

Western Riverside County Multiple Species Habitat Conservation Plan Consistency Analysis

Date & Time: Mon, Mar 01, 2021, 08:51:58 PST
Position: 11 N 492134 3727268 (± 109.8 ft)
Altitude: 1513ft (± 24.3 ft)
Datum: WGS-84
Azimuth/Bearing: 176° S04E 3129mils True ($\pm 12^\circ$)
Elevation Angle: -05.7°
Horizon Angle: $+01.5^\circ$
Zoom: 0.5X



Conditional Use Permit 200001

**WESTERN RIVERSIDE COUNTY MULTIPLE SPECIES
HABITAT CONSERVATION PLAN CONSISTENCY
ANALYSIS**

**CONDITIONAL USE PERMIT 200001
WINCHESTER, RIVERSIDE COUNTY, CALIFORNIA
ASSESSOR'S PARCEL NUMBERS 466-050-019, -020, -021**

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1.0 EXECUTIVE SUMMARY

This Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Consistency Analysis (Analysis) provides the results of the required MSHCP assessments in order to determine if Conditional Use Permit (CUP) 200001 (Project), was consistent with the goals and objectives of the MSHCP. The subject property (Property and/or Site) was located within a MSHCP-designated assessment area for Burrowing Owl (*Athene cunicularia*) (BUOW). In addition, the Project required a MSHCP Section 6.1.2 *Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools* (MSHCP Section 6.1.2) assessment.

The Property was located on the southwest corner of Winchester Road (State Highway 79) (Hwy 79) and Newport Road in the unincorporated Winchester area of Riverside County approximately one aerial mile west of Diamond Valley Lake.

The Site was located in the south-central portion of the Harvest Valley/Winchester Area Plan (HVWAP). The HVWAP consisted of two Subunits. The Project was not located within a Subunit or Criteria Cell with the nearest Criteria Cell #4980 being located approximately 2.60-mile south of the Site. A Reserve Assembly Analysis was not required for the Project.

No MSHCP Section 6.1.2 resources were present on the Project.

Searl Biological Services (SBS) conducted a BUOW protocol survey on the Project and areas within the MSHCP-designated BUOW Assessment Area within 500-feet of the Project. No BUOW were detected; however, the Project will be required to perform a 30-Day Pre-Construction BUOW Survey as part of the Project's Conditions of Approval (COA) prior to ground disturbance due to the presence of suitable BUOW habitat.

The Project, with the implementation of the 30-Day Pre-Construction BUOW Survey, is consistent with the goals and objectives of the MSHCP.

2.0 INTRODUCTION

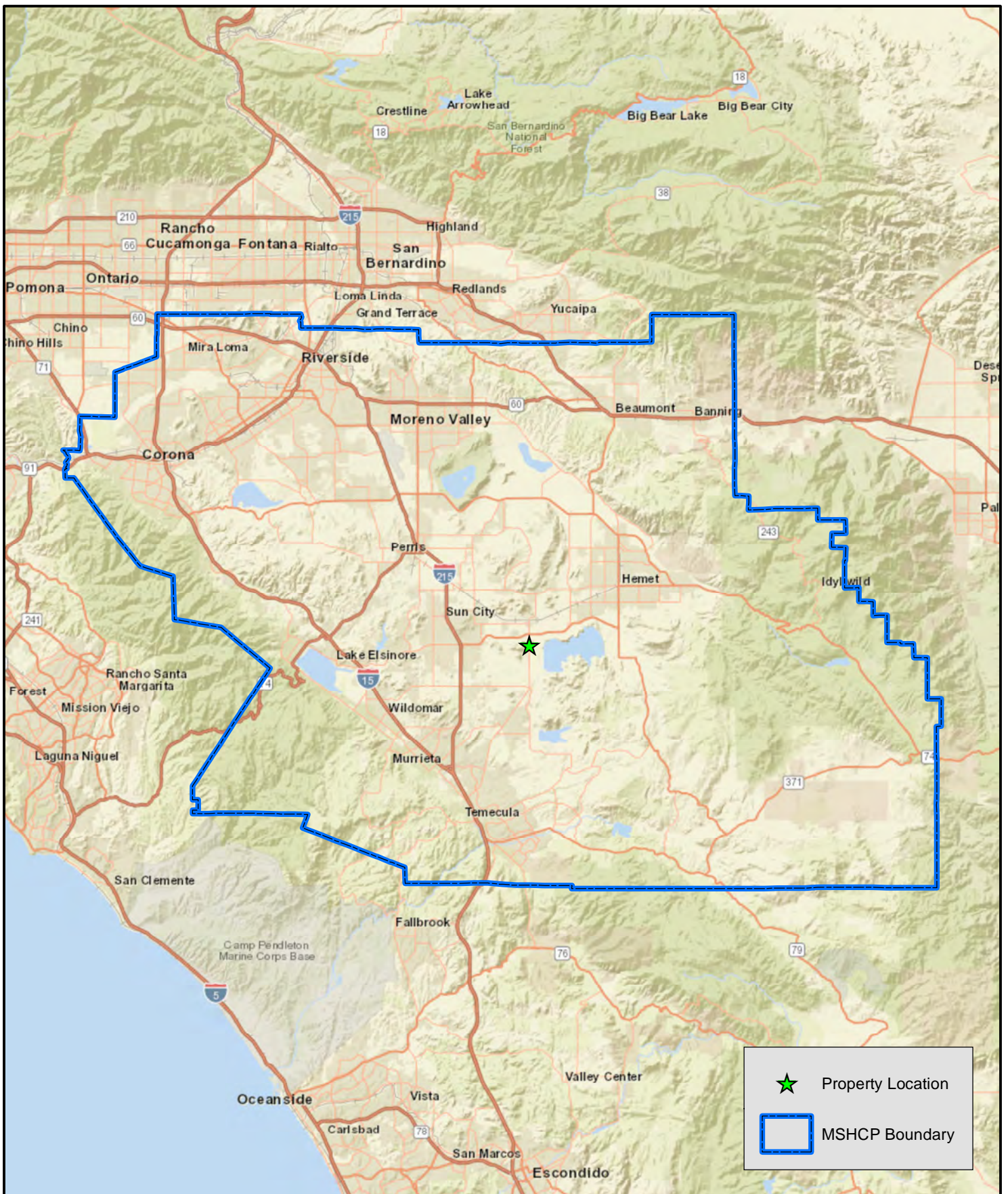
The purpose of this MSHCP Analysis was to summarize the biological data for the Project and to document the Project's consistency with the goals and objectives of the MSHCP. According to the Regional Conservation Authority's (RCA) MSHCP Information Application (Regional Conservation Authority, 2020), the Project required a:



- MSHCP BUOW assessment.

In addition, the Project required a MSHCP Section 6.1.2 assessment which is required for all projects proposing a land use change or applying for a discretionary action.

The Property was located on the southwest corner of Winchester Road (Hwy 79) and Newport Road in the unincorporated Winchester area of Riverside County approximately one aerial mile west of Diamond Valley Lake. *Figure 1 - Regional Map* (Page 2) and *Figure 2 - Vicinity Map* (Page 3) depict the general location of the Project.

The Property was geographically located in Township 6 South, Range 2 West in the northeast quarter of Section 4 of the Winchester 7.5 Minute United States Geological Survey (USGS) California Quadrangle. *Figure 3 - USGS Topographic Map* (Page 4) depicts the Site's geographic location. The Universal Transverse Mercator (UTM) coordinates of the approximate center of the Property was 492,122-meters East; 3,727,129-meters North in Zone 11 (North American Datum [NAD] 83).



