Appendix B

Western Riverside County Multiple Species Habitat Conservation Plan Consistency Analysis, Iron Lofts Project

NOREAS, Inc

December 2024

Western Riverside County
Multiple Species Habitat Conservation Plan
Consistency Analysis

IRON LOFTS PROJECT

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1 EXECUTIVE SUMMARY

The proposed Iron Lofts Project is generally located northeast of Mission Inn Avenue and southeast of Commerce Street, in the City of Riverside, California, (Assessor's Parcel Numbers 211071005, 211071023, 211072004, 211072020, 211071001, 211071002, 211071024, 211072001, 211072002, 211072021, 211072022 and 211071004. For the purposes of this document, the "study area" includes the Project's proposed ground disturbance footprint (Project Site) and a buffer (Figures 1 and 2). The Project is situated within the Cities of Riverside and Norco Area Plan, but lies outside any designated Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Subunit, Cell Group, Criteria Cell, Public/Quasi-Public Land, Linkages/Cores, Conserved Lands, or Western Riverside County Regional Conservation Authority (RCA) Easements. Conservation efforts within the Area Plan focus on Proposed Constrained Linkage 7 and Proposed Core 3. Notably, the Project's 7.03-acre permanent disturbance footprint does not intersect - or adjoin these proposed linkages, cores, or any other MSHCP-designated conservation areas (Figures 3 and 4). It is also important to note that in 2012, the MSHCP mapped the vegetation within the Project Site as Urban (GISD 2024, Figure 6).

Given the Project Site's location outside the specified MSHCP conservation areas and Criteria Cells, the Project does not impact the MSHCP Reserve Assembly process. It does not encroach upon any of the Area Plan's two Subunits, nor does it affect MSHCP Planning Species, Biological Issues, or Considerations pertinent to these Subunits. Additionally, the Project is neither connected to - nor adjacent to, any Cell Groups, Criteria Cells, habitats proposed for conservation, locales designated for additional reserve assembly, cores, or linkages within the MSHCP. According to the RCA MSHCP Information Map, the Project Site is not located within predetermined survey areas for species such as the Burrowing Owl (*Athene cunicularia*), narrow endemic and criteria area sensitive plant species, amphibians, mammals, or the Delhi Sands flower-loving fly (*Rhaphiomidas terminatus abdominalis*) either. Field surveys conducted in 2023 and 2024 did not observe any special status species, nesting birds, remnant raptor nests, riverine resources, or bat guano within the Project Site. Furthermore, the Project does not overlap with any U.S. Fish and Wildlife Service designated critical habitat (Figure 10).

The Project's developed and anthropogenically disturbed land cover types (Figure 7), physical location, and baseline biological characteristics ensure that it does not interfere with the MSHCP's reserve assembly goals, or defined conservation objectives. The Project Site's position outside designated conservation areas and survey zones, coupled with the absence of special status species and sensitive resources within its disturbance footprint, substantiate that the Project is consistent with MSHCP guidelines as described herein, and is unlikely to adversely affect protected biological resources.

The Project Site encompasses 7.03 acres of developed and anthropogenically disturbed land, with an additional study area extending over approximately 51.39-acres. The entire study area is characterized by a single soil type (Figure 8): Arlington fine sandy loam, deep, with 2 to 8 percent slopes. According to the USDA Natural Resources Conservation Service (NRCS), Arlington fine sandy loam is not classified as a hydric soil. This designation indicates that the soil does not

typically experience prolonged saturation necessary to support hydrophytic (water-loving) vegetation. Given that Arlington fine sandy loam is not hydric, it is generally unsuitable for supporting wetland-dependent species, and ecosystems such as vernal pools, wetlands, or riparian riverine habitats. As those systems (i.e., vernal pools, wetlands, riparian and riverine resources) require specific hydrological conditions, including persistent soil saturation, which Arlington fine sandy loam does not provide. The Project Site's limited value as breeding, nesting, or foraging habitat for native species is further diminished by its isolation due to surrounding residential, industrial, and commercial developments, as well as public infrastructure.

2 INTRODUCTION

The purpose of this Consistency Analysis Report (Analysis) is to summarize the biological data for the proposed Iron Lofts Project (hereinafter referred to as the "Project") and to document its consistency with the goals and objectives of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). In a general sense, the Project consists of the construction of residential apartments in the City of Riverside, Riverside County, California.

2.1 Project Area

The Project's study area is defined as its proposed physical ground disturbance footprint (Project Site), plus a buffer (Figures 1 and 2). The Project Site includes the following Assessor's Parcel Numbers (APNs): 211071005, 211071023, 211072004, 211072020, 211071001, 211071002, 211071024, 211072001, 211072002, 211072021, 211072022 and 211071004.

The Project's "study area" includes all lands to be affected directly and/or indirectly by the Project, and are not merely the immediate lands involved in the action itself. Therefore, the following APNs are associated with the Project's "study area": 211022015, 211022016, 211022018, 211022019, 211022031, 211021016, 211022003, 211022006, 211022007, 211022010, 211022011, 211022012, 211022023, 211022027, 211021017, 211021023, 211022002, 211022005, 211022008, 211022013, 211022022, 211022026, 211071010, 211071014, 211071016, 211071021, 211072006, 211072012, 211072016, 211081016, 211021001, 211021015, 211021018, 211021019, 211021024, 211021028, 211022001, 211071009, 211071011, 211071013, 211071018, 211071020, 211072008, 211072015, 211072017, 211081017, 211081020, 211071006, 211071007, 211071008, 211022009, 211022014, 211022017, 211022020, 211022021, 211023010, 211071012, 211071015, 211071017, 211072005, 211072007, 211072011, 211072014, 211081001, 211081002, 211082001, 211082002, 211121004, 211121022, 211121034, 211121037, 211071019, 211071022, 211072009, 211072010, 211121036, 211072013, 211072018, 211072019, 211121005, 211082024, 211121003, 211121006, 211121007, 211131001, 213212004, 213252012, 213252015, 213292005, 213142011, 213142023, 213142028, 213142030, 213212005, 213212018, 213252006, 213252016, 213292003, 213292004, 213142010, 213252007, 213252017, 213293001, 213212015 and 213292007.

The Project can be found on the Riverside East United States Geological Survey (USGS) 7.5-Minute Topographic Quadrangle Map (USGS 1984) – Sections 23 and 24, of Township 2 South

and Range 5 West. The Project occurs at an approximate elevation between 800 and 900 ft. above mean sea level (MSL). Land use in the surrounding vicinity includes commercial, residential, public infrastructure and industrial endeavors. The lands to be impacted by the Project include no MSHCP established Subunits, Cell Groups, Criteria Cells, Public/Quasi-Public Lands, Linkages/Cores, Conserved Lands, or RCA Easements (Figures 3 and 4). The Project's construction limit is 7.03-acres (Figure 2). The Project Site 51.39-acre study area consists entirely of developed and disturbed land cover. Representative photos of the Project Site are provided in Appendix G. Additionally, the Project includes no fuel modification or weed abatement zones. Furthermore, the Project includes no off-site improvements or external staging areas. All staging areas to be used during construction will be contained within the Project's 7.03-acre disturbance footprint. The Project does not include any proposed temporary impacts.

2.2 Project Description

The Project consists of the construction of residential apartments. The Project's construction limit is 7.03-acres. The study area surrounding the Project Site consists entirely of developed and disturbed land cover. Additionally, the Project includes no fuel modification or weed abatement zones. Furthermore, the Project includes no off-site improvements or external staging areas. All staging areas to be used during construction will be contained within the Project's 7.03-acre disturbance footprint. The Project does not include any proposed temporary impacts. A construction Site Plan is included within Appendix A.

2.3 Covered Roads

Commerce Street is a Covered Road – as identified by the RCA. Therefore, MSHCP Covered Operations and Maintenance Activities – may be applicable to Commerce Street (Figures 1 and 2). With that said, the Project doesn't propose improvements to Commerce Street, or any MSHCP Cover Road with a Criteria Area.

2.4 Covered Public Access Activities

The Project involves no construction or improvements to trails or other public access facility, referenced within MSHCP Section 7.4.2. Therefore, this MSHCP Section is not applicable.

2.5 General Setting

The Project Site encompasses 7.03 acres of developed and anthropogenically disturbed land, with an additional study area extending over approximately 51.39-acres. The entire area is characterized by a single soil type (Figure 8): Arlington fine sandy loam, deep, with 2 to 8 percent slopes. This soil is typically found on alluvial fans and terraces in western Riverside County. According to the USDA Natural Resources Conservation Service (NRCS), Arlington fine sandy loam is not classified as a hydric soil. This designation indicates that the soil does not typically experience prolonged saturation necessary to support hydrophytic (water-loving) vegetation. Given that Arlington fine sandy loam is not hydric, it is generally unsuitable for supporting wetland-dependent ecosystems such as vernal pools, wetlands, or sensitive riparian riverine habitats. As those ecosystems (i.e., vernal pools, wetlands, riparian and riverine resources) require specific hydrological conditions, including persistent soil saturation, which Arlington fine sandy loam does not provide.

Field surveys conducted in 2023 and 2024 revealed that the Project Site is predominantly developed or disturbed, with vegetation primarily consisting of non-native species resulting from human activities (Figure 5). No special status species, nesting birds, remnant raptor nests, or bat guano were observed. The Project Site's limited value as breeding, nesting, or foraging habitat for native species is further diminished by its isolation due to surrounding residential, industrial, and commercial developments, as well as public infrastructure.

The Project Site is not located within any designated MSHCP Cell Groups, Criteria Cells, Public/Quasi-Public Lands, Linkages/Cores, Conserved Lands, or Regional Conservation Authority (RCA) Easements. Additionally, it does not fall within predetermined survey areas for species like the burrowing owl, narrow endemic and criteria area sensitive plant species, amphibians, mammals, or the Delhi Sands flower-loving fly. Consequently, the project is not anticipated to impact any MSHCP Planning Species or associated biological considerations.

Considering the non-hydric nature of Arlington fine sandy loam and the extensively disturbed conditions of the Project Site, it is unlikely that the area supports vernal pools, wetlands, riparian riverine habitats, or other sensitive vegetation communities. The site's limited ecological value and lack of proximity to MSHCP-designated areas further suggest minimal impact on protected resources. Therefore, the Project is not expected to adversely affect the functions and values associated with MSHCP resources or reserve assembly.

As the Project Site is not collocated with any USFWS designated critical habitat (Figure 10), nor were any special status species detected during field surveys. Nonetheless, special-status species known to occur within several miles of the Project Site, and their potential for occurrence within it, are detailed within Appendix D and Figure 9. Wildlife species observed within the study area consisted of commonly-occurring species - including, but not limited to, rock pigeon (*Columba livia*), Red-tailed hawk (*Buteo jamaicensis*) common raven (*Corvus corax*), and Side-blotched Lizard (*Uta stansburiana*). A complete list of wildlife species detected within and adjacent to the Project Site during the 2023 and 2024 field surveys are provided in Appendix C.

3 RESERVE ASSEMBLY ANALYSIS

The Project is situated within the Cities of Riverside and Norco Area Plan but lies outside any designated MSHCP Subunit, Cell Group, Criteria Cell, Public/Quasi-Public Land, Linkages/Cores, Conserved Lands, or RCA Easements. The Area Plan aims to conserve between 3,465 and 3,615 acres, comprising approximately 3,375 acres of existing Public/Quasi-Public Lands and an additional 90 to 240 acres of reserve lands. Specifically, the conservation targets are 60 to 140 acres for the City of Norco and 55 to 125 acres for the City of Riverside, both included within the overall target for Additional Reserve Lands. Conservation efforts focus on Proposed Constrained Linkage 7 and Proposed Core 3. Notably, the Project's 7.03-acre permanent disturbance footprint does not intersect or adjoin these proposed linkages, cores, or any other MSHCP-designated conservation areas (Figures 3 and 4).

Given the Project Site's location outside the specified MSHCP conservation areas, the Project does not impact the MSHCP reserve assembly process. It does not encroach upon any of the Area Plan's two Subunits, nor does it affect Planning Species, Biological Issues, or Considerations pertinent to these Subunits. Additionally, the Project is neither connected to nor adjacent to any Cell Groups, Criteria Cells, habitats proposed for conservation, locales designated for additional reserve assembly, cores, or linkages within the MSHCP.

