# BROWN AND STRAUSS INDUSTRIAL PROJECT July 2023

### **General Biological Resources Assessment**

Beaumont United States Geological Survey 7.5-MinuteTopographic Quadrangle Map

**Prepared By** 



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#### 1.0 INTRODUCTION AND EXECUTIVE SUMMARY

NOREAS Inc. (NOREAS) is pleased to provide this General Biological Resources Assessment for the Brown and Strauss Industrial Project (hereafter referred to as the "Project"). The Project Site is located within the City of Banning, California, north of West Lincoln Street, and west of South 8th Street (Assessor's Parcel Numbers [APNs] 540-180-020, 540-180-022 and 540-180-026) (Figures 1 and 2). This document details the methods and results of baseline biological resources surveys and habitat assessments for the Project Site. The intended use of this document is to disclose and evaluate the Project Site's biological conditions and determine the potential for occurrence of common and special-status species<sup>1</sup> - and their habitats. For the purposes of this document, the "study area" includes the Project Site's proposed ground disturbance footprint and a buffer (Figure 2). Additionally, the Project Site is located within the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP), within the Pass Area Plan and the Badlands Habitat Management Unit. The Project Site is not within the boundaries of any MSHCP established Subunit, Cell Group, Criteria Cell, Public/Quasi-Public Land, Linkages/Cores, Conserved Lands, or Regional Conservation Authority (RCA) Easements. According to the RCA MSHCP Information Map, Project limits lie partially - or completely, within predetermined survey areas for the Burrowing Owl (Athene cunicularia), and narrow endemic sensitive plant species (Marvin's onion [Allium marvinii] and Many-stemmed dudleya [Dudleya multicaulis]). With that said, a detailed MSHCP Consistency Analysis Report will be provided under a separate cover.

During pedestrian surveys in 2022 and 2023, it was determined that greater than 99% of the Project Site was comprised of developed, disturbed and/or non-native land cover types. To that end, the Project Site is not collocated with any United States Fish and Wildlife Service (USFWS) designated critical habitat, nor were any special status species detected during field surveys. No nesting birds, remnant raptor nests, or bat guano were detected within the Project Site either.

The Project Site's developed and disturbed land cover has substantially decreased its value as suitable breeding / nesting and foraging habitat for native species. Furthermore, the Project Site has limited, if any, value as a low-quality migration corridor or overland dispersal habitat for wildlife, because it is severely movement constrained by the surrounding residential, industrial, and commercial developments, and public infrastructure.

<sup>&</sup>lt;sup>1</sup> For the purposes of this analysis, "special-status species" refers to any species that has been afforded special protection by federal, state, or local resource agencies (e.g., U.S. Fish and Wildlife Service [USFWS], California Department of Fish and Wildlife [CDFW]) or resource conservation organizations (e.g., California Native Plant Society [CNPS], Western Riverside County Regional Conservation Authority [RCA], etc.). The term "special-status species" excludes those avian species solely identified under Section 10 of the Migratory Bird Treaty Act (MBTA) for federal protection. Nonetheless, MBTA Section 10 protected species are afforded avoidance and minimization protections per state and federal requirements.



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#### 2.0 PROJECT AND PROPERTY DESCRIPTION

For the purposes of this document, the "study area" includes the Project's proposed ground disturbance footprint (Project Site) and a buffer (Figure 2). The Project Site can be found on the Beaumont United States Geological Survey (USGS) 7.5-MinuteTopographic Quadrangle Map (USGS 1984). The Project consists of the construction of a 42,510 square foot (SF) warehouse, a 3,434 SF office, two 500 SF enclosed saw sheds attached to the warehouse, and an outdoor storage yard.





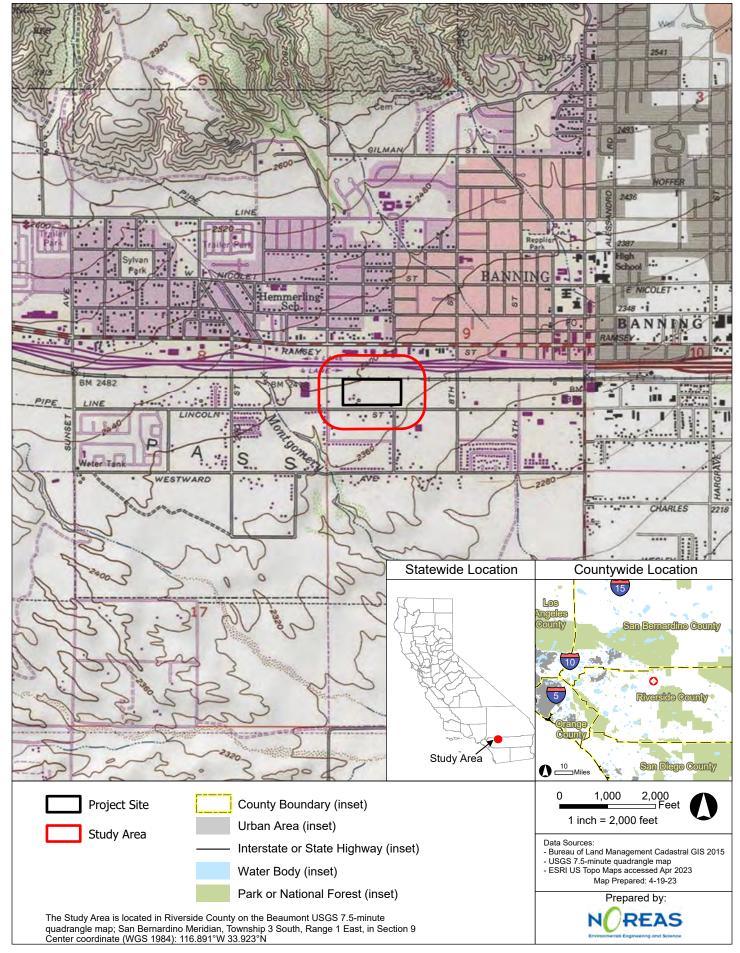


Figure 1. Regional Location

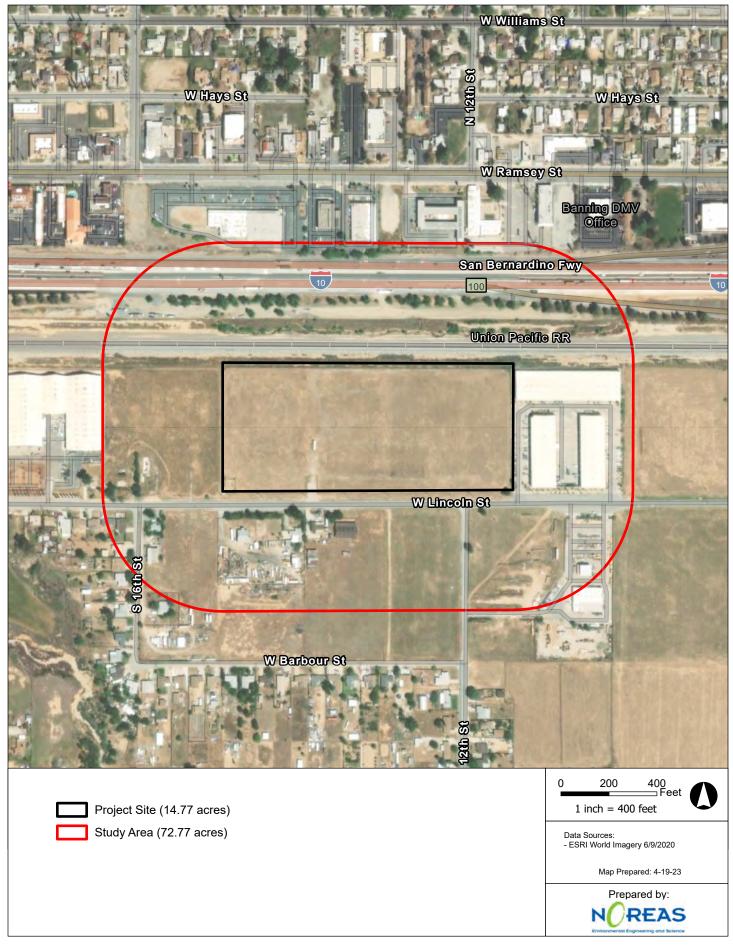


Figure 2. Site Vicinity

#### 3.0 FOCUSED STUDY/SPECIES OF CONCERN

Prior to beginning field surveys, resource specialists were consulted and available information from resource management plans, databases and relevant documents were reviewed to determine the locations and types of biological resources<sup>2</sup> that have the potential to exist within - and adjacent to, the study area. Biological resources were evaluated within several miles of the Project Site.

The materials reviewed included - but were not limited to, the following:

- ✓ US Fish and Wildlife Service (USFWS) Critical Habitat Mapper and File Data (USFWS 2023a);
- ✓ USFWS Riverside County Field Office Species List (USFWS 2023b);
- ✓ USFWS National Wetlands Inventory database (USFWS 2023c);
- ✓ Regional South Coast Missing Linkages Project Report (South Coast Wildlands 2008);
- ✓ California Natural Diversity Database maintained by the California Department of Fish and Wildlife (CDFW) (CDFW 2023);
- ✓ Natural Resource Conservation Service, Soil Survey Geographic Database (SSURGO) (USDA-NRCS 2023a);
- ✓ California Native Plant Society (CNPS) Electronic Inventory (CNPS 2023);
- ✓ MSHCP Transportation and Land Management Agency Geographic Information Services Database (GISD 2023);
- ✓ Regional Conservation Authority GIS Data Mapping Tool (RCA 2032, https://www.wrc-rca.org/rcamaps/);
- ✓ Western Riverside County Multiple Species Habitat Conservation Plan (Dudek 2003); and
- ✓ Aerial Photographs (Microsoft Corporation 2023).

<sup>&</sup>lt;sup>2</sup> For the purposes of this analysis, "biological resources" refers to the plants, wildlife, and habitats that occur, or have the potential to occur, within the study area.



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#### 4.0 METHODS

To support the analysis detailed within Section 3.0 above, pedestrian-based field surveys were performed to assess land cover, general and dominant vegetation communities, habitat types, and species present within communities. Community descriptions were based on observed dominant vegetation composition, and derived from the criteria and definitions of widely accepted vegetation classification systems (Holland 1986 and Sawyer et al. 2009).

Plants were identified to the lowest taxonomic level sufficient to determine whether the species observed 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 Baldwin et al. (2012). The presence of a wildlife species was based on direct observation and/or detection of wildlife sign (e.g., tracks, burrows, nests, scat, skeletal remains or vocalization). Field data compiled for wildlife species included scientific name, and common name. Wildlife of uncertain identity were documented and subsequently identified from specialized field guides and related literature (Burt and Grossenheider 1980; Halfpenny 2000; Sibley 2000; Elbroch 2003 and Stebbins 2003).

