, on any species
 identified as a candidate, sensitive, or special status species in the MSCP, VPHCP, or other local
 or regional plans, policies or regulations, or by the CDFW or USFWS.
- A substantial adverse impact on any Tier I, Tier II, Tier IIIA, or Tier IIIB habitats as identified in the City's Biology Guidelines of the Land Development manual or other sensitive natural community identified in local or regional plans, policies, regulations, or considered sensitive by CDFW or USFWS.
- 3. A substantial adverse impact on wetlands (including, but not limited to, marsh, vernal pool, riparian, etc.) through direct removal, filling, hydrological interruption, or other means.
- 4. Interfering substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, including linkages identified in the MSCP Plan, VPHCP, or impede the use of native wildlife nursery sites.
- A conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan, either within the MSCP or VPHCP plan area or in the surrounding region.
- 6. Introducing land use within an area adjacent to the MHPA that would result in adverse edge effects.
- 7. A conflict with any local policies or ordinances protecting biological resources.
- 8. An introduction of invasive species of plants into a natural open space area.

Proposed impacts resulting from implementation of the AMP are evaluated in terms of significance and the corresponding determinations are provided below.

7.1 SIGNIFICANCE DETERMINATIONS

The AMP would result in significant or potentially significant impacts under guidance criteria 1, 2, and 3. Further discussion is provided below.



7.1.1 Sensitive Species Impacts – Guidance Criterion 1

Sensitive Plant Species

The proposed AMP would result in direct impacts to San Diego mesa mint, graceful tarplant, and Nuttall's scrub oak. Currently there are no Orcutt's brodiaea or San Diego goldenstar observations within the AMP impact area. However, these species do occur on site and there is the potential for impacts to these species from construction of the MALSR lighting.

Generally, impacts to plant species with a CNPS CRPR of 1 or 2 are considered potentially significant. CRPR 3 and 4 species are relatively widespread and impacts to such species would not substantially reduce their populations in the region and are not significant. Graceful tarplant is a CRPR 4.2 species and is widespread in the western portion of the site where it has been documented within a 72.5-acre area. A total of 72 percent (52 acres) of the area known to support this species within the AMP area would be avoided by implementation of the AMP. Therefore, impacts to this species are not considered significant.

Although a CRPR 1B.2 species, Nuttall's scrub oak is widely distributed within the City, with many of the records concentrated in the Los Peñasquitos Canyon Preserve located north of the AMP area (CalFlora 2019). Proposed impacts to five Nuttall's scrub oak individuals are considered less than significant because of the low number of individuals affected, and such impacts would not jeopardize the status of the species in the region or result in future elevated listing of the species. Therefore, impacts to this small number of Nuttall's scrub oak individuals are not significant.

San Diego mesa mint is a federally and state endangered species and City narrow endemic. It is also a CRPR List 1B.1 species and is a covered species under the VPHCP. The VPHCP states that two vernal pools containing San Diego mesa mint may be impacted on MYF due to FAA regulations. Although the impact footprint has been minimized such that the AMP would impact only a single vernal pool supporting this species, these impacts are considered significant in accordance with the City's Significance Determination Thresholds (City 2022), which states that impacts to state or federally listed species and narrow endemics should be considered significant. The VPHCP requires mitigation for any direct impacts to San Diego mesa mint, including salvage of seed or plants to preserve the population genetics. Such measures will be incorporated into the mitigation requirements for this species. Implementation of Mitigation Measures BIO-1A, BIO-2, BIO-3A, BIO-3B, and BIO-9 would reduce impacts to San Diego mesa mint to below a level of significance.

Orcutt's brodiaea is a CRPR 1B.1 species and is a covered species under the City's MSCP. While no known observations of this species overlap with the future projects to be implemented under the AMP, there is potential that this species could be impacted by construction of the MALSR lighting due to nearby known occurrences on MYF and the presence of suitable habitat. The MALSR lighting impact footprint consists of small, discrete areas spaced apart at regular intervals in the eastern portion of the site, and it is expected that any potential impacts to Orcutt's brodiaea would be to small numbers of individuals. These impacts would be less than significant given the small areas affected, combined with avoidance of the known population of hundreds of individuals west of the runway and other scattered observations near onsite vernal pools. Potential impacts to small numbers of individuals would not jeopardize the status of the species in the region or result in future elevated listing of the species.



San Diego goldenstar is a CRPR 1B.1 species and is a covered species under the City's MSCP. While no known observations of this species overlap with the future projects to be implemented under the AMP, there is potential that this species could be impacted by construction of the MALSR lighting due to its known occurrence in other parts of MYF and the presence of suitable habitat. The MALSR lighting impact footprint consists of small, discrete areas spaced apart at regular intervals in the eastern portion of the site, and it is expected that any potential impacts to San Diego goldenstar would be to small numbers of individuals. These impacts would be less than significant given the small areas affected, combined with avoidance of the known populations in the MHPA in the northeastern portion of MYF and conservation of major populations of this species elsewhere in the MHPA. Potential impacts to small numbers of individuals would not jeopardize the status of the species in the region or result in future elevated listing of the species.

Sensitive Animal Species

Implementation of future projects under the AMP would result in direct impacts to habitats occupied or suitable for San Diego fairy shrimp, coastal California gnatcatcher, burrowing owl, orange-throated whiptail, coast horned lizard, Coronado skink, western spadefoot, Cooper's hawk, sharp-shinned hawk, southern California rufous-crowned sparrow, northern harrier, white-tailed kite, horned lark, loggerhead shrike, and San Diego desert woodrat.

Impacts to coastal California gnatcatcher from the permanent removal of 0.1 acre of combined Diegan coastal sage scrub and baccharis scrub and temporary impacts to 0.5 acre of combined Diegan coastal sage scrub and baccharis scrub are considered significant, as this species is federally listed and impacts to federally or state listed species and narrow endemics are considered significant under the City's CEQA significance thresholds (City 2022).

Impacts to San Diego fairy shrimp from filling of occupied vernal pools would be considered significant, as this species is federally listed.

Direct impacts to burrowing owl are not anticipated as this species is not known to occupy the site and the single documented occurrence of this species during the breeding season was in 2007. Other observations of this species have occurred during the wintering season. However, since suitable habitat is present and the species has potential to occupy the site in the future, mitigation measures will be incorporated to ensure significant impacts to this species are avoided.

Potential impacts to the following MSCP-covered species: southern California rufous-crowned sparrow, northern harrier, Cooper's hawk, coast horned lizard, and orange-throated whiptail from removal of 25.2 acres (22.8 acres permanent and 2.4 acres temporary) of sensitive upland habitats that may support these species are not considered significant due to the adequate species coverage and suitable habitats protected under the MSCP within the MHPA. A total of 24.4 acres (97 percent) of the AMP impacts to sensitive upland habitats would occur outside the MHPA.

Potential impacts to Coronado skink, loggerhead shrike, horned lark, white-tailed kite, sharp-shinned hawk, and San Diego desert woodrat (species not covered by the MSCP) by removal of 25.2 acres (22.8 acres permanent and 2.4 acres temporary) of sensitive upland habitats would be less than significant due to the small number of individuals potentially affected, the relatively small amount of habitat impacted, and the remaining suitable habitat in the AMP area, MHPA, and adjacent conserved



lands. Also, the implementation of mitigation measure BIO-9 would help avoid impacts to nesting bird species including loggerhead shrike, horned lark, white-tailed kite, and sharp-shinned hawk.

Potential impacts to western spadefoot from project effects on 0.54 acre of vernal pool are not considered significant given the extensive conservation of high-quality vernal pools within the MHPA on site. Most pool impacts associated with the AMP are to lower quality pools outside the MHPA in the western portion of the site, which are within areas that are regularly mowed and maintained as part of standard airport operations.

As stated previously in Section 4.3.2, Crotch's bumble bee has low potential to use the airfield due to limited presence of suitable floral resources combined with regular mowing of these areas, which removes the limited nectar resources that may be present. Regular mowing of the airfield is required for airport operation safety. This species has a moderate potential to occur in MHPA lands within the AMP area, as well as in adjacent native scrub habitat outside the MHPA in the southeastern part of the AMP area. Significant impacts to Crotch's bumble bee could occur if this species were directly impacted from project implementation. Construction of the MALSR lighting in the southeastern portion of the AMP area is anticipated to be the only AMP component with moderate potential to impact this species. Individual projects will conduct habitat assessments and surveys, as applicable, on a case-by-case basis. Implementation of mitigation measure BIO-8 will reduce these impacts to less than significant.

Significant impacts also could occur if nesting birds, including raptors, were directly impacted by project implementation.

Potentially significant indirect impacts to sensitive species resulting from lighting would be avoided through the following project design features: lighting within the proposed project footprint adjacent to undeveloped habitat would be of the lowest illumination allowed for human safety, selectively placed, shielded, and directed away from these areas to the extent allowable under FAA regulations. Furthermore, lighting is already present on the airport site and additional lighting is not anticipated to have a significant impact. With implementation of these features, no significant impact from lighting would occur.

Short-term noise effects during construction could result in significant impacts to coastal California gnatcatcher nesting in the MHPA, nesting burrowing owls, or nesting northern harrier. Conformance with City Biology Guidelines requiring seasonal restrictions on construction where active nests of gnatcatcher and burrowing owl may be affected, as well as nest avoidance setbacks for California gnatcatcher, burrowing owl, and northern harrier, would reduce this impact to less than significant.

Implementation of Mitigation Measures BIO-1A, BIO-1B, BIO-1D, BIO-2, BIO-4A through 4D, BIO-5A, BIO-5B, BIO-6A through 6D, BIO-7, BIO-8, and BIO-9 would reduce impacts to sensitive wildlife species to below a level of significance.

7.1.2 Sensitive Habitats Impacts – Guidance Criterion 2

Implementation of the AMP would result in direct impacts to 25.7 acres of sensitive habitats, including 0.54 acre of wetlands and 25.2 acres of uplands (i.e., Tier II, Tier IIIA, and Tier IIIB vegetation); these impacts would be considered significant and would require mitigation at ratios prescribed by the City's Biology Guidelines.



Significant impacts also could occur if the project were to impact lands outside of the approved impact footprint, either directly through habitat removal, or indirectly through runoff, sedimentation, fugitive dust, or other edge effects.

Implementation of Mitigation Measures BIO-1A, BIO-1B, BIO-1C, BIO-1D, and BIO-9 would reduce these impacts to below a level of significance.

7.1.3 Wetland Impacts - Guidance Criterion 3

Implementation of future projects under the AMP would impact 0.54 acre of vernal pools; such impacts are considered significant. Permits from the applicable regulatory agencies would be required if the impacted vernal pools are determined to be jurisdictional.

Implementation of Mitigation Measures BIO-1A and BIO-4C would reduce this impact to less than significant.

7.1.4 Wildlife Movement - Guidance Criterion 4

As discussed previously, there are no regionally identified wildlife corridors or habitat linkages in the AMP area, and the project would not create any barriers to wildlife movement. No impact would occur to wildlife corridors or linkages.

