Biological Technical Report

Nighthawk Energy Storage Project

JUNE 2024

Prepared for:

NIGHTHAWK ENERGY STORAGE, LLC

Prepared by:

DUDEK

605 Third Street
Encinitas, California 92024
Contact: Erin Bergman

Table of Contents

SECTION **PAGE NO.**

TABLES

FIGURES

APPENDICES

Acronyms and Abbreviations

Acronym	Definition
amsl	above mean sea level
ASMD	area-specific management directive
BCME	Biological Construction Mitigation/Monitoring Exhibit
BMP	best management practice
CBLA	core biological linkage area
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CRPR	California Rare Plant Rank
CWA	Clean Water Act
dB(A)	A-weighted decibel
gen-tie	generation transmission
GIS	geographic information systems
MBTA	Migratory Bird Treaty Act
MHPA	Multiple Habitat Planning Area
MMC	Mitigation Monitoring Coordination
MSCP	Multiple Species Conservation Program
RWQCB	Regional Water Quality Control Board
SDG&E	San Diego Gas and Electric Company
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service

Executive Summary

This report focuses on the generation transmission line portion of the proposed Nighthawk Energy Storage Project (project) within the City of San Diego. The generation transmission line spans the City of San Diego and the City of Poway and includes land on the Miramar Marine Corps Air Station. The City of San Diego property is south of Beeler Canyon Road and will provide the connection to the San Diego Gas and Electric Company Sycamore Canyon Substation approximately 1.1 miles to the south. The project study area is within the City of San Diego Final Multiple Species Conservation Program Subarea Plan (City of San Diego 1997).

Dudek biologists conducted project-related surveys in March 2021; February, March, April, May, June, July, and August 2022; and May and June 2024. The surveys included vegetation and land cover mapping, jurisdictional resource delineation, rare plant surveys, Crotch bumble bee surveys, focused coastal California gnatcatcher surveys, and Quino checkerspot butterfly surveys. The purpose of this Biological Technical Report is to provide a discussion of biological resources recognized as sensitive by local, state, or federal wildlife agencies and/or environmental organizations.

Based on species composition and general physiognomy, a total of ten native vegetation communities, one non-native vegetation communities, and three land cover types were identified within the study area: chamise chaparral, Diegan coastal sage scrub, Diegan coastal sage scrub-Baccharis-dominated, Diegan coastal sage scrub, disturbed habitat, emergent wetland, freshwater marsh, non-native grassland, non-vegetated channel, scrub oak chaparral, southern mixed chaparral, southern riparian woodland, urban/developed, and urban/developed-ornamental.

The results of the jurisdictional aquatic resource delineation concluded that there are no locations within the impact area that meet the definition of waters of the United States and/or state, including wetlands, subject to review and regulation by the U.S. Army Corps of Engineers, Regional Water Quality Control Board, California Department of Fish and Wildlife, and the City of San Diego.

Implementation of the project will result in direct, permanent impacts to 0.33 acres of Diegan coastal sage scrub-Baccharis dominated, 0.59 acres of Diegan coastal sage scrub and 0.04 southern mixed chaparral communities located outside and within/adjacent to the City's Multiple Species Conservation Program Subarea Plan Multi-Habitat Planning Area. A restoration plan will be provided for mitigation of these vegetation communities. Permanent impacts to native vegetation will be restored. The project will be required to comply with the Migratory Bird Treaty Act and California Fish and Game Code requirements. Compliance with these regulations ensure the project will either avoid the bird breeding season, as feasible, or perform pre-construction nesting bird surveys if construction is to occur during the bird breeding season.

1 Introduction

This technical report provides an analysis of potential biological resource impacts associated with the proposed Nighthawk Energy Storage Project (project) generation transmission (gen-tie) line connection located south of Beeler Canyon Road, within the City of San Diego (City), California.

In accordance with the current San Diego Land Development Code Biology Guidelines (City of San Diego 2018a), this report provides an introduction, a project description, a summary of the pertinent biological resource regulations, the project setting, survey methods, existing biological resources, special-status biological resources, project impacts (direct and indirect), and project mitigation. The project impacts, avoidance, and mitigation measures are discussed in accordance with the California Environmental Quality Act (CEQA), Clean Water Act (CWA), California Fish and Game Code, the City's Final Multiple Species Conservation Program (MSCP) Subarea Plan (Subarea Plan), and the City's Environmentally Sensitive Lands regulations.

1.1 Project Location

The overall project spans the City of San Diego and the City of Poway and includes land on the Miramar Marine Corps Air Station (Figure 1, Project Location). The section within the City of San Diego jurisdiction is within a conservation easement, open space easement, the City of San Diego's Multiple Habitat Planning Area and mitigation area for the Sycamore Estates Development Project and is south of Beeler Canyon Road and will provide the connection to the San Diego Gas and Electric Company (SDG&E) Sycamore Canyon Substation approximately 1.1 miles to the south. The gen-tie line will be located within the jurisdiction of the City of San Diego and is the focus of this report.

1.2 Project Description

The City of Poway is the lead agency for the Nighthawk Energy Storage Project (project). This project consists of a 300-megawatt battery energy storage system (BESS) that will deliver and receive electric power from the existing SDG&E Sycamore Canyon Substation. The primary project components would be located on a portion of approximately 82 acres of partially developed land consisting of Assessor Parcel Numbers (APN) 320-031-0300 in the City of Poway, California and improvements associated with a high-voltage underground transmission line (gen-tie line) would be located within the City of San Diego, California (City), and Marine Corps Air Station Miramar (Miramar Marine Corps).

The only portion of the overall project which requires development within the jurisdiction of City of San Diego lands is the gen-tie line and therefore, this report focuses only on the gen-tie line alignment and associated impacts. This portion is approximately 2.7 acres.

Trenching will be required to construct the 138 kV gen-tie line underground, and may include the use of trenchers, backhoes, excavators, haul vehicles, compaction equipment, and water trucks. Construction of the 138 kV gen-tie line will take approximately 3 months to complete and will occur primarily within the greater Project site in the City of Poway, and in the City of San Diego, primarily in developed areas. The workspace will be limited to within the road right-of-way and private property. Within the northern portion of the gen-tie line alignment, work will be located entirely within developed lands (paved roads).

Permanent structures (equipment vaults) will be constructed at three locations along the alignment, at the very northern and southern ends as well as within the central portion of the alignment, just north of Stonebridge Parkway. Temporary work areas will be designated around each of the vaults. Construction of the proposed project will implement open cut trenching. Upon project construction the temporary work areas around the vaults will be restored via San Diego Landscape guidelines (City of San Diego 2023). Avoidance of City of San Diego wetlands, waters, non-native grassland, and scrub oak chaparral located south of Stonebridge Parkway, will be achieved via jack and bore method. Jack and bore is a trenchless method that involves the use of a boring machine to create a tunnel underground, through which a pipe is installed. It is anticipated that no additional trenching would occur for maintenance and decommissioning activities associated with the gen-tie line.

1.3 Regulatory Context

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) prohibits the take of any migratory bird or any part, nest, or eggs of any such bird. Under the MBTA, "take" is defined as any actions to pursue, hunt, shoot, wound, kill trap, capture, or collect, or any attempt to carry out these activities (16 USC 703 et seq.). Additionally, Executive Order 13186, Responsibilities of Federal Agencies to Protect Migratory Birds, requires that any project with federal involvement address impacts of federal actions on migratory birds with the purpose of promoting conservation of migratory bird populations (66 FR 3853–3856). The executive order requires federal agencies to work with U.S. Fish and Wildlife Service (USFWS) to develop a memorandum of understanding. USFWS reviews actions that might affect these species. Currently, birds are considered to be nesting under the MBTA only when there are eggs or chicks that are dependent on the nest. This project will comply with all requirements of the MBTA. The project will adhere to standard MBTA compliance measures such as avoidance of vegetation clearing during the bird breeding season or preconstruction nesting bird surveys with nest avoidance measures, as applicable.

San Diego Multiple Species Conservation Program

The City is a participant in the San Diego MSCP Plan, a comprehensive, regional, long-term habitat conservation program designed to provide permit issuance authority for take of Covered Species to the local regulatory agencies. The MSCP Plan addresses habitat and species conservation within approximately 900 square miles in the southwestern portion of San Diego County (County of San Diego 1998). It serves as an approved habitat conservation plan pursuant to an approved Natural Communities Conservation Plan in accordance with the state Natural Communities Conservation Planning Act (County of San Diego 1998).

The MSCP Plan establishes a preserve system designed to conserve large blocks of interconnected habitat having high biological value that are delineated into Multiple Habitat Planning Areas (MHPAs). The City's MHPA is a "hard line" preserve developed by the City in cooperation with the wildlife agencies, property owners, developers, and environmental groups. The MHPA identifies biological core resource areas and corridors targeted for conservation, in which only limited development may occur (City of San Diego 1997).

The MSCP Plan identifies 85 plants and animals to be covered under the plan ("Covered Species"). Many of these Covered Species are subject to one or more protective designations under state and/or federal law, and some are endemic to San Diego. The MSCP Plan seeks to provide adequate habitat in the preserve to maintain ecosystem functions and persistence of extant populations of the 85 Covered Species while also allowing participating landowners take of Covered Species on lands located outside of the preserve. The purpose of the MSCP Plan is to

address species conservation on a regional level and thereby avoid project-by-project biological mitigation, which tends to fragment habitat. The Conditions of Coverage were reviewed for all species.

City of San Diego MSCP Subarea Plan

The Subarea Plan (City of San Diego 1997) encompasses 206,124 acres within the MSCP Plan area. The project area is located within the Northern Area of the Subarea Plan (City of San Diego 1997) (Figure 2, Multi-Habitat Planning Area [MHPA] and Local Jurisdictions). The Subarea Plan is characterized by urban land uses with approximately 75% either built out or retained as open space/park system. As mentioned previously, the City MHPA is a hard line preserve developed by the City in cooperation with the wildlife agencies, property owners, developers, and environmental groups. The MHPA identifies biological core resource areas and corridors targeted for conservation, in which only limited development may occur (City of San Diego 1997). The MHPA is considered an urban preserve that is constrained by existing or approved development, and comprises habitat linkages connecting several large core areas of habitat. The criteria used to define core and linkage areas involves maintaining ecosystem function and processes, including large animal movement. Each core area is connected to other core areas or to habitat areas outside of the MSCP either through common boundaries or through linkages. Core areas have multiple connections to help ensure that the balance in the ecosystem will be maintained (City of San Diego 1997). Critical habitat linkages between core areas are conserved in a functional manner with a minimum of 75% of the habitat within identified linkages conserved (City of San Diego 1997).

Although the northern portion of the gen-tie line alignment occurs outside of MHPA, it does occur within a MSCP core biological linkage area (CBLA) (Figure 2). As such, MSCP adjacency guidelines apply to this portion of the project. The central portion of the project, north of Stonebridge Parkway, is located outside of the MHPA boundary whereas the southern portion of the project (i.e., south of Stonebridge Parkway) is within MHPA (Figure 2).

City of San Diego Wetlands Definition

The extent of City wetland jurisdiction is determined based on the City definition of "wetland" provided in Land Development Code Section 113.0103, which is regulated by the City under the Environmentally Sensitive Lands Regulations (Section 143.0141[b]), which state the following:

> "Wetlands" are defined as areas which are characterized by any of the following conditions:
>
> 1. 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 the 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).

This definition is intended to differentiate, for the purposes of delineating wetlands, between (a) naturally occurring wetlands and wetlands intentionally created by human actions and (b) areas with wetlands characteristics unintentionally resulting from human activities in historically non-wetland areas. With the exception of wetlands created for the purpose of providing wetland habitat or resulting from human actions to create open waters or from the alteration of natural stream courses, areas demonstrating wetland characteristics that are artificially created are not considered wetlands by this definition. Taking into account regional precipitation cycles, all adopted scientific, regulatory, and technological information available from the state and federal resource agencies shall be used for guidance on the identification of hydrophytic vegetation, hydric soils, and wetland hydrology.

Under the definition, an area is considered wetland based on the presence of at least one of three physical criteria (vegetation, hydrology, soils) or based on "Map No.C-713 as shown in Chapter 13, Article 2, Division 6" (Land Development Code Section 113.0103). The same code section defines wetland buffers as additional "areas or feature(s) that protects functions and values of the adjacent wetland" where the functions and values include "absorption and slowing of flood waters for flood and erosion control, sediment filtration, water purification, [and] ground water recharge."

The City uses the criteria listed in Section 320.4(b)(2) of the U.S. Army Corps of Engineers (USACE) General Regulatory Policies (33 CFR 320–330) to apply an appropriate buffer around wetlands that serves to protect the function and value of the wetland. According to the City's Biology Guidelines, a wetland buffer is an area surrounding a wetland that helps protect the function and value of the adjacent wetland by reducing physical disturbance from noise, activity and domestic animals and provides a transition zone where one habitat phases into another. The buffer protects the functions and values of wetland areas such as the slowing of flood waters for flood and erosion control, sediment filtration, water purification, and groundwater recharge. The buffer also provides for the need for upland transitional habitat (City of San Diego 2018a). The width of the buffer is determined by factors such as type and size of development, sensitivity of the wetland resource to edge effects, topography, and the need for upland transition (City of San Diego 2018a). There are no set buffer widths required for wetlands delineated outside of the coastal zone.

City of San Diego Biology Guidelines

The City's Development Services Department developed the Biology Guidelines presented in the Land Development Manual "to aid in the implementation and interpretation of the Environmentally Sensitive Lands Regulations, San Diego Land Development Code, Chapter 14, Division 1, Section 143.0101 et seq., and the Open Space Residential (OR-1-2) Zone, Chapter 13, Division 2, Section 131.0201 et seq." (City of San Diego 2018a). The guidelines also provide standards for the determination of impacts and mitigation under CEQA and the California Coastal Act. Sensitive biological resources, as defined by the Environmentally Sensitive Lands Regulations, include lands within the MHPA and other lands outside of the MHPA that contain wetlands; vegetation communities classifiable as Tier I, II, IIIA, or IIIB; habitat for rare, endangered, or threatened species; or narrow endemic species. The most sensitive habitats are classified as Tier I with the least sensitive classified as Tier IV, and varying mitigation ratios and requirements that mitigation be in tier or in kind are based on the sensitivity of the habitat being affected.

In addition, the location of impacts inside or outside of the City's MHPA also determines where and how much mitigation is required, with the highest ratios being required for mitigation outside of the MHPA when project impacts occur within the MHPA (City of San Diego 2018a). Habitat mitigation requirements, along with seasonal grading restrictions, provide protections for sensitive species, with additional species-specific mitigation required for significant impacts to narrow endemic species. Limitations on development in the MHPA also protect wildlife

movement corridors (e.g., linear areas of the MHPA less than 1,000 feet wide) (City of San Diego 2018a). The portion of the site south of Stonebridge Parkway is located inside the MHPA (Figure 2 and Figure 3, Biological Resources). South of Beeler Canyon Road approximately halfway to Stonebridge Parkway is core biological area and biological linkage area. These linkages and core areas occur through the site from east to west and adjacent to the site just south of Beeler Canyon Road.

2 Survey Methods and Limitations

Data regarding biological resources present within the project area were obtained through a review of pertinent literature and field reconnaissance, both of which are described in detail in Sections 2.1 and 2.2. Survey limitations are described in Section 2.3. Survey areas were determined based on suitable habitat for the resource for which the survey was conducted.

2.1 Literature Review

The following data sources were reviewed to assist with the biological resources analysis:

- Biological Resources Resource Report for the Paseo Montril Development Project (RECON 2018)
- U.S. Department of Agriculture Web Soil Survey (USDA 2020)
- California Department of Fish and Wildlife (CDFW) California Natural Diversity Database – Special Animals List (CDFW 2019)
- CDFW California Natural Diversity Database – RareFind, Version 5 (CDFW 2020)
- The Calflora Database (Calflora 2020)
- Rare Plants of San Diego County (Reiser 1996)
- San Diego Plant Atlas (SDNHM 2012), San Diego Mammal Atlas (SDNHM 2017), San Diego Bird Atlas (Unitt 2004)
- The Mammals of North America (Hall and Kelson 1959)
- California Herps (Calherps 2020)
- California Native Plant Society Inventory of Rare and Endangered Plants (CNPS 2020)
- Consortium of California Herbaria vascular plant data (CCH 2020)
- MSCP Subarea Plan (City of San Diego 1997)
- San Diego Municipal Code, Land Development Code—Biology Guidelines (City of San Diego 2018a)
- USFWS Species Occurrence Data (USFWS 2020)
- San Diego Geographic Information Source database (SanGIS 2020)
- San Diego Natural History Museum (SDNHM 2012)
- Aerial maps from the San Diego Association of Governments (SANDAG 2014) and Bing (Microsoft 2020)
- Topographic maps (Google Earth 2020)

2.2 Field Reconnaissance

Biological field surveys for the proposed project were conducted in March 2021; February, March, April, May, June, July, and August 2022; and May and June 2024 by Dudek biologists Brock Ortega and Erin Bergman. Field surveys included vegetation and land cover mapping, habitat quality assessment, biological reconnaissance, spring and late season rare plant surveys, Quino checkerspot butterfly (*Euphydryas editha quino*) surveys, coastal California gnatcatcher (*Polioptila californica californica*) surveys, Crotch bumble bee surveys (*Bombus crotchii*) and a jurisdictional resources delineation. Table 1 lists the survey dates, times, surveying biologists, and weather conditions during the surveys.

All biological surveys were conducted in accordance with the City's Guidelines for Conducting Biological Surveys (Appendix II in City of San Diego 2018a).

Table 1. Schedule of Surveys

Date	Time	Personnel	Purpose	Conditions
04/12/21	5:00 a.m.–10:05 a.m.	Brock Ortega	California gnatcatcher Survey	58°F–66°F; 50%–30% cloud cover, 0–5 mph winds
04/19/21	5:00 a.m.–9:50 a.m.	Brock Ortega	California gnatcatcher Survey	57°F–67°F; 40%–10% cloud cover; 0–3 mph winds
03/08/22	9:30 a.m.– 2:10 p.m.	Brock Ortega	Quino Checkerspot Butterfly Survey	68°F–78°F; 10% cloud cover; 0–3 mph wind
03/13/22	5:30 a.m.–10:00 a.m.	Brock Ortega	California gnatcatcher Survey	55°F–65°F; 20%–10% cloud cover; 0–3 mph winds
03/13/22	10:00 a.m.– 1:50 p.m.	Brock Ortega	Quino Checkerspot Butterfly Survey	65°F–74F; 0% - 10% cloud cover; 0–5 mph wind
03/17/22	9:00 a.m.– 12:00 p.m.	Brock Ortega	Quino Checkerspot Butterfly Survey	65°F–77°F; 0% cloud cover; 0–4 mph wind
03/24/22	9:00 a.m.– 1:55 p.m.	Brock Ortega	Quino Checkerspot Butterfly Survey	65°F–79°F; 0% cloud cover; 0–3 mph wind
03/30/22	8:10 a.m.– 12:10 p.m.	Brock Ortega	Quino Checkerspot Butterfly Survey	65°F–75°F; 0% cloud cover; 0–3 mph wind
04/02/22	9:30 a.m.– 12:30 p.m.	Brock Ortega	Quino Checkerspot Butterfly Survey	70°F–83°F; 0% cloud cover; 0–3 mph wind
04/14/22	12:20 p.m.– 4:40 p.m.	Brock Ortega	Quino Checkerspot Butterfly Survey	65°F–77°F; 0% - 10% cloud cover; 0–4 mph wind
04/16/22	8:00 a.m.-12:12 p.m.	Brock Ortega	California gnatcatcher Survey	65°F–77°F; 0%–10% cloud cover; 0–3 mph winds
04/19/22	10:30 a.m.– 2:20 p.m.	Brock Ortega	Quino Checkerspot Butterfly Survey	65°F–77°F; 0% - 10% cloud cover; 0–4 mph wind
04/23/22	6:45 a.m.–5:21 p.m.	Erin Bergman	Vegetation mapping, habitat assessment, and biological reconnaissance, rare plant reference checks	61°F–75°F; 0%–20% cloud cover; 0–3 mph wind
04/24/22	6:05 a.m.-4:50 p.m.	Erin Bergman	Spring rare plant reference checks	66°F–78°F; 10%–80% cloud cover; 0–3 mph wind

Table 1. Schedule of Surveys

Date	Time	Personnel	Purpose	Conditions
04/25/22	6:03 a.m.– 5:50 p.m.	Erin Bergman	Jurisdictional delineation/Spring rare plant survey	62°F–80°F; 10%–80% cloud cover; 0–3 mph wind
04/27/22	6:15 a.m.–5:35 p.m.	Erin Bergman	Spring Rare plant survey	60°F- 76°F -; 0%–50% cloud cover; 0–5 mph wind
04/29/22	6:12 a.m.-11:00 a.m.	Brock Ortega	California gnatcatcher Survey	59°F–70°F; 40%–20% cloud cover; 0–3 mph winds
04/29/22	11:55 a.m.– 3:15 p m.	Brock Ortega	Quino Checkerspot Butterfly Survey	71°F- 80°F -; 0%–20% cloud cover; 0–5 mph wind
05/05/22	1:10 p.m.– 4:20 p.m.	Brock Ortega	Quino Checkerspot Butterfly Survey	78°F- 85°F -; 0% cloud cover; 0–3 mph wind
05/07/22	7:30 a.m.–11:25 p.m.	Brock Ortega	California gnatcatcher Survey	63°F–80°F; 0% cloud cover; 0–5 mph winds
05/12/22	8:15 a.m.– 1:10 p.m.	Brock Ortega	Quino Checkerspot Butterfly Survey	67°F- 83°F -; 0-10% cloud cover; 0 mph wind
06/14/22	7:30 a.m.-11:25 p.m.	Brock Ortega	California gnatcatcher Survey	61°F–72°F; 20% - 0% cloud cover; 0–5 mph winds
07/20/22	6:05 a.m.-10:10 a.m.	Brock Ortega	California gnatcatcher Survey	65°F–75°F; 0%–100% cloud cover; 0–3 mph winds
07/24/22	8:05 a.m.- 5:15 p.m.	Erin Bergman	Rare plant reference checks	70°F- 103°F -; 0% cloud cover; 0–4 mph wind
07/30/22	6:00 a.m. - 6:30 p.m.	Erin Bergman	Late Season rare plant survey	72°F- 102°F -; 0%–50% cloud cover; 0–2 mph wind
08/03/22	6:00 a.m.-5:10 p.m.	Erin Bergman	Late Season rare plant survey	70°F- 95°F -; 0%–10% cloud cover; 0–6 mph wind
08/04/22	6:10 a.m.-3:15 p.m.	Erin Bergman	Vegetation mapping buffer/Late season rare plants/buffer wetland mapping	60°F- 89°F -; 0%–100% cloud cover; 0–3 mph wind
05/09/24	6:29 a.m.-5:57 p.m.	Erin Bergman	Bumble Bee survey	60°F- 76°F -; 0%–75% cloud cover; 0–3 mph wind
05/23/24	6:16 a.m. -6:11 p.m.	Erin Bergman	Bumble Bee survey	60-79 °F; 0–100 % cloud cover; 0–4 mph wind
06/06/24	8:00 AM–2:00 PM	Erin Bergman and Callie Amoaku	Bumble Bee Survey	67–77°F; 45-100% cloud cover; 0-5 mph wind

Notes: mph = miles per hour.

2.2.1 Resource Mapping

Vegetation communities and land uses on and within the survey area were mapped in the field directly onto a 100-foot scale (1 inch = 100 feet) aerial photograph-based digital ArcGIS mapping application. Once in ArcGIS, the acreage of each vegetation community and land cover present within the project area was determined. Vegetation mapping was conducted within the gen-tie line boundary and biological resources study area (50 feet) and associated vegetation mapping study area buffer (500-foot buffer) (Figure 3).

Pursuant to the Biology Guidelines (City of San Diego 2018a), the vegetation community and land cover mapping follows the Draft Vegetation Communities of San Diego County (Oberbauer et al.2008), which is based on the Preliminary Descriptions of the Terrestrial Natural Communities of California (Holland 1986). These habitats were then cross-walked to their corresponding community in the City's Biology Guidelines (City of San Diego 2018a). Areas within the project area supporting less than 30% native plant species cover were mapped as disturbed land, and areas supporting at least 20% native plant species, but fewer than 50% native cover, were mapped as a disturbed native vegetation community (e.g., disturbed coastal sage scrub).

2.2.2 Flora and Fauna

The plant species encountered during the field survey were identified and recorded directly into a field notebook. Plant species that could not be identified immediately were brought into the laboratory for further investigation. A compiled list of plant species observed in the proposed project area is presented in Appendix A, Plant Compendium. Latin and common names follow the Checklist of the Vascular Plants of San Diego County, 5th Edition (Rebman and Simpson 2014). Where the scientific name listed in Rebman and Simpson (2014) differs from the name currently recognized by the Jepson Interchange List of Currently Accepted Names of Native and Naturalized Plants of California (Jepson Flora Project 2018) or that listed in the California Native Plant Society's Inventory of Rare and Endangered Plants (CNPS 2020), the synonym is included in brackets following the name listed in Rebman and Simpson (2014).

Wildlife species detected during the field survey by sight, calls, tracks, scat, or other signs were recorded directly onto a field notebook. Latin and common names of any animals detected follow Crother (2017) for reptiles and amphibians, American Ornithological Society (AOS 2018) for birds, Wilson and Reeder (2005) for mammals, and North American Butterfly Association (NABA 2016) or SDNHM (2002) for butterflies. In addition to species actually detected during the surveys, expected wildlife use of the project area was determined by known habitat preferences of local species and knowledge of their relative distributions in the area. A list of wildlife species observed in the project area is presented in Appendix B, Wildlife Compendium.

2.2.3 Jurisdictional Resource Delineation

Jurisdictional resources are areas under the jurisdiction of one or all of the resource agencies (USACE, Regional Water Quality Control Board [RWQCB], and CDFW) and/or the City. Dudek biologists completed a formal jurisdictional resource delineation on April 25, 2022, which delineated the extent of jurisdictional features in the proposed gen-tie line and biological resources study area (50 feet) (Figure 3). The delineation mapped jurisdictional resources (including federally defined wetlands) within the survey areas under the purview of CDFW pursuant to Sections 1600 et seq. of the California Fish and Game Code, areas under the jurisdiction of the USACE pursuant to Section 404 of the federal CWA, areas under the jurisdiction of RWQCB pursuant to CWA Section 401 and Section 13000 et seq. of the California Water Code (the 1969 Porter–Cologne Water Quality Act), and wetlands defined under the Biology Guidelines (City of San Diego 2018a).

The delineation methodology used for each jurisdiction or regulating agency, including the USACE, CDFW, RWQCB, and the City, is described as follows:

- The USACE wetlands delineation was performed in accordance with the 1987 USACE Wetlands Delineation Manual (USACE 1987)

- The Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (USACE 2008)
- The Updated Datasheet for the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States (USACE 2010)
- Guidance provided by the USACE and U.S. Environmental Protection Agency on the geographic extent of jurisdiction based on the U.S. Supreme Court's interpretation of the CWA (USACE and EPA 2008)

Pursuant to Section 404 of the CWA, USACE regulates the discharge of dredged and/or fill material into "waters of the United States." The term "wetlands" (a subset of waters of the United States) is defined in Title 33 Code of Federal Regulations Section 328.3(b) as "those areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas." In the absence of wetlands, the limits of USACE jurisdiction in non-tidal waters, such as intermittent streams, extend to the "ordinary high water mark," which is defined in 33 Code of Federal Regulations Section 328.3(e).

The USACE and RWQCB, pursuant to the federal CWA, regulate all areas supporting all three wetlands criteria as "wetlands" described in the USACE manual: hydric soils, hydrology, and hydrophytic vegetation. Wetland statuses of plant species to assist in determining if hydrophytic vegetation is present are outlined in the National Wetland Plant List: 2016 wetland ratings (Lichvar et al.2016). The RWQCB may also take jurisdiction over surface waters lacking USACE regulation pursuant to the state Porter–Cologne Water Quality Control Act. These state exclusive jurisdictional waters generally present a 'beneficial use' to people or wildlife and can be a wetland, seasonal water feature that is hydrologically connected and/or geographically isolated.

In practice, CDFW extends their jurisdiction to the top of a streambank or the associated riparian extent (a plant community dependent on the stream feature), whichever is wider.