Additionally, the Project Site was assessed for its potential to support special-status species based on habitat<sup>3</sup> suitability comparisons with reported occupied habitats (Appendix A). The following potential for occurrence definitions were utilized within Appendix A:

- **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 necessary 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 study may be necessary to determine likely
  presence or absence of species.
- **Present [P]** Species or species sign were observed within the Project Site, or historically has been documented within Project limits.
- Critical Habitat [CH] The Project Site is located within a USFWS-designated critical habitat unit.

#### 4.1 Focused Surveys

As a result of literature reviews and general biological surveys, additional targeted census activities were performed for Burrowing Owl and MSHCP narrow endemic plant species (Marvin's onion [Allium marvinii] and Many-stemmed dudleya [Dudleya multicaulis]). Survey methods for Burrowing Owl were derived from generally accepted professional standards, including — but not limited to, the 1993 California Burrowing Owl Consortium Survey Protocol and Mitigation Guidelines (CBOC 1993), the 1995, 2012 California Department of Fish and Game Staff Reports on Burrowing Owl Mitigation (CDFG 1995 and 2012) and the 2006 Western Riverside County MSHCP Burrowing Owl Survey Instructions. Detailed BUOW survey methods, results, and assumptions are presented within Appendix E. Please note that Burrowing Owls are of limited distribution - or occur infrequently throughout California, and their status is therefore monitored by resource agencies<sup>4</sup>. The Burrowing Owl is not a Federal and/or State listed species.

<sup>&</sup>lt;sup>4</sup> This species could be important locally with deference to preparation of environmental documents relating to the California Environmental Quality Act (CEQA) - based on CEQA Guidelines §15125 (c), and/or §15380.



<sup>&</sup>lt;sup>3</sup> A "habitat" is defined as the place or type of locale where a plant or animal naturally or normally lives and grows.

Field surveys for MSHCP narrow endemic plant species were also performed. Plant survey methods were derived from the standardized guidelines issued by the U.S. Fish and Wildlife Service (USFWS 2000), California Department of Fish and Wildlife (CDFW 2009) and the California Native Plant Society (CNPS 2001). As previously stated, the field surveys were specifically conducted to determine the presence/absence of MSHCP narrow endemic plant species, but the surveys were floristic<sup>5</sup> in nature. Surveys were conducted during the appropriate blooming period for the MSHCP narrow endemic plant species. Detailed MSHCP narrow endemic plant species survey methods, results, and assumptions are presented within Appendix F.

#### 4.2 Evaluation of Wetlands and Waterways

Based on the aforementioned review of commercially available literature and habitat assessments, the presence and/or absence of surface water conveyance features, riparian plant communities, riverine land cover types and wetlands - including vernal pools, was evaluated within the Project Site. Potential features were identified based on professional judgement, aerial photographic signatures, and the presence of a well-defined ordinary high-water mark, bed, bank, channel, and/or the limits of riparian habitat in the field; with deference to vegetation, soils, and observed hydrology.

<sup>&</sup>lt;sup>5</sup> Focused on the distribution, number, types, and relationships of plant species in an area or areas.



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#### 5.0 GENERAL BIOLOGICAL SURVEY RESULTS

Weather conditions during the November 2022, March and April 2023 surveys included clear to cloudy skies, temperatures ranging from 60–77 °F, with winds fluctuating from 0 to 15 miles per hour (mph). Representative photos of the study area are provided in Appendix B.

#### 5.1 Vegetation Communities and Land Cover Types

Two land cover types were observed within the study area: Disturbed/Developed and Ruderal (Figure 3). These types are described below.

#### **Developed/Disturbed**

Disturbed/Developed lands within the study area include locales that have been developed, paved, cleared, graded, or otherwise altered by anthropogenic activities (i.e., industrial warehouses, access roads, concrete pads, ornamental landscaping, industrial facilities, storage yards, commercial enterprises, etc.). Common non-native plants species detected within this type included ripgut brome (*Bromus diandrus*), Sahara mustard (*Brassica Tournefortii*) and Schismus (*Schismus barbatus*).

#### Ruderal

The ruderal vegetation community includes locales that have been subject to recent grading, clearing, or other physical human modification of soils and/or vegetation. These lands also include areas with exposed soils with minimal vegetation, and moderate cover by various non-native annual grasses, and weeds (adapted for growth on substrates subject to disturbance). Common non-native plants species detected within this type included Maltese star-thistle (*Centaurea melitensis*), stinknet (*Oncosiphon piluliferum*), and cheeseweed (*Malva neglecta*). The native fiddleneck (*Amsinckia Intermedia*) was also observed sporadically throughout this vegetation community.

#### 5.2 Wildlife

Wildlife species observed within the study area consisted of commonly-occurring species - including, but not limited to, house finch (*Haemorhous mexicanus*), western meadowlark (*Sturnella neglecta*) common raven (*Corvus corax*), and western cottontail (*Sylvilagus audubonii*). Wildlife detected during the surveys are identified in Appendix D.

#### 5.3 Special-Status Plants

No Federal or State listed plant species were observed within the study area during the 2022 and 2023 field surveys. However, several have been documented within 10 miles (Figure 4). The study area includes no USFWS-designated critical habitat for plants (Figure 5). To that end, the results of the MSHCP narrow endemic plant species surveys (Appendix F), imply that there are no special status plants present within the Project Site. Special-status species known to occur within 10 miles of the Project, and their potential for occurrence, are detailed within Appendix A. Plant species observed during the field surveys are listed in Appendix C.

#### 5.4 Special-Status Wildlife

No special-status wildlife species were observed within the study area during the 2022 and 2023 field survey events. The study area includes no USFWS-designated critical habitat for wildlife (Figure 5). Special-status species known to occur within 10 miles of the Project Site and their potential for occurrence are detailed within Appendix A and Figure 4. No Burrowing Owl were observed within the Project Site. The Burrowing Owl is not a Federal and/or State listed species, but they are of limited distribution and/or occur infrequently throughout California. Wildlife species detected during the surveys are listed in Appendix D.



#### 5.5 Wetlands and Waterways

The literature review and field survey data suggest that it is appropriate to characterize the Project Site as an upland, since no riparian or riverine habitats - or obvious indicators of well-defined water conveyance bed, bank or channel were detected. The topography suggests that the Project Site lacks waters which are typically subject to the Clean Water Act, or Fish and Game Code Section 1600 jurisdiction. Furthermore, the National Wetland Inventory has no records of special aquatic resources within the Project Site (Figure 6).