7.1.5 Adopted Plans – Guidance Criterion 5

Projects in the City are reviewed for compliance with the VPHCP and MSCP SAP guidelines and policies. As discussed in Section 6.1.6 of this document, the AMP would involve the development of incompatible uses with the MHPA, and would therefore conflict with the VPHCP and MSCP SAP. Mitigation Measure BIO-9 would be required to address this impact; however, because it cannot be guaranteed that this measure would reduce impacts to below a level of significance, impacts are considered significant and unavoidable.

7.1.6 Multi-habitat Planning Area Land Use Adjacency – Guidance Criterion 6

The City's MSCP SAP addresses the impacts to preserve areas from adjacent development in Section 1.4.3, Land Use Adjacency Guidelines (City 1997a). The LUAGs provide requirements for land uses adjacent to the habitat preserve in order to minimize indirect impacts to the sensitive resources contained therein.

The AMP development areas are partially located within and adjacent to the MHPA. Section 5.1.3 outlines the AMP's compliance with the LUAGs. No significant impact would occur.

7.1.7 Local Policies or Ordinances – Guidance Criterion 7

The AMP is consistent with the City's Land Development Code Biology Guidelines; no conflict with local policies or ordinances protecting biological resources would occur.



7.1.8 Invasive Species – Guidance Criterion 8

The AMP would not result in the introduction of invasive species of plants into a natural open space area. Any landscaping or revegetation associated with the AMP would not include plant species identified as invasive by Cal-IPC (2019).

7.2 AREA SPECIFIC MANAGEMENT DIRECTIVES

This section presents the conditions of coverage for the 13 MSCP-covered species detected or with high to moderate potential to occur in the AMP area (Orcutt's brodiaea, San Diego goldenstar, San Diego barrel cactus, San Diego mesa mint, San Diego fairy shrimp, orange-throated whiptail, coast horned lizard, southern California rufous-crowned sparrow, Cooper's hawk, northern harrier, burrowing owl, coastal California gnatcatcher, and least Bell's vireo). Each of these species is listed below along with a summary of the MSCP ASMDs (i.e., conditions of coverage) and the AMP consistency for each species. The ASMDs are presented in italics, which would be made conditions of the Site Development Permit (SDP) and are required to be placed on construction plans as part of the Environmental Requirements along with CEQA Mitigation Monitoring and Reporting Program (MMRP) measures.

Orcutt's Brodiaea: The San Vicente population is identified as a critical population in the County's Subarea Plan and must be 100 percent conserved. Area specific management directives must include specific measures to protect against detrimental edge effects.

The San Vicente population of this species is not within the AMP area. Direct impacts to Orcutt's brodiaea are not expected as the known observations are outside the impact footprint of the AMP. However, small numbers of individuals could be impacted by construction of the MALSR lighting should this species be found in the MALSR alignment. Existing airport facilities and operations already result in numerous areas of interface between development and adjacent habitats in the AMP that contribute to potential edge effects. Implementation of future projects under the AMP would not substantially add to edge effects already present in the existing condition on the airport property. Nonetheless, future projects constructed under the AMP would implement dust control, site fencing, and other standard construction BMPs, to minimize indirect impacts to this species during construction. Biological monitoring also would be implemented during construction to help ensure adherence to BMPs. Further, areas within the MHPA will continue to be monitored by the City per the monitoring and management components of the MSCP SAP and VPHCP.

San Diego Goldenstar: Area specific management directives must include monitoring of transplanted populations, and specific measures to protect against detrimental edge effects to this species.

Implementation of future projects under the AMP are not expected to impact this species as the known observations are outside the impact footprint. However, small numbers of individuals could be impacted by construction of the MALSR lighting should this species be found in the MALSR alignment. Existing airport facilities and operations already result in numerous areas of interface between development and adjacent habitats in the AMP that contribute to potential edge effects. Implementation of future projects under the AMP would not substantially add to edge effects already present in the existing condition on the airport property. Nonetheless, future projects constructed under the AMP would implement dust control, site fencing, and other standard construction BMPs to minimize indirect impacts to this species during construction. Biological monitoring also would be implemented during



construction to help ensure adherence to BMPs. Further, areas within the MHPA will continue to be monitored by the City per the monitoring and management components of the MSCP SAP and VPHCP.

San Diego Barrel Cactus: Area specific management directives must include measures to protect this species from edge effects, unauthorized collection, and include appropriate fire management/control practices to protect against a too frequent fire cycle.

As previously stated, existing airport facilities and operations already result in numerous areas of interface between development and adjacent habitats in the AMP that contribute to potential edge effects. Implementation of future projects under the AMP would not substantially add to edge effects already present in the existing condition on the airport property. Nonetheless, future projects constructed under the AMP would implement dust control, site fencing, and other standard construction BMPs, to minimize indirect impacts to this species during construction. Biological monitoring also would be implemented during construction to help ensure adherence to BMPs. Further, areas within the MHPA will continue to be monitored by the City per the monitoring and management components of the MSCP SAP and VPHCP. There is no public access to the MHPA on MYF, thus guarding against unauthorized collection of this species. Fire control would be implemented if a fire were to occur on site, as the project site is a municipal airport surrounded by urban development.

San Diego Mesa Mint: Preserve management plan must include measures to: (1) protect against detrimental effects; (2) maintain surrounding habitat for pollinators; and (3) maintain pool watershed areas.

As previously stated, existing airport facilities and operations already result in numerous areas of interface between development and adjacent habitats in the AMP that contribute to potential edge effects. Implementation of future projects under the AMP would not substantially add to edge effects already present in the existing condition on the airport property. Nonetheless, future projects constructed under the AMP would implement dust control, site fencing, stormwater management, invasive species measures, and other standard construction BMPs to minimize indirect impacts to this species during construction. Biological monitoring also would be implemented during construction to help ensure adherence to BMPs. Further, areas within the MHPA will continue to be monitored by the City per the monitoring and management components of the MSCP SAP and VPHCP. Projects associated with the AMP avoid the majority of native habitat near and adjacent to vernal pools, thereby maintaining habitat for pollinators and avoiding pool watersheds to the extent feasible.

San Diego Fairy Shrimp: Area specific management directives must include specific measures to protect against detrimental edge effects to this species.

As previously stated, existing airport facilities and operations already result in numerous areas of interface between development and adjacent habitats in the AMP that contribute to potential edge effects. Implementation of future projects under the AMP would not substantially add to edge effects already present in the existing condition on the airport property. Nonetheless, future projects constructed under the AMP would implement work-limit perimeter fencing, stormwater management, dust control, and invasive species measures, along with other standard construction BMPs, to minimize indirect impacts to this species during construction. Biological monitoring also would be implemented during construction to help ensure adherence to BMPs. Further, areas within the MHPA will continue to be monitored by the City per the monitoring and management components of the MSCP SAP and VPHCP.



Orange-throated Whiptail: Area specific management directives must address potential edge effects.

The AMP is not expected to substantially increase potential edge effects already present on the airport site due to existing facilities and operations. Nonetheless, the AMP would incorporate measures during construction and post construction to minimize potential detrimental edge effects to orange-throated whiptail. Specifically, work-limits perimeter fencing would be installed, and its accuracy would be verified prior to construction impacts. Biological monitoring also would be implemented during construction to help ensure adherence to BMPs. The AMP would also adhere to the City's LUAGs.

Coast Horned Lizard: Area specific management directives must include specific measures to maintain native ant species, discourage the Argentine ant, and protect against detrimental edge effects to this species.

The AMP is not expected to substantially increase potential edge effects already present on the airport site due to existing facilities and operations. Nonetheless, the AMP design incorporates measures during construction and post construction to minimize potential detrimental edge effects to coast horned lizard. Prior to construction, work-limits perimeter fencing would be installed, and its accuracy would be verified prior to impacts to ensure inadvertent impacts to habitat outside the approved construction limits would not occur. Biological monitoring during construction will also help ensure adherence to BMPs. In addition, container plants or other plant materials brought on site for revegetation activities would be inspected by the landscape specialist/biologist prior to on-site installation for the presence of Argentine ants (*Linepithema humile*), diseases, weeds, and other pests. Plants or planting materials containing pests, weeds, or diseases will not be installed. The AMP would also adhere to the City's LUAGs.

Southern California Rufous-crowned Sparrow: Area specific management directives must include maintenance of dynamic processes, such as fire, to perpetuate some open phases of coastal sage scrub with herbaceous components.

Fire would not be used to aid in maintaining dynamic processes due to the urban nature of the site. The site contains widespread natural openings within Diegan coastal sage scrub habitat that are associated with the presence of vernal pools, which would be maintained as part of ongoing management of the MHPA on site.

Cooper's Hawk: In the design of future AMPs within the Metro-Lakeside-Jamul segment, design of preserve areas shall conserve patches of oak woodland and oak riparian forest of adequate size for nesting and foraging habitat. Area specific management directives must include 300-foot impact avoidance areas around the active nests, and minimization of disturbance in oak woodlands and oak riparian forests.

The AMP area is not within the Metro-Lakeside-Jamul segment of the MSCP. Further, no oak woodland or oak riparian forest occurs on MYF. The AMP would incorporate mitigation measures requiring preconstruction nesting surveys and 300-foot construction setbacks from active nests.

Northern Harrier: Area specific management directives must: manage agricultural and disturbed lands within four miles of nesting habitat to provide foraging habitat; include an impact avoidance area (900 foot or maximum possible within the preserved) around active nests; and include measures of maintaining winter foraging habitat in preserve areas in Proctor Valley, around Sweetwater Reservoir, San Miguel Ranch, Otay Ranch east of Wueste Road, Lake Hodges, and San Pasqual Valley.



The AMP would not impact any preserve lands and impacts to foraging habitat would be mitigated according to the City's biology guidelines and the MSCP SAP. The AMP also would incorporate mitigation measures requiring pre-construction nesting surveys and 900-foot construction setbacks from active nests of this species.

Burrowing Owl: During the environmental analysis of proposed AMPs, burrowing owl surveys (using appropriate protocols) must be conducted in suitable habitat to determine if this species is present and the location of active burrows. If burrowing owls are detected, the following mitigation measures must be implemented: within the MHPA, impacts must be avoided; outside of the MHPA, impacts to the species must be avoided to the maximum extent practicable; any impacted individuals must be relocated out of the impact area using passive or active methodologies approved by the wildlife agencies; mitigation for impacts to occupied habitat (at the Subarea Plan specified ratio) must be through the conservation of occupied burrowing owl habitat or conservation of lands appropriate for restoration, management and enhancement of burrowing owl nesting and foraging requirements.

Management plans/directives must include enhancement of known, historical and potential burrowing owl habitat; and management for ground squirrels (the primary excavator of burrowing owl burrows). Enhancement measures may include creation of artificial burrows and vegetation management to enhance foraging habitat. Management plans must also include monitoring of burrowing owl nest sites to determine use and nesting success; predator control; establishing a 300-foot-wide impact avoidance area (within the preserve) around occupied burrows.