The City's definition of wetlands is broader than the definition applied by the USACE. Under the City's definition, wetlands can include vegetation communities such as freshwater marsh, riparian forest, riparian scrub, or vernal pools. They may also include areas that have hydric soil or wetland hydrology, but in which human activities have resulted in a lack of hydrophytic vegetation (e.g., channelized streambeds) or recurring natural events (City of San Diego 2018a). However, seasonal drainage patterns that are sufficient to etch the landscape (i.e., ephemeral/ intermittent drainages) may not be sufficient to support wetland dependent vegetation. These types of drainages will not satisfy the City's wetland definition unless wetland-dependent vegetation is either present in the drainage or lacking due to past human activities.

Hydrology, vegetation, and soils were assessed. Data was collected at the off-site tributary north of the project area using a Trimble GeoXT handheld GPS unit with sub-meter accuracy. CDFW- and RWQCB-jurisdictional areas were digitized in geographic information systems (GIS) based on the GPS data collected in the field. The data were collected directly onto field maps into a project-specific GIS using ArcGIS software.

2.2.4 Special-Status Plant Species

Focused surveys for special-status plant species were conducted in April and August 2022 at the appropriate phenological stage (blooming and fruiting) to detect and identify the target species. Numerous rare plant reference checks were conducted to access the blooming status of a variety of species. Rare plant reference checks are

documented with photos and video for the 2022 season. Surveys were conducted within the proposed gen-tie line and a 50-foot buffer (Biological Resources Study Area). Field survey methods and mapping of rare plants were in accordance with the California Native Plant Society Botanical Survey Guidelines (CNPS 2001), Protocols for Surveying and Evaluating Impacts to Special Status Native Populations and Natural Communities (CDFG 2009), and USFWS's General Rare Plant Survey Guidelines (Cypher 2002). Special-status plant observations were mapped in the field using a GPS receiver directly onto an aerial field map within collector to record the locations of special-status plant populations. The special-status plant observations were then digitized into the geodatabase by a Dudek GIS technician using ArcGIS software.

2.2.5 Quino Checkerspot Butterfly Surveys

Dudek biologist Brock Ortega conducted focused Quino checkerspot butterfly surveys in 2022 (Dudek 2022a) over the biological resources study area (impact area gen-tie line and a 50-foot buffer) (Figure 3). Prior to the focused surveys, Dudek biologists conducted a habitat assessment within the study area in order to identify suitable habitat and exclude unsuitable habitat. Developed and treed areas were excluded. While host plant surveys were performed separately, surveyors also looked for host plants during the focused surveys to document any changes from the initial host plant mapping effort.

Host plant mapping was completed in March 2022 (Table 1). The survey was conducted on foot during the first protocol Quino checkerspot butterfly survey due to the delay in site access.

The host plant mapping survey focused on the identification and location of seven potential host plants for Quino checkerspot butterfly: dwarf plantain (*Plantago virginica*), woolly plantain (*P. ovata*), Coulter's snapdragon (*Antirrhinum coulterianum*), stiff-branch bird's beak (*Cordylanthus rigidus* ssp. *brevibracteatus*), purple owl's clover (*Castilleja exserta* ssp. *exserta*), and Chinese houses (*Collinsia* spp.) (USFWS 2014; Pratt and Pierce 2009).

The 2014 USFWS protocol states that focused Quino checkerspot butterfly surveys should begin the third week of February and end the second Saturday in May, unless otherwise approved by USFWS. In addition, Dudek biologists Erin Bergman and Callie Amoaku performed a reference check on February 18, 2022, to determine the flight status of Quino checkerspot butterfly and the current status of dwarf plantain by near the base of Otay Mountain off of Otay Mountain Truck Trail (32.57978 N, 116.89845 W). Five Quino checkerspot butterfly butterflies were observed during the reference check, and dwarf plantain was mostly vegetative but occurring in high numbers (weather 60°F–64°F, wind 1–4 mph, cloud cover 20%).

Surveys are to be conducted during the adult flight season by biologists possessing a recovery permit for this species pursuant to Section 10(a)(1)(A) of the federal Endangered Species Act (USFWS 2014).

The survey area was surveyed in one person-day per pass. Because site access was not finalized until March, focused surveys were conducted over 11 passes from March 8, 2022, to May 12, 2022 (Table 1), throughout the entire study area. Since the survey also covered focused surveys for California gnatcatcher (*Polioptila californica*), the areas were first covered for gnatcatcher then gnatcatcher, but both species were looked for throughout the surveys. A reference check was performed to determine the status of Quino checkerspot butterfly flight period on May 3, 2022 (weather 55°F–60°F, wind 1–4 mph, cloud cover 80%), and May 6, 2022 (weather 80°F–90°F, wind 1–5 mph, cloud cover 10%), at the same location where Quino checkerspot butterfly was previously observed. No Quino checkerspot butterflies were observed during the May survey dates.

The biologists were provided with the study area and survey areas through an Esri mobile application. Binoculars were used to aid in detecting and identifying butterfly and other wildlife species.

The survey methods consisted of slowly walking roughly parallel transects spaced approximately 30 feet (10 meters) apart throughout all suitable habitats within the 15.36-acre study area. Survey routes were arranged to thoroughly cover the survey area at a rate of no more than 10 acres per person-hour.

Surveys were conducted only during acceptable weather conditions (i.e., surveys were not conducted during fog, drizzle, or rain; winds greater than 15 mph measured 4 to 6 feet above ground level for more than 30 seconds; temperature in the shade at ground level less than 60°F on a clear, sunny day; or temperature in the shade at ground level less than 70°F on an overcast or cloudy day). Survey times, personnel, and conditions during the Quino checkerspot butterfly survey are shown in Table 1.

2.2.6 Coastal California Gnatcatcher Surveys

Focused surveys for coastal California gnatcatcher were performed within suitable habitat between April 12, 2021, and July 20, 2022, by coastal California gnatcatcher-permitted biologist Brock Ortega according to the schedule in Table 1 (Dudek 2022b). The surveys were conducted following the currently accepted protocol of the USFWS Coastal California Gnatcatcher (*Polioptila californica californica*) Presence/Absence Survey Protocol (USFWS 1997), using the breeding season survey methods.

Survey routes for site visits completely covered the areas of suitable coastal California gnatcatcher habitat on site. Appropriate birding binoculars (8 × 40) were used to aid in detecting and identifying bird species. A recording of coastal California gnatcatcher vocalizations was used to elicit a response from the species. The recording was played approximately every 20 to 100 feet. A 100-scale (1 inch = 100 feet) aerial photograph of the study area overlaid with the vegetation and site boundaries was used to map any coastal California gnatcatcher detected. Weather conditions, time of day, and season were within protocol limits and appropriate for the detection of gnatcatchers, as shown in Table 1.

2.2.7 Crotch Bumble Bee Surveys

Dudek conducted three evenly spaced protocol level surveys for Crotch bumble bee (*Bombus crotchii*) spaced throughout the sampling season (early spring to late summer, as determined by host plant phenology). Visual surveys were conducted from May 9, 2024, to June 6, 2024. The surveys were conducted by qualified biologists with expertise in surveying for Crotch bumble bees. Surveys occurred after sunrise and 3 hours before sunset and were not conducted during wet conditions (e.g., foggy, raining, or drizzling) or windy conditions (i.e., sustained winds greater than 8 mph). The surveys were conducted during optimal conditions when there was sunny to partly sunny skies that were greater than 60°F. Suitable floral resource habitat was identified and mapped within the Project area. For each survey pass, each patch of suitable habitat was visually surveyed for 1 person-hour per 3 acres of the highest quality habitat. See attached Crotch Bumble Bee Survey Report (appendix E).

2.3 Survey Limitations

Site visits were conducted during daylight hours. Focused surveys for rare plants occurred during the peak bloom period for many rare plants near the end of April and in August. Complete inventories of biological resources present on a site often require numerous focused surveys at different times of day during different seasons. Numerous site

visits were conducted for this project including the Quino checkerspot butterfly field season and coastal California gnatcatcher field season. In addition, studies for rare plants, jurisdictional delineation, reconnaissance surveys, vegetation mapping and wildlife surveys were also conducted. Some species such as annual plants are present in only spring or summer, and nocturnal animals are difficult to detect during the day. Other species may be present in such low numbers that they could be missed. Due to such timing and seasonal variations, survey results are not an absolute list of all species that the project area may support. Sensitive species with potential to occur are described in Section 3.2.8, Special-Status Plants, and Section 3.2.9, Special-Status Wildlife, of this report, and in Appendices C and D.

3 Results

3.1 Physical Characteristics

The project site is located south of Beeler Canyon Road in the jurisdiction of the City of San Diego, San Diego County. Currently the area for the proposed gen-tie line site consists of a paved road, an unpaved existing dirt road that is highly compacted and vegetated land along a hillside. Surrounding land uses include open space and paved roads.

The elevations in the study area range from approximately 849 feet above mean sea level (amsl) at the lowest point within the paved areas to approximately 905 feet amsl at the highest section of the slope within City of San Diego property.

According to the Natural Resources Conservation Service Soil Survey, two soil types were mapped in the study area, as shown in Table 2: Redding cobbly loam and Visalia gravelly sandy loam (USDA 2022).

Table 2. Soils within the Study Area

Soil Category	Soil Description	Hydric Rating
Redding	Redding cobbly loam, dissected 15%–30% slopes (RfF)	No
Visalia	Visalia gravelly sandy loam, 2%–5% slopes (VbB)	No

3.2 Biological Resources

The following discussion describes the existing biological conditions within the Vegetation Mapping Study Area (for Vegetation Communities and Land Covers) and the Biological Resources Study Area for the other resources.

3.2.1 Vegetation Communities and Land Cover Types

The vegetation communities and land covers were mapped according to Oberbauer et al. (2008). These habitats were then cross-walked to their corresponding community listed in the City Biology Guidelines (City of San Diego 2018a). A total of 11 native vegetation communities, 1 non-native vegetation community, and 3 land cover types were identified within the project area: chamise chaparral, coast live oak woodland, Diegan coastal sage scrub, Diegan coastal sage scrub-Baccharis-dominated, Diegan coastal sage scrub: inland form, disturbed habitat,

emergent wetland, freshwater marsh, non-native grassland, non-vegetated channel, scrub oak chaparral, southern mixed chaparral, southern riparian woodland, urban/developed, and urban/developed-ornamental (Table 3).

The vegetation communities and land cover types recorded in the project area are described in detail as follows, their acreages are presented in Table 3, and their spatial distributions are presented on Figure 3. Also included in Table 3 are the sensitivity designations of each vegetation community according to the tiers described in the City's Biology Guidelines (City of San Diego 2018a).

Table 3. Vegetation Communities within the Vegetation Mapping Study Area

Vegetation Community/ Land Cover Type	City of San Diego Biology Guidelines Vegetation Community	Subarea Plan Tiera	Total Acreage
Sensitive Upland Vegetation Communities			
Scrub Oak Chaparral	Scrub Oak Chaparral	I	16.67
Diegan Coastal Sage Scrub: *Baccharis*-dominated	Coastal Sage Scrub	II	2.12
Diegan Coastal Sage Scrub: Inland form	Coastal Sage Scrub	II	20.22
Chamise Chaparral	Chamise Chaparral	IIIA	6.93
Southern Mixed Chaparral	Mixed Chaparral	IIIA	10.11
Non-Native Grassland	Non-Native Grassland	IIIB	1.01
	Sensitive Upland Vegetation Communities Subtotal[b]		*57.06*
City Wetlands			
Emergent Wetland	Freshwater Marsh	Wetland	1.16
Freshwater Marsh	Freshwater Marsh	Wetland	0.67
Non-Vegetated Channel	Natural Flood Channel	Wetland	0.71
Southern Riparian Woodland	Riparian forest or woodland	Wetland	1.28
	Wetlands Subtotal[b]		*3.81*
Non-Native Vegetation Communities and Land Covers			
Disturbed Habitat	Disturbed Land	IV	0.72
Urban/Developed	Developed	IV	14.61
Urban/Developed–Ornamental	Developed	IV	0.17
	Non-Native Vegetation Communities and Land Covers Subtotal[b]		*15.49*
	Total[b]		**76.35**

Notes:

[a] City of San Diego 2018a. This column includes the City's Biology Guidelines Tier I–IV ranking system, which refers to upland habitat types.

[b] May not total due to rounding.

3.2.2 Sensitive Upland Vegetation Communities

3.2.2.1 Chamise Chaparral (37200)

Chamise chaparral contains shrubs, overwhelmingly dominated by chamise, from 3 to 10 feet tall, with little cover provided by other species. Mature stands of granitic chamise are densely interwoven and contain few herbaceous

species within the understory (Oberbauer et al. 2008). Stump sprouting allows this vegetation to adapt to repeated fires. Chamise chaparral typically occurs on dry slopes and ridges (Holland 1986).

Areas mapped as chamise chaparral contain at least 80%–90% cover of chamise. Ground cover is limited and consists mainly of bare ground with few annual species. Chamise chaparral is considered a Tier IIIA habitat by the City's Biological Guidelines.

3.2.2.2 Diegan Coastal Sage Scrub: Inland Form (32500)

Diegan coastal sage scrub is a native vegetation community that, according to Oberbauer et al. (2008), is composed of a variety of soft, low, aromatic shrubs, characteristically dominated by drought-deciduous species—such as California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum*), and sages (*Salvia* spp.)—with scattered evergreen shrubs, including lemonadeberry (*Rhus integrifolia*) and laurel sumac. The average height of coastal sage scrub reaches 3 to 4 feet. Diegan coastal sage scrub comprises large portions of the site and is characterized mostly of native species. Dominant species include black sage (*Salvia mellifera*), California sagebrush, California buckwheat (*Eriogonum fasciculatum* var. *fasciculatum*), spiny redberry (*Rhamnus crocea*), and laurel sumac. Less commonly occurring plant species include lemonadeberry, broom baccharis, long stem golden yarrow (*Eriophyllum confertiflorum* var. *confertiflorum*), fascicled tarweed (*Deinandra fasciculata*) and spreading goldenbush (*Isocoma menziesii* var. *menziesii*). The understory of coastal sage scrub vegetation on-site consists of limited cryptogamic crusts with bryophytes and lichens. The majority of these areas have been previously graded or mowed. Graminoids are scattered within the coastal sage scrub community on site within limited areas. Coastal sage scrub is considered a Tier II habitat by the City's Biology Guidelines.

3.2.2.3 Diegan Coastal Sage Scrub: Baccharis Dominated (32530)

Diegan coastal sage scrub-*Baccharis* dominated is similar to Diegan coastal sage scrub except that it is dominated by *Baccharis* species (broom baccharis [*B. sarothroides*] and/or coyote brush [*B. pilularis*] (Oberbauer et al. 2008). This community typically occurs on disturbed sites or those within nutrient-poor soils and is often found within other forms of Diegan coastal sage scrub and on upper terraces of river valleys. Diegan coastal sage scrub–Baccharis dominated is typically a new colonizer of disturbed areas. This community is distributed along coastal and foothill areas in San Diego County.

This vegetation community occurs on the edges of roads and edges of disturbed areas. On site Diegan coastal sage scrub-*Baccharis* dominated is dominated by broom baccharis. Broom baccharis makes up approximately 85% of the vegetation community. Less commonly occurring species include compact brome, deerweed and California buckwheat. Coastal sage scrub-*Baccharis* dominated is considered a Tier II habitat by the City of San Diego's Biology Guidelines (City of San Diego 2018a).

3.2.2.4 Scrub Oak Chaparral (37900)

Scrub oak chaparral contains a dense, evergreen chaparral up to 20 feet tall, dominated by Nuttall's scrub oak with considerable mountain mahogany (*Cercocarpus betuloides)*. In San Diego County, *Quercus berberidifolia* is often the dominant (over 50% cover) and usually occurs in small patches within a variety of other vegetation communities (Oberbauer et al. 2008). Somewhat more mesic than many chaparrals, and often occurring at slightly higher elevations (to ~ 5,000 feet). These more favorable sites recover from fire more quickly than other

chaparrals. Substantial leaf litter accumulates. In San Diego County, this usually on north-facing or otherwise mesic slopes and can occur at various elevations (Oberbauer et al.2008).

Areas mapped as scrub oak chaparral are dominated by Nuttall's scrub oak and San Diego mountain mahogany. On the hillsides where scrub oak chaparral occurs almost a 50% cover of both species occur with minimal ground cover and high-density shrubs. Within the flatter areas especially within the buffer non-native grasses and tocalote are present within the understory. Scrub oak chaparral is considered a Tier I habitat by the City's Biological Guidelines.

3.2.2.5 Southern Mixed Chaparral (37120)

Southern mixed chaparral consists of broad-leaved sclerophyll shrubs that range in height from 1.5 to 3 meters tall. Areas within southern mixed chaparral consist of patches of bare soils or can form mosaics with other coastal sage scrub communities like Venturan coastal sage scrub or Riversidean sage scrub. Southern mixed chaparral can be divided into subtypes like granitic (37121) or mafic (37122) based upon the substrates that are present. Floristic distinctions are unknown. Within San Diego county, southern mixed chaparral is dominated by lilacs such as Ramona lilac (*Ceanothus tomentosus* var. *olivaceus*) as well as C. leucodermis, C. oliganthus; other *Ceanothus* spp. generally indicate other chaparral types. Some site factors include the substrate is dry, rocky, often steep. Southern mixed chaparral is often adjacent to and on moister sites than Chamise Chaparral (37200). Some characteristic plants in this community include chamise (*Adenostoma fasciculatum*), Eastwood manzanita (*Arctostaphylos glandulosa*), Peninsular manzanita (*Arctostaphylos peninsularis*), white fairy lantern (*Calochortus albus*), woollyleaf ceanothus (*Ceanothus tomentosus olivaceus*), wart stemmed lilac (*Ceanothus verrucosus*), San Diego mountain mahogany (*Cercocarpus minutiflorus*), bush rue (*Cneoridium dumosum*), chocolate lily (*Fritillaria biflora*), toyon, honeysuckle (*Lonicera subspicata*), Nuttall's scrub oak (*Quercus dumosa*), laurel sumac, spiny redberry, sugar bush (*Rhus ovata*), white chaparral currant (*Ribes indecorum*), mission manzanita (*Xylococcus bicolor*), Mojave yucca (*Yucca schidigera*), chaparral yucca (*Yucca whipplei*).

Areas mapped as southern mixed chaparral are dominated by San Diego mountain mahogany. This vegetation community had recently burned and after the fire San Diego mountain mahogany has become a dominate species within this community making up well over 60% of the vegetation. The other main dominate species is chamise which makes up at least 30% of the vegetation community. Less commonly occurring species include especially small patches of Nuttall's scrub oak, spiny redberry, mission manzanita and thick leaved yerba santa (*Eriodictyon crassifolium*). Southern mixed chaparral is especially dense on site and within the 500-foot vegetation mapping study area -buffer. This community is the dominant community in the southernmost vegetation mapping study area 500 foot-buffer south of Stonebridge parkway. Southern mixed chaparral is considered a Tier IIIA habitat by the City's Biological Guidelines.

3.2.2.6 Non-Native Grassland (42200)

Non-native grassland consists of dense to sparse cover of annual grasses with flowering culms between 0.5 to 3 feet in height (Oberbauer et al. 2008). In San Diego County, the presence of wild oat (*Avena barbata*), bromes (*Bromus* spp.), stork's bill (*Erodium cicutarium*), and short-pod mustard are common indicators of this community. In some areas, depending on past disturbance and annual rainfall, annual forbs may be the dominant species; however, it is presumed that grasses will dominate (Oberbauer et al. 2008).

On site, non-native grassland is small and patchy. Non- native patchy grassland occurs next to the compacted gravel road and paved gravel road mostly. In this area the non-native grassland consists of weedy species invading from the road with a few grasses. The most abundant species next to the road is tocalote (*Centaurea melitensis*) and stinkwort (*Dittrichia graveolens*) with some graminoides. These areas are small therefore not proving ideal ground for foraging raptors. Other less common species include a variety of European bromes like red brome, rip-gut brome (*Bromus diandrus*), and soft chess (*Bromus hordeaceus*). Tecolote is also common within the non-native grassland patches and disturbed patches. Less common within these non-native grasslands are slender wild oat (*Avena barbara*) and wild oat (*Avena fatua*).

3.2.3 City Wetlands

3.2.3.1 Southern Riparian Woodland (62500)

Southern riparian woodland is moderate density riparian woodlands that is dominated by small trees or shrubs and has scattered taller riparian trees. Southern riparian woodland occurs within major river systems where flood scour occurs and smaller major tributaries. Characteristic species that are typically found in southern riparian woodland include broom baccharis (*Baccharis sarothroides*), western sycamore (Platanus racemosa), western cottonwood (*Populus* spp.), willow species (*Salix* spp.) and elderberry species (*Sambucus* spp.). (Oberbauer et al. 2008).

Southern riparian woodland occurs within one small portion of the site just south of Stonebridge Parkway within the biological resources study area (50-foot buffer). This area is small and consists of red willow (*Salix laevigata*) where water had pooled. Within the vegetation mapping study area buffer (500 feet) southern riparian woodland occurs within the basins. Southern riparian woodland in the vegetation mapping study area buffer (500 feet) site is small and patchy. Southern riparian woodland in this area is dominated by red willow. In some areas, only red willow occurs as an over story. Other areas consist of red willow with just a few western cottonwood (*Populus fremontii*) or Goodding's willow (*Salix gooddingii*). Both western cottonwood and Goodding's willow vary in height. Red willow also varies in height but generally makes up the majority of the density of these riparian woodland patches. A variety of smaller herbs occur along the woodland floor like Mexican rush (*Juncus mexicanus*), mariposa rush (*Juncus dubius*), evening primrose (*Oenothera elata*), western ragweed (*Ambrosia psilostachya*), and beard flat sedge (*Cyperus squarrosus*).

3.2.3.2 Emergent Wetland (52440)

Emergent wetlands are generally persistent wetlands that are dominated by low growing perennial wetland species. Emergent wetlands can be found in channels, seeps, springs, floodplains, margins of lakes or rivers, and various basins such as pools, ponds, meadows, and dune swales. They may be freshwater or alkali wetlands. Associated species include *Carex* species, *Eleocharis* species, *Juncus* species, *Rumex* species, and a variety of others. Emergent wetlands are found throughout San Diego County in areas that are wet (Oberbauer et al.2008).

The emergent wetland occurs within portions of the large basins within the vegetation mapping study area buffer (500 foot). The emergent wetlands onsite are dominated by southern cattail (*Typha domingensis*) and San Diego marsh elder (*Iva hayesiana*) which covers almost 85% of the emergent wetlands. Other more common species include California bulrush (*Schoenoplectus californicus*) and Mexican rush (*Juncus mexicanus*). Less common species found within the emergent wetland include curly dock (*Rumex crispus*), Spanish false fleabane (*Pulicaria paludosa*) and Leopold's rush (*Juncus acutus* ssp. *leopoldii*).

3.2.3.3 Coastal and Valley Freshwater Marsh (52410)

Coastal and Valley Freshwater marsh is dominated by perennial, emergent monocots that range from 4 to 5 meters in height. Coastal and Valley Freshwater marsh typically form completely closed canopies. Typically, this habitat is dominated by *Scirpus* species and *Typha* species. This vegetation community lacks significant currents, is typically flooded permanently by freshwater. Saturation is prolonged creating deep peaty soils. Some characteristic species within this community include *Eleocharis* species, common reed (*Phragmites australis*), *Scirpus* species, and *Typha* species.

Coastal and valley freshwater marsh is present within the buffer within basins. This community is dominated by southern cattails (*Typha domingensis*), and California bulrush (*Schoenoplectus californicus*). These basins consist of almost 100% cover of these species within the buffer.

3.2.3.4 Unvegetated Stream Channel (64200)

Non-vegetated floodplain or channel is not recognized by Holland (1986) but is recognized by Oberbauer et al. (2008). According to Oberbauer et al. (2008), non-vegetated floodplain or channel is the sandy, gravelly, or rocky fringe of waterways or flood channels that is unvegetated on a relatively permanent basis. Vegetation may be present but is usually less than 10% total cover and grows on the outer edge of the channel.

Unvegetated stream channels contain less than 5% total vegetation cover on site. The majority of unvegetated stream channels can be seen on aerial photography because they are large. The unvegetated channels consist of sandy soils and cobble. Unvegetated stream channels are surrounded by coastal sage scrub, scrub oak chaparral, and non-native grassland.

3.2.4 Non-Native Vegetation Communities and Land Covers

3.2.4.1 Disturbed Habitat (11300)

Disturbed habitat is a land cover type characterized by a predominance of non-native species, often introduced and established through human action. Oberbauer et al. (2008) describes disturbed habitat as areas that have been physically disturbed (by previous legal human activity) and are no longer recognizable as native or naturalized vegetation associations but continue to retain a soil substrate. Typically, vegetation, if present, is nearly exclusively composed of non-native plant species such as ornamentals or ruderal exotic species (i.e., weeds).

Disturbed habitat occurs in a few locations within the biological resources study area (50-foot buffer) and the vegetation mapping study area buffer (500-foot buffer). Disturbed habitat occurs on old roads of the site that consist of patches of no vegetation with surrounding weeds, areas with no vegetation and the destruction of the top-soil layer with surrounding weeds, or non-native plant species with mixed ornamentals. When disturbed habitat does not consist of bare ground, non-native annual vegetation is dominant. Disturbed habitat is dominated by tocalote. Less commonly occurring within the disturbed habitat is prickly sow-thistle, short-pod mustard, and tree tobacco (*Nicotiana glauca*). Disturbed habitat is considered a Tier IV habitat (disturbed land) per the City's Biology Guidelines (City of San Diego 2018a).

3.2.4.2 Urban/Developed (12000)

According to Oberbauer et al. (2008), urban/developed land represents areas that have been constructed upon or otherwise physically altered to an extent that native vegetation communities are not supported. This land cover type generally consists of semi-permanent structures, homes, parking lots, pavement or hardscape, and landscaped areas that require maintenance and irrigation (e.g., ornamental greenbelts). Typically, this land cover type is unvegetated or has some ornamental vegetation.

Areas on site with developed land are the paved roads, compacted turnaround areas, compacted parking lot with ornamental plant edges, buildings and manmade structures. Developed land is considered a Tier IV habitat (disturbed land) per the City's Biology Guidelines (City of San Diego 2018a).

3.2.4.3 Urban/Developed Ornamental (12000)

Urban/Developed ornamental consist of planted species for landscaping purposes and are many times connected to urban development, paved areas, highways, parking lots and other city features. Ornamental plantings are considered developed lands. If trees are associated with ornamental plantings nesting species may have potential to occur.

Ornamental land cover consists of species planted for landscaping purposes. Areas mapped as ornamental are located along many of the slopes near paved roads. The soils are disturbed and previously graded. In addition, no tree species are present. These areas consist of non-native plantings. Developed land ornamental is considered a Tier IV habitat (disturbed land) per the City's Biology Guidelines (City of San Diego 2018a).

3.2.5 Jurisdictional Resources

Based on the field delineation efforts described within the methods section, city, state, and federally defined wetlands occur within the project area.

Hydrology, vegetation, and soils were examined at one geographically distinct data station within the project area, and results were recorded on wetland determination data forms to determine the presence or absence of wetland field indicators. The overall project area was assessed for evidence of an ordinary high-water mark, hydrology indicators, wetland vegetation, and nexus to traditional navigable waters of the United States. Figure 3 shows the extent of these jurisdictional boundaries within the project area and Table 4 summarizes the results of each data station.

Field delineations were not performed within the buffer area. Areas within the buffer consist of wetland vegetation communities and are labeled accordingly within the figures, as they will qualify as City of San Diego wetlands. They will also likely be defined as three-parameter wetlands per federal and state definitions based on self-sustaining, persistent, hydrophytic vegetation.

Table 4. Wetland Data Station Summary

Data Station	Wetland Determination Field Indicators			Vegetation Community	Jurisdiction
	Vegetation	Hydric Soils	Hydrology		
1a	✓	✓	✓	Southern riparian woodland	USACE/RWQCB/CDFW/City
1b				Diegan coastal sage scrub	Non-jurisdictional

Notes: USACE = U.S. Army Corps of Engineers; CDFW = California Department of Fish and Wildlife; RWQCB = Regional Water Quality Control Board.

One data station (DS1a) was located within an area mapped as southern riparian woodland which was dominated in the top story by red willow (FACW indicator) acting as a monotypic stand and an understory of Mexican rush (*Juncus mexicanus*) (FACW indicator), and common spikerush (*Eleocharis macrostachya*) (obligate indicator), with some patches of southern cattails (*Typha domingensis*) (all obligate hydrophytic indicators). The entire area was covered in thick duff from the willows making the individual strata of vegetation difficult to see. However, a section of the non-wetland water ephemeral stream flowed through the wetland. The reach of the stream channel widened out where the southern cattails, spikerush, and Mexican rush were observed. This area appeared to receive water from the ephemeral channels that flow as headwaters from the numerous canyons south of the wetland to this point, which slows down the velocity of flowing water performs as a basin. The non-wetland channel, fed by canyon runoff from the surrounding mountains, flows into the site through a natural channel with hydrology indicators (e.g., water marks, drift deposits, and drainage patterns) and fans out within the wetland area acting as a basin.