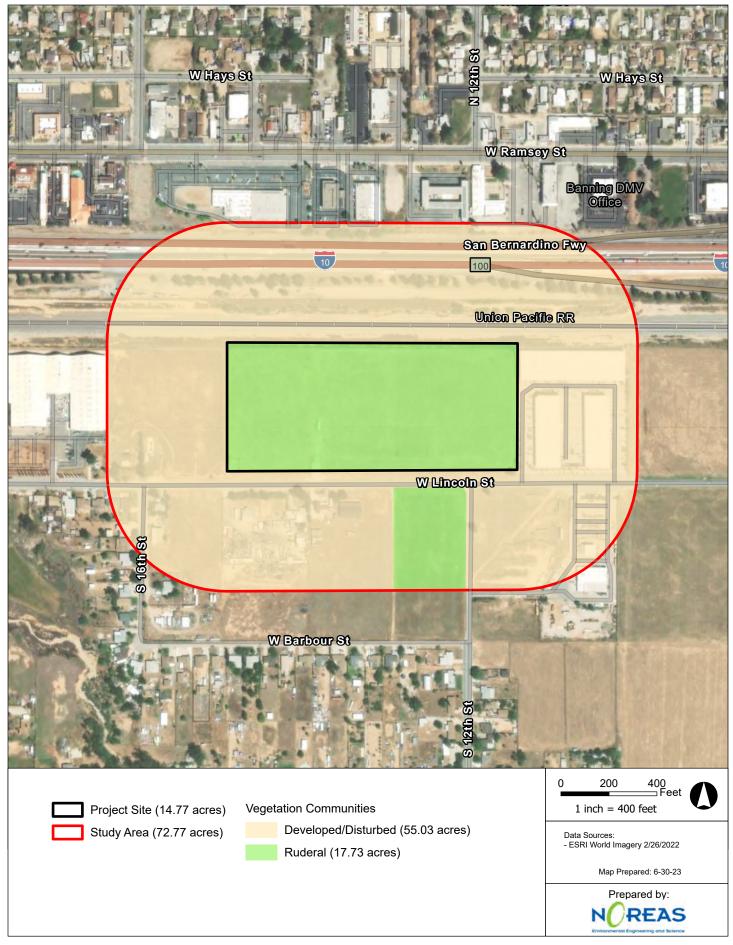


Figure 3. Vegetation Communities and Land Cover Types

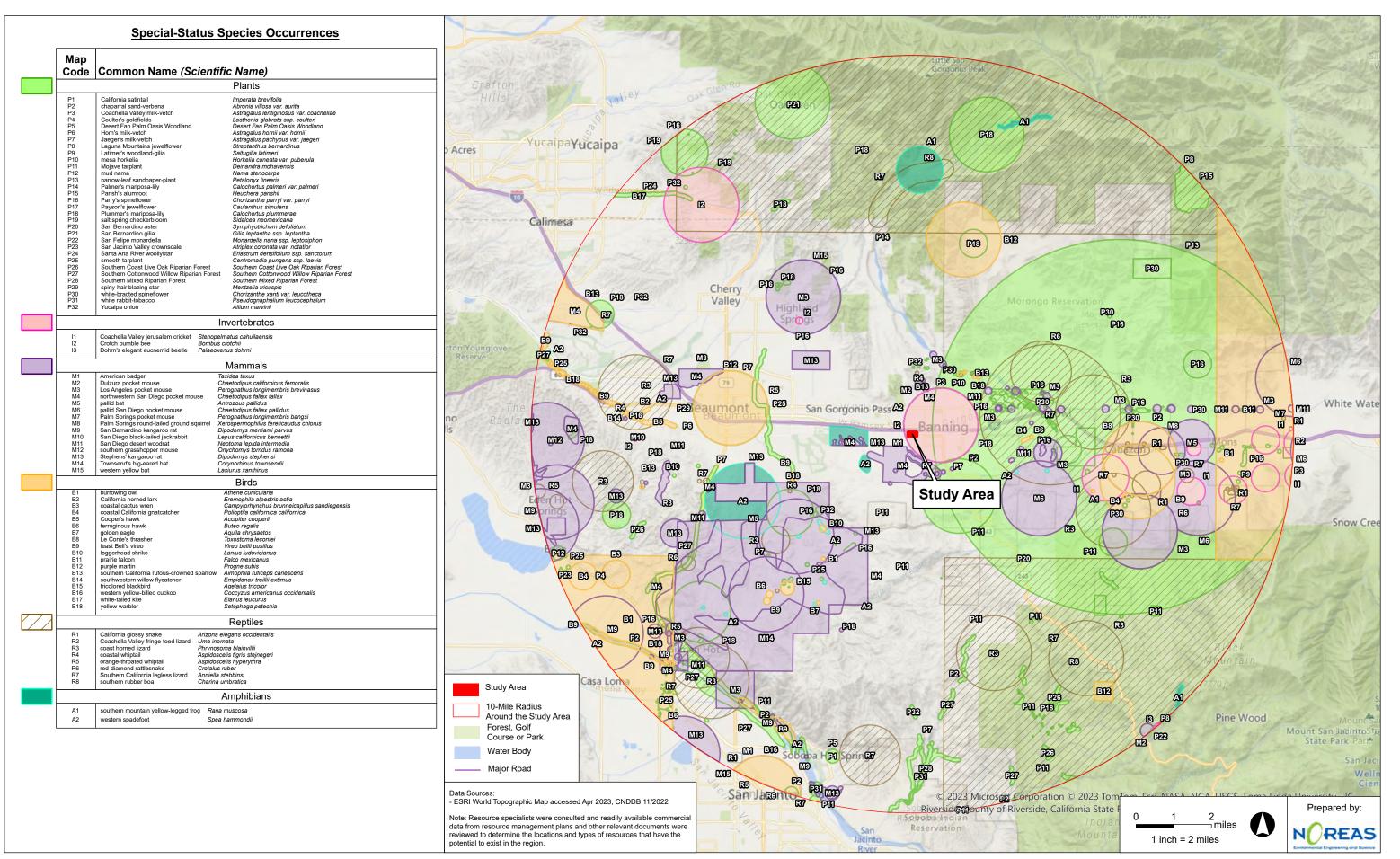


Figure 4. Literature Review

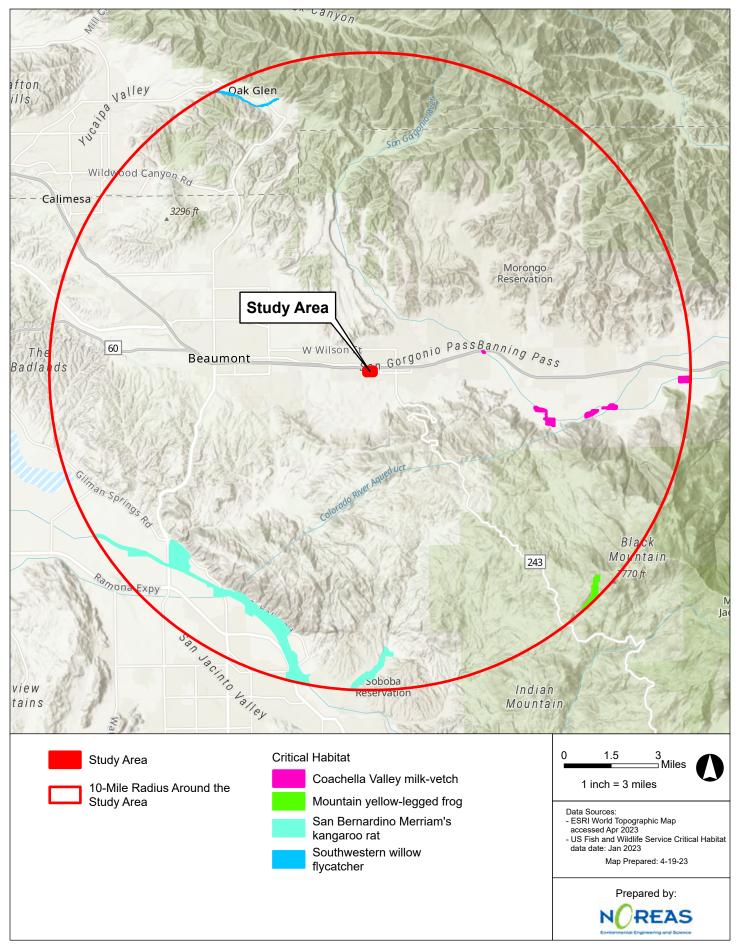


Figure 5. Critical Habitat

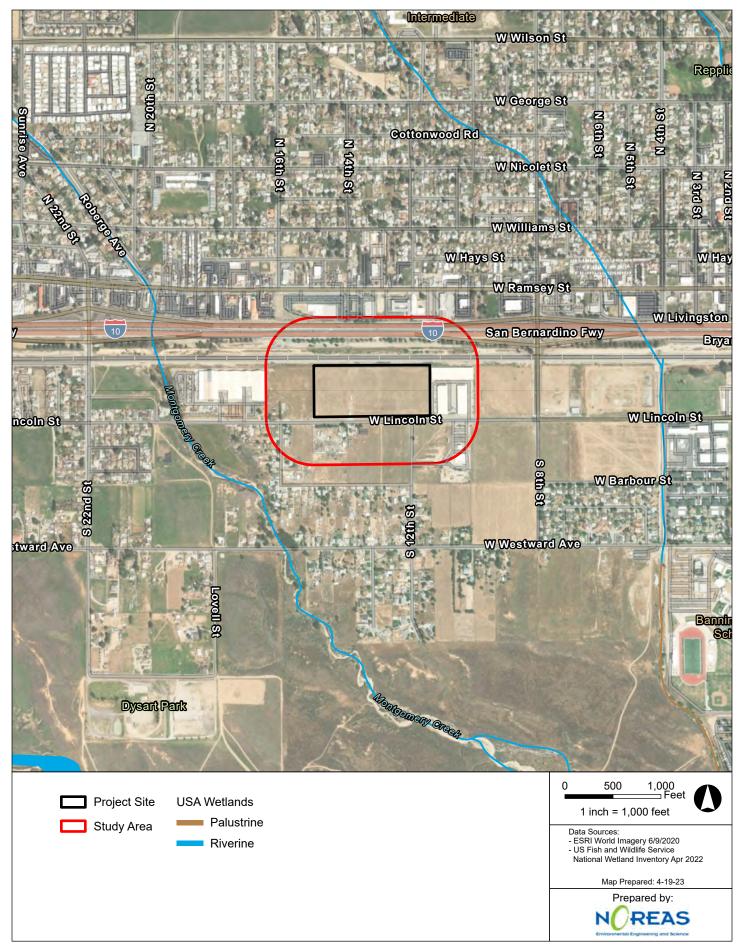


Figure 6. National Wetland Inventory

#### 6.0 CONCLUSION AND RECOMMENDATIONS

In 2022 and 2023, it was determined that greater than 99% of the Project Site was comprised of developed, disturbed and/or non-native habitats. Additionally, the Project Site is not collocated with any USFWS designated critical habitat, nor were any special status species detected during the 2022 or 2023 field surveys. No nesting birds, remnant raptor nests, or bat guano were detected within the Project Site either. The Project Site's developed and disturbed land cover has substantially decreased its value as suitable breeding / nesting, and foraging habitat for native species as well. Furthermore, the Project Site has limited – if any, value as a low-quality migration corridor or overland dispersal habitat for wildlife. This is because the Project Site is severely movement constrained by the surrounding residential, industrial and commercial developments, and public infrastructure.

The following are recommended for implementation during the Project:

- Training of all field staff on applicable, relevant and appropriate local, state, and federal regulatory agency requirements, environmental laws, and regulations associated with working within and near special status species habitats, and biological resources.
- No personnel working within Project limits will "take" or destroy plants, animals, or active nests (or eggs) of birds that are protected under the Federal or State Endangered Species Acts, California Fish and Game Code, and Migratory Bird Treaty Act (MBTA).
- In order to comply with Section 10 of the Migratory Bird Treaty Act and relevant sections of the California Fish and Game Code and the MSHCP, any necessary vegetation clearing should take place outside of the typical avian nesting season (e.g., March 15<sup>th</sup> until September 1st).
  - o If work needs to take place between March 15th and September 1st, a pre-activity clearance survey for nesting birds should be completed prior to the onset of ground disturbance.
  - An activity exclusion buffer zone around occupied nests should be maintained during physical ground disturbing undertakings. Once nesting has ended, the buffer may be removed.
- No more than 72 hours prior to initiation of ground-disturbing activities, a pre-construction clearance survey should be completed by a professional biologist. The survey will identify (if any) special-status species (e.g., Burrowing Owl) are present within locales proposed for disturbance within the Project Site. In the event no special status species are identified within the limits of disturbance, no further action is required.
  - o If special status species are determined to occupy the Project Site or within an area proposed for disturbance, no Project activity shall take place within a safe distance from the species, the location will be flagged for avoidance until the resource is no longer present, delineated on maps, photographed, and reported to the appropriate resource agency to determine how to proceed.

With the implementation of the measures recommended herein, there would be no presumption that the Project would result in the loss of individual species, nor that it would adversely affect local or regional populations of them.



#### 7.0 CERTIFICATION

I hereby certify that the statements furnished above and in the attached figures present the data and information required for this resource assessment, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief. Field work conducted for this investigation was performed by me and under my direct supervision. I certify that I have not signed a nondisclosure or consultant confidentiality agreement with Brown Strauss, Inc. representatives, and that I have no financial interest in the Project. The services performed and documented in this report have been conducted in a manner consistent with the level of care and skill ordinarily exercised by other professional consultants under similar circumstances. No other representations are either expressed or implied and no warranty or guarantee is included or intended in this report.

DATE: July 07, 2023

SIGNED:

Lincoln Hulse

The following NOREAS employees performed the field work and/or participated in preparation of this report: Lenny Malo MS, Lincoln Hulse BS, Vir McCoy BS, Jill Coumoutso BS, Coral Fenech BS and Jonathan Malo.



#### **REFERENCES**

- Baldwin, J., D. Goldman, D. Keil, R. Patterson, and T. Rosatti. 2012. The Jepson Manual: Higher Plants of California. Berkeley: University of California Press.
- Burt, W. H. and R. P. Grossenheider. 1980. A Field Guide to Mammals: North America; North of Mexico. New York, NY: Houghton Mifflin Company.
- CDFW (California Department of Fish and Wildlife). 2023. RareFind. California Department of Fish and Game, Natural Diversity Database (CNDDB). Sacramento, CA: California Department of Fish and Game, Biogeographic Data Branch.
- CNPS (California Native Plant Society). 2023. CNPS Electronic Inventory of Rare and Endangered Plants: CNPS.
- Dudek. 2003. Final Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). Riverside, CA: County of Riverside.
- Geographic Information Services Database (GISD). 2023. Transportation and Land Management Agency Geographic Information Services Database.
- Elbroch, M. 2003. Mammal Tracks & Sign, A Guide to North American Species. Mechanicsburg, PA: Stackpole Books.
- Halfpenny, J.C. 2000. Scats and Tracks of the Desert Southwest, A Field Guide to the Signs of 70 Wildlife Species. Helena, MT: Falcon Publishing, Inc.
- Holland, R.F. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California (California Department of Fish and Game, The Resources Agency, ed), p. 156. Sacramento, CA.
- Microsoft Corporation. 2023. Bing Maps Aerial Imagery. Redmond, WA
- RCA. 2023. Regional Conservation Authority GIS Data Mapping Tool (RCA 2023, https://www.wrc-rca.org/rcamaps/).
- Sawyer, J., T. Keeler-Wolf, and J. Evens. 2009. A Manual of California Vegetation. Sacramento, CA: California Native Plant Society.
- Sibley, D.A. 2000. National Audubon Society. The Sibley Guide to Birds. New York, NY: Alfred A. Knopf, Inc.
- Stebbins, R.C. 2003. A Field Guide to Western Reptiles and Amphibians. New York, NY: Houghton Mifflin.
- USGS (United States Geological Service). 1984 7.5-Minute Quadrangle Beaumont, California.
- USFWS (United States Fish and Wildlife Service). 2023a. Critical Habitat Portal. USFWS
- USFWS (United States Fish and Wildlife Service). 2023b. Los Angeles County Fish and Wildlife Office. Endangered and Threatened Species List. In: U.S. Department of the Interior, editor. San Bernardino, CA: USFWS.