A protocol burrowing owl survey will be conducted prior to construction of individual projects implemented under the AMP, in areas supporting suitable habitat. To avoid direct impacts to breeding owls, clearing, grubbing, and grading of occupied habitat will not be allowed during the breeding season (February 1 to August 31). Impacts to burrowing owl burrows, if present, will require mitigation and monitoring as outlined in the ASMD. Mitigation for loss of occupied habitat, if present, will be implemented to offset these impacts.

Coastal California Gnatcatcher: Area specific management directives must include measures to reduce edge effects and minimize disturbance during the nesting period, fire protection measures to reduce the potential for habitat degradation due to unplanned fire, and management measures to maintain or improve habitat quality including vegetation structure. Additionally, no clearing of occupied habitat within the City MHPA or County's Biological Core Resource Areas between March 1 and August 15.

The AMP incorporates measures during construction and post construction to address potential edge effects and minimize disturbance during the nesting season for coastal California gnatcatcher. Specifically, AMP construction would be implemented on a controlled grading schedule to occur outside of the coastal California gnatcatcher breeding season for project components within the MHPA, and the implementation of the AMP would adhere to the City's LUAGs.

Least Bell's Vireo: Jurisdictions will require surveys (using appropriate protocols) during the CEQA review process in suitable habitat proposed to be impacted and incorporate mitigation measures consistent with the 404(b)1 guideline into the project. Participating jurisdictions' guidelines and ordinances, and state and federal wetland regulations will provide additional habitat protection resulting in no net loss of wetlands. Jurisdictions must require new developments adjacent to preserve areas that create conditions attractive to brown-headed cowbirds to monitor and control cowbirds. Area specific management directives must include measures to provide appropriate successional habitat,



upland buffers for all known populations, cowbird control, and specific measures to protect against detrimental edge effects to this species. Additionally, clearing of occupied habitat must occur between September 15 and March 15 (i.e., outside of the nesting period).

Least Bell's vireo is not expected to nest on site and the AMP would not impact habitat suitable for vireo, nor create conditions that would attract cowbirds.

8.0 MITIGATION AND MONITORING REQUIREMENTS

8.1 MITIGATION

The following Mitigation Measures (MMs) shall be implemented to reduce potential impacts from implementation of future projects under the AMP to below a level of significance.

8.1.1 Mitigation for Sensitive Habitat Impacts

Anticipated habitat mitigation is quantified below in Table 6, *Mitigation for Significant Impacts to Sensitive Habitats*. Mitigation plans, including mitigation details and locations, will be prepared on a project-by-project basis as build out of the master plan occurs.

MM BIO-1 Sensitive Habitat Mitigation Ratios

- A. Mitigation for impacts to sensitive vegetation communities shall be implemented at the time future development projects are proposed. Project-level analysis shall determine whether the impacts are within or outside of the MHPA. Any MHPA boundary adjustments shall be processed by the individual project applicants through the City and Wildlife Agencies during the early project planning stage.
- B. Impacts to 0.54 acre of vernal pool shall be mitigated in accordance with ratios provided in Table 2A of the City's Biology Guidelines. Mitigation is anticipated to occur at 2:1 for impacts to vernal pools not occupied by listed plant species or occupied only by San Diego fairy shrimp and no listed plant species, and 4:1 for impacts to vernal pool occupied by San Diego mesa mint, for a total anticipated vernal pool mitigation obligation of 1.138 acre. Vernal pool mitigation shall be accomplished in-kind and shall incorporate a minimum of 1:1 acre of vernal pool creation/establishment to achieve no net loss of wetland function and values. Prior to impacts, a Vernal Pool Mitigation Plan consistent with VPHCP Section 5.3 Mitigation Framework shall be prepared and incorporate all applicable conditions for vernal pool mitigation. Mitigation for impacts to a vernal pool that has already been used for mitigation would require ratios of 4:1 (pools not occupied by listed species) and 8:1 (pool occupied by listed species) respectively. Concurrence from the FAA is required for any mitigation within the airport boundary.
- C. Impacts to a combined total of 0.6 acre of Diegan coastal sage scrub and baccharis scrub (Tier II) habitats shall be mitigated in accordance with ratios provided in Table 3 of the City's Biology Guidelines, for an anticipated combined mitigation obligation of 0.6 acre.



- D. Impacts to 0.1 acre of chamise chaparral (Tier IIIA) habitat shall be mitigated in accordance with ratios provided in Table 3 of the City's Biology Guidelines, for an anticipated mitigation obligation of 0.05 acre.
- E. Impacts to 24.7 acres of non-native grassland (Tier IIIB) habitat shall be mitigated in accordance with ratios provided in Table 3 of the City's Biology Guidelines, for an anticipated mitigation obligation of 12.4 acres.

Table 6
MITIGATION FOR SIGNIFICANT IMPACTS TO SENSITIVE HABITATS (acres)¹

			Impact ²	2		
Habitat	Tier	Inside MHPA	Outside MHPA	TOTAL	Mitigation Ratio ³	Required Mitigation
Wetland Habitat						
Vernal pool without listed plant species ⁴	Wetland	0.221	0.290	0.511	2:14	1.022
Vernal pool with San Diego mesa mint ⁵	Wetland	0.029		0.029	4:14	0.116
Wetlan	d Subtotal	0.250	0.290	0.54		1.138
Sensitive Upland Habitat						
Diegan coastal sage scrub- including disturbed phase	II	0.4	0.1	0.5	1:1	0.5
Baccharis scrub – including disturbed phase	II	0.1		0.1	1:1	0.1
Tier	II Subtotal	0.5	0.1	0.6		0.6
Chamise chaparral	IIIA	0.1		0.1	0.5:1	0.05
Non-native grassland	IIIB	0.4	24.3	24.7	1:1/0.5:1 ⁶	12.35
Tier III Subtotal		0.5	24.3	24.8		12.4
Sensitive Upland Subtotal		0.1	24.4	25.4		13.0
	TOTAL	0.35	24.69	25.94		14.138

- 1 All data is in acres rounded to the nearest tenth (0.1) for uplands and thousandth (0.001) for wetlands. "--" equals no impact under the impact column, or not applicable where under the mitigation ratio column.
- 2 Temporary and permanent impacts combined.
- 3 Mitigation ratios per City Biology Guidelines and all mitigation is inside the MHPA.
- 4 Per the City Biology Guidelines (2018), mitigation for vernal pool impacts consistent with the VPHCP range from 2:1 to 4:1, and shall be 2:1 for listed fairy shrimp or pools without listed plant species and 4:1 for listed plant species with very limited distributions, e.g., San Diego mesa mint.
- 5 This pool is also part of a mitigation effort associated with previous impacts on MYF. However, the mitigation has not been accepted, therefore higher ratios do not apply.
- 6 Mitigation for non-native grassland is 1:1 for impacts occurring within the MHPA and 0.5:1 for impacts occurring outside the MHPA.
 - F. **Vernal Pool Surveys.** Updated surveys to map vernal pools will be conducted prior to implementation of AMP projects which would affect non-developed lands (i.e., non-native grassland or disturbed habitat). If new pools are identified that would be affected by an AMP project, such impacts shall conform with the applicable avoidance and minimization measures and the mitigation framework described in the VPHCP.



8.1.2 Mitigation for Sensitive Species Impacts

MM BIO-2 Project-specific Biological Resource Surveys

Prior to the construction of any improvement project sited within or adjacent to an undeveloped open space area (i.e., an area supporting naturalized habitat, sensitive habitat, and/or habitat potentially suitable for special-status species), the City shall retain a qualified biologist to perform a reconnaissance survey to verify existing biological resources on and adjacent to the project construction areas. The City shall provide the biologist with a copy of project plans that clearly depict the construction work limits, including construction staging, storage, and access areas, to determine which specific portion(s) of the project will require inspection of adjacent open space areas. The survey shall verify whether the planned construction activities would occur on or in the immediate vicinity of habitat suitable for special-status species. The surveys shall also verify whether the construction activities may result in direct or indirect impacts to special-status species. The survey results shall be submitted to the City to determine the need to implement additional mitigation measures to avoid, minimize, and mitigate impacts to such resources, as applicable. If suitable habitat for special-status plant species is confirmed within or immediately adjacent to potential impact areas of the project, then the City shall retain a qualified biologist to conduct focused presence/absence surveys for rare plants prior to project construction. Surveys shall follow protocols and guidelines approved by the USFWS, CDFW, and/or CNPS and shall be conducted by qualified biologists. Mitigation for impacts to sensitive plant species with CNPS California Rare Plant Rank 1A, 1B, 2A, or 2B shall be determined by the City in consultation with the CDFW and/or USFWS, as applicable. If suitable habitat for special-status wildlife species is confirmed within or adjacent to potential impact areas of the project, then the City shall retain a qualified biologist to conduct focused, protocol-level surveys for special-status wildlife species prior to commencement of construction activities. Surveys shall follow protocols and guidelines approved by the USFWS and/or CDFW and shall be conducted by qualified biologists permitted by the USFWS and the CDFW, as applicable. Mitigation for impacts to sensitive wildlife species shall be determined by the City in consultation with the CDFW and/or USFWS, as applicable.

MM BIO-3 San Diego Mesa Mint

- A. Prior to impacting habitat supporting San Diego mesa mint, collection of seed and/or salvage of plants will occur for future installation into pools at the mitigation site for project impacts.
- B. A Vernal Pool Mitigation Plan consistent with the requirements outlined in VPHCP Section 5.3 Mitigation Framework must be prepared and incorporate all applicable conditions for vernal pool and covered species mitigation.

MM BIO-4 San Diego Fairy Shrimp

- A. Prior to impacting habitat supporting San Diego fairy shrimp, soil shall be salvaged from appropriate pools (i.e., high quality and no presence of versatile fairy shrimp [Branchinecta lindahli]) for installation in pools at the project's mitigation site.
- B. A Vernal Pool Mitigation Plan consistent with the requirements outlined in VPHCP Section 5.3 Mitigation Framework must be prepared and incorporate all applicable conditions for vernal pool and covered species mitigation.



- C. Regulatory permits, as applicable, must be obtained from the appropriate wetland regulatory agencies prior to impacting jurisdictional vernal pools.
- D. Impacts to vernal pools occupied by San Diego fairy shrimp will be mitigated in-kind at ratios identified in BIO-1.

MM BIO-5 Coastal California Gnatcatcher

- A. Impacts to Diegan coastal sage scrub occupied by coastal California gnatcatcher will be mitigated in-kind at ratios identified in BIO-1.
- B. No clearing, grubbing, grading of habitat shall occur between March 1 through August 15, the breeding season of the coastal California gnatcatcher, until the following requirements have been met to the satisfaction of the City Manager:

A Qualified Biologist (possessing a valid Endangered Species Act Section 10(a)(1)(A) Recovery Permit) shall survey those habitat areas within the MHPA that would be subject to construction noise levels exceeding 60 decibels (dBA) hourly average, or exceeding ambient noise levels if greater than 60 dBA, for the presence of the coastal California gnatcatcher. Surveys for the coastal California gnatcatcher shall be conducted pursuant to the protocol survey guidelines established by the USFWS within the breeding season prior to the commencement of any construction. If gnatcatchers are present, then the following conditions must be met:

- I. 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
- II. 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 dBA hourly average or ambient, whichever is higher, at the edge of occupied gnatcatcher habitat. An analysis showing that noise generated by construction activities would not exceed 60 dBA hourly average or ambient (whichever is higher) 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 City Manager 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
- III. 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 dBA hourly average or ambient (whichever is higher) 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 dBA or ambient (whichever is higher) 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).