	Property Location
	MSHCP Boundary

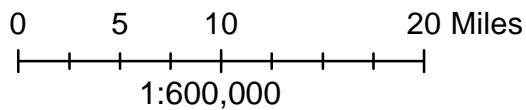


FIGURE 1
Regional Map

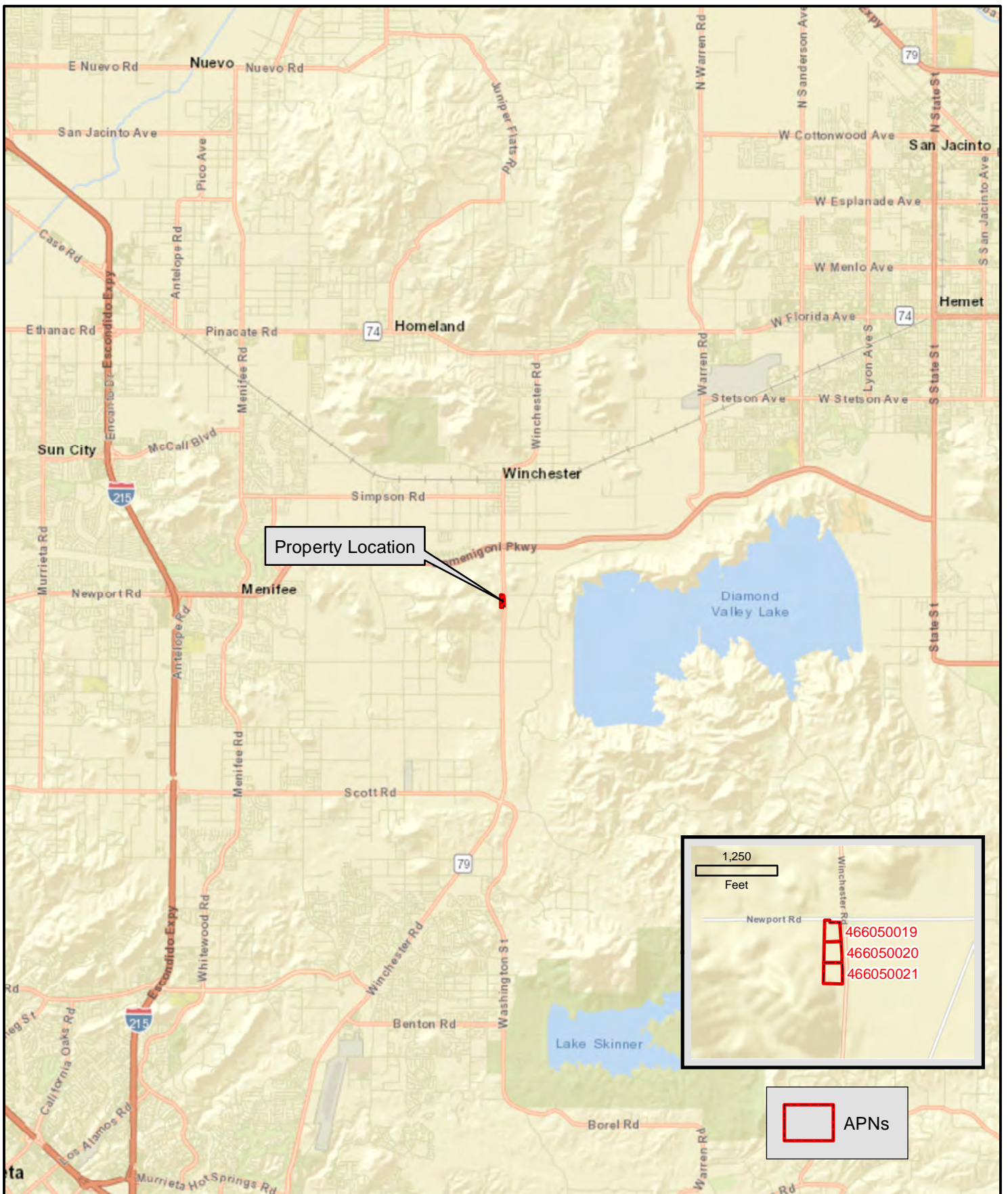
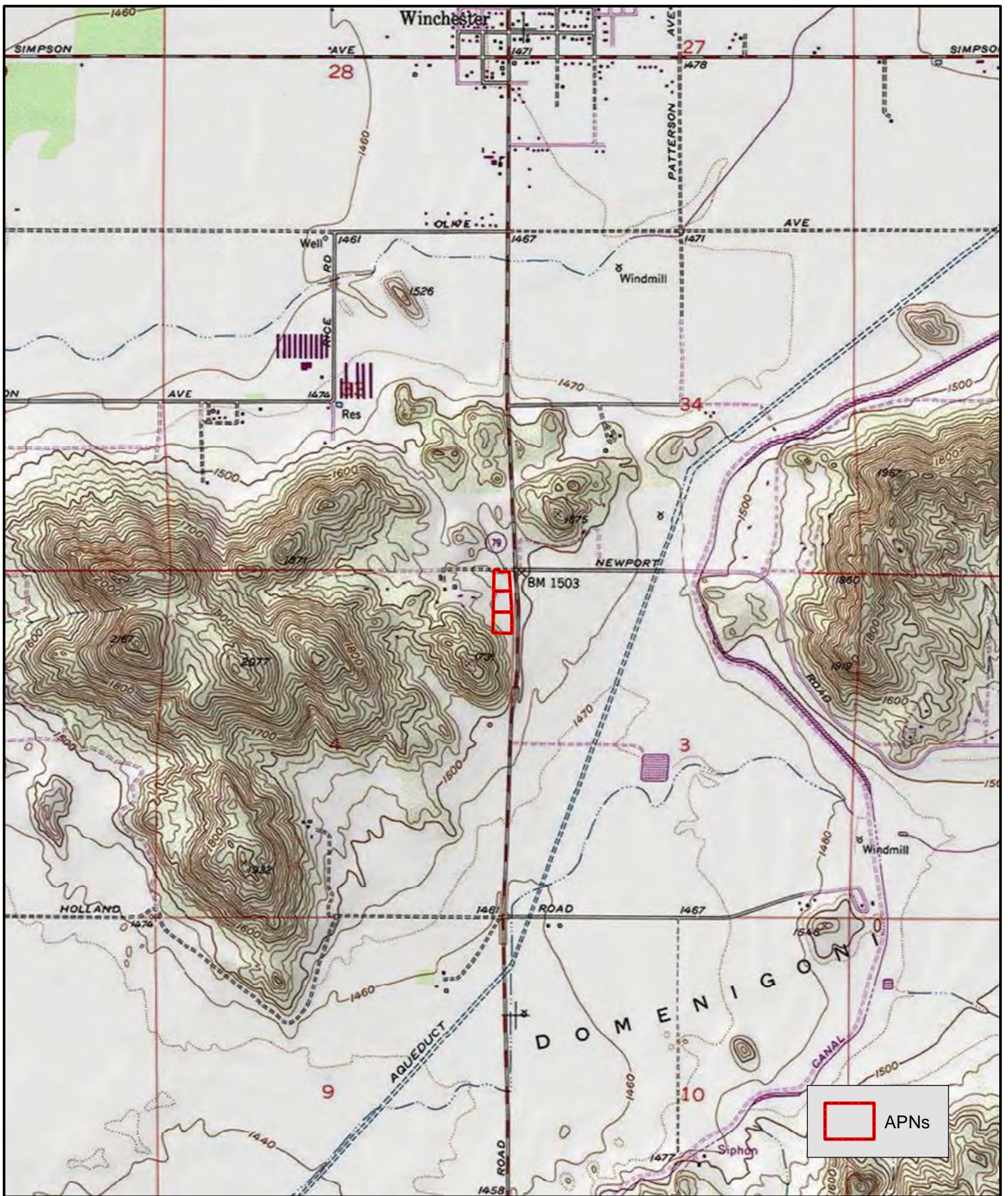



FIGURE 2
Vicinity Map





 APNs



0 0.25 0.5 1 Miles
1:24,000

FIGURE 3
USGS Topographic
Map

2.1 Project Area

The Property consisted of Assessor's Parcel Numbers (APN) 466-050-019, -020, and -021. All acreages throughout the remainder of this document were based on an AutoCAD file of the Property/Project provided by the Project's architect/engineer KSP Studio (KSP). This file¹ was converted by SBS for GIS use in ArcMap. *Figure 4 – Proposed Project Footprint* (Page 6) depicts the Property, onsite Project areas which will consist of developing the entire Site, and a small offsite Project area on Newport Road for ingress/egress. A detailed site plan of the Project is provided in Appendix A. The Property totaled 5.81-acres. The total area proposed for the Project was 6.02-acres, which included 100% of the Property and 0.21-acre of proposed offsite improvements for ingress/egress.

2.2 Project Description

CUP 200001 proposes to construct a one-story, four (4) building, 81,432 square foot (sq. ft.) self-storage facility (see breakdown of building sizes below) which includes a 1,247 sq. ft. office, and recreational vehicle (RV), trailer, and/or boat parking with 20 spaces, an eight (8) pump gas station with a 3,200 sq. ft. convenience store, and a 3,180 sq. ft. drive-thru car wash.

- Building A – 1-story, 3,075 sq. ft.; office portion – 1,247 sq. ft.
- Building B – 1-story, 11,358 sq. ft.
- Building C – 1-story, 56,348 sq. ft.
- Building D – 2-story, 9,404 sq. ft.

A detailed site plan of the Project is provided in Appendix A.

2.3 Covered Roads

The majority of the Property was located within the southern tip of the Community and Environmental Transportation Acceptability Process (CETAP) SR-79 (Hwy 79) Re-alignment Alternatives.

Hwy 79 was a Covered Road designated as an “Expressway” and Newport Road was designated as a “Major” road according to the RCA's MSHCP Information Application (Regional Conservation Authority, 2020). The Project proposes 0.21-acre of improvements within the Right-of-Way (RW) of Newport Road for ingress/egress.

2.4 Covered Public Access Facilities





The Project does not entail the construction of, or improvements to, a Covered Public Access Facility.

2.5 General Setting

The Project was located in a rural area of Winchester approximately 1.0-aerial mile west of Diamond Valley Lake. The Site was situated near the northern end of the Domenigoni Valley with agricultural areas north and south. Hills with an elevation peak of 2,167-feet were present west/southwest of the Property. The immediate surrounding area consisted of rural residential lots, ranches/ranchettes, vacant land, a detention basin to the north, and natural open space to the south/southwest. *Figure 5 – General Setting Aerial Photograph* (Page 8) depicts the setting of a 1:80,000-scale area around the Property.

¹ Acreages may not be exact and may not match other sources (i.e., County APNs, KSP, etc.) due to the file being based on the legal surveyed Property boundary and the conversion process.