# APPENDIX A SPECIAL-STATUS SPECIES POTENTIAL FOR OCCURRENCE 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
А	Chaparral sand-verbena (Abronia villosa var. aurita)	None	None	1B.1	8	1944-2014
А	Coachella Valley milk-vetch (Astragalus lentiginosus					
	var. coachellae)	Endangered	None	1B.2	2	1904-1987
Α	Jaeger's milk-vetch (Astragalus pachypus var. jaegeri)	None	None	1B.1	6	1897-1990
Α	Mesa horkelia (Horkelia cuneata var. puberula)	None	None	1B.1	1	1921
Α	Plummer's mariposa-lily (Calochortus plummerae)	None	None	4.2	20	1982-2010
Α	Western spadefoot (Spea hammondii)	None	None	-	19	1923-2017
Α	American badger (Taxidea taxus)	None	None	-	2	1893-1908
Α	Los Angeles pocket mouse ( <i>Perognathus longimembris brevinasus</i> )	None	None	-	28	1908-2017
А	Crotch bumble bee (Bombus crotchii)	None	None	-	4	1952-2020
А	Northwestern San Diego pocket mouse (Chaetodipus fallax fallax)	None	None	_	15	1993-2016
А	Narrow-leaf sandpaper-plant (Petalonyx linearis)	None	None	2B.3	1	1879-1879
Α	Payson's jewelflower (Caulanthus simulans)	None	None	4.2	1	1968-1968
Α	Southern California legless lizard (Anniella stebbinsi)	None	None	-	13	1893-2018
А	Stephens' kangaroo rat (Dipodomys stephensi)	Threatened	Threatened	-	16	1963-2018
А	Dulzura pocket mouse (Chaetodipus californicus femoralis)	None	None	-	2	1993-1995
А	Southern California rufous-crowned sparrow (Aimophila ruficeps canescens)	None	None	-	7	2002-2017
А	Coastal whiptail (Aspidoscelis tigris stejnegeri)	None	None	-	4	2004-2016
Α	Yucaipa onion / Marvin's onion (Allium marvinii)	None	None	1B.2	7	2005-2020
А	White-bracted spineflower (Chorizanthe xanti var. leucotheca)	None	None	1B.2	15	1994-2018
А	Parry's spineflower (Chorizanthe parryi var. parryi)	None	None	1B.1	23	1969-2018
Α	Mojave tarplant (Deinandra mohavensis)	None	Endangered	1B.3	18	1994-2019
Α	San Diego desert woodrat (Neotoma lepida intermedia)	None	None	-	12	1994-2017
Α	Yellow warbler (Setophaga petechia)	None	None	-	4	2014-2016
А	Pallid San Diego pocket mouse (Chaetodipus fallax pallidus)	None	None	-	6	1938-2000
А	Coastal California gnatcatcher (Polioptila californica californica)	Threatened	None	-	5	1999-2016
Α	Red-diamond rattlesnake (Crotalus ruber)	None	None	-	5	1964-XXXX
Α	Pallid bat (Antrozous pallidus)	None	None	-	2	1964-2011



Potential for occurrence	Common name (Scientific name)	Federal listing status	State listing status	CNPS list	Number of records within 10 miles	Year(s) sighted
Α	Ferruginous hawk (Buteo regalis)	None	None	-	3	1991-2016
Α	Smooth tarplant (Centromadia pungens ssp. laevis)	None	None	1B.1	10	1999
Α	Least Bell's vireo (Vireo bellii pusillus)	Endangered	Endangered	-	7	1908-2016
Α	Loggerhead shrike (Lanius ludovicianus)	None	None	-	2	2003-2006
Α	Southern rubber boa (Charina umbratica)	None	Threatened	-	16	1967-2020
Α	Western yellow bat (Lasiurus xanthinus)	None	None	-	2	1988-1989
А	Coast horned lizard (Phrynosoma blainvillii)	None	None	-	14	1908-2006
А	Horn's milk-vetch (Astragalus hornii var. hornii)	None	None	1B.1	1	1889-1889
А	Spiny-hair blazing star (Mentzelia tricuspis)	None	None	2B.1	1	1886-1886
А	Orange-throated whiptail (Aspidoscelis hyperythra)	None	None	-	6	1912-1994
Α	Purple martin (Progne subis)	None	None	-	3	1897-1984
HP	Burrowing owl (Athene cunicularia)	None	None	-	5	2005-2015
Α	San Bernardino aster (Symphyotrichum defoliatum)	None	None	1B.2	1	1999
А	Coachella Valley jerusalem cricket (Stenopelmatus cahuilaensis)	None	None	-	4	2009
А	Townsend's big-eared bat (Corynorhinus townsendii)	None	None	-	1	1997
Α	Tricolored blackbird (Agelaius tricolor)	None	Threatened	-	1	2015
Α	Palm Springs round-tailed ground squirrel (Xerospermophilus tereticaudus chlorus)	None	None	-	1	1938
А	Le Conte's thrasher (Toxostoma lecontei)	None	None	-	1	1916
Α	Golden eagle (Aquila chrysaetos)	None	None	-	1	2008
Α	Southern mountain yellow-legged frog (Rana muscosa)	Endangered	Endangered	-	4	1908-2012
Α	Palmer's mariposa-lily (Calochortus palmeri var. palmeri)	None	None	1B.2	1	2016
Α	Southern Cottonwood Willow Riparian Forest (Southern Cottonwood Willow Riparian Forest)	None	None	-	10	1980-1991
Α	California glossy snake (Arizona elegans occidentalis)	None	None	-	9	1893-2015
Α	Cooper's hawk (Accipiter cooperii)	None	None	-	1	2004
А	Southern Coast Live Oak Riparian Forest (Southern Coast Live Oak Riparian Forest)	None	None	-	8	1980
Α	California horned lark (Eremophila alpestris actia)	None	None	-	1	2003
А	San Diego black-tailed jackrabbit (Lepus californicus bennettii)	None	None	-	3	2003-2004
А	Southwestern willow flycatcher (Empidonax traillii extimus)	Endangered	Endangered	-	2	2004



Potential for occurrence	Common name (Scientific name)	Federal listing status	State listing status	CNPS list	Number of records within 10 miles	Year(s) sighted
А	Prairie falcon (Falco mexicanus)	None	None	-	3	1977-1983
А	Southern Mixed Riparian Forest (Southern Mixed Riparian Forest)	None	None	-	1	1980
А	White rabbit-tobacco (Pseudognaphalium leucocephalum)	None	None	2B.2	2	2003-2004
Α	Coastal cactus wren (Campylorhynchus brunneicapillus sandiegensis)	None	None	-	1	2001
Α	San Bernardino kangaroo rat (Dipodomys merriami parvus)	Endangered	Candidate Endangered	-	8	1937-2015
Α	San Bernardino gilia (Gilia leptantha ssp. leptantha)	None	None	1B.3	1	1931
А	Santa Ana River woollystar (Eriastrum densifolium ssp. sanctorum)	Endangered	Endangered	1B.1	1	1923
А	California satintail (Imperata brevifolia)	None	None	2B.1	1	1988
А	Desert Fan Palm Oasis Woodland (Desert Fan Palm Oasis Woodland)	None	None	_	1	1977
А	Latimer's woodland-gilia (Saltugilia latimeri)	None	None	1B.2	1	2015
Α	Southern grasshopper mouse (Onychomys torridus ramona)	None	None	-	1	1938
А	Salt spring checkerbloom (Sidalcea neomexicana)	None	None	2B.2	1	1891
А	Coulter's goldfields (Lasthenia glabrata ssp. coulteri)	None	None	1B.1	2	2008-2010
А	Laguna Mountains jewelflower (Streptanthus bernardinus)	None	None	4.3	2	1982
А	Parish's alumroot (Heuchera parishii)	None	None	1B.3	1	1988
Α	Western yellow-billed cuckoo (Coccyzus americanus occidentalis)	Threatened	Endangered	-	1	1893
А	White-tailed kite (Elanus leucurus)	None	None	-	1	2006
А	Mud nama (Nama stenocarpa)	None	None	2B.2	1	2010
А	Coachella Valley fringe-toed lizard (Uma inornata)	Threatened	Endangered		1	1975
Α	San Jacinto Valley crownscale (Atriplex coronata var. notatior)	Endangered	None	1B.1	1	2004
Α	Palm Springs pocket mouse (Perognathus longimembris bangsi)	None	None	-	1	2017
Α	Dohrn's elegant eucnemid beetle (Palaeoxenus dohrni)	None	None	-	1	2017
А	San Felipe monardella (Monardella nana ssp. leptosiphon)	None	None	1B.2	1	1969



#### **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 Site, or historically has been documented within Project limits

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



# APPENDIX B PHOTOGRAPH LOG





**Photograph 1.** Facing Southwest.



Photograph 2. Facing East.





Photograph 3. Facing North.



Photograph 4. Facing West.



### APPENDIX C PLANT SPECIES OBSERVED WITHIN THE STUDY AREA



Scientific Name	Common Name						
-	eae (Aster family)						
Ambrosia dumosa	Western ragweed						
Baccharis neglecta	Roosevelt weed						
Baccharis sarothroides	Desert broom						
Gnaphalium spp.*	Cudweed						
Lactuca serriola *	Prickly lettuce						
Lasthenia gracilis*	Needle goldfields						
Matricaria discoidea*	Pineapple weed						
Oncosiphon piluliferum*	Stinknet						
Symphyotrichum chilense	California aster						
Anacardiac	eae (Cashew family)						
Schinus molle*	Peruvian pepper						
Arecace	ae (Palm family)						
Syagrus romanzoffiana	Queen palm						
Washingtonia Robusta*	Mexican fan palm						
Boraginaceae	(Forget-me-not family)						
Amsinckia menziesii	Fiddleneck						
Brassicace	ae (Mustard family)						
Brassica nigra*	Black mustard						
Brassica Tournefortii*	Sahara mustard						
Pectocarya heterocarpa	Chuckwalla combseed						
Plagiobothrys nothofulvus	Rusty popocornflower						
Sisymbrium irio *	London rocket						
Cupressace	eae (Cypress family)						
Juniperus horizontalis*	Creeping juniper						
Euphorbiad	ceae (Spurge family)						
Croton setigerus*	Dove weed						
Geraniacea	re (Geranium family)						
Erodium cicutarium*	Redstem stork's bill						
Fabace	eae (Pea family)						
Lupinus bicolor	Miniature lupine						
Medicago polymorpha *	Burr medic						
Parkinsonia florida	Blue palo verde						
	ae (Mallow family)						
Malva parviflora*	Cheeseweed						
	ae (Pine family)						
Pinus sp.*	Pine						
Polemoniaceae (Phlox family)							



Scientific Name	Common Name				
Gilia spp.	Gilia species				
Poaceae (Grass family)					
Avena fatua *	Wild oat				
Bromus diandrus *	Ripgut brome				
Bromus madritensis subsp. Rubens *	Red brome				
Festuca arundinacea *	Tall fescue				
Festuca myuros *	Annual fescue				
Hordeum murinum *	Wall barley				
Poa bulbosa *	Bulbous bluegrass				

Nomenclature follows the Jepson Manual, Second Edition (Baldwin et al 2011).