*Construction noise monitoring 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(A) hourly average or to the ambient noise level if it already exceeds 60 dB(A) hourly average. If not, other measures shall be implemented in consultation with the biologist and the City Manager, as necessary, to reduce noise levels to below 60 dB(A) hourly average or to the ambient noise level if it already exceeds 60 dB(A) hourly average. Such measures may include, but are not limited to, limitations on the placement of construction equipment and the simultaneous use of equipment.

If coastal California gnatcatchers are not detected during the protocol survey, the Qualified Biologist shall submit substantial evidence to the City Manager and applicable Resource Agencies that demonstrates whether or not mitigation measures, such as noise walls, are necessary between March 1 and August 15 as follows:

- IV. If this evidence indicates the potential is high for coastal California gnatcatcher to be present based on historical records or site conditions, then Condition III shall be adhered to as specified above.
- V. If this evidence concludes that no impacts to this species are anticipated, no mitigation measures would be necessary.

MM BIO-6 Burrowing Owl Pre-construction Survey

Direct impacts to burrowing owl are not anticipated as this species is not known to occupy the site and the single documented occurrence of this species during the breeding season was in 2007. Other observations of this species have occurred during the wintering season. However, since suitable habitat is present and the species has potential to occupy the site in the future, the following mitigation measures will be implemented to meet the MSCP Subarea Plan Conditions of Coverage for potential impacts to burrowing owl (BUOW) and associated habitat located outside of the MHPA:

- A. Prior to Permit or Notice to Proceed Issuance:
 - 1. As this project has been determined to be BUOW occupied or to have BUOW occupation potential, the Applicant Department or Permit Holder shall submit evidence to the Assistant Deputy Director (ADD) of Entitlements verifying that a Biologist possessing qualifications pursuant to the California Department of Fish and Game 2012 Staff Report on Burrowing Owl Mitigation ("Staff Report"; CDFW 2012) has been retained to implement a BUOW construction impact avoidance program. All biologists surveying for and/or monitoring burrowing owl shall obtain a Scientific Collecting Permit issued by CDFW. Additionally, any proposed burrow or surrogate burrow closure, handling of owls for health assessments,



- banding, passive relocations, eviction, and/or active relocation shall obtain a CESA Memorandum of Understanding⁴ from CDFW.
- 2. The qualified BUOW Biologist (or their designated biological representative) shall attend the pre construction meeting to inform construction personnel about the City's BUOW requirements and subsequent survey schedule.

B. Prior to Start of Construction:

- 1. The Applicant Department or Permit Holder and Qualified BUOW Biologist must ensure that initial pre-construction/take avoidance surveys of the project "site" are completed within 14 days before initial construction activities, including brushing, clearing, grubbing, or grading of the Project site, regardless of the time of the year. An additional verification survey will be conducted within 24 hours of ground disturbing activities. The additional verification survey will be a focused protocol-level survey following methods described in CDFW's 2012 Staff Report on Burrowing Owl Mitigation (CDFG 2012). "Site" means the project site and the area within a radius of 450 feet of the project site. The report shall be submitted and approved by the Wildlife Agencies and/or City MSCP staff prior to construction or BUOW eviction(s) and shall include maps of the project site and BUOW locations on aerial photos. If burrowing owl is detected during preconstruction surveys, setback buffer distances shall be established consistent with Table 1 of CDFW's 2012 Staff Report. Any reduction and/or modifications to the setback buffer distance shall be approved by CDFW prior to implementation.
- 2. The pre-construction survey shall follow the methods described in Appendix D of the CDFG 2012 Staff Report on Burrowing Owl Mitigation.
- 3. Twenty-four hours prior to commencement of ground disturbing activities, the Qualified BUOW Biologist shall verify results of pre-construction/take avoidance surveys. Verification shall be provided to the City's Mitigation Monitoring and Coordination (MMC) Section. If results of the pre construction surveys have changed, and BUOW are present in areas not previously identified, immediate notification to the City and Wildlife Agencies shall be provided prior to ground disturbing activities.

C. During Construction:

1. Best Management Practices Shall Be Employed - BUOWs are known to use open pipes, culverts, excavated holes, and other burrow-like structures at construction sites. Legally permitted active construction projects which are BUOW- occupied and have followed all protocols in this mitigation section, or sites within 450 feet of occupied BUOW areas, should undertake measures to discourage BUOWs from recolonizing previously occupied areas or colonizing new portions of the site. Such measures include, but are not limited to, ensuring that the ends of all pipes and culverts are covered when they are not being worked on, and covering rubble piles, dirt piles, ditches, and berms.

⁴ https://wildlife.ca.gov/Conservation/CESA/Permitting#550391512-memorandum-of-understanding-mou--2081-a



- 2. Ongoing BUOW Detection If BUOWs or active burrows are not detected during the preconstruction surveys, Section "a" below shall be followed. If BUOWs or burrows are detected during the pre-construction surveys, Section "b" shall be followed. Neither the MSCP Subarea Plan nor this mitigation section allow for any BUOWs to be injured or killed outside or within the MHPA; in addition, impacts to BUOWs within the MHPA must be avoided.
 - a. Post Survey Follow Up if Burrowing Owls and/or Signs of Active Natural or Artificial Burrows Are <u>Not</u> Detected During the Initial Pre- Construction Survey Monitoring the site for new burrows is required using the 2012 Staff Report Appendix D methods for the period following the initial pre construction survey, until construction is scheduled to be complete, and is complete. (NOTE Using a projected completion date (that is amended if needed) will allow development of a monitoring schedule which adheres to the required number of surveys in the detection protocol.)
 - i. If no active burrows are found but BUOWs are observed to occasionally use the site for roosting or foraging (one to three sightings), they should be allowed to do so with no changes in the construction or construction schedule.
 - ii. If no active burrows are found but BUOWs are observed during follow up monitoring to repeatedly use the site for roosting or foraging (four or more sightings), the City's MMC Section shall be notified and any portion of the site where owls have been sighted and that has not been graded or otherwise disturbed shall be avoided until further notice.
 - iii. If a BUOW begins using a burrow on the site at any time after the initial preconstruction survey, procedures described in Section b, below, must be followed.
 - iv. Any actions other than these require the approval of the City and the Wildlife Agencies.
 - b. Post-Survey Follow Up if Burrowing Owls and/or Active Natural or Artificial Burrows are detected during the Initial Pre-Construction Survey Monitoring the site for new burrows is required using 2012 Staff Report Appendix D for the period following the initial pre-construction survey, until construction is scheduled to be complete, and is complete. (NOTE Using a projected completion date (that is amended if needed) will allow development of a monitoring schedule which adheres to the required number of surveys in the detection protocol.)
 - This section (b) applies only to sites (including biologically defined territory) wholly outside of the MHPA - all direct and indirect impacts to BUOWs within the MHPA <u>SHALL</u> be avoided.
 - ii. If one or more BUOWs are using any burrows (including pipes, culverts, debris piles, etc.) on or within 300 feet of the proposed construction area, the City's MMC Section shall be contacted. The City's MMC Section shall contact the Wildlife Agencies regarding eviction/collapsing burrows and enlist an appropriate City biologist for on-going coordination with the Wildlife Agencies and the Qualified



BUOW Biologist. No construction shall occur within 300 feet of an active burrow without written concurrence from the Wildlife Agencies. This distance may increase or decrease, depending on the burrow's location in relation to the site's topography and other physical and biological characteristics.

- 1) Outside the Breeding Season If the BUOW is using a burrow on site outside the breeding season (i.e., September 1 January 31), the BUOW may be evicted after the Qualified BUOW Biologist has determined via fiber optic camera or other appropriate device, that no eggs, young, or adults are in the burrow and written concurrence from the Wildlife Agencies for eviction is obtained prior to implementation.
- 2) **During Breeding Season** If a BUOW is using a burrow on site during the breeding season (February 1-August 31), construction shall not occur within 300 feet of the burrow until the young have fledged and are no longer dependent on the burrow, at which time the BUOWs can be evicted. Eviction requires written concurrence from the Wildlife Agencies prior to implementation.
- 3. Survey Reporting During Construction Details of construction surveys and evictions (if applicable) carried out shall be reported immediately (within five working days or sooner) to the City's MMC Section and the Wildlife Agencies and must be provided in writing (as by email) and acknowledged to have been received by the required Agencies and Development Services Department Staff member(s).

D. Post-Construction:

1. Details of the all surveys and actions undertaken on site with respect to BUOW (i.e., occupation, eviction, locations, etc.) shall be reported to the City's MMC Section and the Wildlife Agencies within 21 days post-construction and prior to the release of any grading bonds. This report must include summaries of all previous reports for the site.

MM BIO-7 Burrowing Owl Occupied Habitat

- A. Impacts to non-native grassland occupied by burrowing owl will be mitigated in-kind at ratios identified in BIO-1 and such mitigation lands must be through the conservation of occupied burrowing owl habitat or conservation of lands appropriate for restoration, management, and enhancement of burrowing owl nesting and foraging requirements. Such lands will either be within the MHPA, contiguous with MHPA lands or other preserve lands, or in another location with long-term viability that is acceptable to the City, CDFW, and USFWS. The search for potential mitigation land will focus first on lands within Otay Mesa. If mitigation land cannot be located within Otay Mesa, suitable lands within the City's MSCP SAP boundary will be considered. Temporary impacts to habitat occupied by burrowing owl shall also be mitigated for in conformance with the MSCP Conditions of Coverage for burrowing owl.
- B. A Burrowing Owl Mitigation Plan shall be prepared and approved by the City, CDFW, and USFWS prior to issuance of any construction permits associated with the AMP.



MM BIO-8 Crotch's Bumble Bee Surveys

A qualified biologist will conduct a habitat assessment to determine if potentially suitable habitat for Crotch's bumble bee is present within the project footprint. If potentially suitable habitat is present, the following measures shall be implemented to reduce potential impacts to this species:

A. **Focused Survey**: Before the commencement of construction activities (i.e., demolition, earthwork, clearing, and grubbing), Crotch's bumble bee focused surveys shall be conducted. A qualified biologist familiar with Crotch's bumble bee identification and life history shall conduct three visual surveys at least seven days apart during the colony active period (March 1 through September 1 [CDFW 2023]). Surveys shall be conducted in accordance with the Survey Considerations document for CESA Candidate Bumble Bees published by CDFW. If focused surveys are negative, no further assessment shall be required, and construction activities shall be allowed to proceed without any further requirements.