	Property Boundary
	Proposed Grading
Project Area	
	Offsite
	Onsite

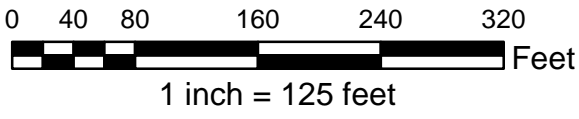
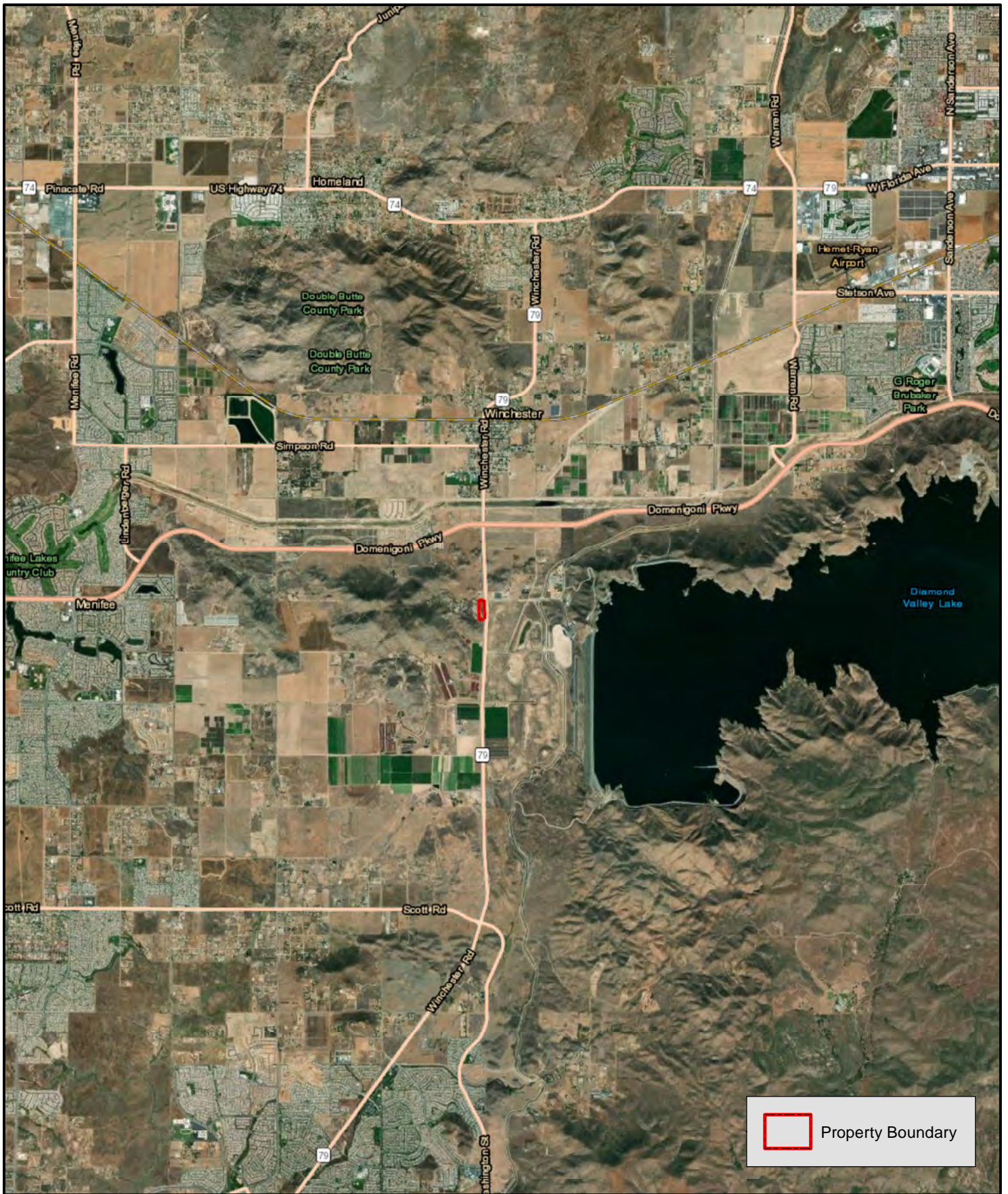



FIGURE 4
Proposed Project Footprint



 Property Boundary

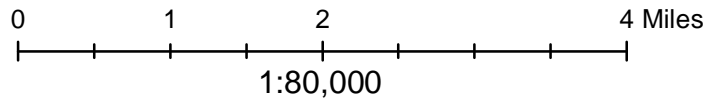


FIGURE 5
General Setting
Aerial Photograph

3.0 RESERVE ASSEMBLY ANALYSIS

The MSHCP "...is a comprehensive, multi-jurisdictional Habitat Conservation Plan (HCP) focusing on Conservation of species and their associated Habitats in Western Riverside County" (Dudek & Associates, Inc., 2003). The MSHCP encompasses approximately 1.26 million acres of land that stretches from the crest of the San Jacinto Mountains west to the Orange County boundary. Ultimately, the MSHCP will result in the conservation of more than 500,000 acres (347,000 acres on existing Public/Quasi-Public Lands [PQP] and 153,000-acres of Additional Reserve Lands [ARL]) that focuses on the 146-species covered by the MSHCP (Dudek & Associates, Inc., 2003).

The MSHCP is a criteria-based plan of which the County's General Plan Area Plan boundaries were utilized to provide the broad organizational framework for the criteria (Dudek & Associates, Inc., 2003). A Conceptual Reserve Design (CRD) was sketched for each Area Plan using vegetation, planning species occurrence data, and biological issues and considerations as the primary criteria for the CRD (Dudek & Associates, Inc., 2003). Subsequent to sketching the CRD, USGS quarter sections (i.e., approximate 160-acre cells) were then overlain on the CRD such that each "Criteria Cell" is an area in real space with a legal description (Dudek & Associates, Inc., 2003). Criteria Cells were then either aggregated into a Criteria Cell Group or retained as individual Criteria Cells based upon the level of conservation and configuration of the Criteria Cell or Criteria Cell Group (Dudek & Associates, Inc., 2003). Criteria Cells were assigned an identification number and each Criteria Cell Group was assigned a letter code. Conservation Criteria was drafted for each Criteria Cell or Criteria Cell Group to provide an explicit description of the areas to be targeted for conservation (Dudek & Associates, Inc., 2003). Those areas located outside of the designated Criteria Cells and/or Criteria Cell Groups are not targeted to be included within the 153,000-acres of ARL.

3.1 Harvest Valley/Winchester Area Plan

The Site was located in the south-central portion of the HVWAP. The HVWAP was approximately 32,181-acres (50-square miles). The HVWAP consisted of two Subunits. The Project was not located in either of the two Subunits as depicted by *Figure 6 – Harvest Valley/Winchester Area Plan and Subunits* (Page 9). Additionally, the Project was not located within a Criteria Cell with the nearest being Criteria Cell #4980 located approximately 2.60-mile south of the Site. A Reserve Assembly Analysis was not required for the Project.

3.2 Public Quasi-Public Lands

The Project will not directly or indirectly impact PQP Lands. This notwithstanding, the nearest PQP Lands was a Bureau of Land Management (BLM) parcel located approximately 1,100-feet southwest of the Property. The area between the BLM parcel and Property consisted of a 1,731-foot hill peak which acts as a natural barrier between the two areas.

4.0 VEGETATION MAPPING

Vegetation community classifications are typically conducted in accordance with the California Department of Fish and Wildlife's (CDFW) Vegetation Classification and Mapping Program (VegCAMP) *List of Vegetation Alliances and Associations* (Natural Communities List) (California Department of Fish and Wildlife, 2020) and *A Manual of California Vegetation*. Vegetation communities and land covers are mapped in the field utilizing both paper maps (i.e., aerial photographs and USGS topographic maps) and Collector for ArcGIS installed on an iPhone 11 connected to a SXBlue II + GNSS submeter unit and antenna (Collector).

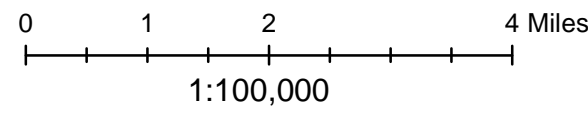
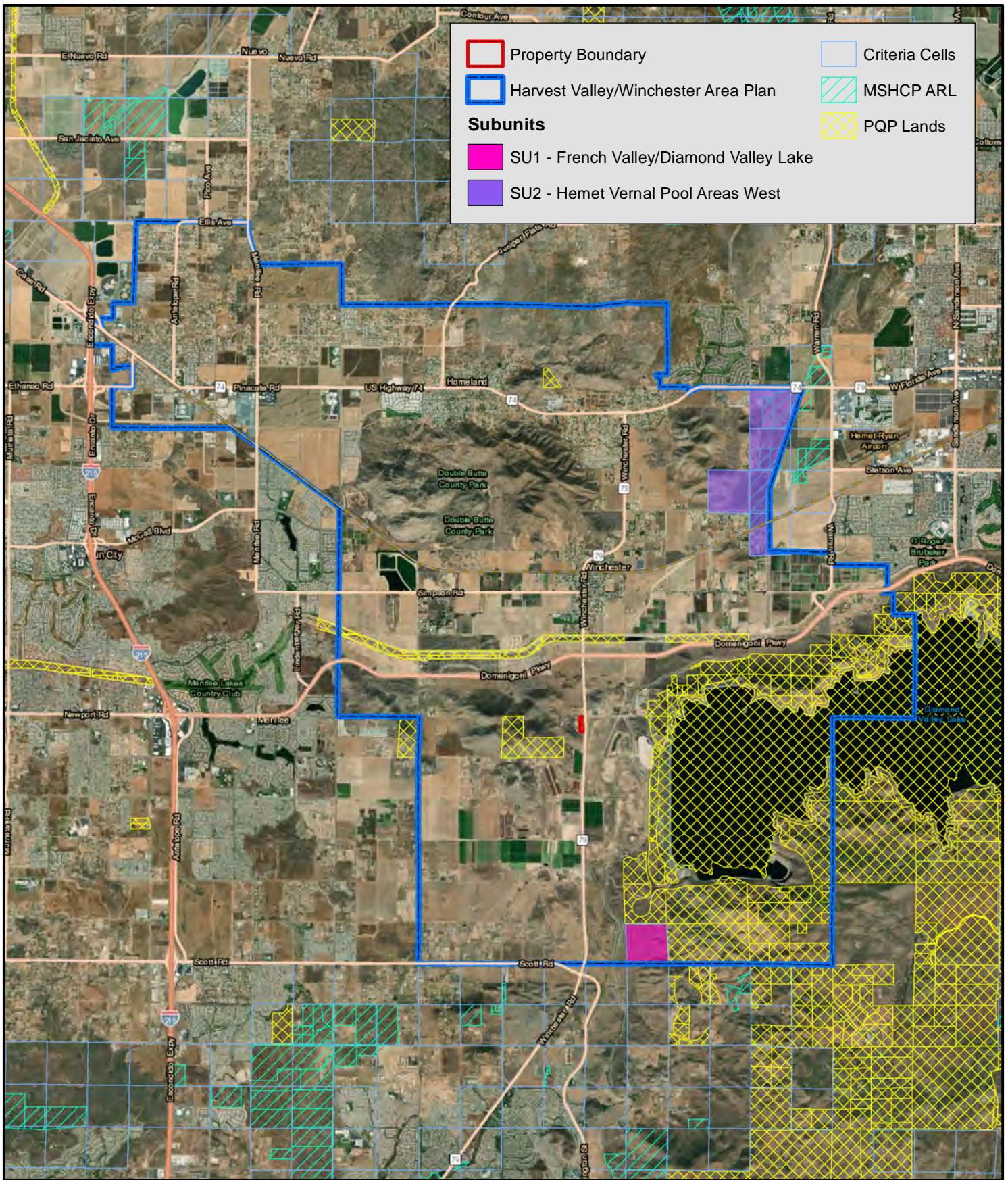