<sup>\*</sup> = naturalized, non- native plant species.

## APPENDIX D WILDLIFE SPECIES OBSERVED WITHIN THE STUDY AREA



Scientific name	Common name					
Birds						
Agelaius phoeniceus	Red-winged blackbird					
Accipiter cooperii	Cooper's hawk					
Buteo jamaicensis	Red-Tailed hawk					
Cathartes aura	Turkey vulture					
Corvus corax	Common Raven					
Calypte anna	Anna's hummingbird					
Corvus brachyrhynchos	American crow					
Sturnus vulgaris	European Starling					
Carpodacus mexicanus	House Finch					
Charadrius vociferus	Killdeer					
Hirundo rustica	Barn swallow					
Sturnella neglecta	Western Meadowlark					
Passerculus sandwichensis	Savanna sparrow					
Petrochelidon pyrrhonota	Cliff swallow					
Columba livia	Rock Pigeon					
Euphagus cyanocephalus	Brewer's Blackbird					
Zonotrichia leucophrys	White-crowned sparrow					
Falco sparverius	American kestrel					
Mimus polyglottos	Northern mockingbird					
Sayornis saya	Say's phoebe					
Melospiza melodia	Song sparrow					
Passer domesticus	House Sparrow					
Sayornis nigricans	Black phoebe					
Spinus psaltria	Lesser goldfinch					
Sturnella neglecta	Western meadowlark					
Tyrannus vociferans	Cassin's kingbird					
Quiscalus quiscula	Common Grackle					
Zenaida macroura	Mourning Dove					
Mar	nmals					
Otospermophilus beecheyi	California ground squirrel					
Sylvilagus audubonii	Desert cottontail					



### APPENDIX E BURROWING OWL SURVEY REPORT





# BROWN AND STRAUSS INDUSTRIAL PROJECT July 2023

### **BURROWING OWL SURVEY**

Beaumont United States Geological Survey 7.5-MinuteTopographic Quadrangle Map

Prepared By

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#### 1.0 SUMMARY / INTRODUCTION

Brown Strauss, Inc. (Brown and Strauss) is proposing to develop the Brown and Strauss Industrial Project (hereafter referred to as the Project). The Project Site is located within the City of Banning, Riverside County, California (Figures 1 and 2), north of West Lincoln Street and west of South 8<sup>th</sup> Street (Assessor's Parcel Numbers [APNs] 540-180-020, 540-180-022 and 540-180-026). This report provides the methods, assumptions, and results of focused surveys for Burrowing Owl (*Athene cunicularia*). The Project Site can be found on the Beaumont United States Geological Survey (USGS) 7.5-MinuteTopographic Quadrangle Map (USGS 1984).

The Project occurs at an approximate elevation of 2,400 ft. above mean sea level (msl). Land use in the vicinity of the Project includes commercial, agriculture, residential and industrial endeavors. For the purposes of this report, the "study area" includes the Project's proposed ground disturbance footprint (Project Site), plus a 500-foot buffer where practical (Figures 1 and 2). The Project Site is located within the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP), Pass Area Plan. According to the Regional Conservation Authority (RCA) MSHCP Information Map, Project limits are within a Burrowing Owl study area. Agricultural and other commercial development activities were historically operated within Project limits. There is also evidence of recent disking throughout the Project Site.

No Burrowing Owls were detected nesting, foraging, or dispersing within the study area during the 2022 and 2023 surveys. Numerous – albeit low quality potential burrows, and burrow complexes were detected (Figure 3). The burrows observed lacked evidence of owl sign (i.e., tracks, molted feathers, cast pellets, prey remains, egg shell fragments, owl white wash, and nest burrow decoration materials). With that said, the lack of Burrowing Owls within the study area is likely a result of the depauperate landscape, and the presence of owl predators. Although the Project has potential to impact lands that could be utilized by Burrowing Owls as habitat, surveys for the species are negative. Therefore, there is no presumption that the Project would result in the loss of individual Burrowing Owls, or that it would adversely affect local - or regional populations, of them.



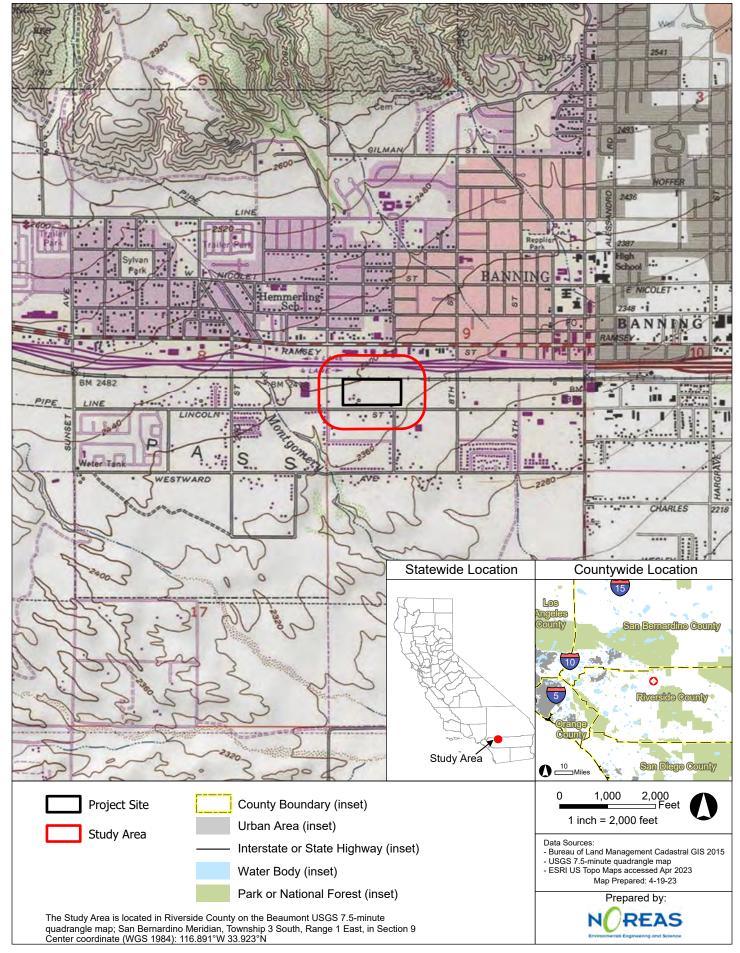


Figure 1. Regional Location

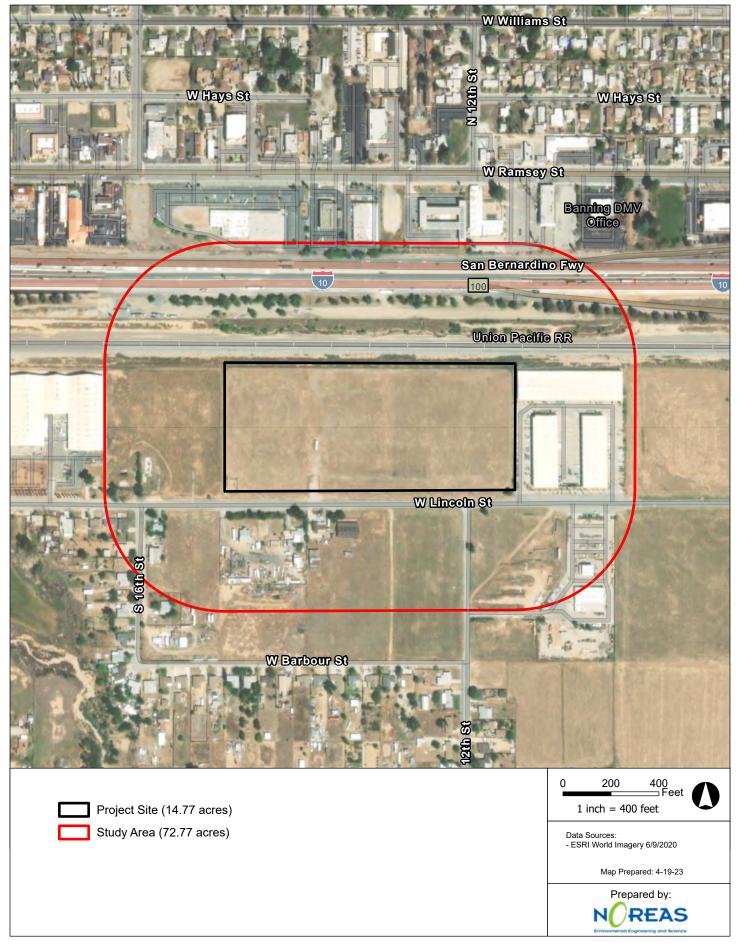


Figure 2. Site Vicinity

### 2.0 BURROWING OWL BACKGROUND

The Burrowing Owl has been designated by the California Department of Fish and Wildlife (CDFW) as a species of special concern. "State Species of Special Concern" status applies to animals not listed for protection under the federal Endangered Species Act or the California Endangered Species Act. The designation denotes that a species is declining at a rate that could result in State listing or that a species has historically occurred in low numbers and known threats to their persistence currently exist. The designation is intended to result in "special consideration" for these animals during the environmental review and discretionary permitting processes. In addition, the designation is also intended to focus research and management attention on poorly-known, potentially at-risk species by stimulating the collection of additional information on their biology, distribution, and status.

Burrowing Owls prefer open, dry annual or perennial grasslands, agricultural and rangelands, deserts, and scrublands characterized by low-growing vegetation. Burrowing Owls also prefer areas inhabited by small mammals as they predominately depend on mammal burrows (particularly ground squirrels) for subterranean nesting. Owls can be found at elevations ranging from 200 ft. below sea level to 9,000 ft. above (CDFG 1995). Burrowing Owls commonly perch on fence posts or on mounds outside their burrows. Northern populations of Burrowing Owls are usually migratory, while more southern populations may move short distances or not at all (Haug et al. 1993, Botelho 1996). Little is known about the winter ranges of migratory populations, although migratory Burrowing Owls are believed to mix with resident populations in California during the winter months (Coulombe 1971, Haug et al. 1993).