If Crotch's bumble bee is detected during focused surveys, Measures B and C below shall be implemented.

- B. **CESA Compliance**: Prior to start of project construction, required consultation with CDFW regarding the project's effects on Crotch's bumble bee must occur. If Crotch's bumble bee is present, a qualified biologist shall identify the location of all nests in or adjacent to the Project site. If nests are identified, 50-foot no-disturbance buffer zones shall be established around nests to reduce the risk of disturbance or accidental take. If take of Crotch's bumble bee is expected, an incidental take permit issued by the CDFW must be obtained, as applicable. Early consultation is encouraged, as significant modification to the Project and mitigation measures may be required to obtain an ITP. In addition, if an incidental take permit is issued for the project that covers Crotch's bumble bee, that document shall supersede any inconsistent measures provided in the AMP EIR. CESA compliance shall only be required if Crotch's bumble bee remains as a candidate state endangered species or is listed as a state endangered species at the time of project construction. If Crotch's bumble bee is delisted, this measure shall not be required.
- C. Compensatory Mitigation: Impacts to habitat occupied by Crotch's bumble bee will be mitigated at ratios identified in BIO-1. If an incidental take permit is issued for the project that covers Crotch's bumble bee, that document shall supersede any measures and mitigation ratios provided in the AMP EIR.

8.1.3 Mitigation for Adopted Plans Impacts

MM BIO-9 MHPA Avoidance and/or Restoration

All development within the MHPA shall be designed to minimize environmental impacts and must avoid disturbing the habitat of MSCP-covered species and wetlands. If such avoidance is unfeasible, impacts shall be mitigated. Temporary access roads and staging areas in the MHPA shall be located in existing disturbed areas rather than in habitat. If temporary disturbance to habitat in the MHPA is unavoidable, restoration of and/or mitigation for the disturbed area shall be required after project completion. If a proposed project would encroach into the MHPA beyond the allowable development area pursuant to Sections 143.0142 and 131.0250(b) of the City of San Diego Land Development Code, Biology Guidelines, a MHPA boundary line adjustment shall be required. Under the City's MSCP Subarea Plan, an adjustment



to the City's MHPA boundary is allowed only if the new MHPA boundary results in an exchange of lands that are functionally equivalent or higher in biological value. A determination of functionally equivalent or higher biological value shall be based on site-specific information (both quantitative and qualitative) that addresses the six boundary adjustment criteria outlined in Section 5.4.3 of the Final MSCP Plan (August 1998), which are as follows:

- 1. Effects on significantly and sufficiently conserved habitats (i.e., the exchange maintains or improves the conservation, configuration, or status of significantly and sufficiently conserved habitats, as defined in Section 3.4.2 [of the Final MSCP Plan]).
- 2. Effects on covered species (i.e., the exchange maintains or increases the conservation of covered species).
- 3. Effects on habitat linkages and function of preserve areas (i.e., the exchange maintains or improves any habitat linkages or wildlife corridors).
- 4. Effects on preserve configuration and management (i.e., the exchange results in similar or improved management efficiency and/or protection of biological resources).
- 5. Effects on ecotones or other conditions affecting species diversity (i.e., the exchange maintains topographic and structural diversity and habitat interfaces of the preserve).
- 6. Effects on species of concern not on the covered species list (i.e., the exchange does not significantly increase the likelihood that an uncovered species will meet the criteria for listing under either the federal or state ESAs).

All proposed MHPA boundary adjustments require approval from the Wildlife Agencies. Approval is required prior to the release of the environmental documentation for the project. Early consultation with the Wildlife Agencies shall be required for any proposed MHPA boundary adjustment. Any proposed boundary adjustment shall also be disclosed in the environmental document (i.e., CEQA) for the project.

8.1.4 Biological Resources Protection During Construction

The following biological resource protection measures will be implemented during construction to help ensure avoidance of indirect impacts to sensitive habitat and species and such measures will be shown on the construction plans:

MM BIO-10 Construction Plan Requirements

Prior to the issuance of any grading permit, the City Manager (or appointed designee) shall verify that the following project requirements are shown on the construction plans:

- I. Prior to Construction
 - A. Biologist Verification The owner/permittee shall provide a letter to the City's Mitigation Monitoring Coordination (MMC) section stating that a Project Biologist (Qualified Biologist) as defined in the City Biology Guidelines (2018), has been retained to implement the



- project's biological monitoring program. The letter shall include the names and contact information of all persons involved in the biological monitoring of the project.
- B. Pre-construction Meeting The Qualified Biologist shall attend the pre-construction meeting, discuss the project's biological monitoring program, and arrange to perform any follow up mitigation measures and reporting including site-specific monitoring, restoration or revegetation, and additional fauna/flora surveys/salvage.
- C. Biological Documents The Qualified Biologist shall submit all required documentation to MMC verifying that any special mitigation reports including but not limited to, maps, plans, surveys, survey timelines, or buffers are completed or scheduled per City Biology Guidelines, MSCP, ESL Ordinance, project permit conditions; CEQA; endangered species acts (ESAs); and/or other local, state, or federal requirements.
- D. BCME The Qualified Biologist shall present a Biological Construction Mitigation/Monitoring Exhibit (BCME) which includes the biological documents in C above. In addition, include: restoration/revegetation plans, plant salvage/relocation requirements (e.g., coastal cactus wren plant salvage, burrowing owl exclusions, etc.), avian or other wildlife surveys/survey schedules (including general avian nesting and USFWS protocol), timing of surveys, wetland buffers, avian construction avoidance areas/noise buffers/barriers, other impact avoidance areas, and any subsequent requirements determined by the Qualified Biologist and the City ADD/MMC. The BCME shall include a site plan, written and graphic depiction of the project's biological mitigation/monitoring program, and a schedule. The BCME shall be approved by MMC and referenced in the construction documents.
- E. Avian Protection Requirements To avoid direct impacts to avian species identified as a listed, candidate, sensitive, or special status species (burrowing owl, coastal cactus wren, northern harrier, white-tailed kite, horned lark, grasshopper sparrow, loggerhead shrike, coastal California gnatcatcher, southern California rufous-crowned sparrow, and yellow warbler), no clearing, grubbing, or grading shall occur during the general avian breeding season (February 1 to September 15) without a pre-construction nesting bird survey. If grubbing, clearing, or grading would occur during the general avian breeding season, a qualified biologist shall survey the project area no more than three days prior to the commencement of the activities to determine if active bird nests belonging to listed, candidate, sensitive, or special status species are present in the affected areas. If the qualified biologist determines that no active nests occur, the activities shall be allowed to proceed. If the qualified biologist determines that an active nest is present, appropriate setbacks shall be implemented as determined by the biologist. CDFW generally recommends a 100-foot buffer for common avian species, 300 feet for listed and sensitive species, and 500 feet for raptors, with reductions in nest buffers allowable depending on the avian species involved, ambient levels of human activity, screening vegetation, and other relevant factors. The buffer shall be delineated by temporary fencing and remain in effect for the duration of all construction activities, or until such time as No impacts shall occur until the young have fledged the nest and the nest is confirmed to no longer be active, as determined by the qualified biologist. The results of the pre-construction nesting bird survey shall be reported to the City in a brief memorandum.



- F. Burrowing Owl Protection Requirement No clearing, grubbing, grading, or other construction activities shall occur in occupied burrowing habitat between February 1 and August 31, the breeding season of the burrowing owl.
- G Resource Delineation Prior to construction activities, the Qualified Biologist shall supervise the placement of orange construction fencing or equivalent along the limits of disturbance adjacent to sensitive biological habitats and verify compliance with any other project conditions as shown on the BCME. This phase shall include flagging plant specimens and delimiting buffers to protect sensitive biological resources (e.g., habitats/flora & fauna species, including nesting birds) during construction. Appropriate steps/care should be taken to minimize attraction of nest predators to the project site.
- H. Education Prior to commencement of construction activities, the Qualified Biologist shall meet with the owner/permittee or designee and the construction crew and conduct an on-site area educational session regarding the need to avoid impacts outside of the approved construction area and to protect sensitive flora and fauna (e.g., explain the avian and wetland buffers, flag system for removal of invasive species or retention of sensitive plants, and clarify acceptable access routes/methods and staging areas, etc.).

II. During Construction

- A. Monitoring All construction (including access/staging areas) shall be restricted to areas previously identified, proposed for development/staging, or previously disturbed as shown on "Exhibit A" and/or the BCME. The Qualified Biologist shall monitor construction activities as needed to ensure that construction activities do not encroach into biologically sensitive areas, or cause other similar damage, and that the work plan has been amended to accommodate any sensitive species located during the pre-construction surveys. In addition, the Qualified Biologist shall document field activity via the Consultant Site Visit Record. The Consultant Site Visit Record shall be e-mailed to MMC on the first day of monitoring, the first week of each month, the last day of monitoring, and immediately in the case of any undocumented condition or discovery.
- B. Subsequent Resource Identification The Qualified Biologist shall note/act to prevent any new disturbances to habitat, flora, and/or fauna on site (e.g., flag plant specimens for avoidance during access, etc.). If active nests or other previously unknown sensitive resources are detected, all project activities that directly impact the resource shall be delayed until species specific local, state or federal regulations have been determined and applied by the Qualified Biologist.

III. Post Construction Measures

A. In the event that impacts exceed previously allowed amounts, additional impacts shall be mitigated in accordance with City Biology Guidelines, ESL, MSCP, VPHCP, State CEQA, and other applicable local, state, and federal law. The Qualified Biologist shall submit a final BCME/report to the satisfaction of the City ADD/MMC within 30 days of construction completion.



8.2 MANAGEMENT ELEMENT

Restoration/revegetation/mitigation management for upland and wetland habitat shall be provided by the City during the required two-year to five-year mitigation and monitoring periods, as well as over the long-term following success of the mitigation efforts.