FIGURE 6
Harvest Valley/Winchester
Area Plan
and Subunits

Some land cover types are not classified in the above-referenced sources (i.e., developed, disturbed, agriculture, etc.); therefore, each land cover is designated with a common name for the purpose of this report. A brief description of the vegetation communities/land covers present on the Project is presented below. Property and Project acreages are provided in *Table 1 – Land Covers* (below). The distribution of vegetation communities and land covers on the Project are depicted on *Figure 7 – Vegetation/Land Covers* (Page 12). A complete list of the flora observed on the Property is provided in Appendix B, and a complete list of the fauna observed on, above, or near the Property is provided in Appendix C.

- **Developed/Disturbed:** The Developed/Disturbed area was present within the offsite Project area. The area consisted of paved road areas and associated road shoulder area which were comprised of compacted dirt/gravel areas.
- **Disturbed/Ornamental:** Disturbed/Ornamental was located in the central-western portion of the Site. The area consisted of dirt road which appeared to be from the adjacent property owner, bare ground, compacted gravel possibly from an old gravel road or pad, and ornamental trees. Peruvian pepper tree (*Schinus molle*) was dominant. Blue gum (*Eucalyptus globulus*) and silk oak (*Grevillea robusta*) were also present. Also present in this area were remnant retaining walls and building foundations.
- **Ruderal:** Ruderal areas consisted of dense non-native annual grasses and forbs. Ripgut grass (*Bromus diandrus*) was dominant with red brome (*Bromus rubens*) and rattail sixweeks grass (*Festuca myuros*) common throughout. Common fiddleneck (*Amsinckia menziesii*), a native annual, was also common throughout the area.
- **Ruderal/Coastal Sage Scrub:** This land cover was present in the southern portion of the Property, and primarily consisted of the Ruderal species above with a few coastal sage scrub (CSS) species sparsely scattered throughout. California buckwheat (*Eriogonum fasciculatum*) was the dominant CSS shrub with a few scattered brittle bush (*Encelia farinosa*) and deerweed (*Acmispon glaber*) present.

Table 1 – Land Covers

COMMON NAME/VEGCAMP COMMUNITY	PROPERTY/ONSITE PROJECT ACRES	OFFSITE PROJECT ACRES
Developed/Disturbed No Corresponding VegCAMP Community	0	0.21
Disturbed/Ornamental No Corresponding VegCAMP Community	1.42	0
Ruderal VegCAMP Alliance Wild oats and annual brome grasslands 42.027.00 No corresponding VegCAMP Association	3.64	0

COMMON NAME/VEGCAMP COMMUNITY	PROPERTY/ONSITE PROJECT ACRES	OFFSITE PROJECT ACRES
Ruderal/Coastal Sage Scrub		
VegCAMP Alliance Wild oats and annual brome grasslands 42.027.00	0.75	0
VegCAMP Alliance California buckwheat scrub 32.040.00		
No corresponding VegCAMP Association		
TOTAL	5.81	0.21

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

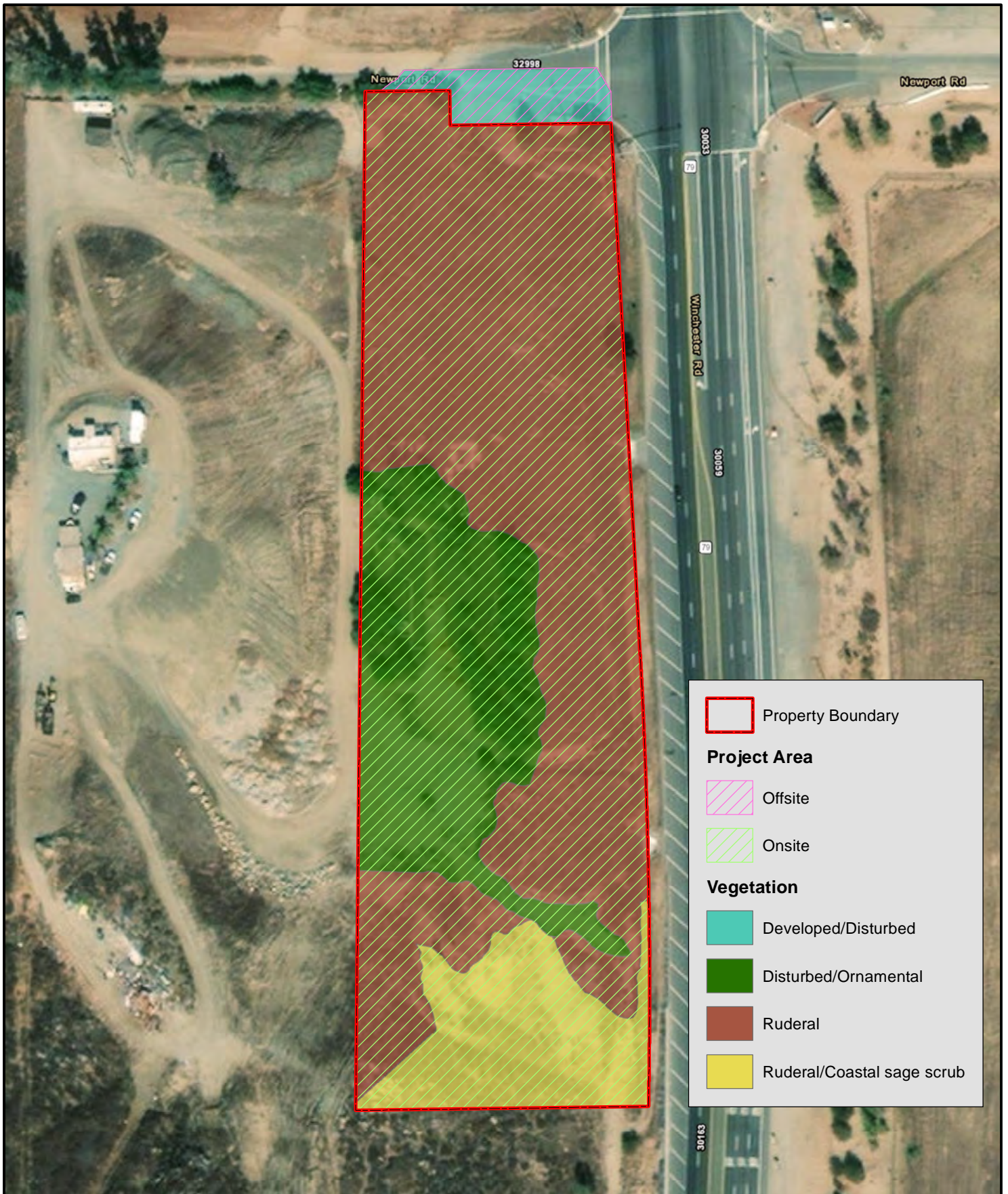
Section 6.1.2 *Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools* (MSHCP Section 6.1.2) of the MSHCP requires all subject properties under the jurisdiction of the MSHCP that are proposing a land use change/applying for a discretionary permit to conduct a MSHCP Section 6.1.2 assessment. This includes a habitat assessment for Riparian/Riverine areas, Vernal Pools, three fairy shrimp species; 1) Riverside fairy shrimp (*Streptocephalus woottoni*) (RFS), 2) vernal pool fairy shrimp (*Branchinecta lynchi*) (VPFS), and 3) Santa Rosa Plateau fairy shrimp (*Linderiella santarosae*) (SRPFS), and three bird species; 1) Least Bell’s Vireo (*Vireo bellii pusillus*) (LBVI), 2) Southwestern Willow Flycatcher (*Empidonax traillii extimus*) (SWFL), and 3) Western Distinct Population Segment (DPS)² Yellow-billed Cuckoo (*Coccyzus americanus*) (YBCU). If the assessment identifies suitable habitat for any of the six-species associated with riparian/riverine areas and vernal pools listed above, and the proposed project design does not incorporate avoidance of the identified habitat, focused surveys would be required, and avoidance and minimization measures will be implemented in accordance with the MSHCP’s species-specific objectives for these species.

According to Section 6.1.2 of the MSHCP:

"Riparian/Riverine Areas are lands which contain Habitat dominated by tress [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 fresh water flow during all or a portion of the year."