This wetland was determined to be jurisdictional due to the dominant percentages of hydrophytic vegetation, presence of hydric soils and wetland hydrology indicators observed at the point of investigation. This wetland is under the regulatory purview of USACE, RWQCB, CDFW, and the City of San Diego.

One data station (DS1b) was located just outside the wetland in coastal sage scrub habitat. The coastal sage scrub habitat occurs just outside the wetland and runs up a steep slope next to Stonebridge parkway. The coastal sage scrub consisted of laurel sumac, deerweed and California sagebrush. The understory of the sagebrush consisted of non-native grasses like red brome, rip-gut brome, and wild oat. No indicator species occurred within the coastal sage scrub.

A total of 0.14 acres of potential jurisdictional resources (i.e., features) were mapped during the formal delineation conducted within the project area, and are summarized in Table 5. There are a total of 0.11 acres of wetlands and 0.03 acres of non-wetland waters under USACE/RWQCB/CDFW jurisdiction within the project area. Approximately 0.01 acres of the non-wetland waters is considered CDFW Riparian.

Figure 3 shows the extents of these potential jurisdictional boundaries within the project area.

Table 5. Potential Jurisdictional Aquatic Resources within the Project Area

Aquatic Resource	Type of Aquatic Habitat (Oberbauer et al. 2008)	Amount of Aquatic Resource Within the Survey Area (Ac/LF)	Regulatory Purview
Waters of the U.S. and State			
Unvegetated Ephemeral Stream	Non-Vegetated Channel (64200)	0.02/78	City, CDFW, RWQCB, and USACE
Wetland	Southern Riparian Woodland (62500)	0.11	City, CDFW, RWQCB, and USACE
Subtotal Waters of the U.S. and State		*0.13*	
Waters of the City and State, exclusively			
Riparian Extent	Southern Riparian Woodland (62500)	0.01	City and CDFW
Subtotal Waters of the City and State, exclusively		*0.01*	
Grand Total Jurisdictional Waters		***0.14***	—

Notes: USACE = U.S. Army Corps of Engineers; CDFW = California Department of Fish and Wildlife; RWQCB = Regional Water Quality Control Board.

[a] Totals in table may not sum due to rounding.

3.2.6 Floral Diversity

A total of 112 species of native or naturalized plants, 76 native (68%) and 36 non-native (32%), were recorded during the biological reconnaissance and rare plant surveys for the project. A cumulative list of all plant species observed in the project area is provided in Appendix A of this report. Two special-status plant species, San Diego goldenstar (*Bloomeria clevelandii*; California Rare Plant Rank [CRPR] 1B.1) and small-flower microseris (*Microseris douglasii platycarpha*; CRPR 4.2) were observed on site along the hillside of the proposed generation tie line route during focused rare plant surveys in 2022.

3.2.7 Wildlife Diversity

The project area supports habitat primarily for upland species within coastal sage scrub habitat. These upland habitats also provide foraging and nesting habitat for migratory and resident bird species and other wildlife species.

A total of 73 native wildlife species, including 43 birds, 16 butterflies, 10 mammals, 2 amphibians, and 3 reptiles, were recorded during the biological reconnaissance surveys for the project area. Of the total 73 wildlife species observed during the biological surveys, 1 special-status species was observed: the coastal California gnatcatcher (*Polioptila californica californica*). A cumulative list of all wildlife species observed in the project area during the biological surveys is provided in Appendix B of this report.

3.2.8 Special-Status Plants

Plant species are considered sensitive if they have been listed or proposed for listing by the federal or state government as rare, endangered, or threatened ("listed species"); have a CRPR of 1–4; are listed as an MSCP-Covered Species; and/or have been adopted by the City as narrow endemic. An evaluation of known records in the Poway quadrangle and the surrounding quadrangles, including San Pasqual, San Vicente Reservoir, Escondido, Rancho

Santa Fe, El Cajon, La Mesa, Del Mar, and La Jolla (CDFW 2019, 2020; CNPS 2022; USFWS 2020), was conducted to determine which species have been recorded in the project vicinity. In addition, Dudek's knowledge of biological resources and regional distribution of each species, as well as elevation, habitat, and soils present within the project area, was used to evaluate and determine the potential for various special-status species to occur.

Focused rare plant surveys were conducted in April and August 2022.

The potential for sensitive plant species to occur within the native habitat associated with the project area is described in Appendix C. Sensitive plant species with high and moderate potential to occur were excluded after conducting well timed spring and late season rare plant surveys with consistent rare plant reference checks.

Two sensitive plant species, small-flower microseris (*Microseris douglasii* ssp. *platycarpha*) and San Diego goldenstar (*Bloomeria clevelandii* or *Muilla clevelandii*), were observed during rare plant surveys within the biological resources study area (50-foot buffer). A description of species observed on site are provided as follows; Appendix C provides descriptions of species with potential to occur in the project vicinity. Outside of the project site within the 50-foot survey buffer, four sensitive species were observed: Nuttall's scrub oak (*Quercus dumosa*; CRPR 1B.1), San Diego marsh elder (*Iva hayesiana*; CRPR 2B.2), southwestern spiny rush (*Juncus acutus* ssp. *leopoldii*; CRPR 4.2), and ashy spike moss (*Selaginella cinerascens*; CRPR 4.1) (Figure 3).

San Diego Goldenstar (*Bloomeria clevelandii or Muilla clevelandii)*

San Diego Goldenstar has a CRPR of 1B.1. San Diego goldenstar is an MSCP covered species. San Diego goldenstar is a perennial herb and is distributed along the southwestern region of San Diego County (CNPS 2022). San Diego goldenstar is found in valley grassland, coastal sage scrub, chaparral, and foothill woodland. This species occurs equally in wetlands and non-wetlands and can be found associated with vernal pools. This species' blooming period is between April and May. San Diego goldenstar occurs at elevations less than 100–5,710 feet amsl.

A total of 242 San Diego goldenstar individuals were observed on the hillside within Diegan coastal sage scrub in the biological resources study area (50 foot) in the southern portion of the proposed gen-tie line route (Figure 3).

San Diego Marsh-Elder (*Iva hayesiana*)

San Diego marsh-elder has a CRPR 2B.2. It is a perennial herb that occurs in San Diego and Baja California, Mexico. It occurs in marshes, swamps, and playas in elevations between 35 feet and 1,640 feet amsl.

Five individuals were mapped on site within the biological resources study area (50 foot) (Figure 3).

Nuttall's Scrub Oak (*Quercus dumosa*)

Nuttall's scrub oak has a CRPR of 1B.1. It is a perennial evergreen shrub that occurs in Southern California and Baja California, Mexico. It is found in coniferous forests, chaparral, and coastal sage scrub in elevations between 50 feet and 1,310 feet amsl.

One individual was mapped within the biological resources study area (50 foot) (Figure 3).

Small-Flower Microseris (*Microseris douglasii* ssp. *platycarpha*)

Small-flower microseris has a CRPR of 4.2. Small-flower microseris is an annual herb and is distributed along the coast of San Diego County (CNPS 2020). Small-flower microseris is found in valley grassland, coastal sage scrub, and foothill woodland. This species' blooming period is between March and May. Small-flower microseris occurs in wetlands at elevations less than 3,600 feet amsl.

A total of 22 small-flower microseris individuals were observed on the hillside within Diegan coastal sage scrub in the biological resources study area (50 foot) (Figure 3).

3.2.9 Special-Status Wildlife

Sensitive wildlife species are those listed as federal/state endangered or threatened, those proposed for listing, those fully protected by CDFW, those on the California Watch List, California species of special concern, or MSCP -Covered Species. An evaluation was conducted of known records in the Poway quadrangle and the surrounding quadrangles, including Del Mar, Rancho Santa Fe, San Vicente Reservoir, La Jolla, El Cajon, La Mesa, San Pasqual, and Escondido (CDFW 2019, 2020; USFWS 2020). In addition, Dudek's knowledge of biological resources and regional distribution of each species, as well as elevation, habitat, and soils present within the project area, was used to evaluate and determine the potential for various special-status species to occur.

Protocol-level wildlife surveys were conducted for Quino checkerspot butterfly and coastal California gnatcatcher. Crotch bumble bee surveys were conducted per CDFW protocols. Other sensitive wildlife species known to occur in the surrounding region, and those which have a potential to occur within the project area, are described in Appendix D. Coastal California gnatcatcher and Southern California rufous-crowned sparrow were observed within the vegetation mapping study area buffer (500 foot). Coastal California gnatcatcher was observed during the 2021 survey, but not during the 2022 protocol surveys. Sensitive wildlife species determined to have high potential to occur or occur within the vegetation mapping study area buffer (500 foot) include: Cooper's hawk (*Accipiter cooperii*) (Appendix B: Wildlife Compendium).

A description of species observed on site, as well as those with high or moderate potential to occur is provided as follows. Appendix D provides a description of these species, as well as those with a low or no potential to occur.

Coastal California Gnatcatcher

Coastal California gnatcatcher is federally listed threatened, a species of special concern, and an MSCP-Covered Species. Coastal California gnatcatcher breeds in lower elevations (less than 500 meters, or 1,640 feet) south and west of the Transverse and Peninsular Ranges (Atwood and Bolsinger 1992). Higher densities of this species occur in coastal San Diego and Orange Counties, and lower densities are found in Los Angeles, Orange, western Riverside, southwestern San Bernardino, and inland San Diego Counties (Atwood 1993; Preston et al.1998). The coastal California gnatcatcher primarily occupies open coastal sage scrub habitat that is dominated by California sagebrush. This species is relatively absent from coastal sage scrub habitats dominated by black sage, white sage (*Salvia apiana*), or sugar sumac (*Rhus ovata*).

One coastal California gnatcatcher individual was observed in the coastal sage scrub habitat within the City of San Diego vicinity in April 2021. This individual is thought to have been moving through generally poor habitat to better habitat as it was never detected in that area again in 2021 or 2022 (Figure 3). Suitable habitat within the

project area has the potential to support the federally threatened coastal California gnatcatcher. This habitat is the dominant vegetation community within the project area.

Cooper's Hawk

Cooper's hawk is an MSCP covered species and a California Watch List species that nests and forages in dense stands of live oak, riparian woodlands, or other woodlands habitats, often near water. This species has high potential to occur within the vegetation mapping study area buffer (500 ft). Southern riparian woodland, as well as coast live oak woodland associated with Beeler Creek, located immediately north of the proposed gen-tie line route, is present. The buffer consists of high-quality habitat for nesting in southern riparian woodland. The nearest California Natural Diversity Database occurrence record is from 1985, located 3.5 miles east in Sycamore Canyon (CDFW 2022).

Southern California Rufous-Crowned Sparrow

Southern California rufous-crowned sparrow is an MSCP covered species and a California Watch List species that inhabits open coastal scrub and chaparral with a low cover of scattered scrub interspersed with rocky and grassy patches. There are suitable grasslands and coastal sage scrub for this species to nest and forage within the buffer. The nearest California Natural Diversity Database occurrence is 0.75 miles northeast, recorded in 1998 (CDFW 2022). Southern California rufous-crowned sparrow was observed within the vegetation mapping study area (500-foot buffer) during the biological surveys.

3.2.10 Wildlife Corridors and Habitat Linkages

Wildlife corridors are linear features that connect large patches of natural open space and provide avenues for the immigration and emigration of animals. Wildlife corridors contribute to population viability by (1) assuring the continual exchange of genes between populations, which helps maintain genetic diversity; (2) providing access to adjacent habitat areas, representing additional territory for foraging and mating; (3) allowing for a greater carrying capacity; and (4) providing routes for colonization of habitat lands following local population extinctions or habitat recovery from ecological catastrophes (e.g., fires).

Habitat linkages are patches of native habitat that function to join two larger patches of habitat. They serve as connections between habitat patches and help reduce the adverse effects of habitat fragmentation. Although individual animals may not move through a habitat linkage, the linkage does represent a potential route for gene flow and long-term dispersal. Habitat linkages may serve as both habitat and avenues of gene flow for small animals such as reptiles and amphibians. Habitat linkages may be represented by continuous patches of habitat or by nearby habitat "islands" that function as steppingstones for dispersal.

The vegetation mapping study area buffer (500-foot) likely provides refuge and cover for wildlife species and their movements. The biological resources study area (50 foot) is narrow or paved and therefore does not provide cover. Wildlife could move between the habitat along the site and move within buffers and utilize the cover of buffers.

The MHPA was designed to include key biological core area and biological linkage areas within the City (City of San Diego 1997). The proposed project consists of a section that is determined to be a biological core area and biological linkage area. A biological core area and biological linkage area occurs in the northernmost section of the project site and is adjacent to the project site (Figure 2).

4 Consistency with the City's MSCP

4.1 Consistency with the Multiple Species Conservation Program

The proposed project impact footprint is located inside the MHPA and outside the MHPA. The northern part of the project is within biological core area and biological linkage area; therefore, the project is expected to document compliance with biological core area and biological linkage area and MHPA Land Use Adjacency Guidelines. The southern portion of the project site south of Stonebridge Parkway is located within the MHPA boundary.

A conservation easement grant was recorded May 9, 2003, as instrument number 2003-0547336 and corrected on March 5, 2004, as instrument number 2004-0180743 and finally mapped as number 14895 filed on October 21, 2004, and number 14931 filed on December 17, 2004, runs south of Stonebridge parkway. The conservation easement was part of the biological mitigation for the Sycamore Estates development near the project site and was added to the MHPA. Due to this area being under a conservation easement a higher mitigation ratio was required by City of San Diego guidelines.

Figure 2 shows a biological core area and biological linkage area within the northern section of the gen-tie line. The site is also considered adjacent to the biological core area and biological linkage area within the northern section. The northern work section consists entirely of developed land (paved roads) and disturbed land. Construction will only take place within the paved road and turn around area in the northern section. The developed land is adjacent and within biological core area and biological linkage area therefore, adjacency guidelines are also followed. The central and southern section of the site are outside the MHPA and biological core area and biological linkage area. A portion of the southern section consists of wetlands and coastal sage scrub. All wetlands will be avoided.

Coastal California Gnatcatcher

Coastal California gnatcatcher has been documented within the vegetation mapping study area buffer (500-foot). (Figure 3 and Figure 4, Impacts to Biological Resources). Therefore, avoidance measures related to Coastal California gnatcatcher adjacency issues will be addressed pertaining to the following requirements.

According to the MHPA requirements:

> "All clearing, grubbing or grading (inside and outside the MHPA will be restricted during the breeding season where development may impact California gnatcatcher species from March 1--August 15. The breeding season is intended to be avoided for this project."

If the bird breeding season cannot be avoided in order to stay consistent with the MSCP, the following requirements will be applied:

> "Noise mitigation will be required for significant noise impacts to certain avian species during their breeding season depending upon the location of the slope (such as land adjacent to MSCP) and what birds may be present in the area such as the California gnatcatcher. If these avian species are present, then mitigation will be required if construction or operational noise levels would exceed

60 dB(A), or the existing ambient noise level if already above 60 dB(A) during the breeding season. For California gnatcatcher habitat within the MHPA and occupied, construction or operational noise levels exceeding 60 dB(A) (or exceeding the existing ambient noise level if already above 60 dB[A]) during the breeding season is considered significant."

If the coastal California gnatcatcher breeding season cannot be avoided, a biological noise monitor will be present to ensure that noise does not exceed 60 A-weighted decibels (dB[A]) during the breeding season.

4.2 Project Consistency with MHPA Land Use Adjacency Guidelines

Northern and Southern Section of Gen-Tie Line within Biological Core Area and Biological Linkage Area and MHPA Adjacency to Biological Core Area and Biological linkage Area

The proposed project is consistent with the MSCP because the proposed project will place three permanent structures within developed land cover types only, and the proposed project will not negatively impact the goals and objectives of the City of San Diego Subarea Plan or MSCP. Thus, the proposed project is consistent with MSCP/MHPA, and MSCP/MHPA adjacency guidelines.

- ***Developed and paved areas should not drain directly into the Biological Core Area, Biological Linkage Area or MHPA***. No drainage is expected for this project. If drainage is expected, developed and paved areas within the project will not drain directly into the CBLA or MHPA; rather, those areas will drain directly to the biofiltration basins if needed, which prevent the release of toxins, chemicals, petroleum products, and exotic plant materials before draining into the CBLA or MHPA.
- ***Toxic chemicals will not be used during project implementation***. No toxic chemicals are proposed to be used for project components, including the development. Gasoline pans will be placed under all construction equipment when not in use.
- ***All lighting should be faced away from the Biological Core Area, Biological Linkage Area and MHPA.*** Nighttime work is not expected for this project. Daytime work is expected. If nighttime work is expected, any nighttime lighting, including but not limited to security lighting, will be shielded and directed away from the CBLA and MHPA per the City's Outdoor Lighting Ordinance so there is no spill of light into the CBLA or MHPA.
- ***Uses in or adjacent to the Biological Core Area, Biological Linkage Area and MHPA will be designed to minimize noise impacts***. Work is to be avoided during the bird breeding season. If the bird breeding season cannot be avoided, a biologist will conduct nesting surveys prior to any construction work during the bird breeding season to determine any potential nest locations. A biological noise monitor will monitor with a piccolo monitor during the bird breeding season to ensure that noise does not exceed an average of 60 db(A). Gen-tie line construction should not exceed an average 60 db(A) over each 1-hour period. The project will include standard nesting bird conditions in accordance with the MBTA.
- ***New development adjacent to the Biological Core Area, Biological Linkage Area and MHPA will be required to provide barriers boundaries to direct public access to appropriate locations and reduce domestic animal predation.*** No public access is expected given that the project area is gated within all sections of the paved area. In addition, the southern section is also gated. The only areas for public access include Stonebridge parkway (paved road), which consists of paved walking trails.

- ***No invasive non-native plant species shall be introduced into areas adjacent to the Biological Core Area, Biological Linkage Area or MHPA.*** No landscaping is expected within the northern portion of the project site. If landscaping becomes required in this portion, no non-native or invasive species will be included in landscaping on the project site. The southern area would not propose invasive plant species as part of the revegetation plan.
- ***New residential development located adjacent to and topographically above the Biological Core Area, Biological Linkage Area or 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 Biological Core Area, Biological Linkage Area or MHPA.*** Brush management is not proposed. Area specific management directives consist of "measures to reduce edge effects and minimize disturbance, 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".
- ***Manufactured slopes associated with site development shall be included within the development footprint for projects within or adjacent to the Biological Core Area, Biological Linkage Area or MHPA.*** The project grading would be entirely within an existing development and does not include any proposed manufactured slopes.

Southern Section of Gen-Tie Line South of Stonebridge Parkway within the MHPA

The southern section south of Stonebridge Parkway is within the MHPA. The proposed project is consistent with the MSCP because permanent direct impacts associated with the proposed southern section of the gen-tie line project will not negatively impact the goals and objectives of the City MSCP through on-site restoration, minimization, and avoidance measures. Thus, the proposed project is consistent with the MSCP within the southern section of the project site.

The proposed project will apply the following measures consistent with the MSCP guidelines:

- Wetland and waters avoidance through horizontal directional drilling (including both wetlands and non-wetland waters).
- Mitigation of permanent direct impacts to previously restored coastal sage scrub habitat with restoration after permanent impacts.
- Avoidance of Impacts to San Diego Goldenstar: (1) avoiding the San Diego goldenstar population within coastal sage scrub as feasible, (2) minimizing impacts to San Diego goldenstar where possible within the gen-tie line route, and (3) translocation of goldenstar where other options are not feasible.

4.3 Area Specific Management Directives

Area specific management directives (ASMD) were developed for certain MSCP covered species as a condition of coverage under the MSCP. The conditions for coverage outlined in the City's MSCP Subarea Plan have been reviewed in conjunction with the species which have a potential to occur within the project area. All ASMDs for those species will be adhered to. Table 6 describes how the project will comply with the ASMD for species with a potential to occur within the project site.

Table 6. Area-Specific Management Directives Compliance

MSCP Covered Species	Area Specific Management Directives (ASMD)	Project Compliance
Cooper's hawk	ASMD must include 300-foot impact avoidance areas around the active nests, and minimization of disturbance in oak woodlands and oak riparian forests.	The proposed project would not result in impacts to oak woodlands or oak riparian forest. To avoid any indirect impacts Cooper's hawk, construction within 300-feet of suitable habitat shall occur outside of the breeding season for these species (February 1 to September 15).
Southern California rufous-crowned sparrow	ASMD must include maintenance of dynamic processes, such as fire, to perpetuate some open phases of coastal sage scrub with herbaceous components.	The proposed project will restore all temporarily impacted vegetation to pre-project conditions and will only result in a short-term loss of suitable habitat for this species.
Coastal California Gnatcatcher	ASMD 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. No cleaning of occupied habitat within the cities' MHPAs and within the County's Biological Resource Core Areas may occur between March 1 through August 15.	Although the project may result in indirect impacts to coastal California gnatcatcher located inside the MHPA, these impacts would not be considered significant because the City has "take" authority for this species outside of the MHPA. Since the project will be restored following construction edge effects are not anticipated. The project will not result in a change in the local fire regime. The project will be in compliance by avoiding the bird breeding season and keep noise levels below 60 db.
San Diego Goldenstar	ASMD must include measures to avoid, reduce and minimize impacts to San Diego goldenstar where possible outside the MHPA. For areas outside the MHPA being impacted a 5-year restoration and monitoring plan for San Diego Goldenstar will be provided.	The proposed project would avoid the San Diego goldenstar population within coastal sage scrub as feasible, minimizing impacts to San Diego goldenstar where possible within the gen-tie line route, and translocate San Diego goldenstar in accordance with the 5-year restoration and monitoring plan. A total of 242 San Diego goldenstar individuals were observed on the southern hillside. A total of 78 individuals were within the work area.

5 Impacts Analysis

The purpose of this section is to describe the direct, indirect, and cumulative impacts of the proposed project on special-status biological resources. The significance determinations for proposed or potential impacts are described in this section, and mitigation measures to reduce impacts are provided in Section 6.

5.1 Definition of Impacts and Significance

Based upon the project description, direct impacts, indirect (short-term and long-term), and cumulative impacts are defined as follows.

Direct impacts may include both the permanent loss of on-site habitat and the plant and wildlife species that it contains, as well as the temporary loss of on-site habitat. Permanent impacts typically result in a loss of function and value of habitat. An example is a permanent structure being installed like a building or permanent removal of a root system of a plant. Temporary impacts may also result in a loss; however, typically does not permanently change the landform, land use or function. An example is trimming a tree or driving over a root system. For wetland communities, both temporary and permanent impacts are considered and treated as permanent impacts and require mitigation to meet state and federal no net loss policy and City of San Diego Wetland Regulations.

Impacts to easements due to continued use are considered permanent impacts. Mitigation cannot be proposed within easement areas.

Direct impacts were quantified by overlaying the proposed impact alignment onto the biological resources map and evaluating the impacts by vegetation community.

Development of the underground gen-tie line requires the construction of three above ground vault structures. Since these structures are permanent fixtures on the landscape, all impacts associated with their construction are considered a permanent direct impact.

The work areas around the vault structures and the trenches associated with placement of the underground gen-tie line will be revegetated immediately following project construction to the City of San Diego Landscape Guidelines (City of San Diego 2023).

According to the Biology Guidelines, lands containing Tier I, II, IIIA, and IIIB habitats (see Table 3 of this report) and all City wetlands are considered sensitive and declining and, as such, impacts to these resources may be considered significant. Lands designated as Tier IV are not considered to have significant habitat value and impacts are not considered significant.

The City's Biology Guidelines also include additional information regarding significance as follows (City of San Diego 2018a):

a. Total upland impacts (Tiers I–IIIB) less than 0.1 acres are not considered significant and do not require mitigation.
b. Total wetland impacts less than 0.01 acres are not considered significant and do not require mitigation. This does not apply to vernal pools, road pools supporting listed fairy shrimp, or wetlands within the Coastal Zone.
c. Removal/control of non-native plants is not considered to constitute a significant habitat impact for which compensatory habitat acquisition, preservation, or creation for the area impacted is required. Mitigation for indirect impacts such as erosion control or --site infestation by non-native species may be needed. Examples include disturbed wetlands dominated by invasive plant species such as giant reed or Mexican fan palm.

Direct impacts to individual sensitive species, aside from impacts to sensitive habitat, may also be considered significant based on the rarity and extent of impacts. In general, conformance with the MSCP Subarea Plan, including provisions to provide habitat mitigation at required ratios, will reduce impacts to sensitive species to less than significant. The exceptions to this are impacts to Narrow Endemic Covered Species and non-Covered Species that are state listed or federally listed and/or have a CRPR of 1B.1, 1B.2, 2B.1, or 2B.2. For impacts to Narrow Endemic Covered Species or state-listed or federally listed species, species-specific mitigation is required on a case-by-case basis to reduce impacts to less than significant. As stated in the Biology Guidelines, "it is expected that the majority of CEQA sensitive species not covered by the MSCP will be adequately mitigated through the habitat-based mitigation" (City of San Diego 2018a). Direct impacts to plant species ranked CRPR 3 or 4 are not considered significant since insufficient information is available to determine sensitivity (for CRPR 3 species) or the species are not considered "rare" from a statewide perspective (for CRPR 4 species). Similarly, impacts to wildlife species that are only Watch List status per CDFW are not considered significant because any populations identified on site do not represent a significant percentage of the population in terms of the ability for the species to persist. Exceptions to this may occur for larger projects that could substantially reduce locally significant species populations. A portion of the proposed gen-tie line route is located within a CBLA; however, impacts will only occur on already developed land (paved road). The majority of the northern and central portion consist of developed land. The southern portion, which is inside the MHPA, consists of southern riparian woodland that will be avoided and coastal sage scrub that will be temporarily impacted with gen-tie line construction.

Indirect impacts refer to off-site and on-site effects that are short-term impacts due to the project construction or long-term design of the project and the effects it may have to adjacent resources. Indirect impacts imply a secondary source that is usually adjacent that would create an indirect effect on a sensitive species or habitat. Examples include lighting, noise, non-natives, or drainage.

For this project, it is assumed that the potential short-term indirect impacts resulting from construction activities may include dust, noise, and general human presence that may temporarily disrupt species and habitat vitality and construction-related soil erosion and runoff. Potential long-term indirect impacts to biological resources may also occur as a result of the proposed project through introduction of non-native species and increased human presence during and following construction. Since portions of the proposed gen-tie line route are located within a CBLA and an MHPA, development will result in potential indirect impacts to the preserve.

In accordance with the Subarea Plan and pursuant to the San Diego RWQCB Municipal Permit and the City's Stormwater Standards Manual (City of San Diego 2018b), projects are required to implement site design, source control, and treatment control best management practices (BMPs). Development projects will be required to meet National Pollutant Discharge Elimination System regulations and incorporate BMPs during construction and permanent BMPs as defined by the City's Stormwater Standards Manual as part of project development. Implementation of these regulatory requirements will reduce potential short- and long-term indirect impacts such as adverse (e.g., polluted or erosive) runoff conditions.

Significant indirect impacts to breeding birds may occur if construction activities produce noise or other types of disturbance in proximity to active nests, potentially resulting in abandonment of nests or other breeding failure. The City's Biology Guidelines provide necessary widths for active nest buffers and breeding season dates for Covered Species, including raptors (City of San Diego 2018a).

Cumulative impacts refer to the combined environmental effects of the proposed project and other relevant projects. In some cases, the impact from a single project may not be significant, but when combined with other projects, the cumulative impact may be significant.

5.2 Direct Impacts

5.2.1 Vegetation Communities and Land Cover Types

Implementation of the project will result in permanent direct impact to native vegetation communities on the project site. Construction of the proposed project will implement open cut trenching between Stonebridge Parkway and the SDG&E substation, with subsequent habitat restoration to return the area to preconstruction conditions. Implementation of the proposed project will result in direct permanent impacts totaling 0.94 acres to disturbed and developed areas, and direct permanent impacts totaling 0.96 acres (see Table 7 and Figure 4) to vegetation communities considered sensitive under the City of San Diego are those listed as Tier I through Tier III (rare to common uplands, respectively) and wetlands (City of San Diego 2018a).

Per City of San Diego guidelines, total impacts to sensitive upland vegetation communities greater than 0.1 acre and impacts to wetlands greater than 0.01 acres are considered biologically significant. There are permanent impacts to sensitive vegetation communities, 0.57 acres of coastal sage scrub inside the MHPA, 0.02 acre of coastal sage scrub outside the MHPA, 0.33 acres of coastal sage scrub–Baccharis dominated vegetation outside the MHPA, and 0.04 acre of southern mixed chaparral outside the MHPA, meeting the threshold of significance per City of San Diego Guidelines. Mitigation will be required and is discussed further in Section 6, Mitigation.