9.0 ACKNOWLEDGEMENTS

The following people contributed to the preparation of this report:

Sean Bohac¹ Certificate in GIS, San Diego Mesa College, 2003

B.S., Biology, The Evergreen State College, 1998

Erica Harris² B.S., Biology, emphasis in Zoology, San Diego State University, 2009

Shelby Howard^{3,5} M.S., Biology, San Diego State University, 2004

B.S., Biology, University of Texas, El Paso, 1999

Laura Moreton^{2,4} M.S., Biodiversity Survey, University of Sussex, 2007

B.S., Biology, San Diego State University, 2006 A.S., Biology, Southwestern College, 2004

Stacy Nigro^{2,4} B.S., Forest Resources and Conservation, Emphasis in Wildlife Ecology,

University of Florida, 1994

Linda Garcia⁶ M.A., English, National University, San Diego, 2012

B.A., Literatures in English, University of California, San Diego, 2003

¹GIS Specialist; ²Biologist; ³Principal; ⁴Primary Author; ⁵Contributing Author; ⁶Technical Editor



10.0 REFERENCES

- American Ornithological Society (AOS). 2023. AOS Checklist of North and Middle American Birds (online checklist). Retrieved from: https://checklist.americanornithology.org/taxa.
- American Society of Landscape Architects. (Living Document) San Diego County Invasive Ornamental Plant Guide. Available at: https://www.asla-sandiego.org/aslasdwp/wp-content/uploads/2014/10/Most Invasive Plant Guide.pdf.
- Atkins. 2017. Airport Master Plan Montgomery-Gibbs Executive Airport. Working Paper 4 Environmental Overview. October.
- Baldwin, B. G., D. H. Goldman, D. J. Keil, R. Patterson, T. J. Rosatti, and D. H. Wilken (eds.). 2012. The Jepson manual: vascular plants of California, second edition. Berkeley, CA: University of California Press.
- Bradley, R.D., Ammerman, L.K., Baker, R.J., Bradley, L.C., Cook, J.A., Dowler, R.D. Jones, C., Schmidly, D.J, Stangi, F.B., Van De Bussche, R.A., Wursig, B. (2014). Revised checklist of North American mammals north of Mexico. Museum of Texas Tech University Occasional Papers. 327:1-27.
- C&S Engineers, Inc. 2019. Montgomery-Gibbs Executive Airport Master Plan (AMP).
- Calflora. 2019. Available at: https://www.calflora.org/cgi-bin/species query.cgi?where-calrecnum=6991. Accessed June 4.
- California Department of Fish and Wildlife. 2019. California Natural Diversity Data Base. RareFind 5.
 - 2025a. State and Federally Listed Endangered & Threatened Animals of California. Available at: https://www.wildlife.ca.gov/Data/CNDDB/Plants-and-Animals. January.
 - 2025b. Special Animals List. Available at: https://www.wildlife.ca.gov/Data/CNDDB/Plants-and-Animals. January.
 - 2023. Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species.
 - 2012. Staff Report on Burrowing Owl Mitigation. March 7.
- California Invasive Plant Council. 2019. California Invasive Plant Inventory Database. Available at: http://www.cal-ipc.org/paf/.
- California Native Plant Society. 2025. Inventory of Rare and Endangered Plants (online edition, v9.5.1). Available at: http://www.rareplants.cnps.org.
- Collins, J. T. and T. W. Taggart. 2006. The Center for North American herpetology (CNAH): The academic portal to North American herpetology. Available at: http://www.cnah.org/index.asp.



- HELIX Environmental Planning, Inc. 2025. Montgomery-Gibbs Executive Airport Master Plan. Construction Noise Impact Report. July.
 - 2016. Montgomery Field Runway Extension Project Vernal Pool Restoration. 2016 Monitoring Report.
 - 2013. Montgomery Field Runway Extension Project Vernal Pool Restoration. Year 5 Monitoring Report. September 6.
 - 2012. Montgomery Field Runway Extension Project Vernal Pool Restoration. Year 4 Monitoring Report. October 3.
 - 2011. Montgomery Field Runway Extension Project Vernal Pool Restoration. Year 3 Monitoring Report. October 25.
 - 2010. Montgomery Field Runway Extension Project Vernal Pool Restoration. Year 2 Monitoring Report. December 3.
 - 2010. Montgomery Field Runway Extension Project Vernal Pool Restoration. Year 1 Monitoring Report. February 26.
 - 2009. Montgomery Field Detailed Vernal Pool Mitigation Plan. September 5.
- Holland, R.F. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California. State of California, The Resources Agency, 156 pp.
- Hughey, Joel. 2022. Bird Strike Report MYF. October 20.
- iNaturalist. 2025. Explore Observation, Crotch's Bumble Bee. Available from:
 https://www.inaturalist.org/observations?subview=map&taxon_id=271451. Accessed March 7, 2025.
- JE Fuller and City of San Diego Airports Division. 2020. Montgomery-Gibbs Executive Airport Wildlife Hazard Assessment. February.
- Merkel and Associates. 2015. Montgomery Field Localizer Project. Mitigation Plan. Revised November 25.
- Oberbauer, T. 2008. Terrestrial Vegetation Communities in San Diego County Based on Holland's Descriptions. Revised from 1996 and 2005. July.
- P&D Environmental. 1998. Resource Management Plan for Montgomery Field Airport. July.
- Rebman, J.P. and M.G. Simpson. 2014. Checklist of the Vascular Plants of San Diego County. 5th Edition. San Diego Natural History Museum, San Diego, California. 132 pp.



- RECON Environmental. 2022. Biological Monitoring for Montgomery-Gibbs Executive Airport Burrowing Owl Exclusion. October 20.
 - 2008. Final Environmental Constraints Report for West and Northwest Areas of Montgomery Field Airport, San Diego, California. May 19.
- Rocks Biological Consulting. 2013. Montgomery Field Reconstruct 5-23 and Taxiway G Project Biological Resources Report. Revised January 8.
- Rundel, P. 1986. Structure and function in California chaparral. Fremontia, Vol. 14 (3), pp. 3-10.
- San Diego, City of. 2022. California Environmental Quality Act Significance Determination Thresholds. City of San Diego Planning Department.
 - 2020. Focused Survey Results for the Coastal California Gnatcatcher (*Polioptila californica californica*) for the City of San Diego, Fire-Rescue Parking Pad Expansion Project. June 24.
 - 2019. Revised Final Vernal Pool Habitat Conservation Plan. Prepared by City of San Diego. October.
 - 2018. City of San Diego Municipal Code, Land Development Code, Biology Guidelines. Amended. February 1 by Resolution No. R-311507.
 - 1997a. Multiple Species Conservation Program. City of San Diego MSCP Subarea Plan. March.
 - 1997b. Implementing Agreement by and between USFWS, CDFW, and City of San Diego. To Establish a Multiple Species Conservation Program "MSCP" for the Conservation of Threatened, Endangered, and other Species in the Vicinity of San Diego, California. July.
- San Diego, County of. 1998. Final Multiple Species Conservation Program. MSCP Plan August.
- U.S. Army Corps of Engineers. 1997. Indicator Species for Vernal Pools. Special Public Notice, Regional General Conditions to Nationwide Permits. November 25.
- U.S. Department of Agriculture. 2019. Web Soil Survey. Natural Resources Conservation Service. Available at: https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm. Accessed May 10.
- U.S. Fish and Wildlife Service. 2019. Occurrence Information for Multiple Species within Jurisdiction of the Carlsbad Fish and Wildlife Office. Carlsbad Fish and Wildlife Office.

 Available at: http://www.fws.gov/carlsbad/gis/cfwogis.html. May 1.
 - 2014. Comments on the Vernal Pool Mitigation Project, Montgomery Field Runway Extension Project, San Diego, California. April 11.
- Zeiner, David, W. Laudenslayer, and K. Mayer eds. 1988. California Statewide Wildlife Habitat Relationships System. Volume 1: Amphibians and Reptiles. California Department of Fish and Game: The Resource Agency, Sacramento.



Appendix A

Plant Species Observed

Family	Scientific Name*,†	Common Name	Habitat ¹
Dicots			
Aizoaceae	Carpobrotus edulis*,high	hottentot-fig	NNG
Anacardiaceae	Malosma laurina	laurel sumac	CC, DCSS, NNG
Apiaceae	Foeniculum vulgare*,high	fennel	DH, NNG
Asphodelaceae	Asphodelus fistulosus*,mod	onion weed	DH
Asteraceae	Ambrosia psilostachya	western ragweed	DH, SWS
	Artemisia californica	California sagebrush	CC, DCSS
	Baccharis sarothroides	broom baccharis	BS, DCSS
	Centaurea melitensis*,mod	tocalote	CC, DCSS, NNG
	Deinandra fasciculata	fascicled tarplant	DCSS, CC, NNG, VP
	Dimorphotheca sinuata*	glandular Cape marigold	DH
	Dittrichia graveolens*,mod	stinkwort	DH
	Erigeron canadensis	horseweed	NNG
	Glebionis coronaria*,mod	garland daisy	DH
	Helminthotheca echioides*,lim	bristly ox-tongue	DH
	Heterotheca grandiflora	telegraph weed	DCSS, DH, NNG
	Holocarpha virgata ssp. elongata†	graceful tarplant	DCSS, NNG
	Lactuca serriola*	wild lettuce	NNG
	Pseudognaphalium californicum	California everlasting	NNG
	Sonchus asper*	prickly sow thistle	NNG
	Xanthium strumarium	cocklebur	SWS
Brassicaceae	Brassica nigra*,mod	black mustard	DH, NNG
	Hirschfeldia incana*,mod	short-pod mustard	NNG
Cactaceae	Opuntia littoralis	coastal prickly pear	DCSS
Chenopodiaceae	Atriplex semibaccata*,mod	Australian saltbush	DH
	Salsola tragus*,lim	Russian thistle	DCSS, DH, NNG
Euphorbiaceae	Croton setigerus	dove weed	DCSS, NNG
•	Ricinus communis*,lim	castor bean	DH, DW
Fabaceae	Acacia sp.*	acacia	NNV, SWS
	Acmispon glaber	deerweed	DCSS
Fagaceae	Quercus dumosa†	Nuttall's scrub oak	CC, DCSS
Geraniaceae	Erodium sp.*	filaree	CC, DCSS, DH, NNG
Gentianaceae	Zeltnera exaltata	canchalagua	DCSS, VP
Lamiaceae	Pogogyne abramsii†	San Diego mesa mint	VP
Myrtaceae	Eucalyptus sp.*	eucalyptus	DCSS, DH, EW
Polygonaceae	Eriogonum fasciculatum	buckwheat	CC, DCSS
, 5	Rumex crispus*,lim	curly dock	DH, DW, SWS
Rhamnaceae	Ceanothus sp.	ceanothus	CC, DCSS
Rosaceae	Adenostoma fasciculatum	chamise	CC, DCSS
	Heteromeles arbutifolia	toyon	CC, DCSS
Salicaceae	Salix lasiolepis	arroyo willow	SWS
Solanaceae	Solanum sp.	nightshade	DCSS
Tamaricaceae	Tamarix sp. *,high	tamarisk	DW, SWS



Family	Scientific Name*,†	Common Name	Habitat ¹
Monocots			
Arecaceae	Washingtonia robusta*,mod	Mexican fan palm	SWS
Poaceae	Avena sp.*	oat	DH, DCSS
	Bromus diandrus*,mod	common ripgut grass	NNG, BS, CC, DCSS
	Bromus madritensis*	foxtail chess	NNG, DH, BS, CC, DCSS
	Cortaderia selloana*,high	white pampas grass	DW, SWS
	Cynodon dactylon*,mod	Bermuda grass	NNG
	Festuca myuros*	fescue	BS, NNG
	Festuca perennis*	Italian ryegrass	DCSS, NNG
	Hordeum sp.*	barley	BS, CC, DCSS, NNG
	Lamarckia aurea*	goldentop	NNG
	Paspalum dilatatum*	dallis grass	DH
	Pennisetum setaceum*,mod	purple fountain grass	DCSS, DH, NNG
	Stipa sp.	needlegrass	DCSS
Cyperaceae	Scirpus sp.	bulrush	SWS

^{*} Non-Native Species



[†] Special Status Species

¹ CC= chamise chaparral; BS= baccharis scrub (including disturbed); DCSS=Diegan coastal sage scrub (including disturbed); DH=disturbed habitat; DW=disturbed wetland; EW=eucalyptus woodland; NNG=non-native grassland; NNV=non-native vegetation; SWS=southern willow scrub (including disturbed); VP=vernal pool.