Burrowing Owls tend to be resident where food sources are stable and available year-round (Rosenberg et al. 1998). Typically, they disperse or migrate south in areas when food becomes seasonally scarce. Burrowing Owls tend to be opportunistic feeders. Large arthropods, mainly beetles and grasshoppers, comprise a substantial portion of their diet (Rosenberg et al. 1998). Small mammals, especially mice, rats, gophers, and ground squirrels, are also important food items. Other prey animals include reptiles and amphibians, scorpions, young cottontail rabbits, bats, and birds such as sparrows and Horned Larks. Consumption of insects increases during the breeding season. Burrowing Owls hover while hunting; after catching their prey they return to perches on fence posts or the ground. Burrowing Owls are primarily active at dusk and dawn, but, if necessary, will hunt at any time of day (CBOC 1993, CDFG 1995; Rosenberg et al. 1998).

The breeding season for Burrowing Owls is March to late August; the season tends to last later in the northern part of the range (CBOC 1993, CDFG 1995, Klute et al. 2003). Clutch size (number of birds hatched at the same time) ranges from 1 to 12 and averages about 7 (Ehrlich 1988). The incubation period is 28–30 days (Ehrlich 1988). The female performs all the incubation and brooding (sitting on eggs to hatch them by the warmth of the body) and is believed to remain continually in the burrow while the male does all the hunting (Rosenberg et al. 1998). The young fledge (take their first flight out of the nest) at 44 days but remain near the burrow and join the adults in foraging flights at dusk (Ehrlich 1988). The maximum life span recorded for a banded bird in the wild is approximately 8.5 years (Rosenberg et al. 1998).

In resident populations, nest site fidelity is common, with many adults nesting each year in their previous year's burrow; young from the previous year often establish nest sites near (<900 ft) their natal sites (Trulio 1997,Rosenberg et al. 1998). Burrowing Owls in migratory populations also often nest in the same burrow, particularly if the previous year's breeding was successful (Belthoff and King 1997). Other birds in the same population may move to burrows near their previous year's burrow. The species is



threatened primarily by loss, degradation, and fragmentation of habitat, although they do readily inhabit anthropogenic landscapes such as agricultural fields, golf courses, and airport grasslands (Korfanta et al. 2005).





#### 3.0 METHODS

Prior to beginning field surveys, resource specialists were consulted and available information from resource management plans and relevant documents were reviewed to determine the locations and types of resources that have the potential to exist within and adjacent to the study area. Resources were evaluated within several miles of the Project. The materials reviewed included, but were not limited to, the following:

- U.S. Fish and Wildlife Service (USFWS) Critical Habitat Mapper and File Data (USFWS 2023a);
- USFWS Carlsbad Field Office Species List for Riverside County (USFWS 2023b);
- California Natural Diversity Database maintained by the CDFW (CDFW 2023);
- 1993 California Burrowing Owl Consortium (CBOC)Burrowing Owl Survey Protocol and Mitigation Guidelines;
- 2021 California Department of Fish and Game (CDFG) Staff Report on Burrowing Owl Mitigation;
- Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP 2003); and
- Aerial Photographs (Microsoft Corporation 2023).

A Burrowing Owl habitat suitability assessment and burrow survey was conducted on November 30, 2022 in accordance with the *March 29, 2006 Western Riverside County MSHCP Burrowing Owl Survey Instructions*. Natural and non-natural substrates were examined for potential burrow sites and complexes. Potential burrows encountered were examined for shape, size, molted feathers, whitewash, cast pellets and/or prey remains. Disturbance characteristics and other animal sign encountered within the study area were documented, to the greatest extent practical.

Since suitable habitat was observed for Burrowing Owls within the study area, four (4) additional surveys were performed (details are presented within *TABLE NO. 1 - SUMMARY OF SURVEY CONDITIONS FOR SURVEYS*). A hand-held, global positioning system (GPS) unit with sub meter accuracy was used to survey predetermined transects that were prepared within a Geographic Information System prior to the start of owl surveys (Figure 3). Survey transects were spaced at appropriate intervals to allow for complete visual coverage of the Project Site, and study area. Where necessary, transect spacing was reduced or expanded in the field - to account for differences in terrain, vegetation density, visibility, health and safety, and access (i.e., private property) considerations. Where access was limited, observations were made from the nearest appropriate vantage points by means of public rights-of-way with the use of binoculars and spotting scopes. The presence of a species was based on direct observations of individual(s), sign, and/or vocalization. Avian scientific nomenclature and common names follows Sibley (2000).

Field surveys were conducted when weather conditions were conducive to observing birds. Surveys were not performed during rain, extreme temperatures, high winds (> 25 miles per hour), or dense fog. Targeted owl surveys were conducted on 12 and 27 March, 05 and 25 April 2023. Surveys were performed from approximately 1 hour before sunrise to 2 hours after sunrise, and from approximately 2 hours before sunset to 1 hours after sunset - when weather conditions were conducive to observing owls outside of burrows.



#### 4.0 BURROWING OWL SURVEY RESULTS

The majority of the study area consists of heavily disturbed ruderal vegetation, with no substantial native stands of vegetation. Agricultural, commercial development, and residential activities were historically operated within Project limits. There is also evidence of recent disking, trash from illegal dumping throughout the Project Site, and an active railroad paralleling the Project's northern border.

No Burrowing Owls were observed nesting, foraging, or dispersing within the study area during the 2022 and 2023 surveys. Nonetheless, potential burrows and burrow complexes – albeit low quality, were detected (Figure 3). The burrows observed lacked evidence of owl tracks, molted feathers, cast pellets, prey remains, egg shell fragments, owl white wash, or nest burrow decoration materials. The presence of several burrows and burrow complexes >11 centimeters (cm) in diameter (height and width), and >150 cm in depth warranted recording and reporting; even though the aforementioned burrows lacked owl sign, or owls. Survey conditions during the field events are presented in Table No. 1.

TABLE NO. 1 - SUMMARY OF SURVEY CONDITIONS FOR SURVEYS

Dates		Survey Type	Time <sup>1</sup> Start/End	Temperature  *Fahrenheit  Start/End	Wind Speed (MPH)	Start/End Cloud Cover (%)	Date of last precipitation prior to survey
11/30/22	Lincoln Hulse	Burrow Survey and Crepuscular BUOW	0700- 1600	55/70	0-05	Clear/Clear	09/09/22
3/12/23	Jill Coumoutso	Burrow Survey and Crepuscular BUOW	0600- 1100	52/63	0-05	Cloudy/Cloudy	03/01/22
3/27/23	Jill Coumoutso	Crepuscular BUOW	0530- 1200	49/62	0-10	Clear/Clear	03/01/23
4/05/23	Jill Coumoutso	Crepuscular BUOW	0530- 1200	50/68	0-05	Clear/Clear	03/01/23
4/25/23	Jill Coumoutso	Crepuscular BUOW	0530- 1200	53/60	0-05	Cloudy/Clear	03/01/23

BUOW = Burrowing Owl MPH = Miles Per Hour

The lack of Burrowing Owls within the study area is likely a result of the depauperate landscape, active rail road paralleling the Project's northern boundary, and the presence of owl predators (e.g., Red-Tailed Hawk [Buteo jamaicensis] and Cooper's hawk [Accipiter cooperii]). Although the Project has potential to impact lands that could be utilized by Burrowing Owls as habitat — under the appropriate suite of environmental conditions, surveys for the species are negative. Therefore, there is no presumption that the Project would result in the loss of individual Burrowing Owls, or that it would adversely affect local or regional, populations of them.

<sup>&</sup>lt;sup>1</sup> While targeted owl surveys were limited to approximately 1 hour before sunrise to 2 hours after sunrise and 2 hours before sunset to 1 hour after sunset; the start and end times presented within this table details all time spent within the study area on any given day - which include setup, reporting and demobilization activities.



Representative photographs of the study area are provided below, and wildlife detected during the surveys are provided within Table No. 2.



**Photograph 1.** Facing Southwest.



Photograph 2. Facing East.



Photograph 3. Facing North.



**Photograph 4.** Potential burrow.



# TABLE NO. 2 – WILDLIFE DETECTED DURING FIELD SURVEYS

Scientific name	Common name		
Bir	ds		
Agelaius phoeniceus	Red-winged blackbird		
Accipiter cooperii	Cooper's hawk		
Buteo jamaicensis	Red-Tailed hawk		
Cathartes aura	Turkey vulture		
Corvus corax	Common Raven		
Calypte anna	Anna's hummingbird		
Corvus brachyrhynchos	American crow		
Sturnus vulgaris	European Starling		
Carpodacus mexicanus	House Finch		
Charadrius vociferus	Killdeer		
Hirundo rustica	Barn swallow		
Sturnella neglecta	Western Meadowlark		
Passerculus sandwichensis	Savanna sparrow		
Petrochelidon pyrrhonota	Cliff swallow		
Columba livia	Rock Pigeon		
Euphagus cyanocephalus	Brewer's Blackbird		
Zonotrichia leucophrys	White-crowned sparrow		
Falco sparverius	American kestrel		
Mimus polyglottos	Northern mockingbird		
Sayornis saya	Say's phoebe		
Melospiza melodia	Song sparrow		
Passer domesticus	House Sparrow		
Sayornis nigricans	Black phoebe		
Spinus psaltria	Lesser goldfinch		
Sturnella neglecta	Western meadowlark		
Tyrannus vociferans	Cassin's kingbird		
Quiscalus quiscula	Common Grackle		
Zenaida macroura	Mourning Dove		
Mam	mals		
Otospermophilus beecheyi	California ground squirrel		
Sylvilagus audubonii	Desert cottontail		