According to the RCA MSHCP Information Map, the Project site is not located within predetermined survey areas for species such as the Burrowing Owl, narrow endemic and criteria area sensitive plant species, amphibians, mammals, or the Delhi Sands flower-loving fly (Figures 3 and 4). Field surveys conducted in 2023 and 2024 did not observe any special status species within the Project Site. Furthermore, the Project does not overlap with any U.S. Fish and Wildlife Service designated critical habitat (Figure 10).

The Project's location and characteristics ensure that it does not interfere with the MSHCP's reserve assembly goals or conservation objectives. Its position outside designated conservation areas and survey zones, coupled with the absence of special status species within its disturbance footprint, substantiate that the Project is consistent with MSHCP guidelines and is unlikely to adversely affect sensitive resources.

3.1 Public Quasi-Public Lands

The majority of the cities in western Riverside County, have contributed open space/land to help establish the MSHCP Conservation Area. These lands are described in the MSHCP as Public/Quasi-Public (PQP) Lands.

3.1.1 Public Quasi-Public Lands in Reserve Assembly Analysis

P/QP Lands are a subset of MSHCP Conservation Area lands that are known to be in public/private ownership and expected to be managed for open space value and/or in a manner that contributes to the Conservation of Covered Species (including lands contained in existing reserves). The Project's 7.03-acre permanent disturbance footprint is not within, nor is it immediately adjacent to - PQP lands (Figure 4).

3.1.2 Project Impacts to Public Quasi-Public Lands

The Project will not directly impact any PQP lands because its disturbance footprint is not located within or adjacent to PQP Lands.

4 VEGETATION MAPPING

In May 2023 and November 2024, pedestrian-based field surveys were performed by NOREAS Inc. (NOREAS) to define general and dominant land cover types, vegetation types, plant community sizes, habitat types, and species present within communities. Type descriptions were based on observed dominant cover and vegetation composition; and were derived from the criteria and definitions of widely accepted land classification systems (Holland 1986; and Sawyer et al. 2009). Plants were identified in the field to the lowest taxonomic level sufficient to

determine whether the species detected were non-native, native, or special-status. Plants of uncertain identity were subsequently identified from taxonomic keys (Baldwin et al. 2012). Scientific and common species names were recorded according to The Jepson Manual (Baldwin et al. 2012) and those detailed in Sections 2.1.3 and 6.1.2 of the MSHCP. This method of floristic survey was conducted to safeguard that special-status plant species were not inadvertently overlooked, simply because they were not targeted during surveys.

One vegetation community or land cover type was detected within the study area: Developed/Disturbed (Table 1, and Figure 7). This cover type is described in detail below.

Disturbed and developed lands within the study area include locales that have been developed, paved, cleared, graded, or otherwise altered by anthropogenic activities (i.e., trash piles, industrial warehouses, train tracks, access roads, concrete pads, non-native vegetation, ornamental landscaping, industrial facilities, storage yards, commercial enterprises, etc.). Common non-native plants species detected within this type included Maltese star-thistle (*Centaurea melitensis*), stinknet (*Oncosiphon piluliferum*), and cheeseweed (*Malva neglecta*), ripgut brome (*Bromus diandrus*), Sahara mustard (*Brassica Tournefortii*) and Schismus (*Schismus barbatus*).

Table 1. Vegetation Community/Land Cover Types

Developed/ Disturbed	51.39	7.03	7.03	0	7.03
Total	**51.39**	**7.03**	**7.03**	**0**	**7.03**

In general terms, the plants observed in the study area included a range of native and non-native species common to disturbed habitats, etc. Commonly-occurring species included: ripgut brome, Sahara mustard, and Schismus, among others. Please note that in 2012, the MSHCP mapped the vegetation within the Project Site as Urban Lands (GISD 2021; Figure 7). A comprehensive list of plant species observed during the 2023 and 2024 surveys is presented in Appendix B.

5 PROTECTION OF SPECIES ASSOCIATED WITH RIPARIAN/RIVERINE AREAS AND VERNAL POOLS (SECTION 6.1.2)

Section 6.1.2 of the MSHCP establishes procedures through which the protection of Riparian/Riverine Areas and Vernal Pools occurs. The purpose of these procedures is to ensure

that the biological functions and values of the riparian/riverine and vernal pool habitat areas throughout the MSHCP Plan Area are maintained such that habitat values for species inside the MSHCP Conservation Area are maintained.

5.1 Riparian/Riverine

5.1.1 Methods

The MSHCP defines Riparian/Riverine Areas as *lands which contain habitat dominated by trees, shrubs, persistent emergents, or emergent mosses and lichens, which occur close to or which depend upon soil moisture from a nearby fresh water source, or areas with freshwater flow during all or a portion of the year*. Regarding artificially created features, the MSHCP states "with the exception of wetlands created for the purpose of providing wetlands Habitat or resulting from human actions to create open waters or from the alteration of natural stream courses, areas demonstrating characteristics as described above which are artificially created are not included in these definitions."

Per the RCA's Consistency Analysis template, riverine features include any feature that is natural in origin as well as past natural features that have been heavily modified and/or redirected and can include features indirectly created through human manipulation of the landscape, including channelization of a historic riverine feature. If these features connect to nearby downstream resources that are either existing or described conservation lands, they would be considered riverine.

Subject matter experts assessed the Project Site and it localized watershed for the presence of hydrophytes, distinct soils, riparian and riverine resources, lakes, rivers, streambeds, surface waters and wetlands in May 2023 and again in November 2024. This evaluation was completed using data acquired from current and historic imagery, hydrologic and soils databases, analytic tools, physical on the ground analyses and measurements. Historic and current aerial photography of the Project were reviewed, prior to and during the field assessments. Aerial photography was informative with deference to the state and function of land resources in both the present, and historic context. As, inundation and vegetative signatures on aerial images can imply the presence - or absence, of waters, or a stream system within a discrete location.

The U.S. Environmental Protection Agency (EPA) WATERS GeoViewer tool also provided access to spatial data sets - such as interactive Upstream/Downstream search capabilities, and interactive Watershed Delineation, to assist in determining the status of potential riparian / riverine resources within the region (epa.maps.arcgis.com/apps/webappviewer). Additionally, the Federal Emergency Management Agency (FEMA) flood zone was reviewed, in addition to the National Wetland Inventory (Figure 11) – which is maintained by the USFWS.

The assessment process incorporated multiple tools and data sources to ensure a thorough evaluation:

1. In-field Observations: Subject matter experts systematically evaluated the Project Site and watershed, looking for indicators like hydrophytic vegetation, distinct soil types, and physical signs of riparian or riverine features. These observations directly informed our conclusions about the presence or absence of riparian/riverine resources.

2. Remote Data Analysis: We used current and historic aerial imagery to analyze potential inundation patterns and vegetative signatures, which provided insights into both present and past conditions of the land. This was complemented by EPA's WATERS GeoViewer for watershed data, FEMA flood zone data, and the USFWS National Wetland Inventory, which offered valuable spatial context on hydrologic connectivity, watershed information, and flood risks.

3. Supplemental Data Sources: Analytic tools such as hydrologic and soil databases were consulted to understand the Project site's capacity for supporting riparian/riverine resources. By combining these remote and in-field methods, we ensured our approach was holistic and aligned with MSHCP standards.

5.1.2 Existing Conditions and Results

Comprehensive evaluations of the Project Site have been conducted to assess the presence of riparian and riverine resources and their implications pursuant to the MSHCP.

Absence of Riparian and Riverine Resources:

Analyses from the United States Geological Survey (USGS) and the United States Fish and Wildlife Service (USFWS) National Wetland Inventory indicate no current or historical drainages on - or adjacent to, the Project Site. This is corroborated by the National Hydrography Dataset, which does not identify any water drainage networks within the Project Site.

Field Evaluations (2023 and 2024):

Project Site assessments conducted during 2023 and 2024 revealed no evidence of existing or historical drainage signatures or water conveyance features within the Project Site. As there were no signs of hydric vegetation, surface water flow, or wetland hydrology in or near the Project Site.

Soil Characteristics:

The soils within the Project Site are classified as well-drained, with no hydric soil ratings. This suggests that the Project Site lacks the saturated conditions necessary to support wetland, riparian or riverine resources.

Connectivity to other Waters:

The Project Site lacks any features or signatures with a surface connection to traditional navigable waterway or relatively permanent surface water connections to significant water bodies in the region. This is further supported by the absence of stream channels,

beds, or banks within the Project Site, as evidenced by the EPA WATERS GeoViewer results, National Wetland Inventory, and USGS 7.5 Quadrangle Map.

According to Section 6.1.2 of the MSHCP, riparian and riverine areas are defined by the presence of certain hydrological, riverine, soil and vegetative characteristics. Given the lack of such features and resources within the Project Site, it is determined that no riparian or riverine resources exist within the Project Site. Therefore, based on the absence of riparian and riverine features, presence of well-drained soil conditions, and lack of connectivity to water bodies outside of the Project, it is definitive that the Project Site does not encompass any riparian or riverine resources as defined by the MSHCP. Consequently, the Project is not anticipated to impact such resources, safeguarding compliance with MSHCP guidelines

5.1.3 Impacts

There is no impact to riparian/riverine resources, because no evidence of any soils, plants or other features that meet the definition of 6.1.2 of the MSHCP, were visible within the Project Site.

5.1.4 Mitigation

There is no mitigation for riparian/riverine resources offered, because there is no impact to riparian/riverine resources associated with development of the Project Site.

5.2 Vernal Pools

5.2.1 Methods

Vernal pools are seasonally inundated, ponded areas that only form in regions where specialized soil and climatic conditions exist. During fall and winter rains typical of Mediterranean climates, water collects in shallow depressions where downward percolation of water is prevented by the presence of a hard pan or clay pan layer (duripan) below the soil surface. Later in the spring when rains decrease and the weather warms, the water evaporates, and the pools generally disappear by May. The shallow depressions remain relatively dry until late fall and early winter with the advent of greater precipitation and cooler temperatures.

Vernal pools provide unusual "flood and drought" habitat conditions to which certain plant and wildlife species have specifically adapted - as well as invertebrate species such as fairy shrimp. One of the factors for determining the suitability of the habitat for fairy shrimp would be demonstrable evidence of seasonal ponding in an area of topographic depression that is not subject to flowing waters. These astatic pools are typically characterized as vernal pools. More specifically, vernal pools are seasonal wetlands that occur in depression, areas without a continual source of water. They have wetland indicators of all 3 parameters (soils, vegetation, and hydrology) during the wetter portion of the growing season but normally lack wetland indicators of hydrology and/or vegetation during the drier portion of the growing season. Obligate hydrophytes and facultative wetlands plant species are normally dominant during the wetter portion of the growing season.

The determination that an area exhibits vernal pool characteristics and the definition of the watershed supporting vernal pool hydrology is made on a case-by-case basis. Such determinations consider the length of time the area exhibits upland and wetland characteristics, and the way the area fits into the overall ecological system as a wetland. The seasonal hydrology of vernal pools provides for a unique environment, which supports plants and invertebrates specifically adapted to a regime of winter inundation, followed by an extended period when the pool soils are dry. The MSHCP lists two general classes of soils known to be associated with special-status plant species; clay soils and Traver-Domino Willow association soils. Without the appropriate soils to create the impermeable restrictive layer, none of the special-status species associated with vernal pools can occur. Methods included a review of recent and historic aerial photographs the Project Site and its immediate vicinity, a review of soils data, and 100% visual coverage pedestrian evaluation. The team also looked for signs of clayey soils, ponding, cracking, mottling, etc.

To clarify the criteria used to determine vernal pool presence or absence, as well as to detail Project Site conditions supporting this determination. The following overview of our methods, and field assessment timing, are provided. Subject matter experts conducted evaluations in May 2023 and again in November 2024. This period captures seasonal conditions when vernal pool hydrology is most detectable, ensuring any ponding would have been observed if present. The assessment relied on established criteria for vernal pool habitat, including hydrology, vegetation, soil characteristics, and topography. Our analysis also included reviews of aerial imagery and drainage characteristics.

5.2.2 Existing Conditions and Results

The Project Site, situated in western Riverside County, is characterized exclusively by Arlington fine sandy loam, deep, with 2 to 8 percent slopes. This soil type is classified as well-drained and is not listed as hydric by the NRCS. Hydric soils are defined by their saturation, flooding, or ponding during the growing season, leading to anaerobic conditions that support vernal pools. The absence of such conditions in Arlington fine sandy loam indicates it does not meet the criteria for hydric soils. Vernal pools are seasonal wetlands that require specific hydrological and soil conditions, including the presence of hydric soils that can retain water during wet seasons. Given that Arlington fine sandy loam is well-drained and lacks hydric properties, it is unlikely to support the ponding necessary for vernal pool formation.