Table 7. Impacts to Vegetation Communities and Land Cover Types

Vegetation Community/ Land Cover Type	City of San Diego Biology Guidelines Vegetation Community	Subarea Plan Tier[a]	Permanent Impacts outside MHPA (Acres)	Permanent Impacts inside MHPA (Acres)
Sensitive Upland Vegetation Communities				
Coast Live Oak Woodland	Oak Woodland	I	0.00	0.00
Scrub Oak Chaparral	Scrub Oak Chaparral	I	0.00	0.00
Diegan Coastal Sage Scrub: *Baccharis*-dominated	Coastal Sage Scrub	II	0.33	0.00
Diegan Coastal Sage Scrub	Coastal Sage Scrub	II	0.02	0.57
Chamise Chaparral	Chamise Chaparral	IIIA	0.00	0.00
Southern Mixed Chaparral	Mixed Chaparral	IIIA	0.04	0.00
Non-Native Grassland	Non-Native Grassland	IIIB	0.00	0.00
Sensitive Upland Vegetation Communities Subtotal[2]			***0.39***	***0.57***
Wetlands				
Emergent Wetland	Freshwater Marsh	Wetland	—	--
Freshwater Marsh	Freshwater Marsh	Wetland	—	--
Non-Vegetated Channel	Natural Flood Channel	Wetland	—	
Southern Riparian Woodland	Riparian forest or woodland	Wetland	0.001	0.00

Table 7. Impacts to Vegetation Communities and Land Cover Types

Vegetation Community/ Land Cover Type	City of San Diego Biology Guidelines Vegetation Community	Subarea Plan Tier[a]	Permanent Impacts outside MHPA (Acres)	Permanent Impacts inside MHPA (Acres)
		Wetlands Subtotal[2]	***0.001***	***0.00***
Non-Native Vegetation Communities and Land Covers				
Disturbed Habitat	Disturbed Land	IV	0.02	0.02
Urban/Developed	Developed	IV	0.90	0.00
Urban/Developed -Ornamental	Developed	IV	0.00	0.00
		Non-Native Vegetation Communities and Land Covers Subtotal[b]	***0.92***	***0.02***

Notes:

[a] City of San Diego 2018a. This column includes the City's Biology Guidelines Tier I–IV ranking system, which refers to upland habitat types.

[b] May not total due to rounding.

5.2.2 Jurisdictional Resources

The jurisdictional delineation conducted on site for the proposed project mapped ephemeral channels, wetlands and non-wetland waters that are regulated by USACE, CDFW, RWQCB, and the City of San Diego. Specifically, a non-wetland water and mapped wetland occur along a portion of the proposed gen-tie line route south of Stoneridge Parkway (Figure 4). While these jurisdictional water resources or City of San Diego wetlands occur within the impact area, avoidance of jurisdictional areas on site will be achieved via horizontal directional drilling beneath the ephemeral channels and wetlands. Therefore, no direct impacts will occur to jurisdictional resources or City of San Diego wetlands as a result of implementing the proposed project.

5.2.3 Special-Status Plants

Focused rare plant surveys were conducted in 2022 to determine the presence/absence of special-status species determined to have potential to occur on site. After surveys were conducted four sensitive species were observed within the Biological Resources Study Area (Section 3.2.8). Species potential, presence, and absence are discussed further in Appendix C. Of those, two species are within the impact footprint: San Diego goldenstar (78 individuals), and small-flower microseris (17 individuals).

Small-flower microseris is a CRPR 4.2 and is not a Covered Species under the MSCP. Plants with a CRPR 4 plant taxa are of limited distribution or infrequent throughout a broader area in California, so that their vulnerability or susceptibility to threat appears low at this time, from a statewide perspective. However, these taxa warrant regular monitoring for evidence of decline and subsequent transfer to a more sensitive rank. Impacts to CRPR 4 plants do not generally meet the meet CEQA standards and thresholds for impact considerations. Therefore, impacts to small-flower microseris are not considered significant.

San Diego goldenstar is a CRPR 1B.1 and a Covered Species under the MSCP. In accordance with the MSCP, the project shall minimize impacts to San Diego goldenstar and translocate San Diego goldenstar where it is impacted. Direct impacts to this species would be significant. Refer to Section 6, Mitigation, for details regarding mitigation.

5.2.4 Special-Status Wildlife

A portion of the proposed project site is located within or adjacent to the MHPA. As such, the proposed project is required to conform to the City's Land Use Adjacency Guidelines (Section 1.4.3 of the City MSCP Subarea Plan) or to provide compatible land use or planning policy/design guidelines conformance (Sections 1.4.1 and 1.4.2 of the City MSCP Subarea Plan) (City of San Diego 2018).

Coastal California gnatcatcher was observed during focused surveys within the vegetation mapping study area buffer (500 foot). Permanent direct impacts to occupied Diegan coastal sage scrub will occur within the gen-tie line. Impacts to potential habitat is not expected to significantly impact habitat Southern California rufous-crowned sparrow, or Cooper's hawk since the impacts are small.

Direct take will not occur because the bird breeding season will be avoided. If the bird breeding season cannot be avoided, a biological/noise monitor will be present to minimize impacts. Because Southern California rufous-crowned sparrow and Cooper's hawk are covered under the MSCP, it is anticipated that these species are adequately conserved regionally through the conservation of similar appropriate habitats within the MHPA. No direct impacts to active nests or the young of nesting coastal California gnatcatcher, Southern California rufous-crowned sparrow, or Cooper's hawk will occur from construction of the proposed project. Finally, the proposed project will implement standard nesting bird avoidance measures in compliance with the MBTA.

There are large mature riparian woodland trees on a portion of the project site (within the biological resources study area (50 feet) where the wetland occurs and within the Vegetation mapping study area (500-foot buffer) that provide suitable nesting habitat for raptor species such as the Cooper's hawk. The City's Biology Guidelines provide necessary widths for active nest buffers and breeding season dates for Covered Species, including raptors (City of San Diego 2018a). Any development inside the MHPA must provide avoidance of 300 feet from any nesting site of Cooper's hawk (City of San Diego 2018). Direct impacts to nesting raptors will be significant. Refer to Section 6, Mitigation, for details regarding mitigation.

5.3 Indirect Impacts

The project would incorporate methods to control runoff, including site design, source control, and treatment control BMPs. The project would be required to meet National Pollutant Discharge Elimination System (NPDES) regulations and incorporate BMPs during construction and permanent BMPs as defined by the City of San Diego's (City's) Storm Water Standards Manual as part of the project development. Prior to proposed construction mobilization, the project contractor will prepare a Stormwater Pollution Prevention Plan (SWPPP), in accordance with the state's General Construction Stormwater Permit – 99-08-DWQ and implement the plan during construction. In addition, the proposed project would provide buffers surrounding all City wetlands where directional drilling will occur. All areas of impacts (trenching and vault construction) will follow San Diego Landscape guidelines. Therefore, the proposed project would not have any long-term indirect impacts on sensitive uplands, jurisdictional resources or special-status plant or wildlife species.

5.3.1 Vegetation Communities and Land Covers

Indirect impacts to vegetation communities, such as Diegan coastal sage scrub, primarily result from adverse edge effects. During vegetation removal and grading activities, short-term edge effects could include dust, soil erosion, and runoff from dust control that could disrupt plant vitality in non-impacted areas. However, all grading activities

will be subject to the proposed project's BMPs and typical restrictions and requirements that address dust control, erosion, and runoff consistent with standard City Stormwater Pollution Prevention Plan requirements of the City Storm Water Standards Manual (City of San Diego 2018b). This includes proper storm drain design and water quality BMPs to prevent erosion and pollution of water runoff. In addition, the project will be required to adhere to all standard construction protection measures described within the mitigation, which includes having a qualified biologist present to supervise flagging of sensitive resources prior to construction, provide environmental training and during construction to ensure no unauthorized impacts occur.

Therefore, short-term indirect impacts to vegetation communities are not anticipated as a result of the project. Overall, long-term indirect impacts to sensitive vegetation communities will be less than significant.

5.3.2 Jurisdictional Resources

As discussed in Section 5.3.1, indirect impacts during construction typically consist of short-term edge effects related to dust, soil erosion, and runoff from dust control. During construction, BMPs consistent with standard City Stormwater Pollution Prevention Plan requirements of the City Storm Water Standards Manual (City of San Diego 2018b) will be implemented. Therefore, no indirect impacts to jurisdictional resources are expected in the short or long term.

5.3.3 MSCP Subarea Plan MHPA Land Use Adjacency Guidelines

The proposed project is consistent with the land use adjacency guidelines within the MHPA as discussed in Section 4.2 of this report. The following items will be required:

> 1) Developed and paved areas should not drain directly into the MHPA; 2) Toxic chemicals will not be used during project implementation; 3) All lighting will be faced away from the MHPA; 4) Uses in or adjacent to the MHPA will be designed to minimize noise impacts; 5) New developments adjacent to the MHPA will be required to provide barriers boundaries to direct public access to appropriate locations and reduce domestic animal predation; 6) No invasive non-native plant species shall be introduced into areas adjacent to the MHPA; 7) New residential development located adjacent to and topographically above the MHPA must be set back from slope edges to incorporate Zone 1 brush management areas on the development pad and outside of the MHPA; 8) Manufactured slopes associated with site development shall be included within the development footprint for projects within or adjacent to the MHPA; 9) The project grading would be entirely within an existing development and does not include any proposed manufactured slopes.

5.3.4 Special-Status Plant Species

Indirect impacts to special-status plants result primarily from adverse edge effects as previously described. During construction activities, edge effects may include dust, which could disrupt plant vitality in the short-term or construction-related soil erosion and water runoff. Standard construction BMPs and construction-related minimization measures to control dust, erosion, and runoff consistent with standard City Stormwater Pollution Prevention Plan requirements of the City Storm Water Standards Manual (City of San Diego 2018b) will minimize these effects. A qualified biological monitor will be onsite during all days of construction in order to prevent any edge effects to sensitive plant species. The qualified biological monitor will flag special status plant species boundaries

for avoidance providing a buffer area to limit any dust, erosion, runoff, or other edge effects. Thus, short-term and long-term indirect impacts to special-status plants are not anticipated as a result of the project.

5.3.5 Special-Status Wildlife Species

Wildlife may be indirectly affected in the short-term by construction-related noise, which can disrupt normal activities and subject wildlife to higher predation risks. Adverse edge effects can cause degradation of habitat quality through the invasion of pest species. Breeding birds can be significantly affected by short-term construction-related noise, which can result in the disruption of foraging, nesting, and reproductive activities.

Most of the indirect impacts to vegetation communities and sensitive plants previously described can also affect special-status wildlife. Wildlife may also be indirectly affected in the short term and long term by construction-related noise, which can disrupt normal activities, cause lasting stress, and subject wildlife to higher predation risks. The following sensitive wildlife species were observed on site: Southern California rufous-crowned sparrow and coastal California gnatcatcher (*Polioptila californica californica*). Cooper's hawk has high potential to occur within the vegetation mapping study area buffer (500 feet) outside the permanent impact area. Indirect impacts from construction-related noise may occur to breeding wildlife if construction occurs during the breeding season (i.e., February 1 through September 15). Special-status species whose breeding/nesting could be significantly impacted by noise include Cooper's hawk, Southern California rufous-crowned sparrow and coastal California gnatcatchers.

Proposed project implementation has the potential to indirectly impact coastal California gnatcatcher, Southern California rufous-crowned sparrow, and Cooper's hawk if they are nesting near the project impacts. Based on the provisions of the MSCP Implementing Agreement between the Wildlife Agencies and the City of San Diego, no additional protection is required to offset potential indirect impacts to the coastal California gnatcatchers located within the vegetation mapping study area buffer (500-foot). Because Southern California rufous-crowned sparrow and Cooper's hawk are covered under the MSCP, it is anticipated that these species are adequately conserved regionally through the conservation of similar appropriate habitats within the MHPA. No indirect impacts to active nests or the young of nesting coastal California gnatcatcher, Southern California rufous-crowned sparrow, or Cooper's hawk will occur from construction of the proposed project.

Crotch's bumble bee was not observed onsite. However, there is flowering habitat and nectar resources found on a portion of the project site (within the biological resources study area). This area was determined to be potentially suitable habitat for Crotch bumble bee; therefore, the entire site was surveyed within the City of Poway and the City of San Diego. The City of San Diego requires a specific condition of approval as an avoidance measure to protect and minimize potential impacts to foraging Crotch's bumble bees during construction due to the presence of nectar resources. See appendix E for Bumble Bee report.

5.4 Cumulative Impacts

The MSCP is a long-term regional conservation plan established to protect sensitive species and habitats in San Diego County. The MSCP is divided into subarea plans that are implemented separately from one another. The project area is located within the MSCP biological core linkage area and both adjacent to and within the MSCP.

The MSCP planning effort is designed to address cumulative impacts through development of a regional plan that addresses impacts to Covered Species and habitats in a manner that assures their conservation despite impacts

of cumulative projects over the long term. The ultimate goal of this plan is the establishment of biological reserve areas in conformance with the State of California Natural Communities Conservation Planning Act.

Cumulative impacts to sensitive vegetation communities or special-status species from implementation of the project are not expected since all activities of the project will be consistent with MSCP requirements. Therefore, cumulative impacts to biological resources will be less than significant.

6 Mitigation

The mitigation measures required to offset significant direct and indirect impacts to sensitive vegetation communities, special-status species, and nesting birds are included in this chapter. These mitigation measures will reduce identified and potential significant impacts to a level that is less than significant pursuant to CEQA.

Per the City of San Diego Guidelines, "[m]itigation must be determined on a case-by-case basis. Mitigation refers to actions to help sustain the viability and persistence of biological resources. Mitigation will consist of actions that either compensate for impacts by replacing or providing substitute habitats or rectify the impact by restoring the affected habitats. The requirements of the mitigation will be based on the type and location of the impacted habitat, and additionally for uplands, on the location of the mitigation site. The Mitigation Element will consist of a discussion of the amount (e.g., quantity) and the type (e.g., method) of mitigation."

6.1 Mitigation, Minimization, and Avoidance Measures for Direct Impacts

Table 8 summarizes the project impacts to vegetation communities shown on Figure 4 and the required mitigation per the City of San Diego's Biology Guidelines (City of San Diego 2018a). Mitigation numbers are provided in Table 8. Impacts to non-native grassland and scrub oak chaparral will be avoided with horizontal directional drilling to avoid wetlands and waters. Total impacts to less than 0.01 acres of City of San Diego wetlands (southern riparian woodland) are considered less than significant per City guidelines. The City does not distinguish between permanent and temporary impacts for mitigation purposes. For all other impacts to sensitive uplands, mitigation is proposed at ratios provided in Table 3 in Section III of the Biology Guidelines.

Table 8. Mitigation Requirements for Permanent Impacts to Vegetation Communities

Vegetation Community	Subarea Plan Tier	Study Area (acres)	Permanent Impacts (acres)	Mitigation Ratio Provided outside the MHPA[a]	Mitigation Ratio within Previously Mitigated Area [b]	Mitigation Ratio Provided within the MHPA[a]	Mitigation Ratio within Previously Mitigated Area [b]	Restoration Mitigation (acres)[c]
Diegan Coastal Sage Scrub: *Baccharis*-dominated	Tier II	2.35	0.35 outside MHPA	1.5:1	N/A	**1:1**	N/A	0.53 outside MHPA *or* **0.35 inside MHPA**
Diegan Coastal Sage Scrub	Tier II	20.22	0.02 outside the MHPA	1.5:1	N/A	**1:1**	N/A	0.03 outside MHPA or **0.02 inside MHPA**
Diegan Coastal Sage Scrub	Tier II	20.22	0.57 inside MHPA	2:1	4:1	1:1	**2:1**	2.28 outside MHPA *or* **1.14 inside MHPA**
Southern Mixed Chaparral	Tier IIIA	10.11	0.04 outside MHPA	1.5:1	N/A	**1:1**	N/A	0.06 outside MHPA *or* **0.04 inside MHPA**

Notes:

[a] Mitigation ratios are from Table 3 of the City Biology Guidelines.

[b] The mitigation ratio is doubled for impacts to the Sycamore Estates mitigation site that is mapped MHPA and placed in a recorded conservation easement.

[c] Based on preferred mitigation, impacts outside and inside the MHPA will be provided within the MHPA at a 1:1 and 2:1 ratio as shown in bold, respectively. Should mitigation be provided outside the MHPA the higher ratio would be required.

In accordance with the Biology Guidelines (City of San Diego 2018a), the following measures and standard conditions will reduce significant effects to vegetation communities and sensitive species identified in Section 5, Impacts Analysis, of this report to a less-than-significant level:

BIO-1 Habitat Restoration to Comply with City of San Diego Biological Guidelines and Mitigation for Permanent Impacts. Details provided in the restoration plan. The owner/permittee shall mitigate upland impacts in accordance with the City of San Diego Biology Guidelines. The proposed project will result in permanent impacts (including on site) to 0.96 acre of coastal sage scrub and southern mixed chaparral communities in the City of San Diego jurisdiction. The project applicant shall provide for restoration of these vegetation communities based on Table 8 of the Biological Technical Report: Diegan coastal sage scrub (outside the MHPA 0.02 acre, inside the MHPA 0.57 acre), Diegan coastal sage scrub-Baccharis dominated (outside the MHPA 0.33 acre), and southern mixed chaparral (outside the MHPA 0.04 acre)

Habitat restoration and erosion control treatments shall be installed within disturbance areas and native habitat, in accordance with the City of San Diego Biological Guidelines and City of San Diego Landscape Guidelines (City of San Diego 2023). Erosion control features shall include silt fence and straw fiber rolls, where appropriate.

BIO-2 Avoidance and Mitigation of Special-Status Plants. A biological monitor will be provided during construction to avoid any impacts. There are 78 San Diego goldenstar plants within the impact area. Populations of San Diego goldenstar will be flagged and avoided where possible. San Diego goldenstar shall be translocated in accordance with the 5- year Restoration Plan.

BIO-3 Nesting Bird Survey. To avoid any direct impacts to nesting birds such as coastal California gnatcatcher, Southern California rufous-crowned sparrow, least Bell's vireo, and Cooper's hawk, construction activities shall occur outside the breeding season (February 1 to September 15). If construction activity is scheduled during the general bird breeding season, a Qualified Biologist shall conduct a preconstruction survey to determine the presence or absence of nesting birds within the proposed work areas and buffer. The preconstruction survey shall be conducted within 3 calendar days prior to the start of construction activities. The applicant shall submit the results of the preconstruction survey to City of San Diego for review and approval prior to initiating any construction activities. If nesting birds are detected, a letter report or mitigation plan in conformance with the applicable local, state, and federal law (e.g., appropriate follow-up surveys, monitoring schedules, construction and noise barriers/buffers) shall be prepared and include proposed measures to be implemented to ensure that take of birds or eggs or disturbance of breeding activities is avoided. As required by the City of San Diego area-specific management directive for Cooper's hawk, the project construction activities shall maintain a 300-foot avoidance area of any active nests detected during the nesting bird survey. If construction activities, particularly clearing/grubbing, grading, and other intensive activities, stop for more than 3 days, an additional nesting bird and raptor survey shall be conducted within the proposed impact area. The report or mitigation plan shall be submitted to the applicable City for review and approval and implemented to the satisfaction of the City of San Diego. The City of San Diego Resident Engineer and/or the Qualified Biologist shall verify and approve that all measures identified in the report or mitigation plan are in place prior to and/or during construction. If nesting birds are not detected during the preconstruction survey, no further mitigation is required. Implementation of

preconstruction surveys for nesting birds, and any required follow-up protection measures, will reduce the potential impact levels to below significant.

6.2 Mitigation, Minimization, and Avoidance Measures for Indirect Impacts

The project shall be required to adhere to all standard construction protection measures listed in the mitigation and monitoring plan and Site Development Permit, which includes having a qualified biologist present to supervise flagging of sensitive resources prior to construction, provide environmental training and during construction to ensure no unauthorized impacts occur. Therefore, the proposed project will avoid indirect impacts to sensitive upland vegetation communities, jurisdictional resources, and special-status plant species with implementation of the following measures:

BIO-4 Indirect Impact Avoidance. Prior to issuance of land development permits by the City of San Diego, including clearing, grubbing, grading, and/or construction permits that impact biological resources, the following measures shall be included on grading and construction plans, or in grading and construction permits:

1. **Qualified Biologist.** The owner/permittee shall provide a letter to the City of San Diego's Mitigation Monitoring Coordination (MMC) Section stating that a project biologist ("Qualified Biologist") as defined in the 2018 City of San Diego Municipal Code, Land Development Code—Biology Guidelines 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.
2. **Pre-Construction Meeting.** The Qualified Biologist shall attend the preconstruction meeting, discuss the project's biological monitoring program, and arrange to perform any follow-up mitigation measures and reporting, including site-specific monitoring, restoration and additional fauna/flora surveys/salvage.
3. **Documentation.** 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 the California Environmental Quality Act (CEQA); the National Environmental Policy Act; the federal Endangered Species Act and the California Endangered Species Act; and/or other local, state, or federal requirements.
4. **Biological Construction Mitigation/Monitoring Exhibit.** The Qualified Biologist shall present a Biological Construction Mitigation/Monitoring Exhibit (BCME), which includes the biological documents above. In addition, the BCME shall include restoration plans, plant salvage/relocation requirements (e.g., burrowing owl exclusions), avian or other wildlife surveys/survey schedules (including general avian nesting surveys and U.S. Fish and Wildlife [USFWS] protocol surveys), 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 of San Diego (Assistant Deputy Director/MMC). The BCME shall include a site plan, a 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.

5. **Construction Fencing.** 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 delineating buffers to protect sensitive biological resources (e.g., habitats/flora and fauna, including nesting birds) during construction. Appropriate steps/care should be taken to minimize attraction of nest predators to the site.
6. **On-Site 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 educational session regarding the need to avoid impacts outside the approved construction area and to protect sensitive flora and fauna (e.g., explain the avian and wetland buffers and the flag system for removal of invasive species or retention of sensitive plants, and clarify acceptable access routes/methods and staging areas).
7. **Biological Monitoring.** During construction, a Qualified Biologist shall be present to assist in the avoidance of impacts to native vegetation, jurisdictional resources, special-status plants and wildlife, and nesting birds.
8. **Covered Trenches.** General biological monitoring shall include verifying that the contractor has covered all steep-walled trenches or excavations overnight or after shift. If trenches or excavations cannot be covered, the monitor shall verify that the contractor has installed exclusionary fencing (e.g., silt fence) around the trenches or excavation areas or installed ramps to prevent entrapment of wildlife (e.g., reptiles and mammals). If animals are encountered within any trenches or excavated areas, they shall be removed by the Qualified Biological Monitor, if possible, or provided with a means of escape (e.g., a ramp or sloped surface) and allowed to disperse. In addition, the Qualified Biological Monitor shall provide training to construction personnel to increase awareness of the possible presence of wildlife beneath vehicles and equipment and to use best judgment to avoid killing or injuring wildlife. The Qualified Biological Monitor shall be available to assist with moving wildlife, if necessary.
9. **Nighttime Construction.** To reduce impacts to nocturnal species in those areas where they have a potential to occur, nighttime construction activity within undeveloped areas containing sensitive biological resources shall be minimized whenever feasible and shielded lights shall be utilized when necessary. Construction nighttime lighting will be subject to City of San Diego's Outdoor Lighting Regulations per San Diego Land Development Code (LDC) Section 142.0740.
10. **BMPs/Erosion/Runoff.** The City of San Diego shall incorporate methods to control runoff, including a stormwater pollution prevention plan to meet National Pollutant Discharge Elimination System regulations or a batch discharge permit from the City of San Diego. Implementation of stormwater regulations are expected to substantially control adverse edge effects (e.g., erosion, sedimentation, habitat conversion) during and following construction both adjacent and downstream from the study area. Typical construction best management practices (BMPs) specifically related to reducing impacts from dust, erosion, and runoff generated by construction activities shall be implemented. During construction, material stockpiles shall be placed such that they cause minimal interference with on-site drainage patterns. This will protect sensitive vegetation from being inundated with sediment-laden runoff. Dewatering shall be conducted in accordance with standard regulations of the Regional Water Quality Control Board (RWQCB). A National Pollutant Discharge Elimination System permit issued by RWQCB to discharge water from dewatering activities shall be required prior

to start of dewatering. This will minimize erosion, siltation, and pollution within sensitive communities. Design of drainage facilities shall incorporate long-term control of pollutants and stormwater flow to minimize pollution and hydrologic changes.

11. **Toxics/Project Staging Areas/Equipment Storage.** Projects that use chemicals or generate by-products such as pesticides, herbicides, and animal waste, and other substances that are potentially toxic or impactive to native habitats/flora/fauna (including water) shall incorporate measures to reduce impacts caused by the application and/or drainage of such materials into the MHPA. No trash, oil, parking, or other construction/development-related material/activities shall be allowed outside any approved construction limits. Where applicable, this requirement shall be incorporated into leases on publicly owned property when applications for renewal occur. A note shall be provided in/on the Construction Drawings that states: "All construction-related activity that may have potential for leakage or intrusion shall be monitored by the Qualified Biologist/applicant's representative or Resident Engineer to ensure there is no impact to the MHPA."

BIO-5 Land Use Adjacency Guidelines. As a condition of the permit, land use adjacency guidelines will be followed. Land use adjacency guidelines apply to the Northern and Southern Section of Gen-Tie Line within the Biological Core Area, Biological Linkage Area and areas adjacent to the MHPA.

The proposed project is consistent with the MSCP because the proposed project will place three permanent structures within developed land cover types only, and the proposed project will not negatively impact the goals and objectives of the City of San Diego Subarea Plan or MSCP. Thus, the proposed project is consistent with MSCP/MHPA, and MSCP/MHPA adjacency guidelines.

- **Developed and paved areas should not drain directly into the Biological Core Area, Biological Linkage Area or MHPA.** No drainage is expected for this project. If drainage is expected, developed and paved areas within the project will not drain directly into the CBLA or MHPA; rather, those areas will drain directly to the biofiltration basins if needed, which prevent the release of toxins, chemicals, petroleum products, and exotic plant materials before draining into the CBLA or MHPA.
- **Toxic chemicals will not be used during project implementation.** No toxic chemicals are proposed to be used for project components, including the development. Gasoline pans will be placed under all construction equipment when not in use.
- **All lighting should be faced away from the Biological Core Area, Biological Linkage Area and MHPA.** Nighttime work is not expected for this project. Daytime work is expected. If nighttime work is expected, any nighttime lighting, including but not limited to security lighting, will be shielded and directed away from the CBLA and MHPA per the City's Outdoor Lighting Ordinance so there is no spill of light into the CBLA or MHPA.
- **Uses in or adjacent to the Biological Core Area, Biological Linkage Area and MHPA will be designed to minimize noise impacts.** Work is to be avoided during the bird breeding season. If the bird breeding season cannot be avoided, a biologist will conduct nesting surveys prior to any construction work during the bird breeding season to determine any potential nest locations. A biological noise monitor will monitor with a piccolo monitor during the bird breeding season to ensure that noise does not exceed an average of 60 db(A). Gen-tie line construction

should not exceed an average 60 db(A) over each 1-hour period. The project will include standard nesting bird conditions in accordance with the MBTA.

- **New development adjacent to the Biological Core Area, Biological Linkage Area and MHPA will be required to provide barriers boundaries to direct public access to appropriate locations and reduce domestic animal predation.** No public access is expected given that the project area is gated within all sections of the paved area. In addition, the southern section is also gated. The only areas for public access include Stonebridge parkway (paved road), which consists of paved walking trails.
- **No invasive non-native plant species shall be introduced into areas adjacent to the Biological Core Area, Biological Linkage Area or MHPA.** No landscaping is expected within the northern portion of the project site. If landscaping becomes required in this portion, no non-native or invasive species will be included in landscaping on the project site. The southern area would not propose invasive plant species as part of the revegetation plan.
- **New residential development located adjacent to and topographically above the Biological Core Area, Biological Linkage Area or 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 Biological Core Area, Biological Linkage Area or MHPA.** Brush management is not proposed. Area specific management directives consist of "measures to reduce edge effects and minimize disturbance, 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".
- **Manufactured slopes associated with site development shall be included within the development footprint for projects within or adjacent to the Biological Core Area, Biological Linkage Area or MHPA.** The project grading would be entirely within an existing development and does not include any proposed manufactured slopes.