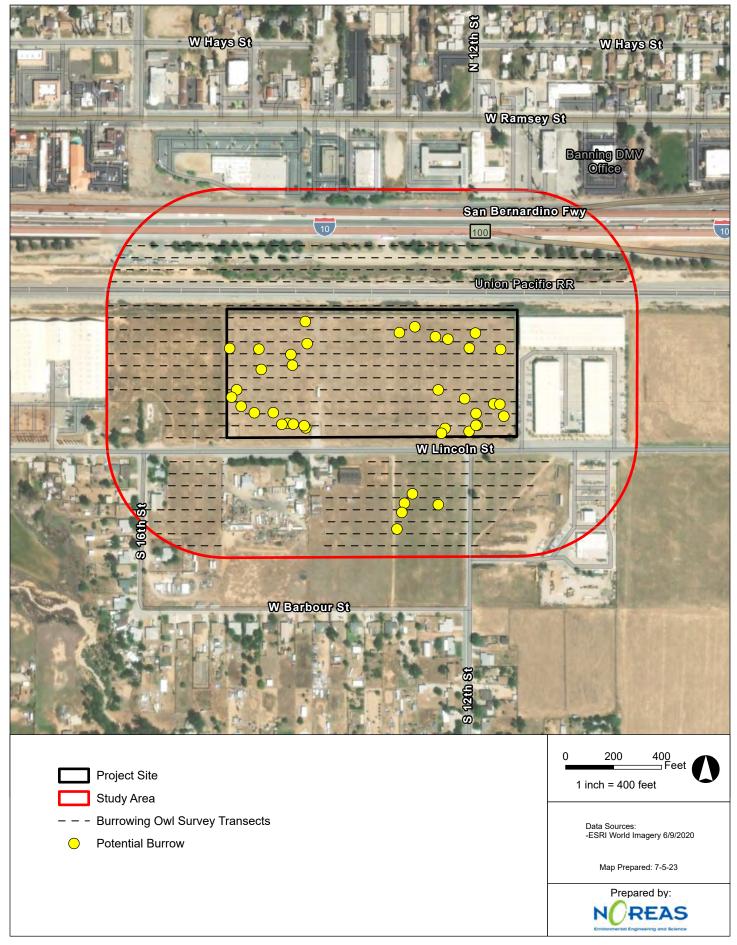


Figure 3. Burrowing Owl Survey Results

#### 5.0 RECOMMENDED MEASURES TO AVOID AND MINIMIZED IMPACTS TO NESTING BIRDS

The following measures are recommended as a means of avoiding, and minimizing adverse impacts to nesting birds that have the potential to occur within the Project Site, and on adjacent lands:

- Due to the presence of potentially suitable habitat, a 30-day pre-construction survey for Burrowing Owls is warranted prior to initial ground-disturbing activities (including vegetation clearing, clearing and grubbing, tree removal, site watering, equipment staging, grading, etc.).
   This is an MSHCP requirement, which safeguards that no owls have colonized the Project Site in the days - or weeks, preceding ground-disturbing activities.
  - o If Burrowing Owls have colonized the Project Site prior to the initiation of ground-disturbing activities, the Project shall immediately inform the RCA and the appropriate wildlife agencies, to coordinate further regarding the need for a Project specific Burrowing Owl Protection and/or Relocation Plan.
  - o If ground-disturbing activities occur, but the Project Site is left undisturbed for more than 30 days, a pre-construction survey will again be warranted to safeguard that Burrowing Owls have not colonized the Project Site since it was last disturbed. If Burrowing Owl is found, the same coordination described above would be necessary
- In order to comply with Section 10 of the Migratory Bird Treaty Act and relevant sections of the California Fish and Game Code, any vegetation clearing within the Project Site should take place outside of the typical avian nesting season (e.g., March 15<sup>th</sup> until September 1<sup>st</sup>) to the maximum extent practical. If work needs to take place between March 15<sup>th</sup> and September 1<sup>st</sup>, a pre-activity survey for nesting birds would be warranted prior to the onset of Project activities. To the maximum extent practicable, a buffer zone from occupied nests should be maintained during physical ground disturbing activities. Once nesting has ended, the buffer may be removed.
- Limits of grading and construction activities shall be clearly delineated with temporary construction staking, flagging, or similar materials.
- To avoid attracting predators and nuisance species, the Project Site shall be clear of debris, where possible. All food-related trash items shall be enclosed in sealed containers and regularly removed from the Project.



The services performed and documented in this report have been conducted in a manner consistent with the level of care and skill ordinarily exercised by other professional consultants under similar circumstances. No other representations are either expressed or implied and no warranty or guarantee is included or intended in this report. Opinions relating to presence, absence, or potential for occurrence of biological resources are based on limited data and actual conditions may vary from those encountered at the times and locations where the data were obtained despite due professional care.

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: July 07, 2023

SIGNED: \_\_\_\_\_\_\_Lincoln Hulse



#### 6.0 REFERENCES

- Belthoff, J. R., and R. A. King. 1997. Between-year movements and nest burrow use by burrowing owls in southwestern Idaho. Technical Report No. 97-3. Idaho Bureau of Land Management.
- Botelho, E. S. 1996. Behavioral ecology and parental care of breeding western burrowing owls (*Speotyto cunicularia hupugaea*) in southern New Mexico, USA. Dissertation, New Mexico State University, Las Cruces.
- California Burrowing Owl Consortium (CBOC). 1993. Burrowing Owl Survey Protocol and Mitigation Guidelines. San Francisco CA
- California Department of Fish and Game (CDFG). 1995. Staff Report on Burrowing Owl Mitigation. Sacramento CA
- \_\_\_\_\_\_. 2012. Staff Report on Burrowing Owl Mitigation. Sacramento CA
- California Department of Fish and Wildlife (CDFW). 2022. RareFind California Department of Fish and Game Natural Diversity Database (CNDDB) Fontana and Devore USGS 7.5-Minute Quadrangles. Sacramento, CA: California Department of Fish and Game, Biogeographic Data Branch.
- Coulombe, H. N. 1971. Behavior and population ecology of the burrowing owl, *Speotyto cunicularia*, in the Imperial Valley of California. Condor 73:162–176.
- County of Riverside. 2003. Final Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). Riverside, CA: County of Riverside.
- County of Riverside. 2006. Burrowing Owl Survey Instructions for the Western Riverside County Multiple Species Habitat Conservation Plan Area (E.P. Department, ed), p. 4. Riverside, CA: County of Riverside.
- Ehrlich, P. R. 1988. The Birders Handbook: Natural History of North American Birds. Simon and Schuster Inc. New York
- Haug, E. A., B. A. Millsap, and M. S. Martell. 1993. The burrowing owl (*Speotyto cunicularia*). In A. Poole and F. Gill (eds.), The Birds of North America, No. 61. Philadelphia, PA: The Academy of Natural Sciences and Washington, DC: The American Ornithologists' Union.
- Klute, D. S., L. W. Ayers, M. T. Green, W. H. Howe, S. L. Jones, J. A. Shaffer, S. R. Sheffield, and T. S. Zimmerman. 2003. Status Assessment and Conservation Plan for the Western Burrowing Owl in the United States. U.S. Department of Interior, Fish and Wildlife Service, Biological Technical Publication FWS/BTP-R6001-2003, Washington, D.C.
- Korfanta, N.M., D.B. McDonald, and T.C. Glenn. 2005. Burrowing owl (*Athene cunicularia*) population genetics: A comparison of North American forms and migratory habits. *Auk* 122(2): 464-478.
- Microsoft Corporation. 2023. Bing Maps Aerial Imagery. Redmond, WA.
- Rosenberg, D. K., J. Gervaia, H. Ober, and D. DeSante. 1998. An adaptive management plan for the burrowing owl population at Naval Air Station Lemoore, Lemoore, California.



Sibley, D.A. 2000. The Sibley Guide to Birds. Random House Press, New York, New York. 201 pp.

Trulio, L. 1997. Burrowing owl demography and habitat use at two urban sites in Santa Clara County, California. Journal of Raptor Research 9:84–89.

United States Fish and Wildlife Service (USFWS). 2023. Critical Habitat Portal. USFWS

United States Geological Service (USGS). 1984. 7.5-Minute Quadrangle Beaumont, California.



# APPENDIX F MSHCP NARROW ENDEMIC PLANT SURVEY REPORT





# BROWN AND STRAUSS INDUSTRIAL PROJECT July 2023

# NARROW ENDEMIC PLANT SURVEY REPORT

Prepared By

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PHOTOGRAPH LOG



# 1.0 INTRODUCTION / SUMMARY

To support the Brown and Strauss Project (hereafter referred to as the Project), NOREAS Inc. (NOREAS) performed a focused Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP), narrow endemic sensitive plant species visual encounter survey. According to the Regional Conservation Authority (RCA) MSHCP Information Map, the Project limits lie partially - or are completely within predetermined survey areas for narrow endemic sensitive plant species (i.e., Marvin's onion [Allium marvinii] and Many-stemmed dudleya [Dudleya multicaulis]).

The Project Site is located within the City of Banning, Riverside County, California (Figures 1 and 2); north of West Lincoln Street, and west of South 8<sup>th</sup> Street (Assessor's Parcel Numbers [APNs] 540-180-020, 540-180-022 and 540-180-026). The Project can be found on the Beaumont United States Geological Survey (USGS) 7.5-MinuteTopographic Quadrangle Map (USGS 1984). For the purposes of this report, the "Project Site" includes the Project's proposed ground disturbance footprint (Project Site). This report provides the methods, assumptions, and results of the 2023 targeted plant surveys for Marvin's onion and Many-stemmed dudleya.

In summary, Marvin's onion and Many-stemmed dudleya were not detected during the surveys. Given the extent of anthropogenic disturbance within the Project Site, the habitat quality is extremely low for special status plants. Therefore, there is no presumption that the Project would result in the loss of individual Marvin's onion and Many-stemmed dudleya, nor that it would adversely affect local or regional populations of them.



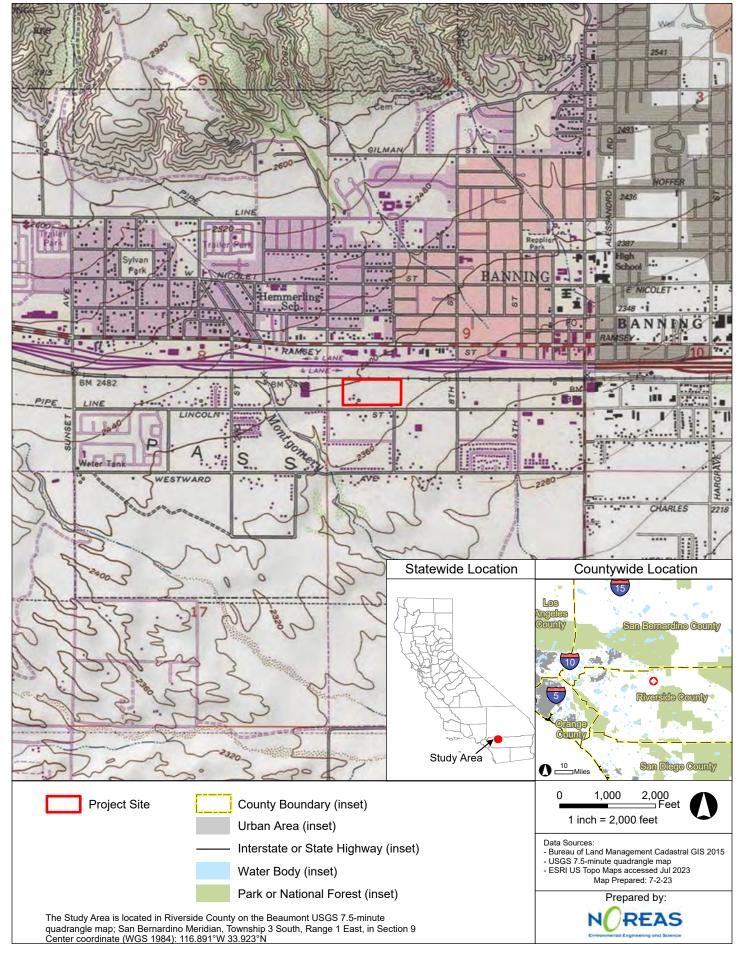


Figure 1. Regional Location



Figure 2. Site Vicinity

### 2.0 METHODS

Prior to beginning field surveys, resource specialists were consulted and available information from resource management plans and relevant documents were reviewed to determine the locations and types of resources that have the potential to exist within and adjacent to the Project Site. Resources were evaluated within several miles of the Project. The primary materials reviewed included, but were not limited to, the following:

- ✓ US Fish and Wildlife Service (USFWS) Critical Habitat Mapper and File Data (USFWS 2023a);
- ✓ USFWS Riverside County Field Office Species List (USFWS 2023b);
- ✓ USFWS National Wetlands Inventory database (USFWS 2023c);
- ✓ California Natural Diversity Database maintained by the California Department of Fish and Wildlife (CDFW) (CDFW 2023);
- ✓ Natural Resource Conservation Service, Soil Survey Geographic Database (SSURGO) (USDA-NRCS 2023a);
- ✓ California Native Plant Society (CNPS) Electronic Inventory (CNPS 2023);
- ✓ MSHCP Transportation and Land Management Agency Geographic Information Services Database (GISD 2023);
- ✓ Regional Conservation Authority GIS Data Mapping Tool (RCA 2032, https://www.wrc-rca.org/rcamaps/);
- ✓ Western Riverside County Multiple Species Habitat Conservation Plan (Dudek 2003); and
- ✓ Aerial Photographs (Microsoft Corporation 2023).