"Vernal pools are seasonal wetlands that occur in depression areas that have wetlands indicators of all three parameters (soils, vegetation and hydrology) during the wetter

² Distinct Population Segment: In addition to the listing and delisting of species and subspecies, the ESA [Endangered Species Act] allows the listing/delisting of Distinct Population Segments of vertebrate species (i.e., animals with backbones, mammals, birds, fish, reptiles, and amphibians). A Distinct Population Segment is a portion of a species' or subspecies' population or range. The Distinct Population Segment is described geographically instead of biologically, such as "all members of XYZ that occur north of 40 north latitude" (U. S. Fish and Wildlife Service - Pacific Region, 2019)



	Property Boundary
Project Area	
	Offsite
	Onsite
Vegetation	
	Developed/Disturbed
	Disturbed/Ornamental
	Ruderal
	Ruderal/Coastal sage scrub

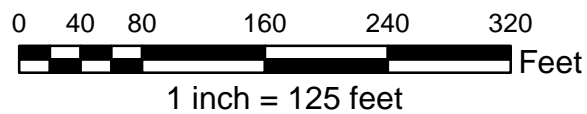


FIGURE 7
Vegetation/
Land Covers

portion of the growing season but normally lack wetlands 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, while upland species (annuals) may be dominant during the drier portion of the growing season. The determination that an area exhibits vernal pool characteristics, and the definition of the watershed supporting vernal pool hydrology, must be made on a case-by-case basis. Such determinations should consider the length of the time the area exhibits upland and wetland characteristics and the manner in which the area fits into the overall ecological system as a wetland. Evidence concerning the persistence of an area's wetness can be obtained from its history, vegetation, soils, and drainage characteristics, uses to which it has been subjected, and weather and hydrologic records."

"Fairy Shrimp. *For Riverside, vernal pool and Santa Rosa fairy shrimp, mapping of stock ponds, ephemeral pools and other features shall also be undertaken as determined appropriate by a qualified biologist."*

"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."

5.1 Riparian/Riverine Areas

5.1.1 Methods

5.1.1.1 Office Review

Prior to initiating the MSHCP Section 6.1.2 field assessment, SBS conducted an office review and analysis of the Winchester 7.5 Minute USGS California Quadrangle, historic aerial photography from Historic Aerials online and/or Google Earth, the U. S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI), Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps, and the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey. Also, SBS conducted a query of both the California Natural Diversity Database (CNDDB) and the USFWS Carlsbad Fish and Wildlife Office (CFWO) "Species Occurrence Data" GIS data to determine if the three-targeted fairy shrimp and/or three-targeted bird species listed above in Section 5.0 have been reported to occur within five miles of the Property.

5.1.1.2 Riparian/Riverine Field Mapping Assessment

A potential Riparian/Riverine Area is walked and mapped with Collector, recording a vertex for every two feet traveled, as either a polyline and/or polygon depending on the habitat type (i.e., Riparian vs. Riverine) and the width of the feature³. The jurisdictional extent of a Riparian/Riverine Area is typically the dripline⁴ of the riparian vegetation associated with the water feature if present, or the top of the streambank in the absence of riparian vegetation. Data collected while walking the potential Riparian/Riverine Area includes characteristics and functions such as hydrology, soils/substrates, dominant plant species/vegetation community, biological functions and values, presence/absence regarding the species listed in MSHCP Section 6.1.2, habitat suitability for LBVI, SWFL, YBCU, RFS, VPFS, SRPFS, and whether or not the

³ Any feature \leq to three feet in width, or lacking a discernable bed and bank, is mapped as a polyline and given a mean width. The feature is then calculated and depicted in ArcGIS by utilizing the Buffer feature to represent the mean width.

⁴ The area defined by the outermost circumference of a tree canopy where water drips from and onto the ground.

feature contributes to downstream resources for MSHCP Section 6.1.2 species and/or MSHCP Conservation Areas.

5.1.1.3 Field Survey Date and Weather Conditions

The MSHCP Section 6.1.2 assessment was conducted by biologist Tim Searl on December 7, 2020. Detailed survey information and conditions are presented in *Table 2 - MSHCP Section 6.1.2 Assessment Conditions* (Page 15).

5.1.2 Existing Conditions and Results

5.1.2.1 Historic Aerial Photography Analysis

Google Earth images from 2006, 2012, and 2014 were downloaded and georeferenced by SBS. An analysis of the Property and immediate surrounding area from each of those years is presented below.

2006

In 2006 each of the three Property parcels had at least one structure and appeared to be rural residential. Also, each of the three parcels extended further to the east prior to the widening of Hwy 79. The two southern parcels had direct access to Hwy 79 via dirt or gravel access road. The remaining vacant areas appear consistent with the current conditions. The property immediately west consisted of a rural residence with the vacant areas supporting ruderal vegetation. A rural residence was also present south of the Site along Hwy 79. Dryland agriculture appeared to be present to the north. *Figure 8 – 2006 Aerial Photograph* (Page 16) depicts the conditions described above.

2012

Construction for the widening of Hwy 79 in this area had begun in 2012 according to *Figure 9 – 2012 Aerial Photograph* (Page 17). The rural residences on the Property, to the west, and south had all been demolished. The majority of the property to the west had been cleared of vegetation and appeared to have been utilized as a staging ground for the Hwy 79 widening. The RW of Hwy 79 north of the Site appeared to have been partially graded with the remaining areas still in dryland agriculture.

2014

By 2014, the widening of Hwy 79 in this area appeared completed. Additional grading had occurred in the southern portion of the Property as part of, what appears to be, an aggregate crushing operation on the Property to the west. This likely accounts for the remnant gravel currently present in the southern portion of the Property. Additional areas appeared graded immediately north of the Property; however, it is unclear whether the detention basin had been completed. *Figure 10 – 2014 Aerial Photograph* (Page 18) depicts the conditions described above.

5.1.2.2 NWI

No drainage or wetland areas were mapped on or near the Property by the NWI (U. S. Fish and Wildlife Service, 2021).

5.1.2.3 FEMA

The Property was located in Zone X, which according to FEMA are “Areas of Minimal Flood Hazard” (Federal Emergency Management Agency, 2021).

5.1.2.4 Query Results

Although no suitable habitat was present on the Project, LBVI, RFS, and VPFS have been documented to occur within five miles of the Project. A total of 16 records (LBVI = 5; RFS = 8; VPFS = 3) from 1998 to 2020 were reported. The nearest documented record was of RFS approximately 2.0-miles west of the

Table 2 – MSHCP Section 6.1.2 Assessment Conditions

DATE	FIELD PERSONNEL	SURVEY TIME	TEMPERATURE ⁵	HUMIDITY	% CLOUD COVER	WIND SPEED	ANNUAL PRECIPITATION TO-DATE ⁶
12/7/2020	Tim Searl	06:30-13:00	51-72	52-14	100-100	0-2	0.40

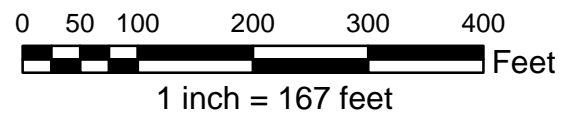
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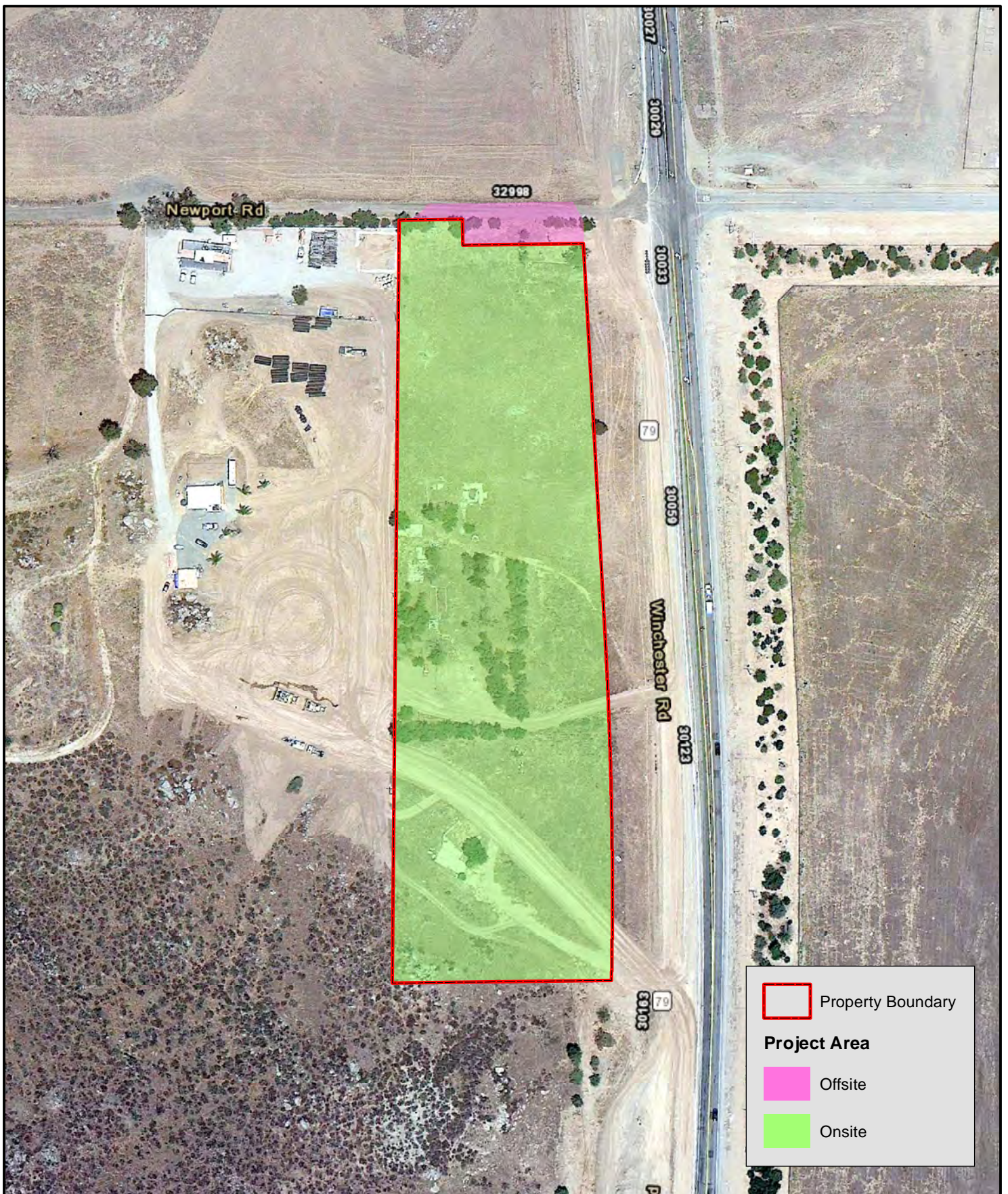
⁵ Temperature (Degrees Fahrenheit), Humidity (percent), and Wind Speed (mean miles per hour) were obtained in the field with a Kestrel 3500 weather meter.