Surveys conducted in 2023 and 2024 revealed no topographic depressions or low-lying areas capable of holding water within the Project Site either, further diminishing the potential for vernal pool development. Also, there were no signs of hydric vegetation, surface water flow, or wetland hydrology observed on or near the Project Site, supporting the conclusion that conditions are unsuitable for vernal pools as well. Additionally, the Project Site lacks features with surface connections to other waterways or permanent water bodies. The absence of stream channels, beds, or banks within the Project Site aligns with the well-drained nature of Arlington fine sandy loam, which does not facilitate the hydrological conditions necessary for vernal pools. Based on soil characteristics, field evaluations, and hydrological assessments, Arlington fine

sandy loam is not conducive to the formation or support of vernal pools within the Project Site. The well-drained, non-hydric nature of this soil type, combined with the lack of topographic depressions and hydric vegetation, indicates that vernal pool ecosystems are not present or sustainable within the Project Site.

5.2.3 Impacts

There are no impacts to vernal pools, because none occur within the Project Site, and the soil type within the it does not support the potential for vernal pools.

5.2.4 Mitigation

No mitigation is required, because no vernal pools exist within the Project Site.

5.3 Fairy Shrimp

Pursuant to MSHCP *Section 6.1.2*, all projects should be assessed for the potential to support one of three species of fairy shrimp, including the Riverside fairy shrimp (*Streptocephalus woottonii*), vernal pool fairy shrimp (*Branchinecta lynchi*), and Santa Rosa fairy shrimp (*Linderiella santarosae*). Additionally, assessments for these fairy shrimp would also – by default, address the San Diego fairy shrimp (*Branchinecta sandiegonensis*), which is not a MSHCP Covered Species, but has a limited potential to occur in Western Riverside County. Assessments for fairy shrimp begin with the evaluation of vernal pools, stock ponds, ephemeral pools and other features with a potential to inundate seasonally and support the above-referenced species within the Project Site.

5.3.1 Methods

Subject matter experts assessed the Project Site in May 2023 and again in November 2024, corresponding with spring and fall. This period captures the seasonal conditions where habitats with the potential to support fairy shrimp are typically most detectable: The Project Site evaluations were conducted out of an abundance of caution to ensure that no potential habitat for fairy shrimp, such as ponded water within topographic depressions, existed on the Project Site.

Fairy shrimp habitat can include vernal pools and other natural, non-vernal pool seasonal ponds, as well as artificially created features such as stock ponds, and disturbed features such as tire ruts and other disturbance-related depressions. During our field evaluation, the Project Site was also inspected for any ponding or evidence of ponding (e.g., cracked soils, hydrophytic vegetation) or depression features that could become inundated, including natural depressions and artificial depressions such as tire ruts. As fairy shrimp can be found in non-vernal pool features such as stock ponds, ephemeral pools, road ruts, human-made depressions, or other depressions that may pond water.

5.3.2 Existing Conditions and Results

The Project Site, located in western Riverside County, is characterized by well-drained soils, anthropogenically disturbed land cover, and an absence of hydrological or topographical features necessary to support fairy shrimp. Fairy shrimp require specific environmental conditions, including the presence of vernal pools or other seasonal wetlands, which are not present within the Project Site. The Project Site is composed entirely of Arlington fine sandy loam, deep, with 2 to 8 percent slopes. This soil type is classified as well-drained and is not considered hydric. Hydric soils, which are essential for the formation of vernal pools and other ephemeral aquatic habitats, exhibit saturation and anaerobic conditions during the growing season. The absence of these hydrological properties in Arlington fine sandy loam precludes the presence of the ponded water necessary to sustain fairy shrimp. Field evaluations conducted in 2023 and 2024 confirmed that the Project Site lacks topographic depressions or low-lying areas capable of retaining water. Fairy shrimp rely on shallow, temporary pools for their life cycle, and the absence of such features within the Project Site eliminates the potential for their occurrence. The Project Site's vegetation is primarily non-native and disturbed as well, with no hydrophytic plants observed. The lack of hydric vegetation further indicates the absence of wetland or seasonal aquatic environments. No signs of surface water flow, ponding, or wetland hydrology were noted during field surveys, reinforcing the conclusion that the site does not support conditions favorable for fairy shrimp. Additionally, the Project Site is isolated from traditional navigable waterways or permanent surface water connections to significant water bodies in the region. Based on soil characteristics, topography, vegetation, and hydrological evaluations, the Project Site does not provide the necessary conditions to support fairy shrimp. The well-drained, non-hydric soils, absence of topographic depressions, and lack of hydric vegetation or wetland hydrology confirm that the Project Site is unsuitable for the establishment or persistence of fairy shrimp populations.

5.4 Riparian Birds

Riparian Birds covered under the MSHCP such as the Least Bell's vireo (*Vireo bellii pusillus*) [LBVI], Southwestern willow flycatcher (*Empidonax trallii extimus*) [SWWF] and Yellow-billed cuckoo (*Coccyzus americanus*) [YBCU] are found only in well-developed riparian habitat. No habitat features suitable for any riparian birds exist within the Project Site. Therefore, evaluations for the presence of riparian birds were not warranted - or required. No further discussion on riparian birds is made in this report.

6 PROTECTION OF NARROW ENDEMIC PLANT SPECIES (SECTION 6.1.3)

The Project is not within a predetermined survey area for Narrow Endemic Plant Species and there is no suitable habitat for Narrow Endemic Plant Species within the Project Site. Therefore, no further discussion is made in this document with deference to Narrow Endemic Plant Species.

7 ADDITIONAL SURVEY NEEDS AND PROCEDURES (SECTION 6.3.2)

The Project Site is not mapped in a criteria survey area for plants, burrowing owls, mammals, or amphibians. When a project is located within an MSHCP mapped survey area, surveys must be conducted within suitable habitat for species, according to accepted protocols.

7.1 MSHCP Criteria Area Sensitive Plant Species

The Project is not within a predetermined survey area for MSHCP Criteria Area Sensitive Plant Species, and there is no suitable habitat for Criteria Area Sensitive Plant Species within the Project Site. Therefore, no further discussion is made in this document with deference to MSHCP Criteria Area Plant Species.

7.2 Burrowing Owl

The Project is not within a predetermined survey area for Burrowing Owl, and there is no suitable habitat for Burrowing Owls within the Project Site. Therefore, no further discussion is made in this document with deference to Burrowing Owls.

7.3 Mammals

The Project is not within a predetermined survey area for mammals, and there is no suitable habitat for mammals within the Project Site. Therefore, no further discussion is made in this document with deference to Mammals.

7.4 Amphibians

The Project is not within a predetermined survey area for amphibians, and there is no suitable habitat for amphibians within the Project Site. Therefore, no further discussion is made in this document with deference to Amphibians

8 INFORMATION ON OTHER SPECIES

8.1 Delhi Sands Flower Loving Fly

The Project Site does not fall within the Delhi soils mapped within the MSHCP (Figure 8). Therefore, no further discussion is made in this document with deference to the Delhi Sands Flower Loving Fly.

8.2 Species Not Adequately Conserved

MSHCP Table 9-3 identifies 28 species where requirements must be met for those to be considered adequately conserved. None of the species listed in the MSHCP Table 9-3 occur on - or near, the Project Site. Therefore, there is no further action required.

8.3 Crotch's Bumblebee

8.3.1 Method

Survey methods for Crotch's bumble bee (*Bombus crotchii* – CBB) habitat assessments were derived from generally accepted professional standards. Evaluation methods for assessing the suitability of the Project Site for CBB involved two thorough site visits to determine the presence of essential habitat elements. This approach included examining whether the Project Site has suitable nesting conditions, such as small mammal burrows, and assessing the availability of diverse nectar and pollen resources critical for CBB colony development. Additionally, the assessment considered the Project's isolation from natural habitats that could support CBB and evaluated the surrounding landscape's composition and proximity to determine the likelihood of CBB occurrence.

8.3.2 Crotch's Bumblebee Impact Avoidance

The comprehensive assessment concluded that the Project Site lacks the essential habitat elements required for the survival and reproduction of CBB. The findings indicate that it is not reasonable to expect this Project Site to support a CBB population, and as such, focused surveys for CBB are not warranted based on the following key findings:

Vegetation and Forage Resources

- The vegetation within the Project Site is dominated by developed and disturbed conditions with negligible amounts of native plant species.
- Potential CBB nectar sources are insufficient within the Project Site to support a viable CBB population.

Nesting Conditions

- Frequent anthropogenic disturbances within the Project Site have eliminated suitable nesting substrates such as abandoned rodent burrows typically used by CBB.

Landscape Context and Isolation

- The Project Site is highly disturbed and surrounded by urban development, isolating it from contiguous native habitats and wildlands that could support CBB populations.
- The nearest historic CBB observation is over a mile away from the Project Site, further supporting the low likelihood of CBB presence.

Biodiversity and Habitat Suitability

- The Project Site has low biodiversity and lacks a reliable continuum of nectar sources required to sustain CBB colonies.
- No bumble bees (*Bombus spp.*) were observed during any fieldwork conducted in 2023 and 2024, further confirming the absence of suitable habitat.

Conclusion

The findings presented herein conclusively demonstrate that the Project Site lacks the physical and biological features necessary to support CBB.

9 GUIDELINES PERTAINING TO THE URBAN/WILDLANDS INTERFACE (SECTION 6.1.4)

The MSHCP Section 6.1.4 Guidelines are intended to address indirect effects associated with locating development in proximity to MSHCP Conservation Areas, where applicable. The Project's permanent impact area is not in proximity to an established Cell Group, Criteria Cell, PQP Land, Linkage / Core, Conserved Land, or RCA Conservation Easement; therefore, the MSHCP guidelines pertaining to Urban/Wildlands Interface for the management of edge factors such as lighting, urban runoff, toxics, and domestic predators do not apply.

10 BEST MANAGEMENT PRACTICES (VOLUME I, APPENDIX C)

This section of the report is designed to describe and comment as to the necessity of implementation of the BMPs identified in Volume 1, Appendix C. The BMPs and their applicability to the Project is identified in Table 2.

Table 2. MSHCP Best Management Practices Applicability (Volume 1, Appendix C)

BMP	Applicable Yes or No	Comment
No. 1 – A condition shall be placed on grading permits requiring a qualified biologist to conduct a training session for Project personnel prior to grading. The training shall include a description of the species of concern and its habitats, the general provisions of the Endangered Species Act (Act) and the MSHCP, the need to adhere to the provisions of the Act and the MSHCP, the penalties associated with violating the provisions of the Act, the general measures that are being implemented to conserve the species of concern as they relate to the Project, and the access routes to and Project boundaries within which the Project activities must be accomplished.	Not Applicable	There are no special status species within, or near the Project Site
No. 2 – Water pollution and erosion control plans shall be developed and implemented in accordance with RWQCB requirements.	Yes	The Project will include grading and paving.
No. 3 – The footprint of disturbance shall be minimized to the maximum extent feasible. Access to sites shall be via preexisting access routes to the greatest extent possible.	Yes	The Project Site is < 7.03-acres, and is accessible from Commerce Street.
No. 4 – The upstream and downstream limits of Projects disturbance plus lateral limits of disturbance on either side of the stream shall be clearly defined and marked in the field and	Not Applicable	There are no streambed resources on, or near the Project Site

BMP	Applicable Yes or No	Comment
reviewed by the biologist prior to initiation of work.		
No. 5 – Project should be designed to avoid the placement of equipment and personnel within the stream channel or on sand and gravel bars, banks, and adjacent upland habitats used by target species of concern.	Not Applicable	There are no streambed Resources, on or near the Project Site
No. 6 – Projects that cannot be conducted without placing equipment or personnel in sensitive habitats should be timed to avoid the breeding season of riparian identified in MSHCP Global Species Objective No. 7.	Not Applicable	There are no sensitive habitat, riparian or streambed resources on, or near the Project Site
No. 7 – When stream flows must be diverted, the diversions shall be conducted using sandbags or other methods requiring minimal instream impacts. Silt fencing of other sediment trapping materials shall be installed at the downstream end of construction activity to minimize the transport of sediments offsite. Settling ponds where sediment is collected shall be cleaned out in a manner that prevents the sediment from reentering the stream. Care shall be exercised when removing silt fences, as feasible, to prevent debris or sediment from returning to the stream.	Not Applicable	There are no streambed resources on, or near the Project Site
No. 8 – Equipment storage, fueling, and staging areas shall be located on upland sites with minimal risks of direct drainage into riparian areas or other sensitive habitats. These designated areas shall be in such a manner as to prevent any runoff from entering sensitive habitat. Necessary precautions shall be taken to prevent the release of cement or other toxic substances into surface waters. Project related spills of hazardous materials shall be reported to appropriate entities including but not limited to applicable jurisdictional city, FWS, and CDFG, RWQCB and shall be cleaned up immediately and contaminated soils removed to approved disposal areas.	Not Applicable	There are no sensitive habitat, riparian or streambed resources on, or near the Project Site