Plants were identified to the lowest taxonomic<sup>1</sup> 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).

Focused botanical surveys were conducted on 14 April and 17 May, 2023. Field survey methods were derived from the standardized guidelines issued by the U.S. Fish and Wildlife Service (USFWS 2000), California Department of Fish and Wildlife (CDFW 2009) and the California Native Plant Society (CNPS 2001). As previously stated, the field surveys were specifically conducted to determine the presence/absence of Marvin's onion and Many-stemmed dudleya, but the surveys were floristic<sup>2</sup> in nature. Surveys were conducted during the appropriate blooming period for Marvin's onion and Many-stemmed dudleya.

An evaluation of reference populations was performed prior to initiating surveys in early April of 2023 to safeguard that survey timing was appropriate<sup>3</sup>, and to assess local variations in plant phenology<sup>4</sup> of the target species (Figure 3, Appendix A – Photographs 5 and 6). To that end, a targeted and methodical pedestrian-survey for Marvin's onion and Many-stemmed dudleya was conducted by walking through

<sup>&</sup>lt;sup>4</sup> Phenology is the study of periodic events in biological life cycles and how these are influenced by seasonal and interannual variations in climate, as well as habitat factors.



<sup>&</sup>lt;sup>1</sup> Botanical taxonomy is the practice and science of categorization or classification. A taxonomy (or taxonomical classification) is a scheme of classification, especially a hierarchical classification, in which plants are organized into groups or types.

<sup>&</sup>lt;sup>2</sup> Focused on the distribution, number, types, and relationships of plant species in an area, or multiple areas.

<sup>&</sup>lt;sup>3</sup> Prior to field surveys, a botanist visited a representative number of reference populations in 2023 to safeguard that survey timing was appropriate and to assess local variations in plant phenology. Reference populations were visited for both species that have a potential to occur.

areas of suitable habitat within Project Site. Survey transects<sup>5</sup> were spaced to allow for complete visual coverage of the Project Site. Transect spacing was reduced or expanded in the field to account for differences in terrain, vegetation density, visual field, health and safety considerations, access issues, and areas of potential habitat to provide adequate visibility.



<sup>&</sup>lt;sup>5</sup> A transect is a path along which one counts and records occurrences of the objects of study.



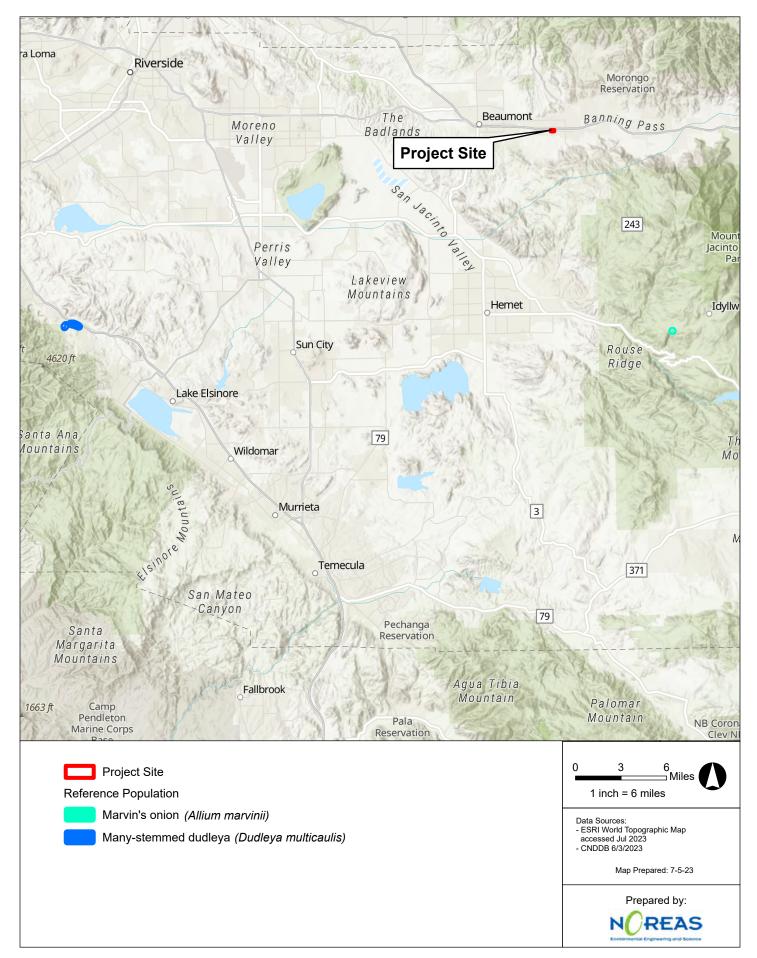


Figure 3. Reference Population Map

# 3.0 BOTANICAL SURVEY RESULTS

Weather conditions during the April and May 2023 surveys included partly cloudy skies, temperatures ranging from 65–72 °F, and winds vacillating from 0 to 05 miles per hour. During the pedestrian surveys it was determined that greater than 99% of the Project Site was comprised of disturbed, and/or non-native land cover types. Marvin's onion and Many-stemmed dudleya was not detected during any of pedestrian based biological surveys which were performed within the Project Site. Representative photographs of the Project Site, Marvin's onion and Many-stemmed dudleya reference populations are provided in Appendix A. Plant species observed during the surveys are listed in Appendix B.

The services performed and documented in this report have been conducted in a manner consistent with the level of care and skill ordinarily exercised by other professional consultants under similar circumstances. No other representations are either expressed or implied and no warranty or guarantee is included or intended in this report. Opinions relating to presence, absence, or potential for occurrence of biological resources are based on limited data and actual conditions may vary from those encountered at the times and locations where the data were obtained despite due professional care.





### 4.0 REFERENCES

- Baldwin, J., D. Goldman, D. Keil, R. Patterson, and T. Rosatti. 2012. The Jepson Manual: Higher Plants of California. Berkeley: University of California Press.
- California Department of Fish and Wildlife (CDFW). 2023. RareFind California Department of Fish and Game Natural Diversity Database (CNDDB) Fontana and Devore USGS 7.5-Minute Quadrangles. Sacramento, CA: California Department of Fish and Game, Biogeographic Data Branch.
- California Department of Fish and Wildlife (CDFW). 2009. Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities
- California Native Plant Society (CNPS). 2001. Botanical Survey Guidelines of the California Native Plant Society.
- California Native Plant Society (CNPS). 2023. CNPS Electronic Inventory of Rare and Endangered Plants: CNPS.
- Holland, R.F. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California (California Department of Fish and Game, The Resources Agency, ed), p. 156. Sacramento, CA.

Microsoft Corporation. 2023. Bing Maps Aerial Imagery. Redmond, WA.

United States Fish and Wildlife Service (USFWS). 2023. Critical Habitat Portal. USFWS

United States Geological Service (USGS). 1984. 7.5-Minute Quadrangle Beaumont, California.



# **APPENDIX A**

# **PHOTOGRAPH LOG**



**Photograph 1.** Facing Southwest.



Photograph 2. Facing East.





Photograph 3. Facing North.



Photograph 4. Facing West.





**Photograph 5.** Marvin's onion reference population.



**Photograph 6.** Many-stemmed dudleya reference population.



# **APPENDIX B**

# **PLANT SPECIES OBSERVED**

Scientific Name	Common Name				
Asteraceae	(Aster family)				
Ambrosia dumosa	Western ragweed				
Baccharis neglecta	Roosevelt weed				
Baccharis sarothroides	Desert broom				
Gnaphalium spp.*	Cudweed				
Lactuca serriola *	Prickly lettuce				
Lasthenia gracilis*	Needle goldfields				
Matricaria discoidea*	Pineapple weed				
Oncosiphon piluliferum*	Stinknet				
Symphyotrichum chilense	California aster				
	e (Cashew family)				
Schinus molle*	Peruvian pepper				
Arecaceae	(Palm family)				
Syagrus romanzoffiana	Queen palm				
Washingtonia Robusta*	Mexican fan palm				
Boraginaceae (Forget-me-not family)					
Amsinckia menziesii	Fiddleneck				
Brassicaceae	(Mustard family)				
Brassica nigra*	Black mustard				
Brassica Tournefortii*	Sahara mustard				
Pectocarya heterocarpa	Chuckwalla combseed				
Plagiobothrys nothofulvus	Rusty popocornflower				
Sisymbrium irio *	London rocket				
Cupressaceae	c (Cypress family)				
Juniperus horizontalis*	Creeping juniper				
Euphorbiaced	ie (Spurge family)				
Croton setigerus*	Dove weed				
Geraniaceae (Geranium family)					
Erodium cicutarium*	Redstem stork's bill				
Fabaceae	Pe (Pea family)				
Lupinus bicolor	Miniature lupine				
Medicago polymorpha *	Burr medic				
Parkinsonia florida	Blue palo verde				
Malvaceae (Mallow family)					
Malva parviflora*	Cheeseweed				
Pinaceae (Pine family)					



Scientific Name	Common Name				
Pinus sp.*	Pine				
Polemoniaceae (Phlox family)					
Gilia spp.	Gilia species				
Poaceae (Grass family)					
Avena fatua *	Wild oat				
Bromus diandrus *	Ripgut brome				
Bromus madritensis subsp. Rubens *	Red brome				
Festuca arundinacea *	Tall fescue				
Festuca myuros *	Annual fescue				
Hordeum murinum *	Wall barley				
Poa bulbosa *	Bulbous bluegrass				

An "\*" non-native plant species.