Southern Section of Gen-Tie Line South of Stonebridge Parkway within the MHPA

The southern section south of Stonebridge Parkway is within the MHPA. The proposed project is consistent with the MSCP because permanent direct impacts associated with the proposed southern section of the gen-tie line project will not negatively impact the goals and objectives of the City MSCP through on-site restoration, minimization, and avoidance measures. Thus, the proposed project is consistent with the MSCP within the southern section of the project site.

The proposed project will apply the following measures consistent with the MSCP guidelines:

- **Wetland and waters avoidance** through horizontal directional drilling (including both wetlands and non-wetland waters).
- **Mitigation of permanent direct impacts** to previously restored coastal sage scrub habitat with restoration after permanent impacts.
- **Avoidance of Impacts to San Diego Goldenstar:** (1) avoiding the San Diego goldenstar population within coastal sage scrub as feasible, (2) minimizing impacts to San Diego goldenstar where possible within the gen-tie line route, and (3) translocation of goldenstar where other options are not feasible.

BIO-6 Avoidance Measure for Crotch's Bumble Bee. Should this species no longer be sensitive as defined in the City Biology Guidelines at the time of the preconstruction meeting, then no avoidance measures shall be required. As a condition of approval, the following measures shall be implemented:

1. To avoid impacts on Crotch's bumble bee, removal of habitat in the proposed area of disturbance must occur outside of the Colony Active Period between April 1 through August 31. If the removal of habitat in the proposed area of disturbance must occur during the Colony Active Period, a Qualified Biologist shall conduct a pre-activity (defined as any habitat disturbance) survey no more than three days prior to the initiation of construction activities to determine the presence or absence of Crotch's bumble bee within the proposed area of disturbance.

2. A Qualified Biologist must demonstrate the following qualifications: at least 40 hours of experience surveying for bee or other co-occurring aerial invertebrate species (such as Quino checkerspot butterfly) and have completed a Crotch's bumble bee detection/identification training by an expert Crotch's bumble bee entomologist; or the biologist must have at least 20 hours of experience directly observing Crotch's bumble bee.

3. The pre-activity survey shall consist of photographic surveys following California Department of Fish and Wildlife (CDFW) guidance (i.e., Survey Considerations for California Endangered Species Act [CESA] Candidate Bumble Bee Species, dated June 6, 2023). The surveys shall consist of passive methods unless a Memorandum of Understanding is obtained.

   If additional activities (e.g., capture or handling) are deemed necessary to identify bumble bees of an unknown species that may be Crotch's bumble bee, then the Qualified Biologist shall obtain the required authorization via a Memorandum of Understanding or Scientific Collecting Permit pursuant to CDFW Survey Considerations for CESA Candidate Bumble Bee Species (CDFW 2023). Survey methods that involve lethal take of species are not acceptable.

4. If pre-activity surveys identify Crotch's bumble bee individuals on-site, the Qualified Biologist shall notify and consult with CDFW to establish, monitor, and maintain no-work buffers around the associated floral resources. The size and configuration of the no-work buffer shall be based on the best professional judgment of the Qualified Biologist in consultation with CDFW. Construction activities shall not occur within the no-work buffers until the bees appear no longer active (i.e., associated floral resources appear desiccated and no bees are seen flying for three consecutive days indicating dispersal from the area). Take of any endangered, threatened, candidate species that results from the project is prohibited, except as authorized by State law (Fish and Game Code section 86, 2062, 2067, 2068, 2080, 2085; California Code Regulations, Title 14, section 786.9) under CESA.

5. Survey data shall be submitted by the Qualified Biologist to the California Natural Diversity Database (CNDDB) in accordance with the Memorandum of Understanding with CDFW, or Scientific Collecting Permit requirements, as applicable.

7 Acknowledgments

This report was prepared by Dudek Biologists Erin Bergman, Kimberly Narel, and Callie Amoaku and reviewed by Brock Ortega. Graphics were provided by Andrew Greis. Technical editing was provided by Daniela Yurovsky and formatting was provided by Megan Crist and Summer Forsman.

8 References Cited

16 USC 703–712. 1918. Migratory Bird Treaty Act, as amended.

66 FR 3853–3856. 2001. Responsibilities of Federal Agencies to Protect Migratory Birds.

AOS (American Ornithological Society). 2018. "Checklist of North and Middle American Birds." Accessed October 24, 2018. http://checklist.aou.org/.

Atwood, J.L. 1993. "California Gnatcatchers and Coastal Sage Scrub: The Biological Basis for Endangered Species Listing." In *Interface between Ecology and Land Development in California*, ed. J.E.Keeley, 149–169. Los Angeles, California: Southern California Academy of Sciences.

Atwood, J.L., and J.S. Bolsinger. 1992. "Elevational Distribution of California Gnatcatchers in the United States." *Journal of Field Ornithology* 63:159–168.

Calflora. 2020. *The Calflora Database: Information on California plants for education, research and conservation, with data contributed by public and private institutions and individuals*. Berkeley, California. Accessed January 2020. http://www.calflora.org.

Calherps (California Herps). 2020. "California Herps: A Guide to the Amphibians and Reptiles of California." Accessed February 2020. http://www.californiaherps.com/.

CCH (Consortium for California Herbaria). 2020. "CCH1: Featuring California vascular plant data from the Consortium of California Herbaria and other sources." Accessed January 14, 2020. https://ucjeps.berkeley.edu/consortium/.

CDFG (California Department of Fish and Game). 2009. "Protocols for Surveying and Evaluating Impacts to Special Status Native Populations and Natural Communities." November 24, 2009. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959&inline.

CDFW (California Department of Fish and Wildlife). 2019a. "Special Animals List." California Natural Diversity Database. CDFW, Biogeographic Data Branch. August 2019. Accessed August 2019. https://www.wildlife.ca.gov/Data/CNDDB/Plants-and-Animals.

CDFW. 2020. California Natural Diversity Database (CNDDB). RareFind, Version 5. (Commercial Subscription). Sacramento, California: CDFW, Biogeographic Data Branch. http://www.dfg.ca.gov/biogeodata/cnddb/mapsanddata.asp.

City of San Diego. 1997. *City of San Diego Final MSCP Subarea Plan*. Prepared by the City of San Diego Community and Economic Development Department. March 1997. https://www.sandiego.gov/sites/default/files/legacy/planning/programs/mscp/pdf/subareafullversion.pdf.

City of San Diego. 2018a. *San Diego Municipal Code, Land Development Code—Biology Guidelines*. Amended February 1, 2018, by Resolution No. R-311507. https://www.sandiego.gov/sites/default/files/amendment_to_the_land_development_manual_biology_guidelines_february_2018_-_clean.pdf.

City of San Diego. 2018b. *Storm Water Standards Manual*. October 1, 2018. https://www.sandiego.gov/sites/default/files/storm_water_standards_manual_oct_2018.pdf.

City of San Diego. 2023. City of San Diego LandscapeGuidelines. Accessed November 2023. Core Sub-Area.doc (sandiego.gov)

CNPS (California Native Plant Society). 2001. *California Native Plant Society Botanical Survey Guidelines*. Revised June 2, 2001. Accessed February 2020. https://cnps.org/wp-content/uploads/2018/03/cnps_survey_guidelines.pdf.

CNPS. 2020. *Inventory of Rare and Endangered Plants* (online edition, v8-03 0. 39). Sacramento, California: CNPS. Accessed January 2020. http://www.rareplants.cnps.org.

County of San Diego. 1998. *Final Multiple Species Conservation Program: MSCP Plan*. August 1998. http://www. sdcounty. ca. gov/pds/mscp/docs/SCMSCP/FinalMSCPProgramPlan. pdf.

Crother, B.I. 2017. "Scientific and Standard English Names of Amphibians and Reptiles of North America North of Mexico, with Comments Regarding Confidence in our Understanding." 8th ed. In *Herpetological Circular No. 43*, ed. J.J.Moriarty. Shoreview, Minnesota: Society for the Study of Amphibians and Reptiles.

Cypher, E.A. 2002. *General Rare Plant Survey Guidelines.* Bakersfield, California: California State University, Stanislaus. Revised July 2002. Accessed May 2012. http://www.fws.gov/sacramento/ES/Survey-Protocols-Guidelines/Documents/rare_plant_protocol.pdf.

Dudek. 2022a. 2022 Focused Quino Checkerspot Butterfly Survey Report for the Nighthawk Energy Storage Facility, City of Poway, San Diego County, California. July 23, 2022.

Dudek. 2022b. 2022 Focused Coastal California Gnatcatcher Survey Report for the Nighthawk Energy Storage Facility, City of Poway, San Diego County, California. August 17, 2022.

Google Earth. 2020. *Aerial Photographs*. 1:200 scale.

Hall, E.R. and K.R. Kelson. 1959. *The Mammals of North America*. New York, New York: The Ronald Press Company.

Holland, R.F. 1986. *Preliminary Descriptions of the Terrestrial Natural Communities of California.* Nongame-Heritage Program, California Department of Fish and Game. October 1986.

Jepson Flora Project. 2018. *Jepson eFlora*. Berkeley, California: University of California. Accessed August 2019. http://ucjeps.berkeley.edu/cgi-bin/get_JM_name_data.pl.

Lichvar, R.W., D.L. Banks, W.N. Kirchner, and N.C. Melvin. 2016. *The National Wetland Plant List: 2016 wetland ratings*. Phytoneuron 2016-30: 1–17. Published 28 April 2016. ISSN 2153 733X.

Microsoft. 2020. *Bing Aerial Imagery*.

NABA (North American Butterfly Association). 2016. "Checklist of North American Butterflies Occurring North of Mexico." Adapted from *North American Butterfly Association (NABA) Checklist & English Names of North American Butterflies*, eds. B. Cassie, J. Glassberg, A. Swengel, and G. Tudor. 2nd ed. Morristown, New Jersey: NABA. Accessed August 2019. http://www.naba.org/pubs/enames2_3. html.

Oberbauer, T., M. Kelly, and J. Buegge. 2008. *Draft Vegetation Communities of San Diego County.* March 2008. Accessed August 2019. http://www.sdcanyonlands.org/pdfs/veg_comm_sdcounty_2008_doc.pdf.

Pratt, G.F., and C.L. Pierce. 2009. "A New Larval Food Plant, *Collinsia concolor*, for the Endangered Quino Checkerspot, *Euphydryas editha quino*." *Journal of the Lepidopterists' Society* 64(1): 36–37. https://doi.org/10.18473/lepi.v64i1.a6.

Preston, K.L., P.J. Mock, M.A. Grishaver, E.A. Bailey, and D.F. King. 1998. "California Gnatcatcher Territorial Behavior." *Western Birds* 29:242–257.

Rebman, J.P., and M.G. Simpson. 2014. "Checklist of the Vascular Plants of San Diego County." 5th ed. Online version. San Diego Natural History Museum. Accessed August 12, 2019. https://www.sdnhm.org/download_file/view/3382/582/582/.

RECON (RECON Environmental Inc.). 2018. *Biological Resources Resource Report for the Paseo Montril Development Project.* Prepared for Pardee Homes. January 5, 2018.

Reiser, C.H. 1996. *Rare Plants of San Diego County.* Imperial Beach, California: Aquafir Press.

SanGIS (San Diego Geographic Information Source). 2020. *San Diego Geographic Information Source*. Accessed January 2020. http://www.sangis.org/.

SANDAG (San Diego Association of Governments). 2014. *Aerial Maps*. http://www.sangis.org/news/articles/20151028_2014_Imagery.html

SDNHM (San Diego Natural History Museum). 2002. "Butterflies of San Diego County." Revised September 2002. Accessed August 2019. http://www.sdnhm.org/archive/research/entomology/sdbutterflies.html.

SDNHM. 2012. *San Diego County Plant Atlas*. San Diego, California: SDNHM. Last updated 2012. Accessed August 2019. http://www.sdplantatlas.org/GMap/GMapSpeciesMap.htm.

SDNHM. 2017. *San Diego County Mammal Atlas.* San Diego, California: SDNHM. November 2017. Accessed August 2019.

USACE (U.S. Army Corps of Engineers). 1987. *Corps of Engineers Wetlands Delineation Manual.* Wetlands Research Program Technical Report Y-87- 1. Vicksburg, Mississippi: U.S. Army Engineer Waterways Experiment Station. January 1987. http://www.fedcenter.gov/Bookmarks/index.cfm?id=6403&pge_id=1606.

USACE. 2008. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (*Version 2.0*). Environmental Laboratory, ERDC/EL TR-08-28. Vicksburg, Mississippi: U.S. Army Engineer Research and Development Center. September 2008. http://el.erdc..army.mil/elpubs/pdf/trel08-28.pdf.

USACE. 2010. "Updated Datasheet for the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States." Wetland Regulatory Assistance Program, ERDC/CRREL TN-10-1. Prepared by K.E. Curtis and R.W. Lichvar.Hanover, New Hampshire: U.S. Army Engineer Research and Development Center Cold Regions Research and Engineering Laboratory. July 2010.

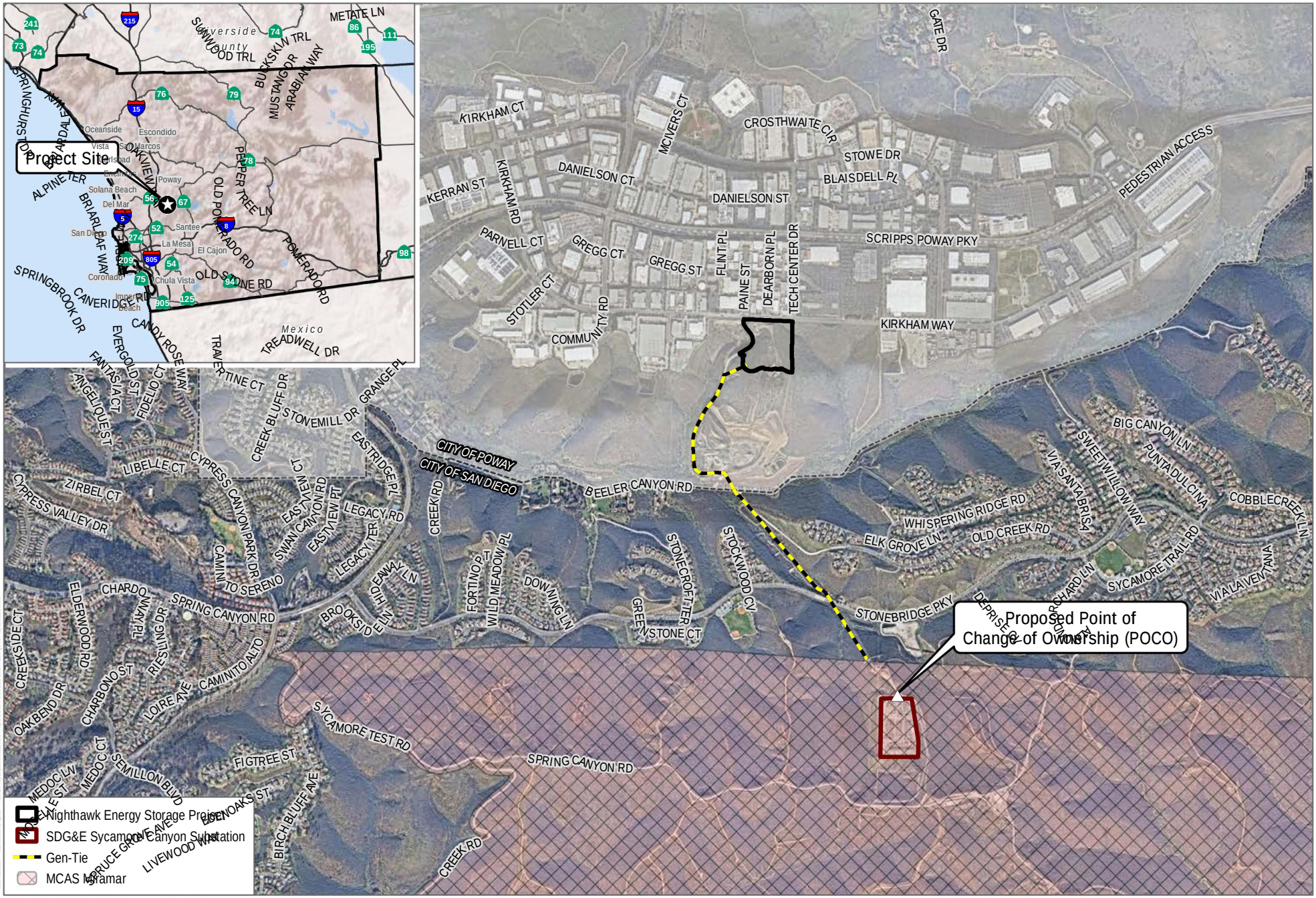
USACE and EPA (U.S. Environmental Protection Agency). 2008. "Clean Water Act Jurisdiction Following the U.S. Supreme Court's Decision in *Rapanos v. United States* & *Carabell v. United States*." December 2, 2008. http://water.epa.gov/lawsregs/guidance/wetlands/upload/2008_12_3_wetlands_CWA_Jurisdiction_Following_Rapanos120208.pdf.

Unitt, P. 2004. *San Diego County Bird Atlas*. Online (Google Earth) version. San Diego, California: San Diego Natural History Museum. Accessed March 30, 2013. http://www.sdnhm.org/science/birds-and-mammals/projects/san-diego-county-bird-atlas/.

USDA (U.S. Department of Agriculture). 2022. "Web Soil Survey." USDA Natural Resources Conservation Service, Soil Survey Staff. http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx.

USFWS (U.S. Fish and Wildlife Service). 2020. "Critical Habitat and Occurrence Data" [map]. Accessed February 2020. http://www.fws.gov/data.

Wilson, D.E., and D.M. Reeder, eds. 2005. *Mammal Species of the World: A Taxonomic and Geographic Reference*. 3rd ed. Baltimore, Maryland: Johns Hopkins University Press.



SOURCE: Arevon 2024; SANGIS 2023, 2024

DUDEK

0 1,000 2,000 Feet

FIGURE 1

Project Location

Nighthawk Energy Storage Project

SOURCE: Arevon 2024; City Poway SubArea Plan; SANGIS 2023, 2024

FIGURE 2

Multi-Habitat Planning Area (MHPA) and Local Jurisdictions

Nighthawk Energy Storage Project

DUDEK

SOURCE: Arevon 2024; SANGIS 2023, 2024

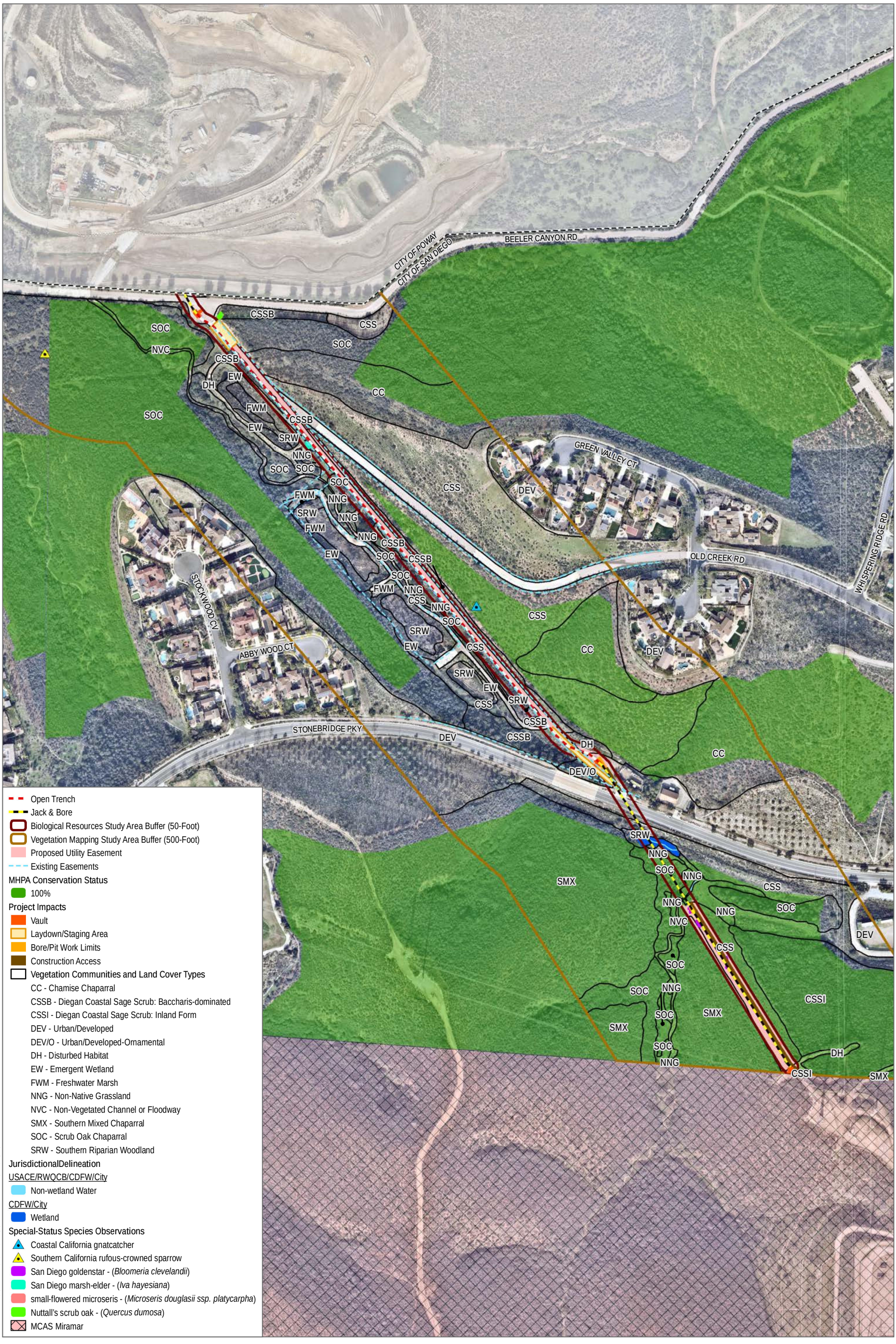
DUDEK

0 150 300 Feet

FIGURE 3

Biological Resources

Nighthawk Energy Storage Project



SOURCE: Arevon 2024; SANGIS 2023, 2024

DUDEK

FIGURE 4

Impacts to Biological Resources

Nighthawk Energy Storage Project

Appendix A
Plant Compendium

Lycophytes [=Lycopods]

SELAGINELLACEAE – SPIKE-MOSS FAMILY

Selaginella cinerascens – mesa spike-moss

Angiosperms: Eudicots

ADOXACEAE – ADOXA FAMILY

Sambucus nigra ssp. *caerulea* – blue elderberry

AMARANTHACEAE – AMARANTH FAMILY

Malosma laurina – laurel sumac

Toxicodendron diversilobum – western poison-oak

* *Schinus molle* – Peruvian pepper tree

APIACEAE – CARROT FAMILY

Daucus pusillus – rattlesnake weed

Sanicula arguta – sharp-tooth sanicle

* *Nerium oleander* – oleander

ASTERACEAE – SUNFLOWER FAMILY

Ambrosia psilostachya – western ragweed

Artemisia californica – coastal sagebrush

Baccharis salicifolia ssp. *salicifolia* – mule-fat, seep-willow

Baccharis sarothroides – broom baccharis

Corethrogyne filaginifolia var. *filaginifolia* – common sand-aster

Deinandra fasciculata – fascicled tarweed

Encelia californica – California encelia

Erigeron foliosus var. *foliosus* – leafy daisy

Eriophyllum confertiflorum var. *confertiflorum* – long-stem golden-yarrow

Hazardia squarrosa var. *grindelioides* – southern sawtooth goldenbush

Heterotheca grandiflora – telegraph weed

Isocoma menziesii var. *vernonioides* – coastal goldenbush

Iva hayesiana – San Diego marsh-elder

Microseris douglasii ssp. *platycarpha* – small-flower microseris

Osmadenia tenella – osmadenia

Porophyllum gracile – odora

Pseudognaphalium californicum – California everlasting

Uropappus lindleyi – silver puffs

* *Carduus pycnocephalus* ssp. *pycnocephalus* – Italian thistle

* *Centaurea melitensis* – tocalote

* *Dittrichia graveolens* – stinkwort
* *Hypochaeris glabra* – smooth cat's ear
* *Lactuca serriola* – prickly lettuce
* *Logfia gallica* – narrow-leaf cottonrose
* *Pulicaria paludosa* – Spanish false-fleabane rafinesquia californica nutt
* *Sonchus asper* ssp. *asper* – prickly sow-thistle
* *Sonchus oleraceus* – common sow-thistle
* *Hedypnois cretica* – crete hedypnois

BORAGINACEAE – BORAGE FAMILY

Cryptantha intermedia var. *intermedia* – Nievitas cryptantha

Eucrypta chrysanthemifolia var. *chrysanthemifolia* – common eucrypta

BRASSICACEAE – MUSTARD FAMILY

Lepidium nitidum – shining peppergrass

* *Hirschfeldia incana* – short-pod mustard

CACTACEAE – CACTUS FAMILY

Opuntia littoralis – coast prickly-pear

CARYOPHYLLACEAE – PINK FAMILY

* *Silene gallica* – common catchfly
* *Spergularia bocconi* – Boccone's sand-spurrey

CHENOPODIACEAE – GOOSEFOOT FAMILY

Chenopodium californicum – California goosefoot

* *Salsola tragus* – prickly russian-thistle, tumbleweed

CONVOLVULACEAE – MORNING-GLORY FAMILY

Calystegia macrostegia ssp. *tenuifolia* – San Diego morning-glory

CRASSULACEAE – STONECROP FAMILY

Dudleya pulverulenta – chalk dudleya

CUCURBITACEAE – GOURD FAMILY

Marah macrocarpa – manroot, wild-cucumber

EUPHORBIACEAE – SPURGE FAMILY

Croton setiger – doveweed

FABACEAE – LEGUME FAMILY

Acmispon americanus var. *americanus* – Spanish-clover

Acmispon glaber var. *glaber* – coastal deerweed
Lupinus bicolor – miniature lupine
Trifolium willdenovii – valley clover
* *Medicago polymorpha* – California burclover
* *Melilotus indicus* – Indian sweetclover

FAGACEAE – OAK FAMILY

Quercus agrifolia var. *agrifolia* – coast live oak, encina
Quercus cornelius-mulleri – desert scrub oak
Quercus xacutidens – Torrey's scrub oak

GERANIACEAE – GERANIUM FAMILY

Geranium carolinianum – Carolina geranium
* *Erodium botrys* – long-beak filaree/storksbill
* *Erodium cicutarium* – red-stem filaree/storksbill

LAMIACEAE – MINT FAMILY

Salvia apiana – white sage
Salvia mellifera – black sage

MONTIACEAE – MONTIA FAMILY

Claytonia perfoliata – miner's-lettuce

MYRSINACEAE – MYRSINE FAMILY

* *Anagallis arvensis* – scarlet pimpernel, poor man's weatherglass

NYCTAGINACEAE – FOUR O'CLOCK FAMILY

Mirabilis laevis var. *crassifolia* – coastal wishbone plant

OLEACEAE – OLIVE FAMILY

* *Olea europaea* – olive

ONAGRACEAE – EVENING-PRIMROSE FAMILY

Oenothera elata ssp. *hookeri* – Hooker's evening-primrose
Clarkia purpurea – winecup clarkia

OROBANCHACEAE – BROOM-RAPE FAMILY

Cordylanthus rigidus – bird's beak

PHRYMACEAE – LOPSEED FAMILY

Diplacus puniceus – coast monkey flower

PLUMBAGINACEAE – LEADWORT FAMILY

* *Limonium perezii* – Perez's marsh-rosemary

POLYGONACEAE – BUCKWHEAT FAMILY

Eriogonum fasciculatum var. *fasciculatum* – coast California buckwheat

* *Rumex crispus* – curly dock

RANUNCULACEAE – BUTTERCUP FAMILY

Thalictrum fendleri var. *fendleri* – Fendler's meadow-rue

RHAMNACEAE – BUCKTHORN FAMILY

Rhamnus crocea – spiny redberry

ROSACEAE – ROSE FAMILY

Adenostoma fasciculatum var. *fasciculatum* – chamise

Cercocarpus minutiflorus – San Diego mountain-mahogany

RUBIACEAE – MADDER OR COFFEE FAMILY

Galium angustifolium ssp. *angustifolium* – narrow-leaf bedstraw

Galium aparine – common bedstraw, goose grass

Galium nuttallii ssp. *nuttallii* – San Diego bedstraw

SALICACEAE – WILLOW FAMILY

Populus fremontii ssp. *fremontii* – western cottonwood

Salix gooddingii – Goodding's black willow

Salix laevigata – red willow

Salix lasiolepis – arroyo willow

SOLANACEAE – NIGHTSHADE FAMILY

* *Nicotiana glauca* – tree tobacco

Angiosperms: Monocots

AGAVACEAE – AGAVE FAMILY

Hesperoyucca whipplei – chaparral candle

CYPERACEAE – SEDGE FAMILY

Cyperus squarrosus – beard flatsedge

Eleocharis macrostachya – pale spike-rush

Schoenoplectus californicus – California bulrush

IRIDACEAE – IRIS FAMILY

Sisyrinchium bellum – blue-eyed-grass

JUNCACEAE – RUSH FAMILY

Juncus acutus ssp. *leopoldii* – southwestern spiny rush
Juncus dubius – mariposa rush
Juncus mexicanus – Mexican rush