⁶ Annual Precipitation (July 01 to June 30) To-Date was obtained from the Riverside County Flood Control and Water Conservation District’s Rain Gauge Map Website for Perris CDF – Station No. 152 (Riverside County Flood Control and Water Conservation District, 2021).



FIGURE 8
2006 Aerial
Photograph





	Property Boundary
Project Area	
	Offsite
	Onsite

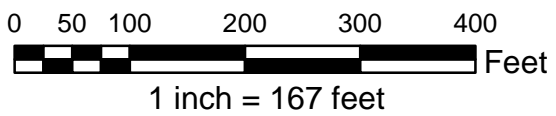


FIGURE 9
2012 Aerial
Photograph

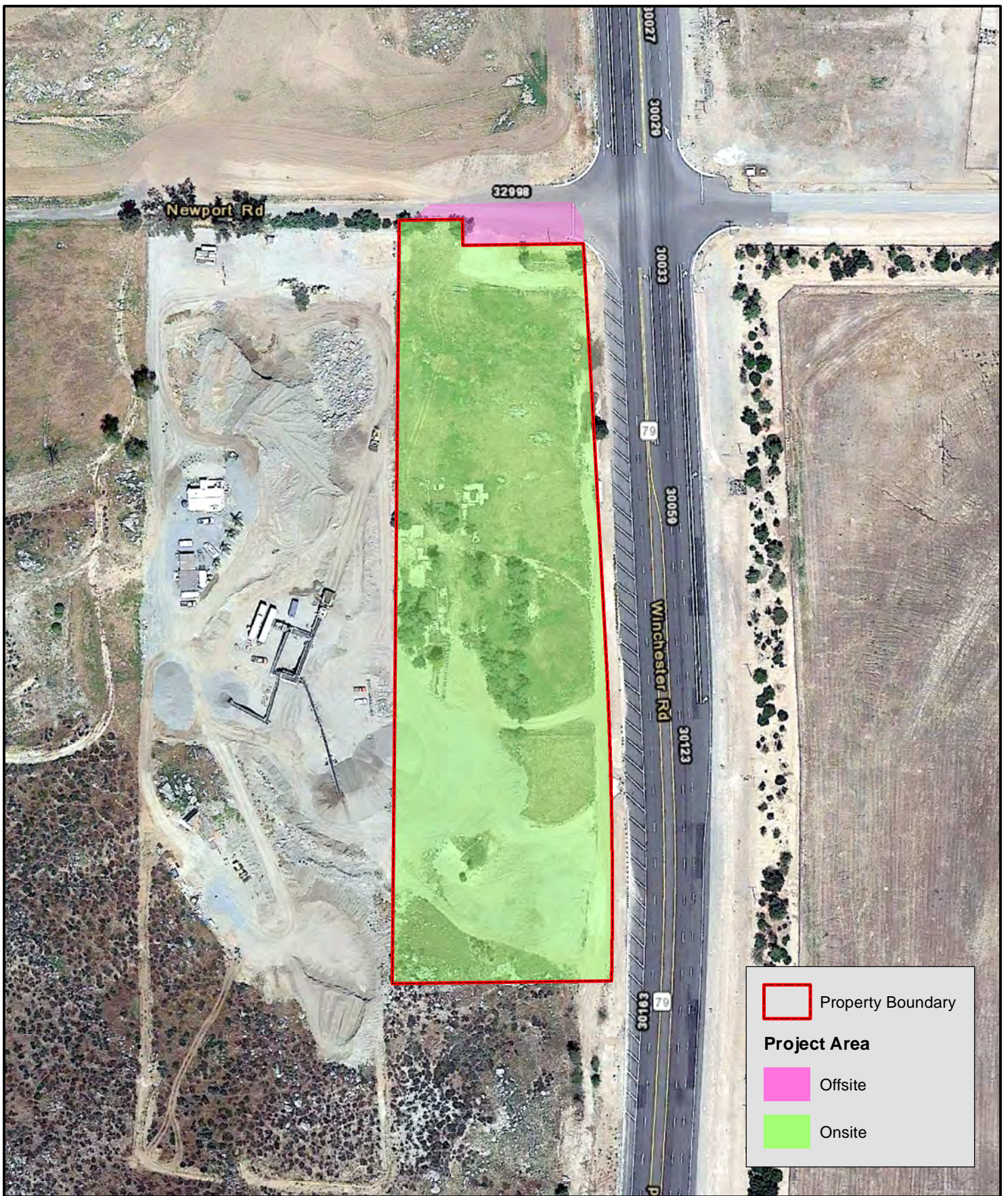
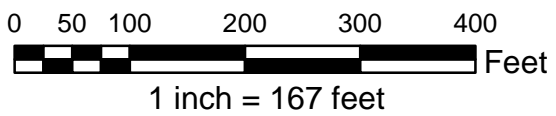


FIGURE 10
2014 Aerial
Photograph



Project in 2004. *Figure 11 – MSHCP Section 6.1.2 Targeted Species Query Results* (Page 20) depicts the query results.

5.1.2.5 Natural Resources Conservation Service Soils

According to the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey (United States Department of Agriculture Natural Resources Conservation Service, 2021), the Project consisted of four soil series as depicted by *Figure 12 – NRCS Soils* (Page 21). A brief description, as described by the NRCS, is presented below. Project acreages are provided in *Table 3 – NRCS Soils* (below). No hydric, clay, or saline-alkali soils were present on the Project.

- **Cieneba sandy loam, 15 to 50 percent slopes, eroded (ChF2):** A somewhat excessively drained residuum soil weathered from igneous rock. The depth to the restrictive feature is 10 to 20-inches to paralithic bedrock. The depth to the water table is typically more than 80-inches. The frequency of ponding is none.
- **Greenfield sandy loam, 2 to 8 percent slopes, eroded (GyC2):** A well-drained alluvium soil derived from granite. The depth to the restrictive feature and the water table is more than 80- The frequency of ponding is none.
- **Hanford coarse sandy loam, 8 to 15 percent slopes, eroded (HcD2):** A somewhat excessively drained alluvium soil derived from granite. The depth to the restrictive feature and the water table is more than 80- The frequency of ponding is none.
- **Madera fine sandy loam, 2 to 5 percent slopes, eroded (MaB2):** A moderately well-drained alluvium soil derived from granite. The depth to duripan is 20 to 40-inches. The depth to the water table is typically more than 80-inches. The frequency of ponding is none.

Table 3 – NRCS Soils

SOIL	PROPERTY/ONSITE PROJECT ACRES	OFFSITE PROJECT ACRES
CkF2	0.27	0
GyC2	1.11	0.15
HcD2	3.55	0
MaB2	0.88	0.06
TOTAL	5.81	0.21

5.1.2.2 Riparian/Riverine Areas Results

No features were present on the Property or offsite Project area meeting the criteria of a Riparian/Riverine Area.

5.1.3 Impacts

No Riparian/Riverine Area impacts will occur due to the lack of Riparian/Riverine Areas on the Project.

5.1.4 Mitigation

No Riparian/Riverine Area mitigation is required. The Project is consistent with the Riparian/Riverine Areas section of MSHCP Section 6.1.2.