Appendix B

Animal Species Observed

	Taxon	Scientific Name†	Common Name	
Order	Family			
VERTEBRATES		·		
Birds				
Accipitriformes	Accipitridae	Buteo jamaicensis	red-tailed hawk	
Apodiformes	Trochilidae	Calypte anna	Anna's hummingbird	
Columbiformes	Columbidae	Zenaida macroura	mourning dove	
Falconiformes	Falconidae	Falco sparverius	American kestrel	
Passeriformes	Aegithalidae	Psaltriparus minimus	bushtit	
	Alaudidae	Eremophila alpestris	horned lark	
	Corvidae	Corvus corax	common raven	
	Fringillidae	Haemorhous mexicanus	house finch	
		Spinus psaltria	lesser goldfinch	
	Icteriidae	Sturnella neglecta	western meadowlark	
	Mimidae	Mimus polyglottos	northern mockingbird	
		Toxostoma redivivum	California thrasher	
	Passerellidae	Melozone crissalis	California towhee	
		Pipilo maculatus	spotted towhee	
	Polioptilidae	Polioptila californica	coastal California	
		californica†	gnatcatcher	
	Troglodytidae	Thryomanes bewickii	Bewick's wren	
	Tyrannidae	Sayornis saya	Say's phoebe	
		Tyrannus vociferans	Cassin's kingbird	
Mammals				
Lagomorpha	Leporidae	Sylvilagus audubonii	desert cottontail	
Rodentia	Sciuridae	Otospermophilus beecheyi	California ground squirrel	

[†] Special Status Species



Appendix C

Sensitive Plant Species with Potential to Occur

Species Name	Common Name	Status ¹	Habit, Ecology and Life History	Potential to Occur
City of San Diego Narrow	Endemic Plants			
Acanthomintha ilicifolia	San Diego thorn-mint	FT/SE CRPR 1B.1 MSCP Covered	Small annual herb. Occurs on clay soils near vernal pools and in grassy openings in coastal sage scrub and chaparral. Flowering period: April–June. Elevation: 100–3,150 feet (30–960 meters).	Low. The most recent observation of this species in the vicinity of the project area was in 1936 over 1.5 miles north of the project site. Although suitable habitat is present on site, this species has not been found on site during general or focused surveys.
Agave shawii	Shaw's agave	/ CRPR 2B.1 MSCP Covered	Shrub. Found in coastal areas in coastal sage scrub habits. Flowering period: September-March. Elevation: 0-315 feet (0-95 meters).	None. This species in known from coastal areas. Project site is too far from inland the coast for this species to occur and is outside its known elevation range.
Ambrosia pumila	San Diego ambrosia	FE/ CRPR 1B.1 MSCP Covered	Small herb. Occurs on clay soils. Found in grasslands, valley bottoms and dry drainages, also can occur on slopes, disturbed places, and in coastal sage scrub. Flowering period: April–October. Elevation: 165-1970 feet (50-600 meters).	Low. The most recent sightings of this species in the vicinity date back to 1936 and are over two miles south of the project site. Although suitable habitat is present on site, this species has not been found on site during general or focused surveys.
Aphanisma blitoides	ashanisma	/ CRPR 1B.2 MSCP Covered	Herb. Found in coastal bluff scrub, coastal dunes, and coastal scrub. Usually on bluffs and slopes near the ocean in sandy or clay soils. Flowering period: March-June. Elevation: 10-1000 feet (3-305 meters).	None. This species is found predominantly along the coast. The project site is too far inland for this species to occur.
Astragalus tener var. titi	coastal dunes milkvetch	FE/SE CRPR 1B.1 MSCP Covered	Annual herb. Coastal bluff scrub, coastal dunes, coastal prairie. Moist, sandy depressions of bluffs or dunes along and near the Pacific Ocean; one site on a clay terrace. Flowering period: March-May. Elevation: 3-150 feet (1-45 meters).	None. This species is found predominantly along the coast. The project site is too far inland for this species to occur and is outside the known elevation range for this species.
Cylindropuntia californica var. californica (Opuntia parryi var. serpentine)	snake cholla	/ CRPR 1B.1 MSCP Covered	Stem succulent. Found in chaparral and coastal scrub. Flowering period: April-July. Elevation: 50-950 feet (15-290 meters).	Low. Although suitable habitat is present on site, this perennial stem succulent would likely have been observed if present.



Species Name	Common Name	Status ¹	Habit, Ecology and Life History	Potential to Occur
Deinandra conjugens	Otay tarplant	FT/SE CRPR 1B.1 MSCP Covered	Annual Herb. Found on fractured clay soils in grasslands or lightly vegetated coastal sage scrub in southern San Diego County and northwestern Baja California, Mexico. In San Diego County, found in scattered localities from the vicinity of Sweetwater Reservoir south to the Mexico border. Flowering Period: May-June. Elevation: 65-985 feet (20-300 meters).	None. This species occurs in the southern part of San Diego County. The project site is outside the known range of this species.
Dudleya brevifolia	short-leaved dudleya	/SE CRPR 1B.1 MSCP Covered	Small leaf succulent. Occurs in open areas and sandstone bluffs in chamise chaparral or Torrey pine forest. Flowering period: April–May. Elevation: 0-410 feet (0-125 meters).	None. Suitable habitat does not occur on the project site.
Dudleya variegata	Variegated dudleya	/ CRPR 1B.2 MCSP Covered	Openings in sage scrub and chaparral, isolated rocky substrates in open grasslands, and a proximity to vernal pools and mima mound topography characterize habitats utilized by this species Southern San Diego County; northwestern Baja California, Mexico Flowering period: April-June. Elevation: 0-985 feet (0-300 meters).	Low. The most recent observation of this species in the vicinity of the project area was in 1936 over 1.5 miles north of the project site. Although suitable habitat is present on site, this species has not been found on site during general or focused surveys.
Navarretia fossalis	spreading navarretia	FT/ CRPR 1B.1 VPHCP Covered	Annual herb. Grows in vernal pools, vernal swales, or roadside depressions. Population size is strongly correlated with rainfall. Depth of pool appears to be a significant factor as this species is rarely found in shallow pools. Found in western Riverside and southwestern San Diego counties as well as northwestern Baja California, Mexico. Flowering period: April-June. Elevation: 100-4,265 feet (30-1,300 meters).	Low. CNDDB records indicate this species was found in the northeast portion of the site in 1979, however, 1986 surveys of the same pools were negative, and successive surveys also have been negative for this species. The City's 2019 VPHCP does not show this species as occurring on site and it may no longer be extant at this location.



Species Name	Common Name	Status ¹	Habit, Ecology and Life History	Potential to Occur
Orcuttia californica	California orcutt grass	FE/SE CRPR 1B.1 VPHCP Covered	Annual grass. Grows in vernal pools in valley grassland and wetland communities. Flowering period: April – August. Elevation: 197 – 2,165 feet (700 meters).	Low. Last observed in the project vicinity, over 1 mile from the project site, in 2011. Although suitable habitat is present on site, this species has not been found on site during general or focused surveys.
Pogogyne abramsii	San Diego mesa mint	FE/SE CRPR 1B.1 VPHCP Covered	Small herb. Occurs in vernal pools within grasslands, chamise chaparral, or coastal sage scrub communities. Flowering period: March–July. Elevation: 230-640 feet (70-195 meters).	Present. Species has been documented in several vernal pools in the eastern and northeastern portions of the site (HELIX 2009-2013 and City VPHCP data).
Pogogyne nudiuscula	Otay Mesa mint	FE/SE CRPR 1B.1 VPHCP Covered	Annual herb. Grows in coastal mesa vernal pools within chaparral, coastal sage scrub, and wetland communities. Flowering period: March – June. Elevation: 328 – 820 feet (100 – 250 meters).	None. This species is found only in the Otay Mesa region of southern San Diego County (City VPHCP 2019). The project site is outside the range of this species.
Plants				
Bloomeria clevelandii	San Diego goldenstar	/ CRPR 1B.1	Perennial bulbiferous herb. Found on clay soils in chaparral, coastal scrub, valley and foothill grassland, and vernal pools. Flowering period: April-May. Elevation: 164-1,525 feet (50-465 meters).	Present. Several small populations (one to 15 individuals) were observed within grassland and sage scrub in the eastern portion of the site (RECON 2008).
Brodiaea orcuttii	Orcutt's brodiaea	/ CRPR 1B.1 MSCP Covered	Small perennial herb. Occurs only on clay and serpentine soils in vernally moist environments, usually near vernal pools, meadows, and seeps. Flowering period: May–July. Elevation: 330–5,740 feet (100–1,750 meters).	Present. A population of several hundreds of individuals was found within an area west of the runway (RECON 2008), and smaller numbers of this species were documented in discrete locations within and adjacent to several onsite vernal pools (HELIX 2010-2013; Merkel and Associates 2015).
Ceanothus verrucosus	wart-stemmed ceanothus	/ CRPR 2B.2 MSCP Covered	Shrub. Found in chaparral plant communities where it prefers rocky slopes. Flowering period: January-April. Elevation: 0-1,150 feet (0-350 meters).	Low. This conspicuous shrub would likely have been observed if present.



Species Name	Common Name	Status ¹	Habit, Ecology and Life History	Potential to Occur
Eryngium aristulatum var. parishii	San Diego button- celery	FE/SE CNPS List 1B.1 VPHCP Covered	Small annual or perennial herb. Grows in vernal pools or mima mound areas with vernally moist conditions in San Diego and Riverside counties, as well as Baja California, Mexico. Flowering period: April-June. Elevation: 0-2,315 feet (0-705 meters).	Low. A single CNDDB record indicate this species was found in a single pool in the eastern portion of the site in 1979, but species has not been observed again during general or focused site surveys. The City's 2019 VPHCP does not show this species as occurring on site, and it may no longer be extant at this location.
Holocarpha virgata ssp. elongata	graceful tarplant	/ CRPR 4.2	Annual herb. Found in grasslands on coastal mesas and in foothills San Diego, Orange, and Riverside counties. Flowering period: May-November. Elevation: 0-2,950 feet (0-900 meters).	Present. Species is widespread in non- native grassland habitat on site and has been noted during several biological surveys (RECON 2008, Rocks Biological Consulting 2013, HELIX 2017).
Ferocactus viridescens	San Diego barrel cactus	/ CRPR 2B.1 MSCP Covered	Perennial stem succulent. Found in chaparral, coastal scrub, valley and foothill grassland, and vernal pools. Flowering period: May-June. Elevation: 10-1,476 feet (3-450 meters).	Present. Fewer than 10 individuals observed in coastal sage scrub in the eastern portion of the site (P&D Environmental 1998). Population is presumed extant.
Isocoma menziesii var. decumbens	decumbent goldenbush	/ CRPR 1B.2	Perennial shrub. Found in chaparral and coastal scrub often on sandy, disturbed areas. Flowering period: April-November. Elevation: 32-442 feet (10-135 meters).	Low. This conspicuous shrub would likely have been observed if present.
Quercus dumosa	Nuttall's scrub oak	/ CRPR 1B.1	Perennial evergreen shrub. Found on sandy soils or clay loam in closed-cone coniferous forest, chaparral, and coastal scrub. Flowering period: February-April (sometimes as late as August). Elevation: 49-1,312 feet (15-400 meters).	Present. Scattered individuals were observed in Diegan coastal sage scrub and chamise chaparral by HELIX during the June 2017 field reconnaissance, and five individuals were observed in one location in non-native grassland (RECON 2008). Individuals occurring in the grassland habitat are subject to mowing from airport maintenance operations.