LILIACEAE – LILY FAMILY

Calochortus splendens – splendid mariposa lily

POACEAE – GRASS FAMILY

Melica imperfecta – coast range melic
Stipa pulchra – purple needle grass
* *Avena barbata* – slender wild oat
* *Avena fatua* – wild oat
* *Brachypodium distachyon* – purple false brome
* *Bromus diandrus* – ripgut grass
* *Bromus hordeaceus* – soft chess
* *Festuca myuros* – rat-tail fescue
* *Festuca perennis* – perennial rye grass
* *Lamarckia aurea* – golden-top
* *Melinis repens* ssp. *repens* – natal grass
* *Bromus rubens* – foxtail chess, red brome
* *Cenchrus setaceus* – African fountain grass

THEMIDACEAE – BRODIAEA FAMILY

Bloomeria clevelandii – San Diego goldenstar
Bloomeria crocea var. *crocea* – common goldenstar

TYPHACEAE – CATTAIL FAMILY

Typha domingensis – southern cattail

* signifies introduced (non-native) species

Appendix B
Wildlife Compendium

Amphibians

Frogs

HYLIDAE – TREEFROGS

Pseudacris hypochondriaca – Baja California treefrog

Toads

BUFONIDAE – TRUE TOADS

Anaxyrus boreas – western toad

Birds

Blackbirds, Orioles and Allies

ICTERIDAE – BLACKBIRDS

Agelaius phoeniceus – red-winged blackbird

Icterus bullockii – Bullock's oriole

Icterus cucullatus – hooded oriole

Bushtits

AEGITHALIDAE – LONG-TAILED TITS AND BUSHTITS

Psaltriparus minimus – bushtit

Cardinals, Grosbeaks and Allies

CARDINALIDAE – CARDINALS AND ALLIES

Passerina caerulea – blue grosbeak

Pheucticus melanocephalus – black-headed grosbeak

Falcons

FALCONIDAE – CARACARAS AND FALCONS

Falco sparverius – American kestrel

Finches

FRINGILLIDAE – FRINGILLINE AND CARDUELINE FINCHES AND ALLIES

Haemorhous mexicanus – house finch

Spinus psaltria – lesser goldfinch

Flycatchers

TYRANNIDAE – TYRANT FLYCATCHERS

Myiarchus cinerascens – ash-throated flycatcher
Sayornis nigricans – black phoebe
Tyrannus vociferans – Cassin's kingbird

Hawks

ACCIPITRIDAE – HAWKS, KITES, EAGLES, AND ALLIES

Buteo jamaicensis – red-tailed hawk
Buteo lineatus – red-shouldered hawk

Herons and Bitterns

ARDEIDAE – HERONS, BITTERNS, AND ALLIES

Ardea alba – great egret

Hummingbirds

TROCHILIDAE – HUMMINGBIRDS

Calypte anna – Anna's hummingbird
Selasphorus sasin – Allen's hummingbird

Jays, Magpies and Crows

CORVIDAE – CROWS AND JAYS

Aphelocoma californica – California scrub-jay
Corvus brachyrhynchos – American crow
Corvus corax – common raven

Mockingbirds and Thrashers

MIMIDAE – MOCKINGBIRDS AND THRASHERS

Toxostoma redivivum – California thrasher

New World Quail

ODONTOPHORIDAE – NEW WORLD QUAIL

Callipepla californica – California quail

Old World Warblers and Gnatcatchers

POLIOPTILIDAE – GNATCATCHERS

Polioptila californica californica – coastal California gnatcatcher

Pigeons and Doves

COLUMBIDAE – PIGEONS AND DOVES

Zenaida macroura – mourning dove

Roadrunners and Cuckoos

CUCULIDAE – CUCKOOS, ROADRUNNERS, AND ANIS

Geococcyx californianus – greater roadrunner

Shorebirds

CHARADRIIDAE – LAPWINGS AND PLOVERS

Charadrius vociferus – killdeer

Silky Flycatchers

PTILOGONATIDAE – SILKY-FLYCATCHERS

Phainopepla nitens – phainopepla

Swallows

HIRUNDINIDAE – SWALLOWS

Hirundo rustica – barn swallow

Petrochelidon pyrrhonota – cliff swallow

Thrushes

TURDIDAE – THRUSHES

Sialia mexicana – western bluebird

Waterfowl

ANATIDAE – DUCKS, GEESE, AND SWANS

Anas platyrhynchos – mallard

Wood Warblers and Allies

PARULIDAE – WOOD-WARBLERS

Geothlypis trichas – common yellowthroat

Woodpeckers

PICIDAE – WOODPECKERS AND ALLIES

Colaptes auratus – northern flicker

Dryobates nuttallii – Nuttall's woodpecker

Wrens

TROGLODYTIDAE – WRENS

Thryomanes bewickii – Bewick's wren

New World Sparrows

PASSERELLIDAE – NEW WORLD SPARROWS

Aimophila ruficeps – rufous-crowned sparrow

Melospiza melodia – song sparrow

Melozone crissalis – California towhee

Pipilo maculatus – spotted towhee

Spizella atrogularis – black-chinned sparrow

Typical Warblers, Parrotbills, Wrentit

SYLVIIDAE – SYLVIID WARBLERS

Chamaea fasciata – wrentit

Invertebrates

Butterflies

LYCAENIDAE – BLUES, HAIRSTREAKS, AND COPPERS

Brephidium exile – western pygmy-blue

Callophrys dumetorum – bramble hairstreak

Satyrium saepium – hedgerow hairstreak

Strymon melinus – gray hairstreak

NYMPHALIDAE – BRUSH-FOOTED BUTTERFLIES

Danaus plexippus – monarch

Junonia coenia – common buckeye

Libytheana carinenta – American snout
Nymphalis antiopa – mourning cloak
Speyeria callippe comstocki – Comstock's fritillary
Vanessa cardui – painted lady

RIODINIDAE – METALMARKS

Apodemia mormo virgulti – Behr's metalmark

HESPERIIDAE – SKIPPERS

Erynnis funeralis – funereal duskywing

PAPILIONIDAE – SWALLOWTAILS

Papilio eurymedon – pale swallowtail
Papilio rutulus – western tiger swallowtail

PIERIDAE – WHITES AND SULFURS

Anthocharis sara sara – Pacific sara orangetip
Pieris rapae – cabbage white
Pontia protodice – checkered white

Mammals

Canids

CANIDAE – WOLVES AND FOXES

Canis latrans – coyote

Cats

FELIDAE – CATS

Lynx rufus – bobcat

Hares and Rabbits

LEPORIDAE – HARES AND RABBITS

Sylvilagus audubonii – desert cottontail
Sylvilagus bachmani – brush rabbit

Mustelids

MEPHITIDAE – SKUNKS

Mephitis mephitis – striped skunk

Pocket Gophers

GEOMYIDAE – POCKET GOPHERS

Thomomys bottae – Botta's pocket gopher

Squirrels

SCIURIDAE – SQUIRRELS

Otospermophilus beecheyi – California ground squirrel

Ungulates

CERVIDAE – DEERS

Odocoileus hemionus – mule deer

Rats, Mice, and Voles

CRICETIDAE – RATS, MICE, AND VOLES

Neotoma macrotis – big-eared woodrat

Neotoma sp. – woodrat

Reptiles

Lizards

PHRYNOSOMATIDAE – IGUANID LIZARDS

Sceloporus occidentalis – western fence lizard

Uta stansburiana – common side-blotched lizard

Snakes

COLUBRIDAE – COLUBRID SNAKES

Lampropeltis californiae – California kingsnake

Appendix C

Special-Status Plant Species Potentially Occurring within the Nighthawk Energy Storage Project

Scientific Name	Common Name	Status (Federal/State/CRPR/ City of San Diego MSCP)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Abronia maritima	red sand-verbena	None/None/4.2/None	Coastal dunes/perennial herb/ Feb–Nov/0–330	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable vegetation present. Red sand verbena occurs in sandy beach dune habitat which are not present onsite. Red sand verbena does not have potential to occur onsite. A reference check was performed on 4/4/22 for a different project. Red sand verbena can be easily observed year-round as it is a large succulent perennial. Reference check site photos are saved to Instagram account socalrare_plants (Instagram 2022).
Acanthomintha ilicifolia	San Diego thorn-mint	FT/SE/1B.1/NE	Chaparral, Coastal scrub, Valley and foothill grassland, Vernal pools; Clay, Openings/annual herb/Apr–June/ 35–3,145	Not expected to occur. A reference check was performed on 4/19/22 where some San Diego thorn-mint was blooming and others vegetative. Another check was performed on 4/21/22 where the majority of the San Diego thorn-mint was blooming. No San Diego thorn-mint was observed during spring rare plant surveys on 4/25/22 or 4/27/22. Some large collections of San Diego thorn mint occur east of the project site near Sycamore Canyon trailhead (CalFlora 2022, CCH 2022, San Diego Plant Atlas 2022). Reference check site photos are saved to Instagram account socalrare_plants (Instagram 2022). The majority of the site is made up of Redding cobbly loam which is not a clay soil (USDA SoilWeb 2022; Reiser 1994). San Diego thorn mint requires clay soils.

Scientific Name	Common Name	Status (Federal/State/CRPR/ City of San Diego MSCP)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Acmispon prostratus	Nuttall's acmispon	None/None/1B.1/Covered	Coastal dunes, Coastal scrub/ annual herb/Mar–June(July)/0–35	Not expected to occur. The site is outside of the species' known elevation range. Nuttall's acmispon occurs in coastal dunes and does not have potential to occur onsite.
Adolphia californica	California adolphia	None/None/2B.1/None	Chaparral, Coastal scrub, Valley and foothill grassland; Clay/perennial deciduous shrub/Dec–May/35–2,425	Not expected to occur. A reference check was performed on 4/22/22 and 4/29/22 for California adolphia. California adolphia was in bloom at reference check locations. California adolphia was not observed during spring rare plant surveys on 4/25/22 or 4/27/22.California adolphia can be observed year-round as it is a large shrub. California adolphia collections are generally coastal and have not been collected east of Pomerado road (CalFlora 2022, CCH 2022, San Diego Plant Atlas 2022). Reference check site photos are saved to Instagram account socalrare_plants (Instagram 2022).
Agave shawii var. *shawii*	Shaw's agave	None/None/2B.1/NE	Coastal bluff scrub, Coastal scrub/perennial leaf/Sep–May/ 10–395	Not expected to occur. The site is outside of the species' known elevation range. Shaw's agave occurs in sandy coastal soils unless planted ornamentally. No Shaw's agave was observed during rare plant surveys.
Ambrosia monogyra	singlewhorl burrobrush	None/None/2B.2/None	Chaparral, Sonoran desert scrub; Sandy/perennial shrub/Aug–Nov/ 35–1,640	Not expected to occur. Singlewhorl burrobrush typically occurs within or on the edges of washes, streams, channels or riparian areas. Singlewhorl burrobrush was not observed during rare plant surveys on 4/25/22 or 4/27/22. Singlewhorl burrobrush is a

Scientific Name	Common Name	Status (Federal/State/CRPR/ City of San Diego MSCP)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
				large perennial shrub that can easily be observed year-round. Singlewhorl burrobrush collections are southern coastal within San Diego county. No collections have been made north of Santee, California. Locally, this species is out of range (CalFlora 2022, CCH 2022, San Diego Plant Atlas 2022).
Ambrosia pumila	San Diego ambrosia	FE/None/1B.1/NE	Chaparral, Coastal scrub, Valley and foothill grassland, Vernal pools; Alkaline (sometimes), Clay (sometimes), Disturbed areas (often), Sandy (sometimes)/perennial rhizomatous herb/Apr–Oct/65–1,360	Not expected to occur. San Diego ambrosia can be observed year-round and was not observed during rare plant surveys. San Diego ambrosia does not occur north of Mission Trails Regional Park or east of Interstate 15 (CalFlora 2022, CCH 2022, San Diego Plant Atlas 2022). A reference check was performed on 4/23/22 and 6/1/22 and 7/22/22. San Diego ambrosia was vegetative the first two visits and blooming 7/22/22. Reference check site photos are saved to Instagram account socalrare_plants (Instagram 2022).
Aphanisma blitoides	aphanisma	None/None/1B.2/NE	Coastal bluff scrub, Coastal dunes, Coastal scrub; Gravelly (sometimes), Sandy (sometimes)/annual herb/ Feb–June/5–1,000	Not expected to occur. Aphanisma occurs only on coastal bluffs or coastal bluff scrub right next to the ocean. Locally, aphanisma would be far outside its range onsite. A rare plant reference check was performed 4/4/22 on coastal bluffs where it was vegetative. Reference check site photos are saved to Instagram account socalrare_plants (Instagram 2022).

Scientific Name	Common Name	Status (Federal/State/CRPR/ City of San Diego MSCP)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Arctostaphylos glandulosa ssp. *crassifolia*	Del Mar manzanita	FE/None/1B.1/Covered	Chaparral/perennial evergreen shrub/June–Apr/0–1,195	Not expected to occur. No Arctostaphylos species were observed onsite during rare plant surveys. Del Mar manzanita occurs generally on the coast unless it is an ornamental planting (CalFlora 2022, CCH 2022, San Diego Plant Atlas 2022).
Artemisia palmeri	San Diego sagewort	None/None/4.2/None/None	Chaparral, Coastal scrub, Riparian forest, Riparian scrub, Riparian woodland; Mesic, Sandy/perennial deciduous shrub/(Feb)May–Sep/ 50–3,000	Not expected to occur. San Diego sagewort was not observed during rare plant surveys. Collections have not been made near the site (CalFlora 2022, CCH 2022, San Diego Plant Atlas 2022). San Diego sagewort occurs in riparian areas. One small riparian area occurs onsite where San Diego sagewort is absent.
Asplenium vespertinum	western spleenwort	None/None/4.2	Chaparral, Cismontane woodland, Coastal scrub; Rocky/perennial rhizomatous herb/Feb–June/ 590–3,280	Not expected to occur. This fern was not observed during rare plant surveys. Habitat for this species is limited onsite.
Astragalus deanei	Dean's milk-vetch	None/None/1B.1/None	Chaparral, Cismontane woodland, Coastal scrub, Riparian Forest/perennial herb/Feb–May/ 245–2,280	Not expected to occur. Dean's milk vetch was not observed during rare plant surveys. Locally, Dean's milk vetch is outside the range of the project site. Dean's milk vetch occurs east of highway 67 (CalFlora 2022, CCH 2022, San Diego Plant Atlas 2022).
Astragalus oocarpus	San Diego milk-vetch	None/None/1B.2/None	Chaparral, Cismontane woodland/perennial herb/May–Aug/ 1,000–5,000	Not expected to occur. San Diego milk-vetch was not observed during rare plant surveys. San Diego milk-vetch has a distribution that is east of Ramona, California (CalFlora 2022, CCH 2022, San Diego Plant Atlas 2022). No collections or observations have been made near the project site.

Scientific Name	Common Name	Status (Federal/State/CRPR/ City of San Diego MSCP)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Astragalus tener var. *titi*	coastal dunes milk-vetch	FE/SE/1B.1/NE	Coastal bluff scrub, Coastal dunes, Coastal prairie/annual herb/Mar–May/ 5–165	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable vegetation present.
Atriplex coulteri	Coulter's saltbush	None/None/1B.2/None	Coastal bluff scrub, Coastal dunes, Coastal scrub, Valley and foothill grassland; Alkaline (sometimes), Clay (sometimes)/perennial herb/Mar–Oct/ 10–1,505	Not expected to occur. Coulter's saltbush was not observed during rare plant surveys. The majority of collections occur within the Ramona grasslands in alkaline moist areas or on the coast (CalFlora 2022, CCH 2022, San Diego Plant Atlas 2022).
Atriplex pacifica	south coast saltscale	None/None/1B.2/None	Coastal bluff scrub, Coastal dunes, Coastal scrub, Playas/annual herb/ Mar–Oct/0–460	Not expected to occur. South coast saltscale was not observed during rare plant surveys. The site is outside of the species' known elevation range.
Atriplex parishii	Parish's brittlescale	None/None/1B.1/None	Chenopod scrub, Playas, Vernal pools; Alkaline/annual herb/June–Oct/ 80–6,230	Not expected to occur. Parish's brittlescale was not observed during rare plant surveys. No suitable vegetation present onsite for this species.
Baccharis vanessae	Encinitas baccharis	FT/SE/1B.1/Covered	Chaparral, Cismontane woodland; Sandstone/perennial deciduous shrub/ Aug–Nov/195–2,360	Not expected to occur. Encinitas baccharis was not observed during late season rare plant surveys.
Bergerocactus emoryi	golden-spined cereus	None/None/2B.2/None	Chaparral, Closed-cone coniferous forest, Coastal scrub; Sandy/perennial stem/May–June/10–1,295	Not expected to occur. Golden-spined cereus was not observed during rare plant surveys. A reference check was performed on 4/7/22 in full bloom. Golden-spined cereus can be easily observed year-round. The distribution for golden-spined cereus is near the coast or on the US/Mexico border (CalFlora 2022, CCH 2022, San Diego Plant Atlas 2022). No collections occur near the project site.

Scientific Name	Common Name	Status (Federal/State/CRPR/ City of San Diego MSCP)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Bloomeria clevelandii	San Diego goldenstar	None/None/1B.1/Covered	Chaparral, Coastal scrub, Valley and foothill grassland, Vernal pools; Clay/ perennial bulbiferous herb/Apr–May/ 165–1,525	Present during spring surveys.
Brodiaea filifolia	thread-leaved brodiaea	FT/SE/1B.1/Covered	Chaparral, Cismontane woodland, Coastal scrub, Playas, Valley and foothill grassland, Vernal pools; Clay (often)/perennial bulbiferous herb/ Mar–June/80–3,670	Not expected to occur. Thread-leaved brodiaea was not present during rare plant surveys. A rare plant reference check was performed on 4/25/22 where thread-leaved brodiaea was in full bloom. Reference check site photos are saved to Instagram account socalrare_plants (Instagram 2022). All collections occur west of interstate 15 (CalFlora 2022, CCH 2022, San Diego Plant Atlas 2022). No collections occur near the project site.
Brodiaea orcuttii	Orcutt's brodiaea	None/None/1B.1/Covered	Chaparral, Cismontane woodland, Closed-cone coniferous forest, Meadows and seeps, Valley and foothill grassland, Vernal pools; Clay, Mesic/ perennial bulbiferous herb/May–July/ 100–5,550	Not expected to occur. Orcutt's brodiaea was not present during rare plant surveys. A rare plant reference check was performed on 4/25/22 where Orcutt's brodiaea was in full bloom. Reference check site photos are saved to Instagram account socalrare_plants (Instagram 2022). No collections have been made near the project site (CalFlora 2022, CCH 2022, San Diego Plant Atlas 2022).
Calandrinia breweri	Brewer's calandrinia	None/None/4.2/None	Chaparral, Coastal scrub; Burned areas, Disturbed areas, Loam (sometimes), Sandy (sometimes)/ annual herb/(Jan)Mar–June/35–4,000	Not expected to occur. Brewer's calendrina was not observed during rare plant surveys.
Calochortus plummerae	Plummer's mariposa-lily	None/None/4.2/None	Chaparral, Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Valley and foothill	Not expected to occur. Plummer's mariposa lily was not observed during rare plant surveys. Collections have not

Scientific Name	Common Name	Status (Federal/State/CRPR/ City of San Diego MSCP)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
			grassland; Granitic, Rocky/perennial bulbiferous herb/May–July/330–5,575	been made in San Diego county (CalFlora 2022, CCH 2022, San Diego Plant Atlas 2022). A rare plant reference check was performed on 6/9/22 where Plummer's mariposa lily was in full bloom, bud and fruit. Reference check site photos are saved to Instagram account socalrare_plants (Instagram 2022).
Camissoniopsis lewisii	Lewis' evening-primrose	None/None/3/None	Cismontane woodland, Coastal bluff scrub, Coastal dunes, Coastal scrub, Valley and foothill grassland; Clay (sometimes), Sandy (sometimes)/ annual herb/Mar–May (June)/0–985	Not expected to occur. Lewis' evening primrose was not observed during rare plant surveys. A rare plant reference check was performed on 4/4/22 where Lewis' evening primrose was in bloom and vegetative. Reference check site photos are saved to Instagram account socalrare_plants (Instagram 2022). No collections have been made near the Poway area (CalFlora 2022, CCH 2022, San Diego Plant Atlas 2022).
Castilleja plagiotoma	Mojave paintbrush	None/None/4.3/None	Great Basin scrub, Joshua tree "woodland", Lower montane coniferous forest, Pinyon and juniper woodland/ perennial herb (hemiparasitic)/ Apr–June/985–8,200	Not expected to occur. No suitable vegetation present.
Ceanothus cyaneus	Lakeside ceanothus	None/None/1B.2/Covered	Chaparral, Closed-cone coniferous forest/perennial evergreen shrub/ Apr–June/770–2,475	Not expected to occur. Lakeside ceanothus was not observed during rare plant surveys.
Ceanothus otayensis	Otay Mountain ceanothus	None/None/1B.2/None	Chaparral/perennial evergreen shrub/ Jan–Apr/1,965–3,605	Not expected to occur. The site is outside of the species' known elevation range.
Ceanothus verrucosus	wart-stemmed ceanothus	None/None/2B.2/Covered	Chaparral/perennial evergreen shrub/ Dec–May/5–1,245	Not expected to occur. Wart stemmed ceanothus has a coastal distribution. No collections have been made near

Scientific Name	Common Name	Status (Federal/State/CRPR/ City of San Diego MSCP)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
				Poway, California that are east of Interstate-15 (CalFlora 2022, CCH 2022, San Diego Plant Atlas 2022). Reference checks were performed for this species 4/19/22 in full bloom. Reference check site photos are saved to Instagram account socalrare_plants (Instagram 2022). No wart-stemmed ceanothus was observed onsite during spring rare plant surveys.
Centromadia parryi ssp. *australis*	southern tarplant	None/None/1B.1/None	Marshes and swamps, Valley and foothill grassland, Vernal pools/ annual herb/May–Nov/0–1,570	Not expected to occur. Southern tarplant was not observed during rare plant surveys. No collections have been documented near Poway, California. The majority of collections are within the Ramona grasslands and near Del Mar, California (CalFlora 2022, CCH 2022, San Diego Plant Atlas 2022).
Centromadia pungens ssp. *laevis*	smooth tarplant	None/None/1B.1/None	Chenopod scrub, Meadows and seeps, Playas, Riparian woodland, Valley and foothill grassland; Alkaline/ annual herb/Apr–Sep/0–2,095	Not expected to occur. A reference check was performed on 7/21/22 and 5/4/22. Reference check site photos are saved to Instagram account socalrare_plants (Instagram 2022). Smooth tarplant was not observed during rare plant surveys. The closest collection of smooth tarplant is in Santee, California (CalFlora 2022, CCH 2022, San Diego Plant Atlas 2022).
Chaenactis glabriuscula var. *orcuttiana*	Orcutt's pincushion	None/None/1B.1/None	Coastal bluff scrub, Coastal dunes/ annual herb/Jan–Aug/0–330	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable vegetation present.

Scientific Name	Common Name	Status (Federal/State/CRPR/ City of San Diego MSCP)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Chamaebatia australis	southern mountain misery	None/None/4.2/None	Chaparral/perennial evergreen shrub/ Nov–May/985–3,345	Not expected to occur. The large scrub, southern mountain misery was not observed during rare plant surveys. Collections occur east of highway 67 or much further south near Otay mountain (CalFlora 2022, CCH 2022, San Diego Plant Atlas 2022).
Chloropyron maritimum ssp. *maritimum*	salt marsh bird's-beak	FE/SE/1B.2/Covered	Coastal dunes, Marshes and swamps/ annual herb (hemiparasitic)/ May–Oct (Nov)/0–100	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable vegetation present.
Chorizanthe leptotheca	Peninsular spineflower	None/None/4.2/None	Chaparral, Coastal scrub, Lower montane coniferous forest; Granitic/ annual herb/May–Aug/985–6,230	Not expected to occur. Peninsular spineflower was not observed during rare plant surveys. All collections occur east of highway 67 (CalFlora 2022, CCH 2022, San Diego Plant Atlas 2022). No collections have been observed near the project site.
Chorizanthe orcuttiana	Orcutt's spineflower	FE/SE/1B.1/None	Chaparral, Closed-cone coniferous forest, Coastal scrub; Openings, Sandy/ annual herb/Mar–May/10–410	Not expected to occur. The site is outside of the species' known elevation range.
Chorizanthe polygonoides var. *longispina*	long-spined spineflower	None/None/1B.2/None	Chaparral, Coastal scrub, Meadows and seeps, Valley and foothill grassland, Vernal pools; Clay (often)/ annual herb/Apr–July/100–5,015	Not expected to occur. Long-spined spineflower was not observed during rare plant surveys. A reference check was performed for long-spined spineflower on 5/4/22 when in still had some blooms. Reference check site photos are saved to Instagram account socalrare_plants (Instagram 2022). Long-spined spineflower has not been collected near the project site. Occurrences are west of interstate 15. Denser collections are in eastern San Diego county near Julian (CalFlora 2022, CCH 2022, San Diego Plant Atlas 2022).

Scientific Name	Common Name	Status (Federal/State/CRPR/ City of San Diego MSCP)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Cistanthe maritima	seaside cistanthe	None/None/4.2/None	Coastal bluff scrub, Coastal scrub, Valley and foothill grassland; Sandy/ annual herb/(Feb)Mar–June(Aug)/ 15–985	Not expected to occur. Seaside cistanthe was not observed during rare plant surveys. A rare plant reference check was performed 4/6/22. The plant was only vegetative. Another reference check was performed on 5/12/22 where it was still in bud. Reference check site photos are saved to Instagram account socalrare_plants (Instagram 2022). In addition, seaside cistanthe occurs near the coast. No collections have been made near Poway (CalFlora 2022, CCH 2022, San Diego Plant Atlas 2022).
Clarkia delicata	delicate clarkia	None/None/1B.2/None	Chaparral, Cismontane woodland; Gabbroic (often)/annual herb/ Apr–June/770–3,280	Not expected to occur. Delicate clarkia was not observed during rare plant surveys. A rare plant reference check was performed on 4/24/22 when it was in full bloom. Reference check site photos are saved to Instagram account socalrare_plants (Instagram 2022). No collections have been made near the project site (CalFlora 2022, CCH 2022, San Diego Plant Atlas 2022).
Clinopodium chandleri	San Miguel savory	None/None/1B.2/Covered	Chaparral, Cismontane woodland, Coastal scrub, Riparian woodland, Valley and foothill grassland; Gabbroic (sometimes), Rocky (sometimes)/ perennial shrub/Mar–July/395–3,525	Not expected to occur. San Miguel savory was not observed during rare plant surveys. Collections occur east of highway 67. Other collections are much further south near Jamul, California (CalFlora 2022, CCH 2022, San Diego Plant Atlas 2022).
Comarostaphylis diversifolia ssp. *diversifolia*	summer holly	None/None/1B.2/None	Chaparral, Cismontane woodland/ perennial evergreen shrub/Apr–June/ 100–2,590	Not expected to occur. Summer holly was not observed during rare plant surveys. Summer holly has a coastal

Scientific Name	Common Name	Status (Federal/State/CRPR/ City of San Diego MSCP)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
				distribution and generally occurs west of Interstate 15. No collections have been made near the project site (CalFlora 2022, CCH 2022, San Diego Plant Atlas 2022).
Convolvulus simulans	small-flowered morning-glory	None/None/4.2/None	Chaparral, Coastal scrub, Valley and foothill grassland; Clay, Seeps, Serpentinite/annual herb/Mar–July/ 100–2,425	Not expected to occur. Small-flowered morning glory was not observed during rare plant surveys. A rare plant reference check was performed on 4/25/22 where small-flowered morning glory was in fruit and flower. Reference check site photos are saved to Instagram account socalrare_plants (Instagram 2022).
Corethrogyne filaginifolia var. *incana*	San Diego sand aster	None/None/1B.1/None	Chaparral, Coastal bluff scrub, Coastal scrub/perennial herb/June–Sep/ 10–375	Not expected to occur. San Diego Sand aster occurs only near the coast in bluff scrub and coastal scrub. The project site is outside the range of San Diego sand aster (CalFlora 2022, CCH 2022, San Diego Plant Atlas 2022). The site is outside of the species' known elevation range.
Corethrogyne filaginifolia var. *linifolia*	Del Mar Mesa sand aster	None/None/1B.1/Covered	Chaparral, Coastal bluff scrub, Coastal scrub; Sandy/perennial herb/ May–Sep/15–490	Not expected to occur. Del Mar Mesa sand aster occurs only near the coast in bluff scrub and coastal scrub. The project site is outside the range of Del Mar Mesa sand aster (CalFlora 2022, CCH 2022, San Diego Plant Atlas 2022). The site is outside of the species' known elevation range.
Cylindropuntia californica var. *californica*	snake cholla	None/None/1B.1/NE	Chaparral, Coastal scrub/perennial stem/Apr–May/100–490	Not expected to occur. Snake cholla was not observed during rare plant surveys. The site is outside of the species' known elevation range.