5.2 Vernal Pools

5.2.1 Methods

The perimeter of a potential Vernal Pool is walked and mapped by creating a polygon utilizing Collector. Data collected while walking each potential Vernal Pool feature includes plant species composition, presence/absence of standing water, evidence of potential ponding (i.e., cracked mud), functions and values,

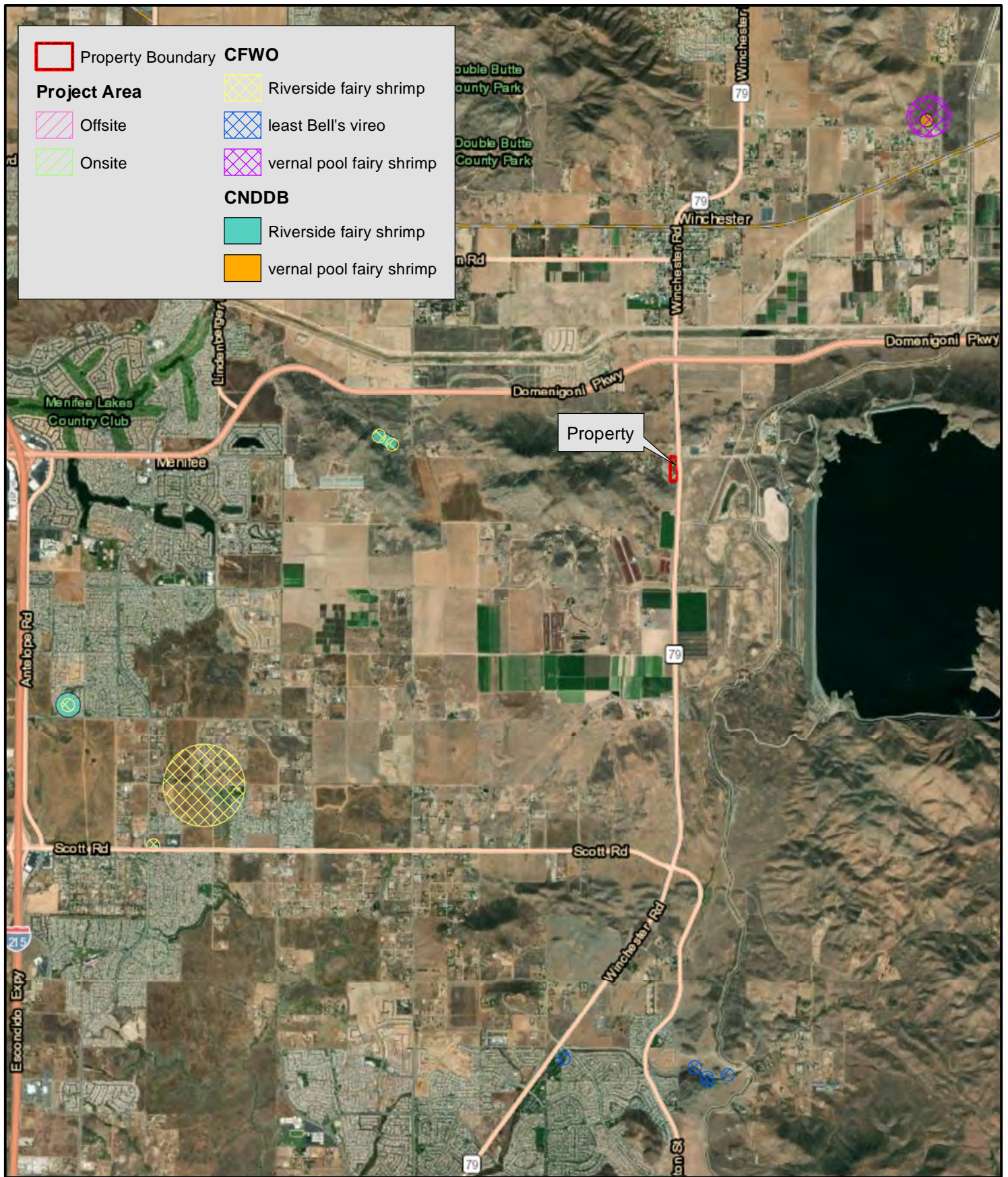
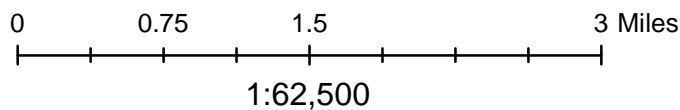


FIGURE 11
MSHCP Section 6.1.2
Targeted Species
Query Results





	Property Boundary
Project Area	
	Offsite
	Onsite
Soil	
	CkF2
	GyC2
	HcD2
	MaB2

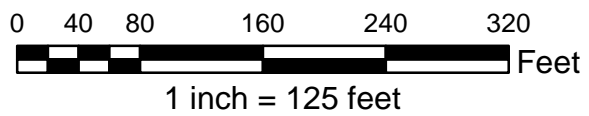


FIGURE 12
NRCS Soils

presence/absence regarding the species listed in MSHCP Section 6.1.2, and habitat suitability for RFS, VPFS, SRPFS.

5.2.2 Existing Conditions and Results

No evidence of vernal pools was recorded on site. Vernal pools are depressions in areas where a hard-underground layer prevents rainwater from draining downward into the subsoils. When rain fills the pools in the winter and spring, the water collects and remains in the depressions. In the springtime, the water gradually evaporates away, until the pools become completely dry in the summer and fall. Vernal pools tend to have an impermeable layer that results in ponded water. The soil texture (i.e., the amount of sand, silt, and clay particles) typically contains higher amounts of fine silts and clays with lower percolation rates. Pools that retain water for a sufficient length of time will develop hydric cells. Hydric cells form when the soil is saturated from flooding for extended periods of time and anaerobic conditions (i.e., lacking oxygen or air) develop. None of these conditions (i.e., no depressions, hydric soils, etc.) were observed on the Site or offsite Project areas and all soils are mapped as sandy/loamy items that don't retain water.

5.2.3 Impacts

No Vernal Pool impacts will occur due to the lack of Vernal Pools on the Project.

5.2.4 Mitigation

No Vernal Pool mitigation is required. The Project is consistent with the Vernal Pools of MSHCP Section 6.1.2.

5.3 Fairy Shrimp

5.3.1 Methods

The perimeter of a potential Fairy Shrimp Habitat feature is walked and mapped by creating a polygon utilizing Collector. Data collected while walking each potential Fairy Shrimp feature includes plant species composition, presence/absence of standing water, evidence of potential ponding (i.e., cracked mud), functions and values, presence/absence regarding the species listed in MSHCP Section 6.1.2, and habitat suitability for RFS, VPFS, SRPFS.

5.3.2 Existing Conditions and Results

No suitable habitat for fairy shrimp was detected on the Property. Similar to the vernal pool assessment, no features were detected that would support fairy shrimp. No standing water or other sign of areas that pond water (i.e., mud cracks, tire ruts) were recorded.

5.3.3 Impacts

No Fairy Shrimp impacts will occur due to the lack of Fairy Shrimp habitat on the Project.

5.3.4 Mitigation

No Fairy Shrimp mitigation is required. The Project is consistent with the Fairy Shrimp of MSHCP Section 6.1.2.

5.4 Riparian Birds

5.4.1 Methods

Potentially suitable habitat for LBVI, SWFL, and/or YBCU are mapped in the field utilizing Collector. Habitat assessments are conducted by SWFL and YBCU permitted biologist Tim Searl (Permit Number: TE02351A-1).

A polygon is created in the field utilizing Collector while walking the perimeter of potentially suitable habitat for riparian birds. Data collected while assessing the potential habitat includes characteristics such as vegetation community, dominant plant species present, plant densities, and presence or absence of surface water.

5.4.2 Existing Conditions and Results

No suitable habitat for LBVI, SWFL, or YBCU was present on the Property or offsite Project area.

5.4.3 Impacts

No impacts will occur to Riparian Birds due to the lack of Riparian Bird habitat on or near the Project.

5.4.4 Mitigation

No Riparian Bird mitigation is required. The Project is consistent with MSHCP Section 6.1.2.

6.0 PROTECTION OF NARROW ENDEMIC PLANT SPECIES (SECTION 6.1.3)

The Property and offsite Project area were not located within a designated assessment area for Narrow Endemic Plant Species (NEPS).

7.0 ADDITIONAL SURVEY NEEDS AND PROCEDURES (SECTION 6.3.2)

The MSHCP covers 146 species of plants and animals of which 40 species have specific survey requirements (Dudek & Associates, Inc., 2003). 34 of the 40 species have an associated survey area map that designates areas where surveys may be required if suitable habitat is present (Dudek & Associates, Inc., 2003).

7.1 Criteria Area Plant Species

The Property and offsite Project area were not located within a designated assessment area for Criteria Area Plant Species (CAPS).

7.2 Amphibians

The Property and offsite Project area were not located within a designated assessment area for Amphibians.

7.3 Burrowing Owl

The Property was located within a designated assessment area for BUOW as depicted by *Figure 13 – BUOW Assessment Area* (Page 24). A description of the MSHCP Objectives and BUOW assessment process are provided below.

7.3.1 Background

7.3.1.1 MSHCP Objectives

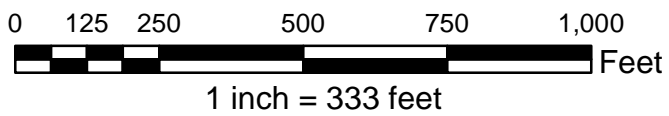
The MSHCP objectives for BUOW include the following:

Objective 1

Include within the MSHCP Conservation Area at least 27,470 acres of suitable primary habitat for the burrowing owl including grasslands.



FIGURE 13
BUOW Assessment Area



Objective 2

Include within the MSHCP Conservation Area at least 5 Core Areas and interconnecting linkages. Core areas may include the following: (1) Lake Skinner/Diamond Valley Lake area (Existing Core C plus Proposed Extension of Existing Cores 5, 6, 7; 29,060 acres); (2) playa west of Hemet (Proposed Noncontiguous Habitat Block 7; 1,250 acres); (3) San Jacinto Wildlife Area/Mystic Lake area including Lake Perris area (Existing Core H; 17,470 acres); (4) Lake Mathews (Existing Core C plus Proposed Extension of Existing Cores 2; 23,710 acres); and (5) along the Santa Ana River (9,670 acres). The Core Areas should support a combined total breeding population of approximately 120 burrowing owls with no fewer than five pairs in any one Core area.

Objective 3

Include within the MSHCP Conservation Area at least 22,120 acres of suitable secondary habitat for the burrowing owl including playas and vernal pools, and agriculture outside of the Core Areas identified above. Areas where additional suitable habitat could be conserved include west of the Jurupa Mountains, near Temescal Wash (i.e., vicinity of Alberhill), near Temecula Creek, within the Lakeview Mountains, Banning, the Badlands, Gavilan Hills, and Quail Valley.