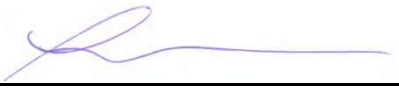
BMP	Applicable Yes or No	Comment
No. 9 – Erodible fill material shall not be deposited into water courses. Brush, loose soils, or other similar debris material shall not be stockpiled within the stream channel or on its banks.	Not Applicable	There are no water courses, streambed resources on, or near the Project Site
No. 10 – The qualified project biologist shall monitor construction activities for the duration of the project to ensure that practicable measures are being employed to avoid incidental disturbance of habitat and species of concern outside the Project Site	No (But available as needed)	The Project Site consists of Developed/Disturbed land cover.
No. 11 – The removal of native vegetation shall be avoided and minimized to the maximum extent practicable. Temporary impacts shall be returned to pre-existing contours and revegetated with appropriate native species.	No	Project includes no temporary impacts, and the Project Site consists of Developed/Disturbed land cover.
No. 12 – Exotic species that prey upon or displace target species of concern should be permanently removed from the site to the extent feasible.	Yes	The Project Site will remove Developed/Disturbed cover from Riverside County.
No. 13 – To avoid attracting predators of the species of concern, the Project Site shall be kept as clean of debris as possible. All food related trash items shall be enclosed in sealed containers and regularly removed from the site(s).	Yes	Standard Measure
No. 14 – Construction employees shall strictly limit their activities, vehicles, equipment, and construction materials to the proposed Project Site and designated staging areas and routes of travel. The construction area(s) shall be the minimal area necessary to complete the project and shall be specified in the construction plans. Construction limits will be fenced with orange snow screen. Exclusion fencing should be maintained until the completion of all construction activities. Employees shall be instructed that their activities are restricted to the construction areas.	Yes	Standard Measure

BMP	Applicable Yes or No	Comment
No. 15 – The Permittee shall have the right to access and inspect any sites of approved projects including any restoration/ enhancement area for compliance with project approval conditions including these BMPs.	Yes	Standard Measure

11 CERTIFICATION

I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

DATE: December 31, 2024

SIGNED: 

12 REFERENCES

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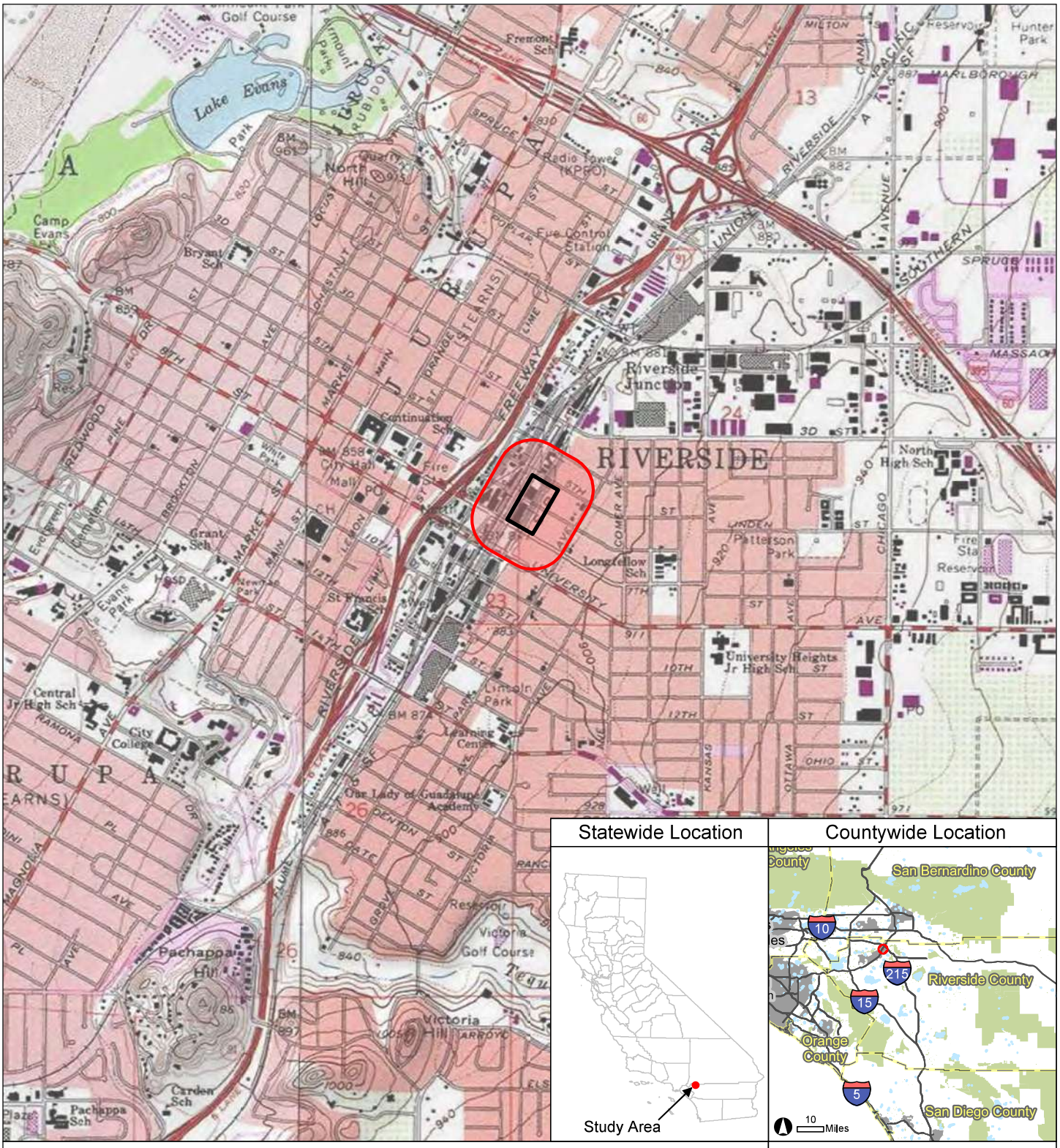
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FIGURES



Project Site

Study Area

Interstate or State Highway (inset)

County Boundary (inset)

Urban Area (inset)

Park or National Forest (inset)

Water Body (inset)

0 1,000 2,000 Feet

1 inch = 2,000 feet

The Study Area is located in Riverside County on the Riverside East USGS 7.5-minute quadrangle map; San Bernardino Meridian, Township 2S, Range 5W, in Sections 23, 24;

Center coordinates (WGS 1984): 117.205°W 33.776°N

Data Sources:
- California Public Land Survey System 2020
- USGS 7.5-minute quadrangle map
- ESRI US Topo Maps accessed Dec 2024

Map Prepared: 12-26-24

Prepared by:

NOREAS
Environmental Engineering and Science

Figure 1. Regional Location



Figure 2. Site Vicinity

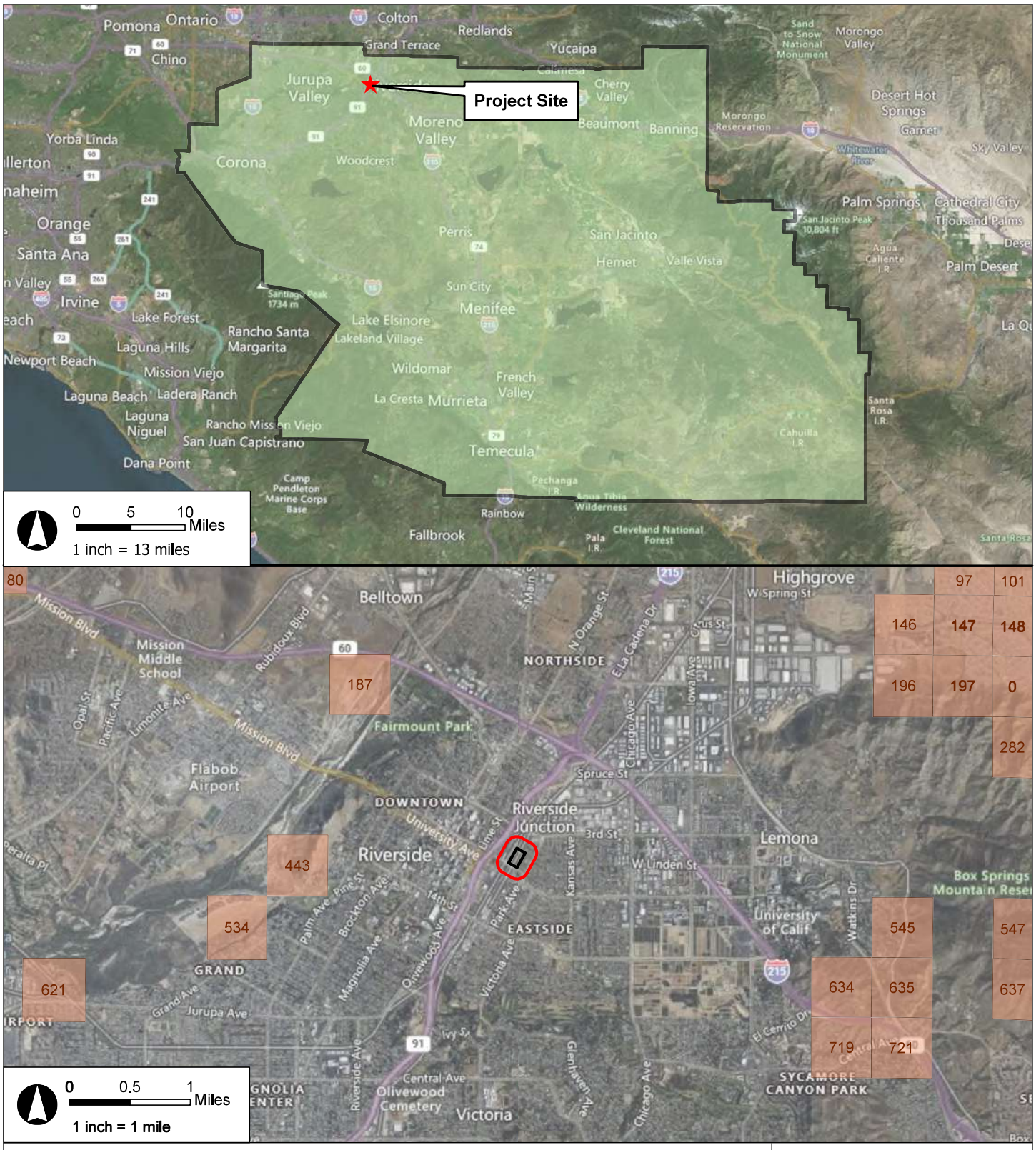


Figure 3. MSHCP Criteria Cells

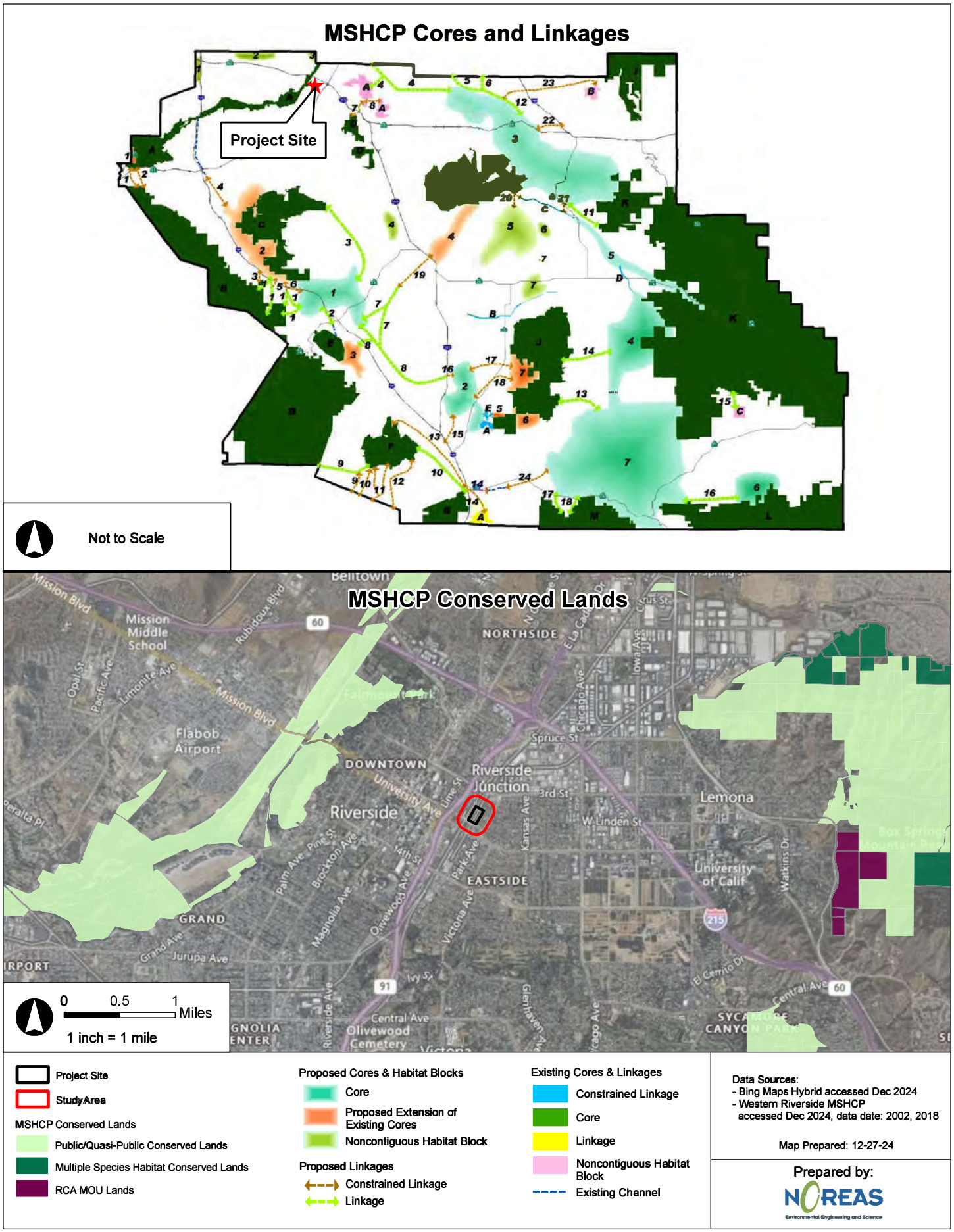


Figure 4. Cores, Linkages, and Conserved Lands

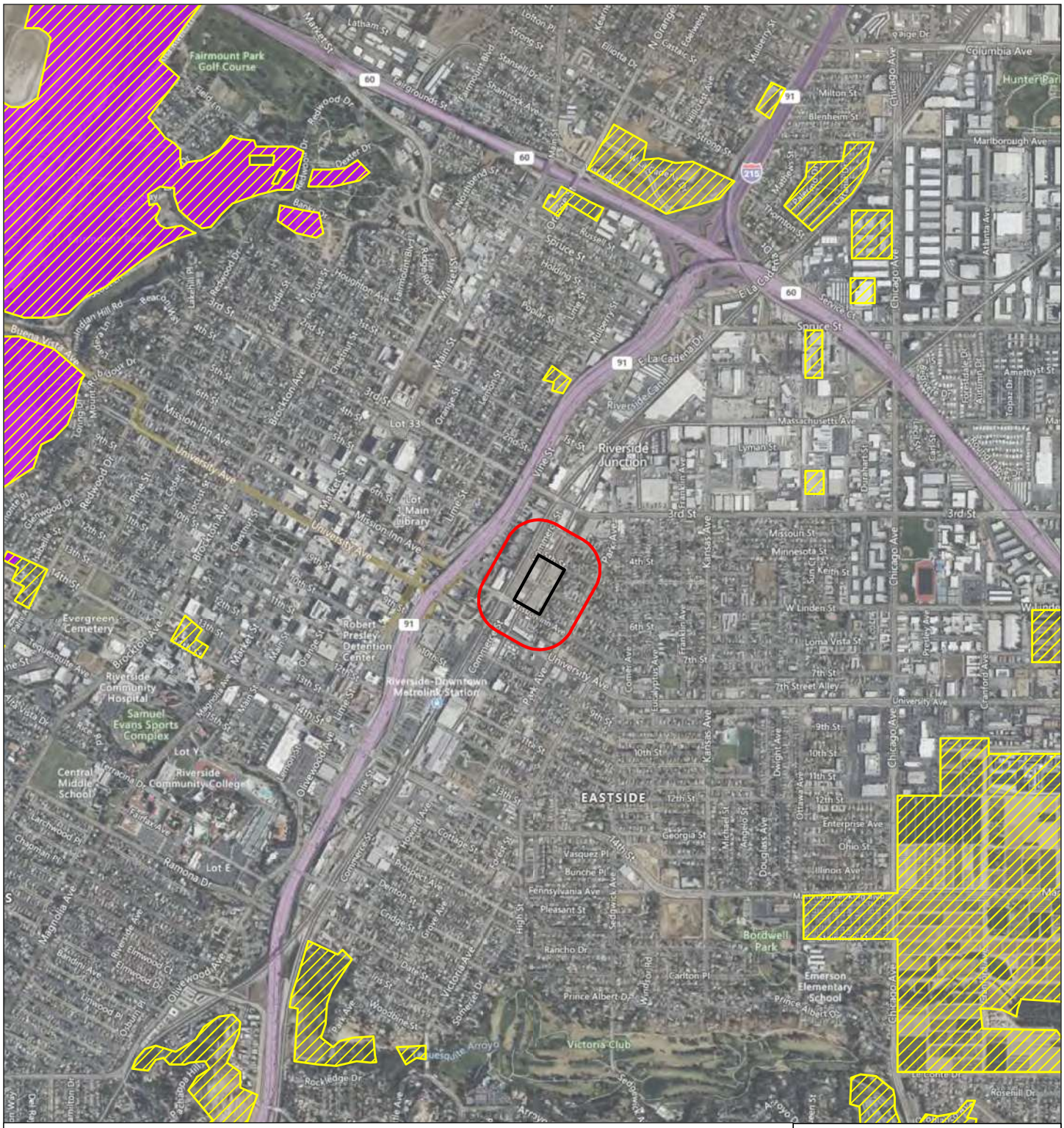


Figure 5. MSHCP Species Survey Areas

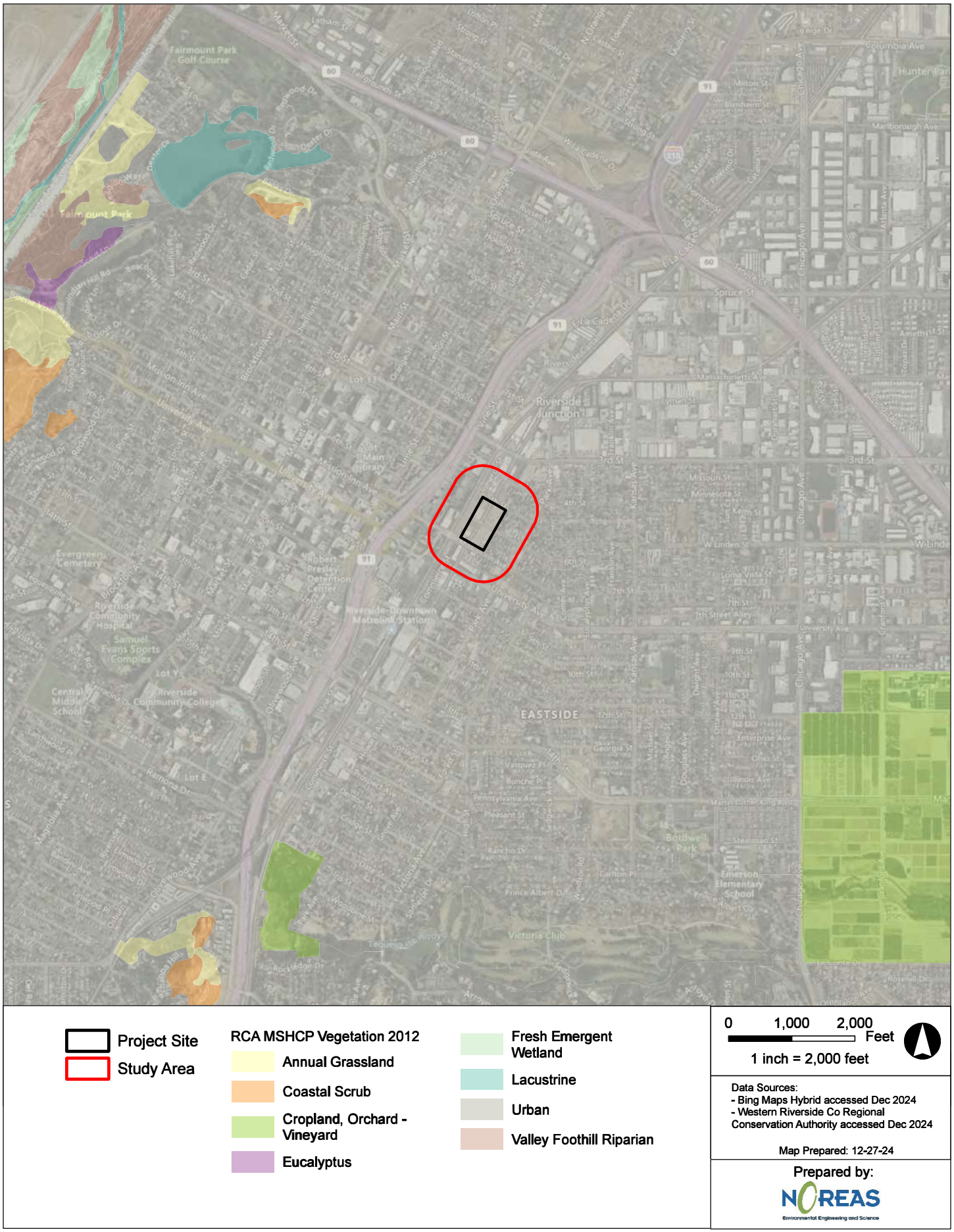
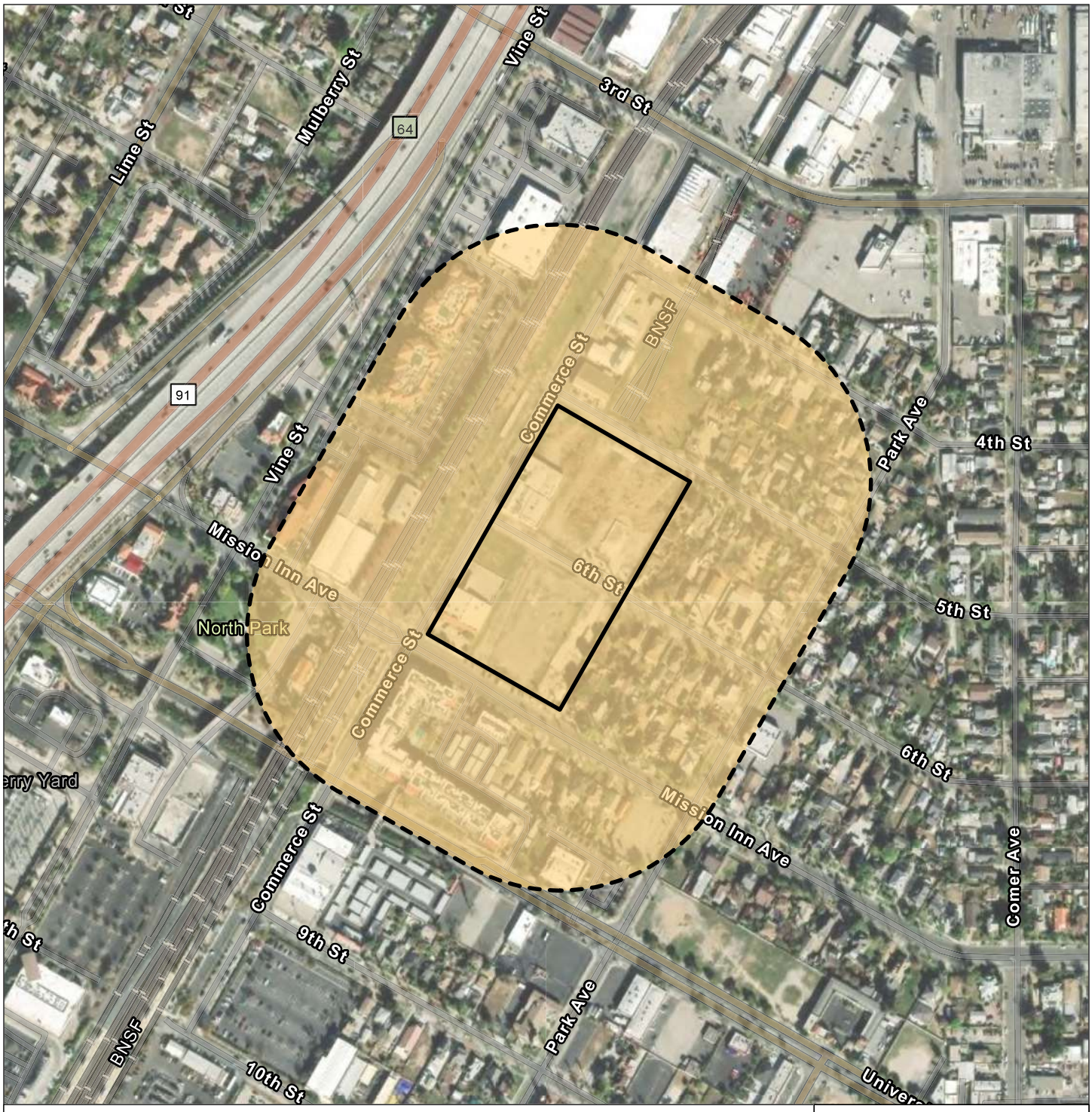