Scientific Name	Common Name	Status (Federal/State/CRPR/ City of San Diego MSCP)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Dichondra occidentalis	western dichondra	None/None/4.2/None	Chaparral, Cismontane woodland, Coastal scrub, Valley and foothill grassland/perennial rhizomatous herb/(Jan)Mar–July/165–1,640	Not expected to occur. Western dichondra was not observed during rare plant surveys. Collections have been made north of the project site (CalFlora 2022, CCH 2022, San Diego Plant Atlas 2022).
Dieteria asteroides var. *lagunensis*	Mt. Laguna aster	None/SR/2B.1/None	Cismontane woodland, Lower montane coniferous forest/perennial herb/ (May)July–Aug/2,590–7,870	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable vegetation present. A reference check was performed on 7/24/22 to check bloom status and it was blooming. Reference check site photos are saved to Instagram account socalrare_plants (Instagram 2022).
Diplacus aridus	low bush monkeyflower	None/None/4.3/None	Chaparral, Sonoran desert scrub/ perennial evergreen shrub/Apr–July/ 2,460–3,935	Not expected to occur. Low bush monkeyflower was not observed during rare plant surveys. The site is outside of the species' known elevation range.
Dudleya blochmaniae ssp. *blochmaniae*	Blochman's dudleya	None/None/1B.1/None	Chaparral, Coastal bluff scrub, Coastal scrub, Valley and foothill grassland; Clay (often), Rocky, Serpentinite/ perennial herb/Apr–June/15–1,475	Not expected to occur. Blochman's Dudleya was not observed during rare plant surveys. Blochman's Dudleya occurs in unique clay soil not present onsite. Blochman's Dudleya also has a coastal distribution. No collections occur near the project site (CalFlora 2022, CCH 2022, San Diego Plant Atlas 2022).
Dudleya brevifolia	short-leaved dudleya	None/SE/1B.1/NE	Chaparral, Coastal scrub; Sandstone/ perennial herb/Apr–May/100–820	Not expected to occur. Short-leaved Dudleya was not observed during rare plant surveys. Short-leaved Dudleya occurs in unique sandstone soil not present onsite. Short-leaved Dudleya also has a coastal distribution. No collections occur near the project site (CalFlora 2022, CCH 2022, San Diego Plant Atlas 2022).

Scientific Name	Common Name	Status (Federal/State/CRPR/ City of San Diego MSCP)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Dudleya variegata	variegated dudleya	None/None/1B.2/NE	Chaparral, Cismontane woodland, Coastal scrub, Valley and foothill grassland, Vernal pools; Clay/perennial herb/Apr–June/10–1,900	Not expected to occur. Variegated Dudleya was not observed during rare plant surveys. A rare plant reference check was performed on 4/22/22 where variegated Dudleya was in full bloom. Reference check site photos are saved to Instagram account socalrare_plants (Instagram 2022). A collection has been made near hill country trail and another near San Vicente reservoir somewhat near the project site (CalFlora 2022, CCH 2022, San Diego Plant Atlas 2022). Therefore, a refence check was important as the site had some potential for occurrence. Rare plant surveys determined a lack of presence.
Dudleya viscida	sticky dudleya	None/None/1B.2/Covered	Chaparral, Cismontane woodland, Coastal bluff scrub, Coastal scrub; Rocky/perennial herb/May–June/ 35–1,800	Not expected to occur. Sticky Dudleya was not observed during rare plant surveys. Sticky Dudleya has a coastal distribution (CalFlora 2022, CCH 2022, San Diego Plant Atlas 2022). Therefore, no collections have been made near the project site.
Ericameria palmeri var. *palmeri*	Palmer's goldenbush	None/None/1B.1/Covered	Chaparral, Coastal scrub; Mesic/perennial evergreen shrub/ (July)Sep–Nov/100–1,965	Not expected to occur. Palmer's goldenbush was not observed during rare plant surveys. No collections have been made near the site. The majority of collections occur near Rancho San Diego, California where Palmer's goldenbush is more likely to occur (CalFlora 2022, CCH 2022, San Diego Plant Atlas 2022).

Scientific Name	Common Name	Status (Federal/State/CRPR/ City of San Diego MSCP)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Eriodictyon sessilifolium	sessile-leaved yerba santa	None/None/2B.1/None	Coastal scrub; Volcanic/perennial shrub/July/560–560	Not expected to occur. The site is outside of the species' known elevation range.
Eryngium aristulatum var. *parishii*	San Diego button-celery	FE/SE/1B.1/Covered	Coastal scrub, Valley and foothill grassland, Vernal pools; Mesic/annual/ perennial herb/Apr–June/65–2,030	Not expected to occur. San Diego button celery was not observed during rare plant surveys. San Diego button celery only occurs within vernal pools. No vernal pools are present onsite. Reference checks were performed on 4/23/22 where San Diego button celery was in bloom. Reference check site photos are saved to Instagram account socalrare_plants (Instagram 2022).
Erysimum ammophilum	sand-loving wallflower	None/None/1B.2/Covered	Chaparral, Coastal dunes, Coastal scrub; Openings, Sandy/perennial herb/Feb–June(July–Aug)/0–195	Not expected to occur. San Loving wallflower was not observed during rare plant surveys. The site is outside of the species' known elevation range.
Erythranthe diffusa	Palomar monkeyflower	None/None/4.3/None	Chaparral, Lower montane coniferous forest; Gravelly (sometimes), Sandy (sometimes)/annual herb/Apr–June/ 4,000–6,000	Not expected to occur. Palomar monkeyflower was not observed during rare plant surveys. The site is outside of the species' known elevation range.
Euphorbia misera	cliff spurge	None/None/2B.2/None	Coastal bluff scrub, Coastal scrub, Mojavean desert scrub; Rocky/ perennial shrub/(Oct)Dec–Aug/ 35–1,640	Not expected to occur. Cliff spurge was not observed during rare plant surveys. Cliff spurge has a coastal distribution (CalFlora 2022, CCH 2022, San Diego Plant Atlas 2022). A rare plant reference check was performed 4/4/22 where cliff spurge was blooming and fruiting. Reference check site photos are saved to Instagram account socalrare_plants (Instagram 2022).
Ferocactus viridescens	San Diego barrel cactus	None/None/2B.1/Covered	Chaparral, Coastal scrub, Valley and foothill grassland, Vernal pools/ perennial stem/May–June/10–1,475	Not expected to occur. San Diego barrel cactus was not observed during rare plant surveys. A rare plant

Scientific Name	Common Name	Status (Federal/State/CRPR/ City of San Diego MSCP)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
				reference check was performed on 4/19/22 where San Diego barrel cactus was blooming. Reference check site photos are saved to Instagram account socalrare_plants (Instagram 2022).
Geothallus tuberosus	Campbell's liverwort	None/None/1B.1/None	Coastal scrub, Vernal pools/ephemeral liverwort//35–1,965	Not expected to occur. Cambell's liverwort was not observed during rare plant surveys. No collections have been made near the project site (CalFlora 2022, CCH 2022, San Diego Plant Atlas 2022).
Githopsis diffusa ssp. *filicaulis*	Mission Canyon bluecup	None/None/3.1/None	Chaparral/annual herb/Apr–June/ 1,475–2,295	Not expected to occur. Mission canyon bluecup was not observed during rare plant surveys. The site is outside of the species' known elevation range.
Grindelia hallii	San Diego gumplant	None/None/1B.2/None	Chaparral, Lower montane coniferous forest, Meadows and seeps, Valley and foothill grassland/perennial herb/ May–Oct/605–5,725	Not expected to occur. San Diego gumplant was not observed during rare plant surveys. The majority of collections occur east of Alpine, California and are found in areas like Cuyamaca Rancho State Park and Mt. Lauguna (CalFlora 2022, CCH 2022, San Diego Plant Atlas 2022).
Harpagonella palmeri	Palmer's grapplinghook	None/None/4.2/None	Chaparral, Coastal scrub, Valley and foothill grassland; Clay, Openings/ annual herb/Mar–May/65–3,130	Not expected to occur. Palmer's grapplinghook was not observed during rare plant surveys. A rare plant reference check was performed on 4/4/22. Numerous plants were fruiting and were observed fruiting throughout April. Reference check site photos are saved to Instagram account socalrare_plants (Instagram 2022).

Scientific Name	Common Name	Status (Federal/State/CRPR/ City of San Diego MSCP)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Hazardia orcuttii	Orcutt's hazardia	None/ST/1B.1/None	Chaparral, Coastal scrub; Clay (often)/ perennial evergreen shrub/Aug–Oct/ 260–280	Not expected to occur. Orcutt's hazardia was not observed during rare plant surveys. The site is outside of the species' known elevation range.
Heterotheca sessiliflora ssp. *sessiliflora*	beach goldenaster	None/None/1B.1/None	Chaparral, Coastal dunes, Coastal scrub/perennial herb/Mar–Dec/ 0–4,015	Not expected to occur. Beach goldenaster was not observed during rare plant surveys. This variety of beach goldenaster occurs near the beach and has not been collected near the project site which is too far inland (CalFlora 2022, CCH 2022, San Diego Plant Atlas 2022).
Holocarpha virgata ssp. *elongata*	graceful tarplant	None/None/4.2/None	Chaparral, Cismontane woodland, Coastal scrub, Valley and foothill grassland/annual herb/May–Nov/ 195–3,605	Not expected to occur. Graceful tarplant was not observed during rare plant surveys. A rare plant reference check was performed on 5/30/22 where it was blooming. However, graceful tarplant can be observed year-round because the dead stocks are also easy to identify when the plant is not vegetative or in flower. Reference check site photos are saved to Instagram account socalrare_plants (Instagram 2022).
Hordeum intercedens	vernal barley	None/None/3.2/None	Coastal dunes, Coastal scrub, Valley and foothill grassland, Vernal pools/ annual herb/Mar–June/15–3,280	Not expected to occur. Vernal barley was not observed during rare plant surveys. Vernal barley occurs within vernal pools which are not present onsite.
Horkelia truncata	Ramona horkelia	None/None/1B.3/None	Chaparral, Cismontane woodland; Clay, Gabbroic/perennial herb/May–June/ 1,310–4,265	Not expected to occur. Ramona horkelia was not observed during rare plant surveys. A rare plant reference check was performed near Iron

Scientific Name	Common Name	Status (Federal/State/CRPR/ City of San Diego MSCP)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
				mountain. However, the site is outside of the species' known elevation range.
Hulsea californica	San Diego sunflower	None/None/1B.3/None	Chaparral, Lower montane coniferous forest, Upper montane coniferous forest; Burned areas, Openings/ perennial herb/Apr–June/ 3,000–9,560	Not expected to occur. San Diego sunflower was not observed during rare plant surveys. The site is outside of the species' known elevation range.
Hymenothrix wrightii	Wright's hymenothrix	None/None/4.3/None	Cismontane woodland, Lower montane coniferous forest, Valley and foothill grassland/perennial herb/June–Oct/ 4,590–5,085	Not expected to occur. The site is outside of the species' known elevation range. A rare plant reference check was performed on 7/24/22 to check bloom status. Wright's hymenothrix was blooming.
Isocoma menziesii var. *decumbens*	decumbent goldenbush	None/None/1B.2/None	Chaparral, Coastal scrub/perennial shrub/Apr–Nov/35–445	Not expected to occur. Decumbent goldenbush was not observed during rare plant surveys. The site is outside of the species' known elevation range.
Iva hayesiana	San Diego marsh-elder	None/None/2B.2/None	Marshes and swamps, Playas/ perennial herb/Apr–Oct/35–1,640	Observed out of bounds within the buffer. None were observed within the project boundary.
Juglans californica	Southern California black walnut	None/None/4.2/None	Chaparral, Cismontane woodland, Coastal scrub, Riparian woodland/ perennial deciduous tree/Mar–Aug/ 165–2,950	Not expected to occur. Southern California walnut was not observed during rare plant surveys. This large tree is easy to observe year-round. No collections have been made near the project site (CalFlora 2022, CCH 2022, San Diego Plant Atlas 2022).
Juncus acutus ssp. *leopoldii*	southwestern spiny rush	None/None/4.2/None	Coastal dunes, Marshes and swamps, Meadows and seeps/perennial rhizomatous herb/(Mar) May–June/ 10–2,950	Observed within the buffer. A rare plant reference check was performed on 6/15/22 but this large rush can be easily observed year-round. Reference check site photos are saved to Instagram account socalrare_plants (Instagram 2022).

Scientific Name	Common Name	Status (Federal/State/CRPR/ City of San Diego MSCP)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Lasthenia glabrata ssp. *coulteri*	Coulter's goldfields	None/None/1B.1/None	Marshes and swamps, Playas, Vernal pools/annual herb/Feb–June/5–4,000	Not expected to occur. Coulter's goldfields typically grow in wet marshes or vernal habitat. This habitat was not present onsite. A reference check was performed on 5/4/22 and flowering status was ending. Only a few were in flower but many going to seed. Survey timing onsite for rare plant surveys fit peak bloom from Coulter's goldfields. No Coulter's goldfields were observed during spring rare plant surveys. Coulter's goldfields occur near the coast in San Diego county (west of I-15) and south of La Mesa, California. No collections occur near the site (CalFlora 2022, CCH 2022, San Diego Plant Atlas 2022). Reference check site photos are saved to Instagram account socalrare_plants (Instagram 2022).
Lathyrus splendens	pride-of-California	None/None/4.3/None	Chaparral/perennial herb/Mar–June/ 655–5,000	Not expected to occur. Pride of California was not observed during rare plant surveys. Pride of California generally has a range that is near the US/Mexico border and is more likely in eastern San Diego county today. No collections have been made near the site within recent decades (CalFlora 2022, CCH 2022, San Diego Plant Atlas 2022).
Lepechinia cardiophylla	heart-leaved pitcher sage	None/None/1B.2/Covered	Chaparral, Cismontane woodland, Closed-cone coniferous forest/ perennial shrub/Apr–July/ 1,705–4,490	Not expected to occur. Heart-leaved pitcher sage was not observed during rare plant surveys. The site is outside of the species' known elevation range.

Scientific Name	Common Name	Status (Federal/State/CRPR/ City of San Diego MSCP)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Lepidium virginicum var. *robinsonii*	Robinson's pepper-grass	None/None/4.3/None	Chaparral, Coastal scrub/annual herb/Jan–July/5–2,900	Not expected to occur. Robinson's pepper-grass was not observed during rare plant surveys. The closest collection is near Lake Miramar (CalFlora 2022, CCH 2022, San Diego Plant Atlas 2022).
Leptosiphon grandiflorus	large-flowered leptosiphon	None/None/4.2/None	Cismontane woodland, Closed-cone coniferous forest, Coastal bluff scrub, Coastal dunes, Coastal prairie, Coastal scrub, Valley and foothill grassland; Sandy (usually)/annual herb/ Apr–Aug/15–4,000	Not expected to occur. Large flowered leptosiphon was not observed during rare plant surveys. The nearest collection is north of hwy 78 (CalFlora 2022, CCH 2022, San Diego Plant Atlas 2022).
Leptosyne maritima	sea dahlia	None/None/2B.2/None	Coastal bluff scrub, Coastal scrub/ perennial herb/Mar–May/15–490	Not expected to occur. Sea dahlia was not observed during rare plant surveys. The site is outside of the species' known elevation range. The distribution of sea dahlia is coastal (CalFlora 2022, CCH 2022, San Diego Plant Atlas 2022). A rare plant reference check was performed on 4/19/22 and was in full bloom. Reference check site photos are saved to Instagram account socalrare_plants (Instagram 2022).
Lycium californicum	California box-thorn	None/None/4.2/None	Coastal bluff scrub, Coastal scrub/ perennial shrub/Mar–Aug (Dec)/ 15–490	Not expected to occur. California box thorn was not observed during rare plant surveys. The site is outside of the species' known elevation range.
Microseris douglasii ssp. *platycarpha*	small-flowered microseris	None/None/4.2/None	Cismontane woodland, Coastal scrub, Valley and foothill grassland, Vernal pools; Clay/annual herb/Mar–May/ 50–3,510	Observed onsite during surveys.
Mobergia calculiformis	light gray lichen	None/None/3/None	Coastal scrub/crustose lichen (saxicolous)//35–35	Not expected to occur. Light gray lichen was not observed during rare plant surveys. The site is outside of the species' known elevation range.

Scientific Name	Common Name	Status (Federal/State/CRPR/ City of San Diego MSCP)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Monardella hypoleuca ssp. *lanata*	felt-leaved monardella	None/None/1B.2/Covered	Chaparral, Cismontane woodland/ perennial rhizomatous herb/June–Aug/ 985–5,165	Not expected to occur. Felt-leaved monardella was not observed during rare plant surveys. No collections have been made near the site. All collections are east of hwy 67 (CalFlora 2022, CCH 2022, San Diego Plant Atlas 2022).
Monardella viminea	willowy monardella	FE/SE/1B.1/Covered	Chaparral, Coastal scrub, Riparian forest, Riparian scrub, Riparian woodland/perennial herb/June–Aug/ 165–740	Not expected to occur. Willowy monardella was not observed during rare plant surveys. The closet collections are near Sycamore canyon trailhead (CalFlora 2022, CCH 2022, San Diego Plant Atlas 2022).
Myosurus minimus ssp. *apus*	little mousetail	None/None/3.1/None	Valley and foothill grassland, Vernal pools/annual herb/Mar–June/ 65–2,095	Not expected to occur. Little mousetail was not observed onsite during rare plant surveys. Vernal pools are required for little mousetail and no vernal pools are present onsite. No suitable habitat occurs onsite.
Navarretia fossalis	spreading navarretia	FT/None/1B.1/NE	Chenopod scrub, Marshes and swamps, Playas, Vernal pools/ annual herb/Apr–June/100–2,145	Not expected to occur. Spreading navarretia was not observed during rare plant surveys. Vernal pools are required for this species and no vernal pools are present onsite. No suitable vegetation present. A rare plant reference check was performed on 4/25/22 where spreading navarretia was in full bloom. Reference check site photos are saved to Instagram account socalrare_plants (Instagram 2022).
Navarretia prostrata	prostrate vernal pool navarretia	None/None/1B.2/None	Coastal scrub, Meadows and seeps, Valley and foothill grassland, Vernal pools/annual herb/Apr–July/10–3,965	Not expected to occur. Prostrate vernal pool navarretia was not observed during rare plant surveys. No habitat occurs onsite for prostrate vernal pool navarretia.

Scientific Name	Common Name	Status (Federal/State/CRPR/ City of San Diego MSCP)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Nemacaulis denudata var. *denudata*	coast woolly-heads	None/None/1B.2/None	Coastal dunes/annual herb/Apr–Sep/ 0–330	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable vegetation present. A reference check was performed on 4/21/22 where coast woolly heads were in full bloom. Reference check site photos are saved to Instagram account socalrare_plants (Instagram 2022).
Ophioglossum californicum	California adder's-tongue	None/None/4.2/None	Chaparral, Valley and foothill grassland, Vernal pools/perennial rhizomatous herb/Jan–June(Dec)/195–1,720	Not expected to occur. California adder's tongue was not observed during spring rare plant surveys. A rare plant reference check was performed on 4/6/22. California adder's tongue was vegetative on this date. The reference check was at Iron Mountain. Reference check site photos are saved to Instagram account socalrare_plants (Instagram 2022).
Orcuttia californica	California Orcutt grass	FE/SE/1B.1/NE	Vernal pools/annual herb/Apr–Aug/ 50–2,165	Not expected to occur. California Orcutt grass was not observed during rare plant surveys. California Orcutt grass is associated with vernal pool which are not present onsite. No suitable vegetation present.
Orobanche parishii ssp. *brachyloba*	short-lobed broomrape	None/None/4.2/None	Coastal bluff scrub, Coastal dunes, Coastal scrub/perennial herb (parasitic)/Apr–Oct/10–1,000	Not expected to occur. Short-lobed broomrape was not observed during rare plant surveys.
Packera ganderi	Gander's ragwort	None/SR/1B.2/Covered	Chaparral/perennial herb/Apr–June/ 1,310–3,935	Not expected to occur. Gander's ragwort was not observed onsite during rare plant surveys. The site is outside of the species' known elevation range.

Scientific Name	Common Name	Status (Federal/State/CRPR/ City of San Diego MSCP)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Pentachaeta aurea ssp. *aurea*	golden-rayed pentachaeta	None/None/4.2/None	Chaparral, Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Riparian woodland, Valley and foothill grassland/annual herb/Mar–July/260–6,065	Not expected to occur. Golden rayed pentachaeta was not observed during rare plant surveys. A rare plant reference check was performed on 5/15/22 when the blooms were coming to an end. April surveys would have observed peak bloom. Reference check site photos are saved to Instagram account socalrare_plants (Instagram 2022).
Phacelia ramosissima var. *austrolitoralis*	south coast branching phacelia	None/None/3.2/None	Chaparral, Coastal dunes, Coastal scrub, Marshes and swamps/perennial herb/Mar–Aug/15–985	Not expected to occur. South coast branching phacelia was not observed onsite. South coast branching phacelia has a coastal distribution. No collections have been made near Poway, California (CalFlora 2022, CCH 2022, San Diego Plant Atlas 2022).
Phacelia stellaris	Brand's star phacelia	None/None/1B.1/None	Coastal dunes, Coastal scrub/annual herb/Mar–June/5–1,310	Not expected to occur. Brand's star phacelia occurs in coastal sandy dunes. The site doesn't have any habitat for this species and is too far inland. A rare plant reference check was performed for Brand's star phacelia 4/21/22 where Brand's star phacelia was in full bloom. Reference check site photos are saved to Instagram account socalrare_plants (Instagram 2022).
Pinus torreyana ssp. *torreyana*	Torrey pine	None/None/1B.2/Covered	Chaparral, Closed-cone coniferous forest/perennial evergreen tree// 100–525	Not expected to occur. The site is outside of the species' known elevation range.
Piperia cooperi	chaparral rein orchid	None/None/4.2/None	Chaparral, Cismontane woodland, Valley and foothill grassland/perennial herb/Mar–June/50–5,200	Not expected to occur. Chaparral rein orchid was not observed during rare plant surveys in spring. No collections have been made near the site.

Scientific Name	Common Name	Status (Federal/State/CRPR/ City of San Diego MSCP)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
				Collections are west of interstate 15 and east of Hwy 67 (CalFlora 2022, CCH 2022, San Diego Plant Atlas 2022).
Pogogyne abramsii	San Diego mesa mint	FE/SE/1B.1/NE	Vernal pools/annual herb/Mar–July/ 295–655	Not expected to occur. San Diego mesa mint was not observed during rare plant surveys. Venal pools are required for San Diego mesa mint and no vernal pools are present onsite. No suitable vegetation present.
Pogogyne nudiuscula	Otay Mesa mint	FE/SE/1B.1/NE	Vernal pools/annual herb/May–July/ 295–820	Not expected to occur. Otay mesa mint was not observed onsite. The majority of collections occur within Otay Mesa but generally occur south of Miramar (CalFlora 2022, CCH 2022, San Diego Plant Atlas 2022). Otay mesa mint occurs within vernal pools and no vernal pools are present onsite. A rare plant reference check was performed on 4/22/22. Otay mesa mint was in full bloom. Reference check site photos are saved to Instagram account socalrare_plants (Instagram 2022).
Polygala cornuta var. *fishiae*	Fish's milkwort	None/None/4.3/None	Chaparral, Cismontane woodland, Riparian woodland/perennial deciduous shrub/May–Aug/ 330–3,280	Not expected to occur. Fish's milkwort was not observed during rare plant surveys. No collections have been made near Poway, California. The closest collections are east of hwy 67 (CalFlora 2022, CCH 2022, San Diego Plant Atlas 2022).
Pseudognaphalium leucocephalum	white rabbit-tobacco	None/None/2B.2/None	Chaparral, Cismontane woodland, Coastal scrub, Riparian woodland/ perennial herb/(July)Aug–Nov(Dec)/ 0–6,885	Not expected to occur. White rabbit tobacco was not observed during rare plant surveys. No collections have been made near Poway, California. The

Scientific Name	Common Name	Status (Federal/State/CRPR/ City of San Diego MSCP)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
				majority of collections occur within northern Camp Pendleton and San Clemente, California (CalFlora 2022, CCH 2022, San Diego Plant Atlas 2022).
Quercus cedrosensis	Cedros Island oak	None/None/2B.2/None	Chaparral, Closed-cone coniferous forest, Coastal scrub/perennial evergreen tree/Apr–May/835–3,145	Not expected to occur. Cedros Island Oak was not observed during rare plant surveys. No collections have been made near Poway, California. Documented collections occur in Otay Open space preserve (CalFlora 2022, CCH 2022, San Diego Plant Atlas 2022).
Quercus dumosa	Nuttall's scrub oak	None/None/1B.1/None	Chaparral, Closed-cone coniferous forest, Coastal scrub/perennial evergreen shrub/Feb–Apr (May–Aug)/ 50–1,310	Nuttall's scrub oak was observed within the buffer of the project site.
Quercus engelmannii	Engelmann oak	None/None/4.2/None	Chaparral, Cismontane woodland, Riparian woodland,Valley and foothill grassland/perennial deciduous tree/Mar–June/165–4,265	Not expected to occur. Engelmann oak was not observed during rare plant surveys. No collections have been made near Poway, California. The closest collection is near Sycamore Canyon trailhead (CalFlora 2022, CCH 2022, San Diego Plant Atlas 2022).
Romneya coulteri	Coulter's matilija poppy	None/None/4.2/None	Chaparral, Coastal scrub/perennial rhizomatous herb/Mar–July (Aug)/ 65–3,935	Not expected to occur. Coulter's matilija poppy was not observed during rare plant surveys. No collections have been made near Poway, California or near the site. The closest collection is near Blue Sky preserve (CalFlora 2022, CCH 2022, San Diego Plant Atlas 2022).
Rupertia rigida	Parish's rupertia	None/None/4.3/None	Chaparral, Cismontane woodland, Lower montane coniferous forest,	Not expected to occur. Parish's rupertia was not observed during rare plant

Scientific Name	Common Name	Status (Federal/State/CRPR/ City of San Diego MSCP)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
			Meadows and seeps, Pebble (Pavement) plain, Valley and foothill grassland/perennial herb/June–Aug/ 2,295–8,200	surveys. The site is outside of the species' known elevation range.
Salvia munzii	Munz's sage	None/None/2B.2/None	Chaparral, Coastal scrub/perennial evergreen shrub/Feb–Apr/375–3,490	Not expected to occur. Munz's sage was not observed during rare plant surveys. Munz's sage generally occurs south of Santee, California (CalFlora 2022, CCH 2022, San Diego Plant Atlas 2022). A reference check was performed for Munz's sage on 4/22/22 where it was in full bloom. Reference check site photos are saved to Instagram account socalrare_plants (Instagram 2022).
Scutellaria bolanderi ssp. *austromontana*	southern mountains skullcap	None/None/1B.2/None	Chaparral, Cismontane woodland, Lower montane coniferous forest/ perennial rhizomatous herb/June–Aug/ 1,390–6,560	Not expected to occur. Southern mountains skullcap was not observed during rare plant surveys. The site is outside of the species' known elevation range. A reference check was performed on 7/24/22 to check bloom status. Southern mountains skullcap was in full bloom.
Selaginella cinerascens	ashy spike-moss	None/None/4.1/None	Chaparral, Coastal scrub/perennial rhizomatous herb//65–2,095	Observed onsite during rare plant surveys within buffer.
Senecio aphanactis	chaparral ragwort	None/None/2B.2/None	Chaparral, Cismontane woodland, Coastal scrub/annual herb/ Jan–Apr(May)/50–2,620	Not expected to occur. Chaparral ragwort was not observed onsite. Chaparral ragwort has not been collected near the project site and has a more coastal distribution. In addition, chaparral ragwort utilizes sandy soils which are not present onsite (CalFlora 2022, CCH 2022, San Diego Plant Atlas 2022).