Listing is as follows: F = Federal; S = State of California; E = Endangered; T = Threatened; R= Rare. CRPR = California Rare Plant Rank: 1A–presumed extinct; 1B–rare, threatened, or endangered in California and elsewhere; 2A–presumed extirpated in California but more common elsewhere; 2B–rare, threatened, or endangered in California but more common elsewhere; 3–more information needed; 4–watch list for species of limited distribution. Extension codes: .1–seriously endangered; .2–moderately endangered; .3–not very endangered.



Appendix D

Sensitive Animal Species with Potential to Occur

Species Name	Common Name	Status ¹	Habitat Associations	Potential to Occur
INVERTEBRATES				
Bombus crotchii	Crotch's bumble bee	/sc	Inhabits shrublands, chaparral, and open grasslands with suitable nectar and pollen sources. Primarily nests underground and forages on a wide variety of flowers, but a short tongue renders it best suited to open flowers with short corollas. Species is most commonly observed on flowering plants in the Fabaceae, Asteraceae, Apocynaceae, and Lamiaceae families. Occurrence has also been linked to habitats containing Asclepias, Chaenactis, Lupinus, Medicago, Phacelia, and Salvia genera.	Low potential on the airfield, moderate potential in the MHPA. Observations of this species have been reported in the Tierrasanta area east of I-15, with the closest observation located near a finger canyon two miles east of the airport in 2023, and several observations further east in Mission Trails Regional Park between 2017 and 2024 (iNaturalist 2025). The species has moderate potential to forage or nest in native scrub or grassland habitats within the MHPA as well as scrub habitats immediately adjacent to the MHPA in the southeastern part of the AMP area. The species has low potential to forage or nest on the airfield due to limited presence of suitable floral resources (non-native grasses dominate the airfield) combined with regular mowing of these areas.
Branchinecta sandiegonensis	San Diego fairy shrimp	FE/ VPHCP Covered	Endemic to San Diego and Orange County mesas. Found in vernal pools in chaparral, coastal scrub, vernal pool, and wetland habitat.	Present. Species has been documented in numerous vernal pools on site during various biological surveys (RECON 2008; HELIX 2010-2016; and City's 2019 VPHCP).



Species Name	Common Name	Status ¹	Habitat Associations	Potential to Occur
VERTEBRATES				
Amphibians and Reptile	S			
Aspidoscelis hyperythra	orange-throated whiptail	/WL MSCP Covered	Inhabits low-elevation coastal scrub, chaparral, and valley-foothill hardwood habitats including chaparral, cismontane woodland, and coastal scrub. Prefers washes and sandy areas with patches of brush and rocks. Perennial plants are necessary for its food source, termites.	Moderate. Observed in chamise chaparral in 1996 (P&D Environmental 1998). Suitable habitat is present in the eastern and northeastern portions of the site.
Phrynosoma blainvillii	coast horned lizard	/SSC MSCP Covered	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects are required. Also found in chaparral, cismontane woodland, coastal bluff scrub, coastal scrub, desert wash, pinon and juniper woodlands, riparian scrub, riparian woodland, and valley and foothill grassland.	Moderate. Observed in coastal sage scrub in the eastern portion of the site in 1996 (P&D Environmental 1998). Suitable habitat is present in the eastern and northeastern portions of the site.
Plestiodon skiltonianus interparietalis	Coronado skink	/WL	Found in grassland, chaparral, pinon-juniper and juniper sage woodland, pine-oak, and pine forests in the Coast Ranges of Southern California. Prefers early successional stages or open areas. Found in rocky areas close to streams and on dry hillsides. Also known from chaparral, cismontane woodland, and pinon and juniper woodlands.	Moderate. Observed on site in 1994 (P&D Environmental 1998). Suitable habitat is present in the eastern and northeastern portions of the site.
Spea hammondii	western spadefoot	FC/SSC	Occurs in open coastal sage scrub, chaparral, and grassland, along sandy or gravelly washes, floodplains, alluvial fans, or playas; requires temporary pools for breeding and friable soils for burrowing; generally excluded from areas with bullfrogs (Rana catesbiana) or crayfish (Procambarus sp.).	Moderate. Observed in 1994 in the vicinity of vernal pools in the east central portion of the site (P&D Environmental 1998). Vernal pools on-site support suitable habitat for this species.



Species Name	Common Name	Status ¹	Habitat Associations	Potential to Occur
Birds			•	
Astur cooperii	Cooper's hawk	/WL MSCP Covered	Occurs year-round throughout San Diego County's coastal slope where stands of trees are present. Found in oak groves, mature riparian woodlands, and eucalyptus stands or other mature forests.	Moderate. Two individuals observed in eucalyptus trees in the eastern portion of the site in 1996 (P&D Environmental 1998).
Accipiter striatus	sharp-shinned hawk	/WL	Usually observed in areas with tall trees or other vegetative cover but can be observed in a variety of habitats n San Diego County, has widespread distribution but occurs in small numbers and only during winter.	Moderate. Observed foraging on site in 1994 (P&D Environmental 1998). Species could forage over grasslands in winter.
Aimophila ruficeps canescens	southern California rufous-crowned sparrow	/WL MSCP Covered	Occurs in coastal sage scrub and sparse mixed chaparral on rocky hillsides and in canyons; also found in open sage scrub/grassy areas of successional growth.	Moderate. Observed in coastal sage scrub in the eastern portion of the site in 1996 (P&D Environmental 1998). Suitable habitat is present in the northeastern and eastern portions of the site.
Athene cunicularia	burrowing owl	BCC/SC MSCP Covered	Found in grassland or open scrub habitats in San Diego County. Requires burrows and rodents for prey.	Moderate. An individual was excluded from a hangar, and a second individual was killed by bird strike in 2022. A single wintering burrowing owl was observed by MYF operations staff and the City's airport biologist in a broken retaining wall along Montgomery Drive during the 2017-2018 winter season and near the windsock on the airfield in the 2018-2019 winter season (personal communication with City's airport biologist). This species was also detected on site three times during the airport's wildlife hazard assessment surveys conducted between June 2018 and May 2019 (JE Fuller and City 2020). A single burrowing owl individual



Species Name	Common Name	Status ¹	Habitat Associations	Potential to Occur
				was observed in the southwest portion of the site by RECON in 2007. The owl was observed repeatedly in and adjacent to a burrow during protocol breeding season surveys in 2007 (RECON 2008). No other owls have been observed on site during various biological surveys conducted in 1994, 1996, 2009, 2010, 2011, 2012, 2013, 2016, and 2017 (P&D Environmental 1998; HELIX 2009-2013; HELIX 2016; Rocks Biological 2013; Merkel and Associates 2015).
Circus cyaneus	northern harrier	/SSC MSCP Covered	Prefers open grassland and marsh in San Diego County. Their distribution is primarily scattered throughout lowlands, but they can also be observed in foothills, mountains, and desert.	Moderate. Suitable foraging habitat is present. Observed on site in 1994 (P&D Environmental 1998).
Elanus caeruleus	white-tailed kite	/FP	Riparian woodlands and oak or sycamore groves adjacent to grassland. Primarily occurs throughout coastal slopes of San Diego County.	Moderate. Suitable foraging habitat is present. Observed foraging on site in 1994 (P&D Environmental 1998).
Eremophila alpestris actia	horned lark	/WL	Found on sandy beaches and in agricultural fields, grassland, and open areas.	High. Suitable habitat is present and species is known to utilize mowed grasslands and open, disturbed areas. Observed on site in 1994 (P&D Environmental 1998).
Falco mexicanus	prairie falcon	BCC/WL	Nests on cliff or bluff ledges or occasionally in old hawk or raven nests; forages in grassland or desert habitats. Observed yearround in San Diego County but more commonly during winter.	Low. Suitable dry, open habitat occurs on the site; however, this species was not observed or otherwise detected during multiple project surveys. This species could forage over the site.



Species Name	Common Name	Status ¹	Habitat Associations	Potential to Occur
Lanius ludovicianus	loggerhead shrike	BCC/SSC	Inhabits grassland, open sage scrub, chaparral, and desert scrub. An uncommon year-round resident observed throughout San Diego County but absent from pinyon woodlands in higher elevations of the Santa Rosa and Vallecito mountains.	Moderate. Suitable foraging habitat is present. Observed in chamise chaparral in 1996 (P&D Environmental 1998).
Polioptila californica californica	coastal California gnatcatcher	FT/SSC MSCP Covered	Occurs in coastal sage scrub with California sagebrush (<i>Artemesia californcia</i>) as a dominant or co-dominant species, at elevations below 2,500 feet.	Present. Species was detected in 3 locations within Diegan coastal sage scrub and chamise chaparral in the eastern portion of the site during vernal pool restoration field work conducted in 2010 (HELIX 2010), and one individual was detected in Diegan coastal sage scrub in the eastern portion of the site during HELIX's 2017 site reconnaissance.
Vireo bellii pusillus	least Bell's vireo	FE/SE MSCP Covered	Occurs in riparian thickets, usually willow and cottonwood. Summer resident of Southern California. Typically arrives in San Diego County during the third week of March.	High. A single male was detected in 2017 in one location near Aero Drive, staying on site for three weeks before avoiding further detection.
Mammals		T .	T	ı
Neotoma lepida intermedia	San Diego desert woodrat	/SSC	Found in open chaparral and coastal sage scrub, often building large, stick nests in rock outcrops or around clumps of cactus or yucca. Inhabit the coastal slope of southern California from San Luis Obispo County south into coastal northwestern Baja California, Mexico.	Moderate. Nests were observed in sage scrub and chaparral in 1996 (P&D Environmental 1998). Suitable habitat is limited to the northeastern and eastern portions of the site.

Listing is as follows: F = Federal; S = State of California; E = Endangered; T = Threatened; C=Candidate; R = Rare; FP = Fully Protected; BCC = Bird of Conservation Concern; SSC = State Species of Special Concern; WL = Watch List.