Figure 6. RCA MSHCP Vegetation 2012



Project Site (7.03 ac)

Study Area (51.39 ac)

Vegetation Communities

Developed/Disturbed (51.39 ac)

0 200 400 Feet

1 inch = 400 feet

Data Sources:
- ESRI World Imagery accessed Dec 2024

Map Prepared: 12-30-24

Prepared by:
NOREAS
Environmental Engineering and Science

Figure 7. Vegetation Communities and Land Cover Types



Project Site

Study Area

Soil Types

AoC- Arlington fine sandy loam, deep, 2 to 8 percent slopes

0 200 400 Feet

1 inch = 400 feet

Data Sources:
- ESRI World Imagery accessed Dec 2024
- NRCS Web Soil Survey accessed Dec 2024

Map Prepared: 12-27-24

Prepared by:

NOREAS
Environmental Engineering and Science

Figure 8. Soils Map

Special-Status Species Occurrences

Map Code	Common Name *(Scientific Name)*	
	Plants	
P1	Alvin Meadow bedstraw	*Galium californicum ssp. primum*
P2	Brand's star phacelia	*Phacelia stellaris*
P3	bristlysedge	*Carex comosa*
P4	chaparralragwort	*Senecio aphanactis*
P5	Coulter'sgoldfields	*Lasthenia glabrata ssp. coulteri*
P6	Gambel's watercress	*Nasturtium gambelii*
P7	Horn'smilk-vetch	*Astragalus hornii var. hornii*
P8	long-spinedspineflower	*Chorizanthe polygonoides var. longispina*
P9	Los Angelessunflower	*Helianthus nuttallii ssp. parishii*
P10	many-stemmeddudleya	*Dudleya multicaulis*
P11	marshsandwort	*Arenaria paludicola*
P12	mesa horkelia	*Horkelia cuneata var. puberula*
P13	Nevin's barberry	*Berberis nevinii*
P14	Parish's bush-mallow	*Malacothamnus parishii*
P15	Parish's desert-thorn	*Lycium parishii*
P16	Parry'sspineflower	*Chorizanthe parryi var. parryi*
P17	Peruviandodder	*Cuscuta obtusiflora var. glandulosa*
P18	Plummer's mariposa-lily	*Calochortus plummerae*
P19	prairie wedgegrass	*Sphenopholis obtusata*
P20	Pringle'smonardella	*Monardella pringlei*
P21	Riversidian Alluvial Fan Sage Scrub	*Riversidian Alluvial Fan Sage Scrub*
P22	Robinson's pepper-grass	*Lepidium virginicum var. robinsonii*
P23	salt marsh bird's-beak	*Chloropyron maritimumssp. maritimum*
P24	salt spring checkerbloom	*Sidalcea neomexicana*
P25	San Bernardinoaster	*Symphyotrichum defoliatum*
P26	San Diegoambrosia	*Ambrosia pumila*
P27	Santa Ana River woollystar	*Eriastrum densifolium ssp. sanctorum*
P28	slender-hornedspineflower	*Dodecahema leptoceras*
P29	smoothtarplant	*Centromadia pungens ssp. laevis*
P30	Southern California Arroyo Chub/Santa Ana Sucker Stream	*Southern California Arroyo Chub/Santa Ana Sucker Stream*
P31	Southern Cottonwood Willow Riparian Forest	*Southern Cottonwood Willow Riparian Forest*
P32	Southern Riparian Scrub	*Southern Riparian Scrub*
P33	Southern Sycamore Alder Riparian Woodland	*Southern Sycamore Alder Riparian Woodland*
P34	Southern Willow Scrub	*Southern Willow Scrub*
	Invertebrates	
I1	American bumble bee	*Bombus pensylvanicus*
I2	Busck's gallmoth	*Eugnosta busckana*
I3	Crotch bumble bee	*Bombus crotchii*
I4	Delhi Sands flower-loving fly	*Rhaphiomidas terminatus abdominalis*
I5	Desertcuckoo wasp	*Ceratochrysis longimala*
I6	grainose tiger beetle	*Cicindela tranquebarica viridissima*
I7	quino checkerspot butterfly	*Euphydryas edithaquino*
I8	Riverside fairyshrimp	*Streptocephalus wootoni*
I9	white cuckoo bee	*Nealarra alba*
	Mammals	
M1	Americanbadger	*Taxidea taxus*
M2	Los Angeles pocket mouse	*Perognathus longimembris brevinasus*
M3	northwestern San Diego pocket mouse	*Chaetodipus fallax fallax*
M4	pocketed free-tailed bat	*Nyctinomops femorosaccus*
M5	San Bernardino kangaroo rat	*Dipodomys merriami parvus*
M6	San Diego black-tailed jackrabbit	*Lepus californicus bennettii*
M7	San Diego desert woodrat	*Neotoma lepida intermedia*
M8	southerngrasshoppermouse	*Onychomys torridus ramona*
M9	Stephens' kangaroorat	*Dipodomys stephensi*
M10	western mastiff bat	*Eumops perotis californicus*
M11	western yellow bat	*Lasiurus xanthinus*
	Birds	
B1	bald eagle	*Haliaeetus leucocephalus*
B2	Bell's sparrow	*Artemisiospiza belli belli*
B3	burrowingowl	*Athene cunicularia*
B4	Californiablack rail	*Laterallus jamaicensis coturniculus*
B5	California hornedlark	*Eremophila alpestris actia*
B6	coastal California gnatcatcher	*Polioptila californica californica*
B7	Cooper's hawk	*Accipiter cooperii*
B8	Lawrence's goldfinch	*Spinus lawrencei*
B9	least Bell'svireo	*Vireo bellii pusillus*
B10	loggerheadshrike	*Lanius ludovicianus*
B11	merlin	*Falco columbarius*
B12	southern California rufous-crowned sparrow	*Aimophila ruficeps canescens*
B13	Swainson's hawk	*Buteo swainsoni*
B14	tricolored blackbird	*Agelaius tricolor*
B15	western yellow-billed cuckoo	*Coccyzus americanus occidentalis*
B16	yellow-breastedchat	*Icteria virens*
B17	yellow rail	*Coturnicops noveboracensis*
B18	yellow warbler	*Setophaga petechia*
	Reptiles	
R1	California glossy snake	*Arizona elegans occidentalis*
R2	coasthornedlizard	*Phrynosoma blainvillii*
R3	coastal whiptail	*Aspidoscelis tigris stejnegeri*
R4	orange-throatted whiptail	*Aspidoscelis hyperythra*
R5	red-diamond rattlesnake	*Crotalus ruber*
R6	San Bernardinoringnecksnake	*Diadophis punctatus modestus*
R7	San Diego banded gecko	*Coleonyx variegatus abbotti*
R8	Southern California leglesslizard	*Anniella stebbinsi*
R9	southern rubberboa	*Charina umbratica*
	Amphibians	
A1	western spadefoot *Spea hammondii*	
	Fish	
F1	arroyo chub	*Gila orcuttii*
F2	Santa Ana speckleddace	*Rhinichthys osculus ssp. 8*
F3	Santa Ana sucker	*Catostomus santaanae*
F4	steelhead - southern California DPS	*Oncorhynchus mykiss irideus pop. 10*