Scientific Name	Common Name	Status (Federal/State/CRPR/ City of San Diego MSCP)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Sidalcea neomexicana	salt spring checkerbloo m	None/None/2B.2/None	Chaparral, Coastal scrub, Lower montane coniferous forest, Mojavean desert scrub, Playas/perennial herb/ Mar–June/50–5,015	Not expected to occur. Salt spring checkerbloom was not observed during rare plant surveys. No collections have been made near Poway, California. The majority of collections are near the Laguna mountains (CalFlora 2022, CCH 2022, San Diego Plant Atlas 2022).
Sphaerocarpos drewiae	bottle liverwort	None/None/1B.1/None	Chaparral, Coastal scrub/ephemeral liverwort//295–1,965	Not expected to occur. Bottle liverwort was not observed during rare plant surveys. No collections have been made near Poway, California (CalFlora 2022, CCH 2022, San Diego Plant Atlas 2022).
Stemodia durantifolia	purple stemodia	None/None/2B.1/None	Sonoran desert scrub/perennial herb/ (Jan)Apr–Dec/590–985	Not expected to occur. Purple stemodia was not observed during rare plant surveys. No suitable vegetation present. Purple stemodia blooms year-round and can be observed in cobbly wash/stream habitats which are not present onsite.No collections occur near the site. I majority of collections at Mission Trails Regional Park south of the site (CalFlora 2022, CCH 2022, San Diego Plant Atlas 2022).
Stipa diegoensis	San Diego County needle grass	None/None/4.2/None	Chaparral, Coastal scrub/perennial herb/Feb–June/35–2,620	Not expected to occur. San Diego county needlegrass was not observed during rare plant surveys. San Diego county needlegrass generally occurs south of Mission Trails Regional Park (CalFlora 2022, CCH 2022, San Diego Plant Atlas 2022).
Stylocline citroleum	oil neststraw	None/None/1B.1/None	Chenopod scrub, Coastal scrub, Valley and foothill grassland/annual herb/ Mar–Apr/165–1,310	Not expected to occur. No Stylocline species were observed during rare plant surveys. Collections of oil neststraw are

Scientific Name	Common Name	Status (Federal/State/CRPR/ City of San Diego MSCP)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
				near Bakersfield, Ca within the Central Valley (CalFlora 2022, CCH 2022, San Diego Plant Atlas 2022).
Suaeda esteroa	estuary seablite	None/None/1B.2/None	Marshes and swamps/perennial herb/ (Jan–May) July–Oct/0–15	Not expected to occur. Esturary seablite was not observed onsite. Estuary seablite occurs in marshes and swamps. No marshes or swamps occur onsite. The site is outside of the species' known elevation range and there is no suitable vegetation present.
Suaeda taxifolia	woolly seablite	None/None/4.2/None	Coastal bluff scrub, Coastal dunes, Marshes and swamps/perennial evergreen shrub/Jan–Dec/0–165	Not expected to occur. Woolly seablite was not observed during rare plant surveys. Woolly seablite occurs in marshes and swamps which are not present onsite. The site is outside of the species' known elevation range and there is no suitable vegetation present.
Tetracoccus dioicus	Parry's tetracoccus	None/None/1B.2/Covered	Chaparral, Coastal scrub/perennial deciduous shrub/Apr–May/540–3,280	Not expected to occur. Parry's tetracoccus was not observed during rare plant surveys. No collections have been made near Poway, California (CalFlora 2022, CCH 2022, San Diego Plant Atlas 2022).
Texosporium sancti-jacobi	woven-spored lichen	None/None/3/None	Chaparral/crustose lichen (terricolous)//195–2,165	Not expected to occur. Woven-spored lichen was not observed during rare plant surveys. No collections have been made near the project site or near Poway, California (CalFlora 2022, CCH 2022, San Diego Plant Atlas 2022).
Triquetrella californica	coastal triquetrella	None/None/1B.2/None	Coastal bluff scrub, Coastal scrub/moss//35–330	Not expected to occur. Coastal triquetrella was not observed during rare plant surveys. The site is outside of the species' known elevation range.

Scientific Name	Common Name	Status (Federal/State/CRPR/ City of San Diego MSCP)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Viguiera laciniata	San Diego County viguiera	None/None/4.3/None	Chaparral, Coastal scrub/perennial shrub/Feb–June(Aug)/195–2,460	Not expected to occur. San Diego county viguiera was not observed during rare plant surveys. No collections have been made near Poway. The majority of collections are in within the southwestern section of San Diego county (CalFlora 2022, CCH 2022, San Diego Plant Atlas 2022).
Xanthisma junceum	rush-like bristleweed	None/None/4.3/None	Chaparral, Coastal scrub/perennial herb/Jan–Oct/785–3,280	Not expected to occur. Rush-like bristleweed was not observed during rare plant surveys. Rush-like bristleweed can easily be observed year-round as it is a large perennial the size of a shrub. In addition, it blooms for the majority of the year and through the winter. Some collections occur just west of Iron mountain (CalFlora 2022, CCH 2022, San Diego Plant Atlas 2022).

References

CCH. 2022. Consortium of California herbaria database. Accessed 2022. https: //ucjeps.berkeley. edu/consortium/

Calflora. 2022. Calflora Plant Database. Accessed 2022. https: //www.calflora.org/.

Instagram. 2022. "socalrare_plants." Accessed 2022. https://www.instagram.com/.

Reiser 1994. Plants of San Diego County. Accessed 2022. https: //openlibrary. org/books/OL1221042M/ Rare_plants_of_San_Diego_County

San Diego Plant Atlas. 2022. Plant Atlas database. Accessed 2022. https: //www. sdplantatlas. org/

USDA Soilweb. 2022. USDA soilweb database. Accessed 2022. https: //casoilresource. lawr. ucdavis. edu/ soilweb-apps/

Appendix D

Sensitive Wildlife Species Potentially Occurring within the Nighthawk Energy Storage Project

Scientific Name	Common Name	Status (Federal/State/ City of San Diego MSCP)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Amphibians				
Anaxyrus californicus	arroyo toad	FE/SSC/Covered	Semi-arid areas near washes, sandy riverbanks, riparian areas, palm oasis, Joshua tree, mixed chaparral and sagebrush; stream channels for breeding (typically third order); adjacent stream terraces and uplands for foraging and wintering	Low potential to occur. Suitable chaparral and sagebrush present along with riparian woodland present. Beeler creek, a freshwater stream, runs beneath a portion of the site and is associated with coast live oak woodland. Stream channels onsite consist almost entirely of cobble habitat. Arroyo toad require sandy banks which are not present onsite. Upland habitat onsite could support foraging and wintering. No CNDDB occurrences within 5 miles (CDFW 2022). No arroyo toads were observed during wildlife surveys.
Spea hammondii	western spadefoot	None/SSC/None	Primarily grassland and vernal pools, but also in ephemeral wetlands that persist at least 3 weeks in chaparral, coastal scrub, valley–foothill woodlands, pastures, and other agriculture	Low potential to occur. Basins occur within the buffer only which have potential for western spadefoot. No vernal pools, basins, or ponds occur onsite. Beeler creek is north of the site which could also support spawning. However, this section of the creek is shallow and lacks areas for ponding. CNDDB occurrences from 2013 located about 3 miles northeast, and multiple occurrences within 5 miles (CDFW 2022). No western spadefoot were observed during wildlife surveys.
Birds				
Accipiter cooperii (nesting)	Cooper's hawk	None/WL/Covered	Nests and forages in dense stands of live oak, riparian woodlands, or other woodland habitats often near water	High potential to occur. Live oak woodland associated with Beeler creek present. CNDDB occurrence from 1985 located 3.5 miles southeast in Sycamore canyon (CDFW 2022).
Agelaius tricolor (nesting colony)	tricolored blackbird	BCC/SSC, ST/Covered	Nests near freshwater, emergent wetland with cattails or tules, but also in Himalayan blackberry;	Low potential to occur. The only suitable habitat for tricolored blackbird colonies would be within the buffer. However, Cattail

Scientific Name	Common Name	Status (Federal/State/ City of San Diego MSCP)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
			forages in grasslands, woodland, and agriculture	populations lack height. Emergent wetland is not fully developed. Grassland and riparian canyon live oak woodland associated with freshwater Beeler creek stream present. CNDDB occurrence from 2000 located 4 miles southeast (CDFW 2022). Tricolored blackbird was not observed during wildlife surveys.
Aimophila ruficeps canescens	Southern California rufous-crowned sparrow	None/WL/Covered	Nests and forages in open coastal scrub and chaparral with low cover of scattered scrub interspersed with rocky and grassy patches	Present. Observed during wildlife surveys. . Open coastal scrub and chaparral present along with grassland. CNDDB occurrence records from 1998 located 0.75 miles northeast (CDFW 2022).
Ammodramus savannarum (nesting)	grasshopper sparrow	None/SSC/None	Nests and forages in moderately open grassland with tall forbs or scattered shrubs used for perches	Low potential to occur. Grassland onsite consists of very small patches. Grassland areas are not large enough to support grasshopper sparrow habitat or nesting. No CNDDB occurrence records within 5 miles (CDFW 2022). Grasshopper sparrow was not observed during wildlife surveys.
Aquila chrysaetos (nesting & wintering)	golden eagle	None/FP, WL/Covered	Nests and winters in hilly, open/semi-open areas, including shrublands, grasslands, pastures, riparian areas, mountainous canyon land, open desert rimrock terrain; nests in large trees and on cliffs in open areas and forages in open habitats	Not expected to occur. No nesting habitat is present. No cliff faces or suitable nesting areas present. No foraging habitat is present. Areas of grassland consist of very small patches of habitat. No CNDDB occurrence records within 5 miles (CDFW 2022). Golden eagle was not observed during wildlife surveys.
Artemisiospiza belli belli	Bell's sage sparrow	None/WL/None	Nests and forages in coastal scrub and dry chaparral; typically in large, unfragmented patches dominated by chamise; nests in more dense patches but uses more open habitat in winter	Low potential to occur. Coastal scrub and dry chaparral present, but not dominated by chamise. CNDDB occurrence from 1998 located 5 miles southeast in Sycamore canyon (CDFW 2022). Bell's sage sparrow was not observed during wildlife surveys.

Scientific Name	Common Name	Status (Federal/State/ City of San Diego MSCP)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Athene cunicularia (burrow sites & some wintering sites)	burrowing owl	BCC/SSC/Covered	Nests and forages in grassland, open scrub, and agriculture, particularly with ground squirrel burrows	Low potential to occur. The site lacks burrows that are large enough for burrowing owl. No CNDDB occurrence records within 5 miles (CDFW 2022). Burrowing owl was not observed during wildlife surveys.
Buteo swainsoni (nesting)	Swainson's hawk	None/ST/Covered	Nests in open woodland and savanna, riparian, and in isolated large trees; forages in nearby grasslands and agricultural areas such as wheat and alfalfa fields and pasture	Low potential to occur. Riparian woodland is present. Grassland patches are small and patchy onsite. No CNDDB occurrence records within 5 miles (CDFW 2022). Swainson's hawk was not observed during wildlife surveys.
Campylorhynchus brunneicapillus sandiegensis (San Diego & Orange Counties only)	coastal cactus wren	None/SSC/Covered	Southern cactus scrub patches	Not expected to occur. Arid scrub but no cacti present onsite or within the buffer. CNDDB occurrence records from 1984 located immediately northeast of the site. Coastal cactus wren was not observed during wildlife surveys.
Charadrius nivosus nivosus (nesting)	western snowy plover	FT, BCC/SSC/Covered	On coasts nests on sandy marine and estuarine shores; in the interior nests on sandy, barren or sparsely vegetated flats near saline or alkaline lakes, reservoirs, and ponds	Not expected to occur. No suitable vegetation present. The site is not coastal. Western snowy plover was not observed during wildlife surveys.
Coccyzus americanus occidentalis (nesting)	western yellow-billed cuckoo	FT/SE/None	Nests in dense, wide riparian woodlands and forest with well-developed understories	Low potential to occur. Riparian woodland present onsite, but not dense or wide. No suitable habitat is present. Narrow strip of live oak woodland associated with Beeler creek present. No CNDDB occurrences within 5 miles (CDFW 2022). Western yellow-billed cuckoo was not observed during wildlife surveys.
Coturnicops noveboracensis	yellow rail	BCC/SSC/None	Nesting requires wet marsh/sedge meadows or coastal marshes with wet soil and shallow, standing water	Not expected to occur. No suitable marsh vegetation present. Yellow rail was not observed during wildlife surveys.

Scientific Name	Common Name	Status (Federal/State/ City of San Diego MSCP)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Elanus leucurus (nesting)	white-tailed kite	None/FP/None	Nests in woodland, riparian, and individual trees near open lands; forages opportunistically in grassland, meadows, scrubs, agriculture, emergent wetland, savanna, and disturbed lands	Low potential to occur. Grassland patches are small onsite to attract foraging and minimal mature woodlands are present onsite. Woodlands are patchy and narrow. Areas where trees occur are patchy and immature. Coastal sage scrub and disturbed lands present. Nearest CNDDB occurrence is from 1985 located 3.5 miles southeast in Sycamore canyon (CDFW 2022). White-tailed kite was not observed during wildlife surveys.
Empidonax traillii extimus (nesting)	southwestern willow flycatcher	FE/SE/Covered	Nests in dense riparian habitats along streams, reservoirs, or wetlands; uses variety of riparian and shrubland habitats during migration	Low potential to occur. Riparian woodland associated with Beeler creek is minimal and patchy. Nesting is unlikely due to minimal width and length of riparian patches. No CNDDB occurrences within 5 miles (CDFW 2022). Southwestern willow flycatcher was not observed during wildlife surveys.
Eremophila alpestris actia	California horned lark	None/WL/None	This subspecies of horned lark occurs on the state's southern and central coastal slope and in the San Joaquin Valley. Nests and forages in grasslands, disturbed lands, agriculture, and beaches.	Not expected to occur. While grasslands and disturbed lands are present, the site outside the known species range. CNDDB occurrence from 2003 located 3.5 miles south, adjacent to MCAS Miramar (CDFW 2022).California horned lark was not observed during wildlife surveys.
Falco mexicanus (nesting)	prairie falcon	None/WL/None	Forages in grassland, savanna, rangeland, agriculture, desert scrub, alpine meadows; nest on cliffs or bluffs	Not expected to occur. Grassland suitable for foraging is present. Nearest CNDDB occurrence from 1980 approximately 4 miles south in entire La Mesa quadrant (CDFW 2022). Prairie falcon was not observed during wildlife surveys.

Scientific Name	Common Name	Status (Federal/State/ City of San Diego MSCP)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Icteria virens (nesting)	yellow-breasted chat	None/SSC/None	Nests and forages in dense, relatively wide riparian woodlands and thickets of willows, vine tangles, and dense brush	Not expected to occur. Minimal patches of riparian woodland is present onsite, but is patchy and narrow. No CNDDB occurrences within 5 miles (CDFW 2022). Yellow-breasted chat was not present during wildlife surveys.
Ixobrychus exilis (nesting)	least bittern	None/SSC/None	Nests in freshwater and brackish marshes with dense, tall growth of aquatic and semi-aquatic vegetation	Not expected to occur. No suitable marsh habitat or aquatic vegetation present. No CNDDB occurrences within 5 miles (CDFW 2022). Least bittern was not observed during wildlife surveys.
Laterallus jamaicensis coturniculus	California black rail	None/FP, ST/None	Tidal marshes, shallow freshwater margins, wet meadows, and flooded grassy vegetation; suitable habitats are often supplied by canal leakage in Sierra Nevada foothill populations	Not expected to occur. No suitable wet meadow or tidal marsh present and site is not within Sierra Nevada foothills. No CNDDB occurrences within 5 miles (CDFW 2022). California black rail was not observed during wildlife surveys.
Passerculus sandwichensis beldingi	Belding's savannah sparrow	BCC/SE/Covered	Nests and forages in coastal saltmarsh dominated by pickleweed (Salicornia spp.)	Not expected to occur. No suitable vegetation present. Belding's savannah sparrow was not observed during wildlife surveys.
Plegadis chihi (nesting colony)	white-faced ibis	None/WL/Covered	Nests in shallow marshes with areas of emergent vegetation; winter foraging in shallow lacustrine waters, flooded agricultural fields, muddy ground of wet meadows, marshes, ponds, lakes, rivers, flooded fields, and estuaries	Not expected to occur. No suitable aquatic habitat present. Riparian oak woodland onsite associated with Beeler creek, a freshwater stream. No CNDDB occurrences within 5 miles (CDFW 2022). White-faced ibis was not observed during wildlife surveys.

Scientific Name	Common Name	Status (Federal/State/ City of San Diego MSCP)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Polioptila californica californica	coastal California gnatcatcher	FT/SSC/Covered	Nests and forages in various sage scrub communities, often dominated by California sagebrush and buckwheat; generally avoids nesting in areas with a slope of greater than 40%; majority of nesting at less than 1,000 feet above mean sea level	Present. Coastal California gnatcatcher was observed during wildlife surveys. Coastal sagebrush present throughout the site. CNDDB occurrence records from 1991 and 1998 within 1 mile. Focused surveys were conducted.
Pyrocephalus rubinus (nesting)	vermilion flycatcher	None/SSC/None	Nests in riparian woodlands, riparian scrub, and freshwater marshes; typical desert riparian with cottonwood, willow, mesquite adjacent to irrigated fields, ditches, or pastures	Not expected to occur. Riparian woodland habitat is minimal and patchy. Nesting is unlikely. No CNDDB occurrences within 5 miles (CDFW 2022). Vermilion flycatcher was not observed during wildlife surveys.
Rallus obsoletus levipes	Ridgway's rail	FE/FP, SE/Covered	Coastal wetlands, brackish areas, coastal saline emergent wetlands	Not expected to occur. No suitable vegetation present. Site is not coastal. Ridgeway's rail was not observed during wildlife surveys.
Setophaga petechia (nesting)	yellow warbler	None/SSC/None	Nests and forages in riparian and oak woodlands, montane chaparral, open ponderosa pine, and mixed-conifer habitats	Low potential to occur. Riparian habitat onsite consists of one small patch, Suitable riparian patches present within the buffer only. CNDDB occurrences from 2017 located 1.5 miles east (CDFW 2022). Not observed during wildlife surveys.
Sternula antillarum browni (nesting colony)	California least tern	FE/FP, SE/Covered	Forages in shallow estuaries and lagoons; nests on sandy beaches or exposed tidal flats	Not expected to occur. No coastal sandy beaches or tidal influence present. California least tern was not observed during wildlife surveys.
Vireo bellii pusillus (nesting)	least Bell's vireo	FE/SE/Covered	Nests and forages in low, dense riparian thickets along water or along dry parts of intermittent streams; forages in riparian and adjacent shrubland late in nesting season	Low potential to occur. Riparian woodland patches present within buffer only. Adjacent shrubland onsite could support foraging. CNDDB occurrence record from 2017 located along Poway Creek approximately 1.75 miles north (CDFW 2022). Least Bell's vireo was not observed onsite during wildlife surveys.

Scientific Name	Common Name	Status (Federal/State/ City of San Diego MSCP)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Invertebrates				
Branchinecta sandiegonensis	San Diego fairy shrimp	FE/None/Covered	Vernal pools, non-vegetated ephemeral pools	Not expected to occur. No vernal pools or vernal areas present onsite. Riparian stream onsite is vegetated and maintains flow. In addition, basins with high densities of vegetation onsite consist of western toads which would feed on any potential fairy shrimp. No fairy shrimp were observed during wildlife surveys.
Streptocephalus woottoni	Riverside fairy shrimp	FE/None/Covered	Vernal pools, non-vegetated ephemeral pools	Not expected to occur. No vernal pools or vernal areas present onsite. Riparian stream onsite is vegetated and maintains flow. In addition, basins with high densities of vegetation onsite consist of western toads which would feed on any potential fairy shrimp. No fairy shrimp were observed during wildlife surveys.
Lycaena hermes	Hermes copper	FT/None/None	Mixed woodlands, chaparral, and coastal scrub	Not expected to occur. Coastal scrub and southern riparian woodland onsite. While the Poway parcel buffer area contains *Rhamnus crocea* and CA buckwheat, along with other host plants and suitable nectar sources, none are present in the southern San Diego parcel buffer area. No CNDDB occurrences within 5 miles. Hermes copper was not observed during wildlife surveys.
Euphydryas editha quino	quino checkerspot butterfly	FE/SCE/None	Annual forblands, grassland, open coastal scrub and chaparral; often soils with cryptogamic crusts and fine-textured clay; host plants include Plantago erecta, Antirrhinum coulterianum, and Plantago patagonica (Silverado Occurrence Complex)	Not expected to occur. Suitable open coastal scrub and grassland with floral nectar resources present. CNDDB occurrence records from 2005 located 2 miles east in Sycamore Canyon (CDFW 2022). No Quino checkerspot were observed during focused surveys conducted in 2022. As such it is not expected to occur onsite.

Scientific Name	Common Name	Status (Federal/State/ City of San Diego MSCP)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Mammals				
Taxidea taxus	American badger	None/SSC/Covered	Dry, open, treeless areas; grasslands, coastal scrub, agriculture, and pastures, especially with friable soils	Not expected to occur. Dry open grasslands and coastal scrub present, but no friable soils. No CNDDB occurrences within 5 miles (CDFW 2022). American badger was not observed onsite during wildlife surveys.
Dipodomys stephensi	Stephens' kangaroo rat	FE/ST/None	Annual and perennial grassland habitats, coastal scrub or sagebrush with sparse canopy cover, or in disturbed areas	Not expected to occur. Grassland and coastal scrub with disturbed areas present, but no alluvial fans and no CNDDB occurrences within 5 miles (CDFW 2022). Stephen's kangaroo rat was not observed onsite during wildlife surveys.
Euderma maculatum	spotted bat	None/SSC/None	Foothills, mountains, desert regions of southern California, including arid deserts, grasslands, and mixed-conifer forests; roosts in rock crevices and cliffs; feeds over water and along washes	Not expected to occur. No suitable desert vegetation present and no CNDDB occurrences within 5 miles (CDFW 2022). Spotted bat was not observed onsite during wildlife surveys.
Dasypterus xanthinus	western yellow bat	None/SSC/None	Valley–foothill riparian, desert riparian, desert wash, and palm oasis habitats; below 2,000 feet above mean sea level; roosts in riparian and palms	Not expected to occur. No suitable vegetation present. Limited riparian habitat at Beeler Creek located immediately north of the San Diego parcel boundary. No CNDDB occurrences within 5 miles (CDFW 2022). Western yellow bat was not observed onsite during wildlife surveys.
Corynorhinus townsendii	Townsend's big-eared bat	None/SSC/None	Mesic habitats characterized by coniferous and deciduous forests and riparian habitat, but also xeric areas; roosts in limestone caves and lava tubes, man-made structures, and tunnels	Not expected to occur. No suitable vegetation present. Limited mesic habitat in riparian woodland at Beeler Creek immediately north of the San Diego parcel Boundary. No CNDDB occurrences within 5 miles (CDFW 2022). Townsend's big-eared bat was not observed onsite during wildlife surveys.

Scientific Name	Common Name	Status (Federal/State/ City of San Diego MSCP)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Eumops perotis californicus	western mastiff bat	None/SSC/None	Chaparral, coastal and desert scrub, coniferous and deciduous forest and woodland; roosts in crevices in rocky canyons and cliffs where the canyon or cliff is vertical or nearly vertical, trees, and tunnels	Low potential to occur. Coastal scrub present and limited trees for roosting within southern riparian woodland onsite. No CNDDB occurrences within 5 miles (CDFW 2022). Western mastiff bat was not observed during the wildlife surveys.
Nyctinomops macrotis	big free-tailed bat	None/SSC/None	Rocky areas; roosts in caves, holes in trees, buildings, and crevices on cliffs and rocky outcrops; forages over water	Not expected to occur. No rocky substrate present. Limited riparian woodland associated with Beeler Creek immediately north of the Poway parcel boundary could support foraging and roosting opportunities. No CNDDB occurrences within 5 miles (CDFW 2022). Big free-tailed bat was not observed onsite during wildlife surveys.
Neotoma lepida intermedia	San Diego desert woodrat	None/SSC/None	Coastal scrub, desert scrub, chaparral, cacti, rocky areas	Low potential to occur. Coastal scrub and wood rat middens are not present onsite or within the buffer. Nearest CNDDB occurrence is 3 miles southeast from 1998 (CDFW 2022). While San Diego woodrat was not observed onsite during diurnal wildlife surveys, it could still be present as it is mostly nocturnal. *N. macrotis* present.
Lasiurus blossevillii	western red bat	None/SSC/None	Forest, woodland, riparian, mesquite bosque, and orchards, including fig, apricot, peach, pear, almond, walnut, and orange; roosts in tree canopy	Not expected to occur. No suitable vegetation present. No CNDDB occurrences within 5 miles. Western red bat was not observed onsite during diurnal wildlife surveys.
Reptiles				
Thamnophis hammondii	two-striped gartersnake	None/SSC/None	Streams, creeks, pools, streams with rocky beds, ponds, lakes, vernal pools	Not expected to occur. No ponding or vernal pools onsite. May use Beeler creek which lies immediately north of the Poway parcel boundary. Nearest CNDDB occurrence is 3 miles southeast from 1998. Two-striped garter snake was not observed onsite during wildlife surveys.

Scientific Name	Common Name	Status (Federal/State/ City of San Diego MSCP)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Salvadora hexalepis virgultea	coast patch-nosed snake	None/SSC/None	Brushy or shrubby vegetation; requires small mammal burrows for refuge and overwintering sites	Not expected to occur. CA buckwheat scrub onsite but no small mammal burrows. No CNDDB occurrences within 5 miles (CDFW 2022). Coast patch-nosed snake was not observed onsite during wildlife surveys.
Phrynosoma blainvillii	Blainville's horned lizard	None/SSC/Covered	Open areas of sandy soil in valleys, foothills, and semi-arid mountains including coastal scrub, chaparral, valley–foothill hardwood, conifer, riparian, pine–cypress, juniper, and annual grassland habitats	Not expected to occur. Open coastal scrub and grassland present but soils are cobbly, gravelly sandy loam. Southern riparian woodland present onsite and adjacent live oak riparian woodland lies immediately north of Poway parcel boundary. Nearest CNDDB occurrence record is 1.5 mils southeast from 1985 (CDFW 2022). Blainville's horned lizard was not observed onsite during wildlife surveys.
Emys marmorata	western pond turtle	None/SSC/Covered	Slow-moving permanent or intermittent streams, ponds, small lakes, and reservoirs with emergent basking sites; adjacent uplands used for nesting and during winter	Not expected to occur. No ponding onsite but may use Beeler Creek immediately north of the Poway parcel boundary. Uplands onsite could be used for nesting and during winter if species is present in adjacent Beeler creek. No CNDDB occurrences within 5 miles (CDFW 2022). Western pond turtle was not observed during wildlife surveys.
Crotalus ruber	red diamondback rattlesnake	None/SSC/None	Coastal scrub, chaparral, oak and pine woodlands, rocky grasslands, cultivated areas, and desert flats	Moderate potential to occur. Coastal scrub present onsite. In addition, live oak woodland occurs immediately north of the Poway parcel boundary. Nearest CNDDB occurrence is 2 miles south from 2011 (CDFW 2022). Red diamondback rattlesnake was not observed onsite during diurnal wildlife surveys but may still be present as it is active nocturnally, at dusk, and on cloudy days.

Scientific Name	Common Name	Status (Federal/State/ City of San Diego MSCP)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Aspidoscelis tigris stejnegeri	San Diegan tiger whiptail	None/SSC/None	Hot and dry areas with sparse foliage, including chaparral, woodland, and riparian areas.	Not expected to occur. Project site is hot and dry with southern riparian woodland, but foliage is dense, and soils are gravelly/cobbly sandy loam that is not loose/friable. CNDDB occurrence from 1997 located 2.5 miles east (CDFW 2022). San Diegan tiger whiptail was not observed onsite during wildlife surveys.
Aspidoscelis hyperythra	orange-throated whiptail	None/WL/Covered	Low-elevation coastal scrub, chaparral, and valley–foothill hardwood	Not expected to occur. Coastal scrub present. Historic CNDDB occurrence records 2 miles north from 1915 (CDFW 2022). Orange-throated whiptail was not observed onsite during wildlife surveys.