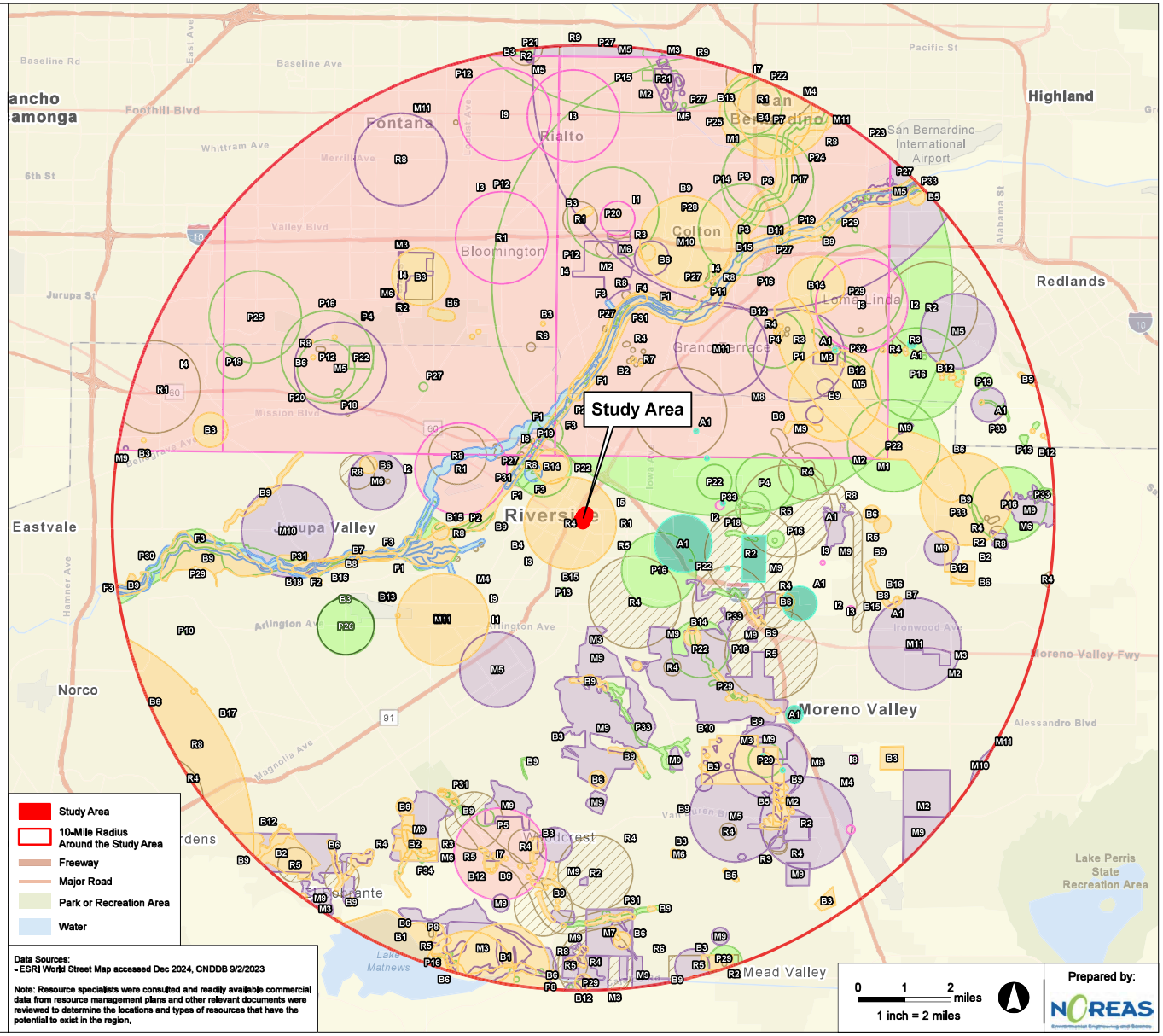


Figure 9. Literature Review

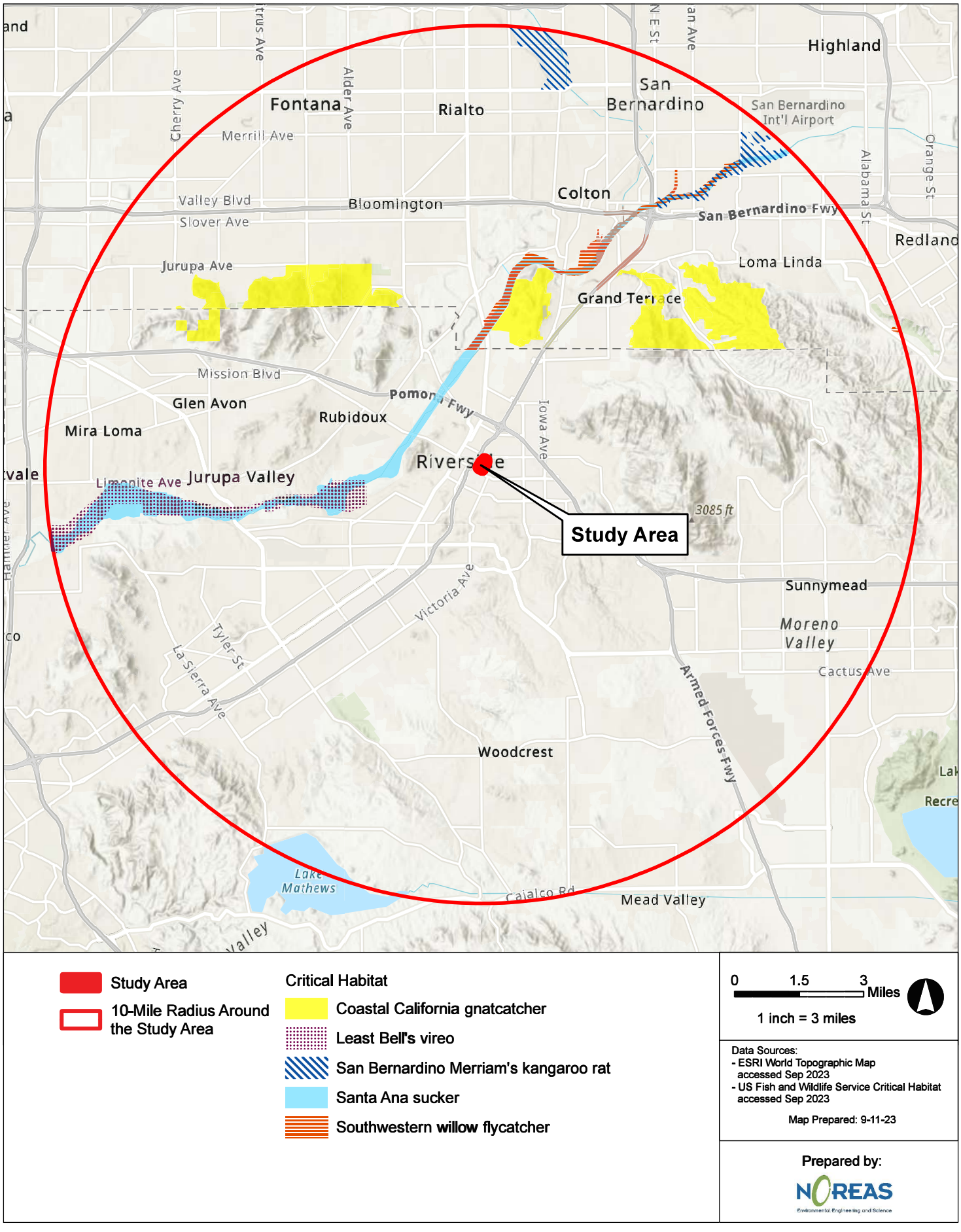


Figure 10. Critical Habitat

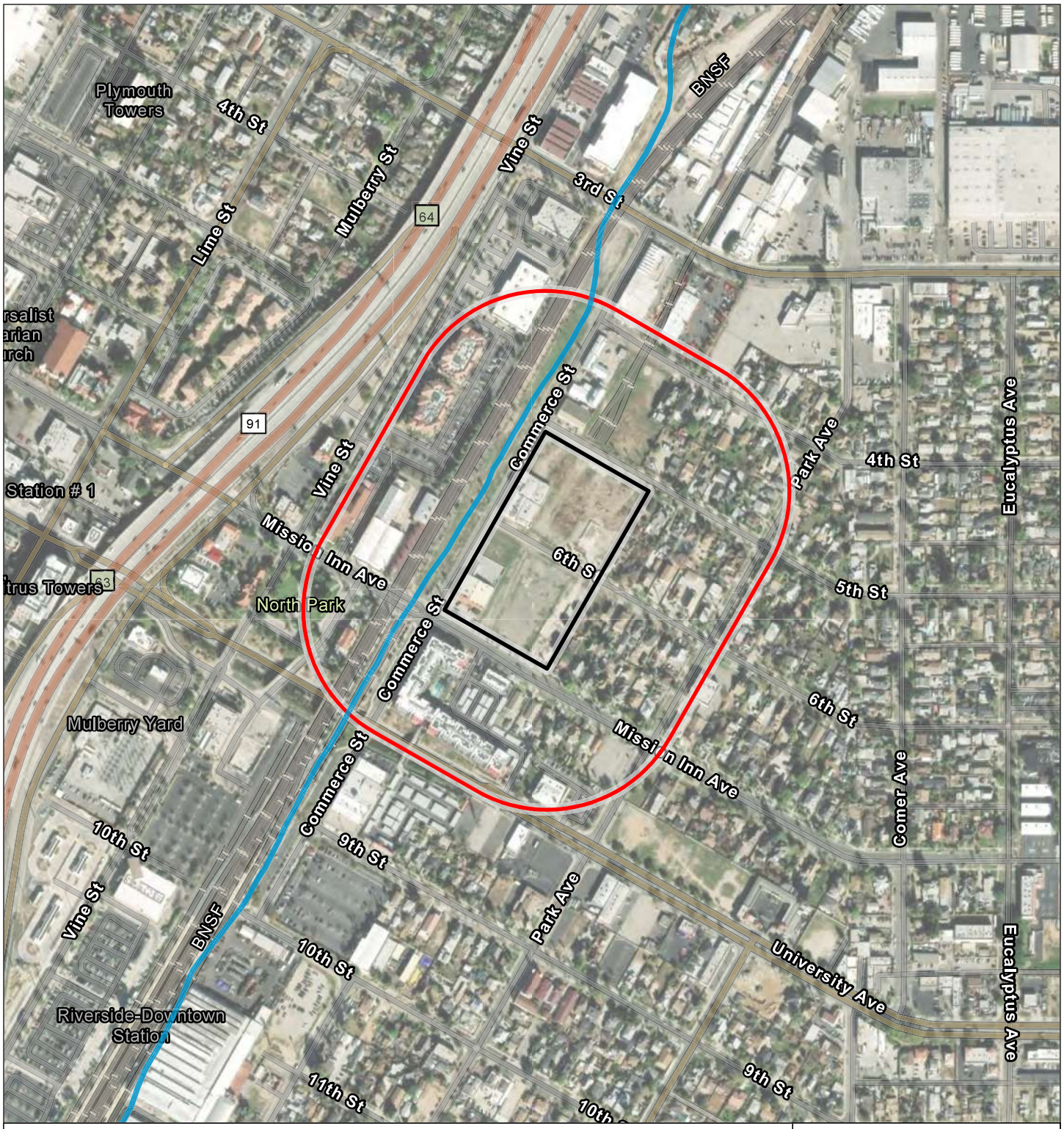


Figure 11. National Wetland Inventory

APPENDICES

Appendix A Site Plan



PROJECT SUMMARY

COMMERCE ST AND MISSION INN AVE
RIVERSIDE, CALIFORNIA

ZONING
CURRENT: BMP (BUSINESS MANUFACTURING AND PARK ZONE)
PROPOSED: MU-U (MIXED-USE URBAN)

AREA
6.97 AC (303,554 SF)
TOTAL DWELLING UNITS: 301 DU
DENSITY: 43.2 DU/AC
FAR: 0.96:1 (292,250 SF)

UNIT MIX
STUDIO: 50 UNITS (17%)
1-BED: 152 UNITS (50%)
2-BED: 99 UNITS (33%)
TOTAL 301 UNITS
AVG. UNIT SIZE: 714 SF

VEHICLE PARKING

RESIDENTIAL REQUIRED: 477 SPACES
(1 SP/STUDIO + 1.5 SP/1-BED + 2 SP/2-BED)

RESIDENTIAL PROVIDED: 388 SPACES (1.29 SP/DU)

378 SURFACE SPACES
10 GARAGE SPACES (2 SP/TH)

*COVERED: 303 SPACES (1 SP/DU)

CALLOUT LEGEND

01 BUILDING A (4-STORY ON GRADE)
02 NOT USED
03 BUILDING C (2-STORY TOWNHOMES)
04 BUILDING D (HISTORIC)
05 LIVE-WORK UNITS
06 COURTYARD A (ACTIVE - POOL)
07 COURTYARD B (PASSIVE)
08 COURTYARD C (SEMI-ACTIVE - SPA)
09 LOBBY
10 LEASING
11 AMENITIES
12 DOG PARK
13 EXISTING PROPERTY LINE
14 NEW PROPERTY LINE
15 PROPOSED SETBACK
16 6TH STREET HAMMERHEAD
17 TRASH ROOM
18 STORMWATER TREATMENT TANK & AQUA-SWIRL

COMMERCIAL FRONTAGE

MIXED-USE COMMERCIAL FRONTAGE COMPLIANCE
(PER SECTION 19.120.050)

LOCATION	FRONTAGE LENGTH*	80% LINEAL GROUND FLOOR FRONTAGE REQUIRED	COMMERCIAL FRONTAGE PROPOSED
MISSION INN AVENUE	254.67FT	203.73FT	206.58 FT (81.1%)

* EXCLUDING NON-BUILDING SITE AREA (DRIVEWAYS OR PEDESTRIAN ENTRANCES)

ktgy
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Iron Lofts, LLC
1201 Dove Street, Suite 520
Newport Beach, CA 92660

IRON LOFTS
RIVERSIDE, CALIFORNIA # 2020-0844

SCHEMATIC DESIGN
JUNE 17, 2024

0 20 40 80

SITE PLAN
PROJECT SUMMARY

A1-0

Appendix B Plant Species Observed Within the Study Area

Scientific Name	*Common Name*
Asteraceae	
Ambrosia artemisiifolia	Ragweed
*Centaurea melitensis**	Maltese star-thistle
*Gnaphalium spp.**	Cudweed
*Hypochaeris glabra**	Smooth cat's ear
*Lactuca serriola **	Prickly lettuce
*Lasthenia gracilis**	Needle goldfields
*Oncosiphon piluliferum**	Stinknet
Heterotheca grandiflora	Telegraph weed
Helianthus annuus	Sunflower
*Sonchus oleraceus**	Common sowthistle
*Schismus barbatus**	Schismu
*Taraxacum officinale**	Common dandelion
Apocynaceae	
*Nerium sp.**	Olenander
Anacardiaceae	
*Schinus molle**	Peruvian pepper
Arecaceae	
Syagrus romanzoffiana	Queen palm
*Washingtonia Robusta**	Mexican fan palm
Brassicaceae	
*Brassica nigra**	Black mustard
*Brassica Tournefortii**	Sahara mustard
*Sisymbrium irio **	London rocket
Chenopodiaceae	
Chenopodium album	Lamb's quarters
Euphorbiaceae	
*Croton setigerus**	Dove weed
Geraniaceae	
*Erodium cicutarium**	Redstem stork's bill
Malvaceae	
*Alcea rosea**	Holyhock
*Malva parviflora**	Cheeseweed
Moraceae	
*Broussonetia papyrifera**	Paper mulberry
Nyctaginaceae	

Scientific Name	*Common Name*
*Bougainvillea sp.**	Bougainvillea
Pinaceae	
*Pinus sp.**	Pine
Poaceae	
*Avena fatua **	Wild oat
*Bromus diandrus **	Ripgut brome
*Bromus madritensis subsp. Rubens **	Red brome
*Festuca arundinacea **	Tall fescue
*Festuca myuros **	Annual fescue
*Festuca perennis**	Perennial ryegrass
*Hordeum murinum **	Wall barley
*Polypogon monspeliensis**	Annual rabbitsfoot grass
Polygonaceae	
*Polygonum aviculare**	Prostrate knotweed
Simaroubaceae	
*Ailanthus altissima**	Tree of heaven
Solanaceae	
Datura wrightii	Sacred thorn-apple
*Nicotiana glauca**	Tree tobacco

Nomenclature follows the Jepson Manual, Second Edition (Baldwin et al 2011).
* = naturalized, non- native plant species.

Appendix C Wildlife Species Observed Within the Study Area

Scientific name	Common name
Birds	
Buteo jamaicensis	Red-Tailed hawk
Cathartes aura	Turkey vulture
Corvus corax	Common Raven
Sturnus vulgaris	European Starling
Carpodacus mexicanus	House Finch
Columba livia	Rock Pigeon
Euphagus cyanocephalus	Brewer's Blackbird
Mimus polyglottos	Northern mockingbird
Passer domesticus	House Sparrow
Sayornis nigricans	Black phoebe
Setophaga coronata	Yellow-rumped warbler
Zonotrichia leucophrys	White-crowned sparrow
Zenaida macroura	Mourning Dove
Mammals	
Otospermophilus beecheyi	California ground squirrel
Sylvilagus audubonii	Cottontail

Appendix D Special-Status Species and Their Potential to Occur Within the Project Site

Potential for occurrence	Common name (Scientific name)	Federal listing status	State listing status	CNPS list	Number of records within 10 miles	Year(s) sighted
A	Crotch bumble bee *(Bombus crotchii)*	None	Candidate Endangered	-	8	1933-2020
A	Desert cuckoo wasp *(Ceratochrysis longimala)*	None	None	-	1	1915-1915
A	California glossy snake *(Arizona elegans occidentalis)*	None	None	-	7	1935-2002
A	Orange-throated whiptail *(Aspidoscelis hyperythra)*	None	None	-	21	1951-XXXX
A	Red-diamond rattlesnake *(Crotalus ruber)*	None	None	-	11	1931-2015
A	Southern California legless lizard *(Anniella stebbinsi)*	None	None	-	26	1897-XXXX
A	California black rail *(Laterallus jamaicensis coturniculus)*	None	Threatened	-	2	1892-1919
A	Western yellow-billed cuckoo *(Coccyzus americanus occidentalis)*	Threatened	Endangered	-	4	1894-2011
A	Robinson's pepper-grass *(Lepidium virginicum var. robinsonii)*	None	None	4.3	8	1889-2004
A	Marsh sandwort *(Arenaria paludicola)*	Endangered	Endangered	1B.1	1	1899
A	Salt marsh bird's-beak *(Chloropyron maritimum ssp. maritimum)*	Endangered	Endangered	1B.2	1	1888
A	Tricolored blackbird *(Agelaius tricolor)*	None	Threatened	-	3	1950-2015
A	Parry's spineflower *(Chorizanthe parryi var. parryi)*	None	None	1B.1	8	1882-2010
A	Santa Ana sucker *(Catostomus santaanae)*	Threatened	None	-	7	2002-2011
A	Delhi Sands flower-loving fly *(Rhaphiomidas terminatus abdominalis)*	Endangered	None	-	36	198X-2013
A	Southern Cottonwood Willow Riparian Forest	None	None	-	6	1980-1985
A	Least Bell's vireo *(Vireo bellii pusillus)*	Endangered	Endangered	-	35	1917-2015
A	Nevin's barberry *(Berberis nevinii)*	Endangered	Endangered	1B.1	4	1999-2009
A	Western spadefoot *(Spea hammondii)*	None	None	-	15	1978-2023
A	Prairie wedge grass *(Sphenopholis obtusata)*	None	None	2B.2	2	1907-1917
A	Arroyo chub *(Gila orcuttii)*	None	None	-	5	1995-2001
A	Santa Ana River woollystar *(Eriastrum densifolium ssp. sanctorum)*	Endangered	Endangered	1B.1	16	1910-2021
A	Greenest tiger beetle *(Cicindela tranquebarica viridissima)*	None	None	-	1	1987-1987
A	Busck's gallmoth *(Eugnosta busckana)*	None	None	-	4	1906-2023
A	Coast horned lizard *(Phrynosoma blainvillii)*	None	None	-	11	1926-2008

Potential for occurrence	Common name (Scientific name)	Federal listing status	State listing status	CNPS list	Number of records within 10 miles	Year(s) sighted
A	Steelhead - southern California DPS *(Oncorhynchus mykiss irideus)*	Endangered	Candidate Endangered	-	1	2013
A	Brand's star phacelia *(Phacelia stellaris)*	None	None	1B.1	1	2000
A	Stephens' kangaroo rat *(Dipodomys stephensii)*	Threatened	Threatened	-	46	1988-2013
A	Northwestern San Diego pocket mouse *(Chaetodipus fallax fallax)*	None	None	-	11	1992-2016
A	American bumble bee *(Bombus pensylvanicus)*	None	None	-	2	1994-2019
A	White cuckoo bee *(Neolarra alba)*	None	None	-	2	1928-1937
A	Swainson's hawk *(Buteo swainsoni)*	None	Threatened	-	2	1889
A	Pocketed free-tailed bat *(Nyctinomops femorosaccus)*	None	None	-	3	1985-1988
A	Western yellow bat *(Lasiurus xanthinus)*	None	None	-	6	1981-1996
A	San Bernardino kangaroo rat *(Dipodomys merriami parvus)*	Endangered	Candidate Endangered	-	10	1908-2017
A	Southern Sycamore Alder Riparian Woodland	None	None	-	10	1980-1985
A	Plummer's mariposa-lily *(Calochortus plummerae)*	None	None	4.2	4	1998-2003
A	Southern California Arroyo Chub/Santa Ana Sucker Stream	None	None	-	1	1991
HP	Chaparral ragwort *(Senecio aphanactis)*	None	None	2B.2	3	1909-2004
A	San Diego banded gecko *(Coleonyx variegatus abbotti)*	None	None	-	1	2015
A	Bell's sparrow *(Artemisiospiza belli belli)*	None	None	-	4	1999-2015
A	San Diego black-tailed jackrabbit *(Lepus californicus bennettii)*	None	None	-	8	1995-2007
A	Yellow-breasted chat *(Icteria virens)*	None	None	-	2	2001-2015
A	Yellow warbler *(Setophaga petechia)*	None	None	-	1	2015
A	Burrowing owl *(Athene cunicularia)*	None	None	-	18	1989-2010
A	Coastal California gnatcatcher *(Polioptila californica californica)*	Threatened	None	-	32	1924-2008
A	Los Angeles pocket mouse *(Perognathus longimembris brevinasus)*	None	None	-	10	1912-2017
A	Smooth tarplant *(Centromadia pungens ssp. laevis)*	None	None	1B.1	9	1948
A	Alvin Meadow bedstraw *(Galium californicum ssp. primum)*	None	None	1B.2	1	1967
A	Southern grasshopper mouse *(Onychomys torridus ramona)*	None	None	-	2	1908-1923

Potential for occurrence	Common name (Scientific name)	Federal listing status	State listing status	CNPS list	Number of records within 10 miles	Year(s) sighted
A	Cooper's hawk *(Accipiter cooperii)*	None	None	-	2	2001-2016
A	San Diego ambrosia *(Ambrosia pumila)*	Endangered	None	1B.1	1	2006
A	Lawrence's goldfinch *(Spinus lawrencei)*	None	None	-	2	2001-2015
A	Parish's bush-mallow *(Malacothamnus parishii)*	None	None	1A	1	1895
A	Mesa horkelia *(Horkelia cuneata var. puberula)*	None	None	1B.1	4	1885-1908
A	Western mastiff bat *(Eumops perotis californicus)*	None	None	-	3	1933-1990
A	American badger *(Taxidea taxus)*	None	None	-	2	1908
A	Loggerhead shrike *(Lanius ludovicianus)*	None	None	-	1	1994
A	Pringle's monardella *(Monardella pringlei)*	None	None	1A	2	1979
A	Southern California rufous-crowned sparrow *(Aimophila ruficeps canescens)*	None	None	-	12	1997-2016
A	Coastal whiptail *(Aspidoscelis tigris stejnegeri)*	None	None	-	5	1993-2016
A	Santa Ana speckled dace *(Rhinichthys osculus ssp. 8)*	None	None	-	1	1996
A	Bristly sedge *(Carex comosa)*	None	None	2B.1	1	1884
A	Los Angeles sunflower *(Helianthus nuttallii ssp. parishii)*	None	None	1A	1	1937
A	Slender-horned spineflower *(Dodecahema leptoceras)*	Endangered	Endangered	1B.1	1	1884
A	Southern Riparian Scrub	None	None	-	1	1985
A	Peruvian dodder *(Cuscuta obtusiflora var. glandulosa)*	None	None	2B.2	1	1890
A	Quino checkerspot butterfly *(Euphydryas editha quino)*	Endangered	None	-	2	1914-1945
A	Coulter's goldfields *(Lasthenia glabrata ssp. coulteri)*	None	None	1B.1	1	1989
A	Merlin *(Falco columbarius)*	None	None	-	1	2014
A	California horned lark *(Eremophila alpestris actia)*	None	None	-	3	1992-2001
A	Gambel's water cress *(Nasturtium gambelii)*	Endangered	Threatened	1B.1	1	1935
A	San Bernardino aster *(Symphyotrichum defoliatum)*	None	None	1B.2	2	1917-1995
A	Riverside fairy shrimp *(Streptocephalus woottoni)*	Endangered	None	-	2	2009
A	Southern Willow Scrub	None	None	-	1	1980
A	San Diego desert woodrat *(Neotoma lepida intermedia)*	None	None	-	1	1999
A	Horn's milk-vetch *(Astragalus hornii var. hornii)*	None	None	1B.1	1	1900
A	Salt spring checkerbloom *(Sidalcea neomexicana)*	None	None	2B.2	1	1906
A	Parish's desert-thorn *(Lycium parishii)*	None	None	2B.3	1	1885
A	Many-stemmed dudleya *(Dudleya multicaulis)*	None	None	1B.2	1	2017
A	Bald eagle *(Haliaeetus leucocephalus)*	Delisted	Endangered	-	5	1975-1981
A	Riversidian Alluvial Fan Sage Scrub	None	None	-	2	1985

Potential for occurrence	Common name (Scientific name)	Federal listing status	State listing status	CNPS list	Number of records within 10 miles	Year(s) sighted
A	Yellow rail *(Coturnicops noveboracensis)*	None	None	-	1	1914
A	Long-spined spineflower *(Chorizanthe polygonoides var. longispina)*	None	None	1B.2	5	1992-2010
A	San Bernardino ringneck snake *(Diadophis punctatus modestus)*	None	None	-	1	2000
A	Southern rubber boa *(Charina umbratica)*	None	Threatened	-	2	1981-1990

CNPS List Definitions

List 1A: Plants presumed extinct in California

List 1B.1: Plants rare, threatened, or endangered in California and elsewhere; seriously threatened in California

List 1B.2: Plants rare, threatened, or endangered in California and elsewhere, fairly threatened in California

List 1B.3: Plants rare, threatened, or endangered in California and elsewhere, not very threatened in California

List 2.1: Plants rare, threatened, or endangered in California, but more common elsewhere; seriously threatened in California

List 2.2: Plants rare, threatened, or endangered in California, but more common elsewhere; fairly threatened in California

Potential for Occurrence Definitions

Absent [A] – Species distribution is restricted by substantive habitat requirements, which do not occur – or are negligible within the Project Site, and no further survey or study is obligatory to determine likely presence or absence of this species.

Habitat Present [HP] – Species distribution is restricted by substantive habitat requirements, which occur within the Project Site, and further survey or study may be necessary to determine likely presence or absence of species.

Present [P] – Species or species sign were observed within the Project's permanent disturbance footprint, or historically has been documented within the Project Site

Critical Habitat [CH] – The Project Site is located within a USFWS-designated critical habitat unit

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Appendix E Photographic Log

	**Photograph 1.** Facing West.
	**Photograph 2.** Facing Southwest.

	**Photograph 3.** Facing North.
	**Photograph 4.** Facing West.

Appendix F Project GIS Files (provided separately)