Objective 4

Include within the MSHCP Conservation Area the known nesting locations of the burrowing owl at Lake Perris, Mystic Lake/San Jacinto Wildlife area, Lake Skinner area, the area around Diamond Valley Lake, playa west of Hemet, Lakeview Mountains, Lake Mathews/Estelle Mountain Reserve and Sycamore Canyon Regional Park.

Objective 5

Surveys for burrowing owl will be conducted as part of the project review process for public and private projects within the burrowing owl survey area where suitable habitat is present (see Burrowing Owl Survey Area Map, Figure 6-4 of the MSHCP, Volume I). The locations of this species determined as a result of survey efforts shall be conserved in accordance with procedures described within Section 6.3.2, MSHCP, Volume I and the guidance provided below:

Burrowing owl surveys shall be conducted utilizing accepted protocols as follows. If burrowing owls are detected on the project site, then the action(s) taken will be as follows:

If the site is within the Criteria Area, then at least 90 percent of the area with long-term conservation value will be included in the MSHCP Conservation Area. Otherwise:

- 1. If the site contains, or is part of an area supporting less than 35 acres of suitable habitat or the survey reveals that the site and the surrounding area supports fewer than 3 pairs of burrowing owls, then the on-site burrowing owls will be passively or actively relocated following accepted protocols.*
- 2. If the site (including adjacent areas) supports three or more pairs of burrowing owls, supports greater than 35 acres of suitable habitat and is non-contiguous with MSHCP Conservation Area lands, at least 90 percent of the area with long-term conservation value and burrowing owl pairs will be conserved onsite.*

The survey and conservation requirements stated in this objective will be eliminated when it is demonstrated that Objectives 1 – 4 have been met.

Objective 6

Pre-construction presence/absence surveys for burrowing owl within the survey area where suitable habitat is present will be conducted for all Covered Activities through the life of the permit. Surveys will be conducted within 30 days prior to disturbance. Take of active nests will be avoided. Passive relocation (use of one-way doors and collapse of burrows) will occur when owls are present outside the nesting season.

Objective 7

Translocation sites for the burrowing owl will be created in the MSHCP Conservation Area for the establishment of new colonies. Translocation sites will be identified, taking into consideration unoccupied habitat areas, presence of burrowing mammals to provide suitable burrow sites, existing colonies and effects to other Covered Species. Reserve Managers will consult with the Wildlife Agencies regarding site selection prior to translocation site development.

7.3.1.2 Life History

The BUOW is a priority 2 California Species of Special Concern (SSC) (Gervais, 2008), and is a Covered species under the MSHCP. In California, the BUOW is a year-round resident throughout much of the state (Gervais, 2008); however, migrants from other regions of western North America may augment resident lowland populations in winter (Gervais, 2008). Habitat for the BUOW primarily consists of open grasslands, but it also occurs in some human-altered landscapes such as agricultural environments (Gervais, 2008). Nest and roost burrows of the BUOW are most commonly dug by the California ground squirrel (*Spermophilus beecheyi*) (CGS) in California, but it will also utilize burrows and dens constructed by the American badger (*Taxidea taxus*), coyote (*Canis latrans*), and fox (*Urocyon cinereoargenteus* and *Vulpes* spp.) (Gervais, 2008).

The diet of the BUOW consists primarily of insects (i.e., centipedes, spiders, beetles, crickets, and grasshoppers) (Gervais, 2008), but it will also take small mammals, reptiles, birds, and carrion (i.e., dead flesh) (Polite, 1999). BUOW hunt from a perch, hover, hawk, dive, and hop after prey on the ground (Polite, 1999). Although insects dominate the BUOW diet numerically, recent research has suggested that in California, rodent populations, particularly those of the California vole (*Microtus californicus*), may greatly influence BUOW survival and reproductive success (Gervais, 2008).

The BUOW breeding season is typically March through August with peak breeding activity occurring in April and May (Polite, 1999). Male BUOW give courtship displays and notes in front of the burrow (Polite, 1999). Clutch size is relatively large with a range of two to ten eggs and a mean of five to six eggs per clutch (Polite, 1999). Young BUOW emerge from the burrow at about two weeks old and are able to fly by about four weeks old (Polite, 1999).

7.3.1.3 Burrowing Owl Survey Protocols

Habitat assessments and focused surveys for BUOW in the MSHCP Plan Area are conducted in accordance with the *Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area* (Environmental Programs Department, 2006) (BUOW Survey Instructions). The MSHCP references the California Burrowing Owl Consortium's *Burrowing Owl Survey Protocol and Mitigation Guidelines* (California Burrowing Owl Consortium, 1993), which was adopted by CDFW in

1995. On March 7, 2012, CDFW provided a revised *Staff Report on Burrowing Owl Mitigation* (California Department of Fish and Wildlife, 2012) that provides more current scientific methods. The survey methods described in the BUOW Survey Instructions and CDFW's revised staff report are similar. However, the BUOW Survey Instructions provide additional detail to ensure consistency with specific conservation requirements of the MSHCP. Surveys are conducted with an attempt to incorporate CDFW guidance, where appropriate such as the *Time of Day* specifically stating that surveys can be conducted until 10:00 AM. The BUOW Survey Instructions are detailed below.

The BUOW Survey Instructions describe Step I as follows:

"The first step in the assessment process is to walk the property to identify the presence of burrowing owl habitat on the project site. If habitat is found on the site, then walk a 150-meter (approximately 500 feet) buffer zone around the project boundary. If permission to access the buffer area cannot be obtained, do not trespass on adjacent property but visually inspect the adjacent habitat areas with binoculars and/or spotting scopes."

If a habitat assessment reveals that BUOW habitat occurs on a site, then, in the least, a *Step II Part A: Focused Burrow Surveys* and *Pre-construction Survey* are required. If BUOW habitat is not present, then no further surveys are required.

Step II surveys consist of two parts; *Part A: Focused Burrow Surveys* and *Part B: Focused Burrowing Owl Surveys*. All Step II surveys must be conducted during the BUOW breeding season (March 1 to August 31), generally between the hours of one hour before sunrise and two hours after sunrise, and/or two hours before sunset and one hour after sunset. Further, Step II surveys cannot be conducted within five days of rain, during rain, high winds (>20mph), dense fog, or temperatures exceeding 90 °F.

Part A surveys are conducted in an effort to detect natural potential BUOW burrows (i.e., CGS burrows), suitable human-created structures (i.e., culverts), and/or occupied BUOW burrows. The BUOW Survey Instructions describe the methods for conducting a Part A survey and those are presented below.

"1. A systematic survey for burrows including burrowing owl sign should be conducted by walking through suitable habitat over the entire survey area (i.e., the project site and within 150 meters). Pedestrian survey transects need to be spaced to allow 100% visual coverage of the ground surface. The distance between transect center lines should be no more than 30 meters (approximately 100 ft.) and should be reduced to account for differences in terrain, vegetation density, and ground surface visibility. To efficiently survey projects larger than 100 acres, it is recommended that two or more qualified surveyors conduct concurrent surveys."

"2. The location of all suitable burrowing owl habitat, potential owl burrows, burrowing owl sign, and any owls observed should be recorded and mapped, including GPS coordinates. If the survey area contains natural or man-made structures that could potentially support burrowing owls, or owls are observed during the burrow surveys, the systematic surveys should continue as prescribed in Part B. If no potential burrows are detected, no further surveys are required. A written report including photographs of the project site, location of burrowing owl habitat surveyed, location of transects, and burrow survey methods should be prepared. If the report indicates further surveys are not required, then the report should state the reason(s) why further focused burrowing owl surveys are not necessary."

Part B surveys are conducted on four separate field survey dates, and the first survey may be conducted concurrent with the Part A survey. These four focused surveys are conducted to adequately determine the presence or absence of BUOW when those structures or features it inhabits, as described above, are present on a subject property. The BUOW Survey Instructions describe the methods for conducting Part B surveys and those are presented below.

"1. Upon arrival at the survey area and prior to initiating the walking surveys, surveyors using binoculars and/or spotting scopes should scan all suitable habitat, location of mapped burrows, owl sign, and owls, including perch locations to ascertain owl presence. This is particularly important if access has not been granted for adjacent areas with suitable habitat."

"2. A survey for owls and owl sign should then be conducted by walking through suitable habitat over the entire project site and within the adjacent 150 m (approx. 500 feet). These "pedestrian surveys" should follow transects (i.e., Survey transects that are spaced to allow 100% visual coverage of the ground surface. The distance between transect center lines should be no more than 30 meters (approx 100 feet.) and should be reduced to account for differences in terrain, vegetation density, and ground surface visibility. To efficiently survey projects larger than 100 acres, it is recommended that two or more qualified surveyors conduct concurrent surveys.) It is important to minimize disturbance near occupied burrows during all seasons."

"3. If access is not obtained, then the area adjacent to the project site shall also be surveyed using binoculars and/or spotting scopes to determine if owls are present in areas adjacent to project site. This 150-meter buffer zone is included to fully characterize the population. If the site is determined not to be occupied, no further surveys are required until 30 days prior to grading (see Pre-construction Surveys below)."

Subsequent to the completion of the proper surveys, a final report shall be submitted to the appropriate Lead Agency (i.e., City or County). The final report shall contain and discuss the necessary information (i.e., survey methods, transect widths, duration, conditions, results, etc.), and the appropriate maps (i.e., transect location map, burrow location map, etc.).

All subject properties containing suitable habitat and/or potential BUOW burrows must conduct a Pre-Construction Survey within 30 days prior to ground disturbance. This includes sites where BUOW were determined to be absent.

7.3.2 Methods

7.3.2.1 CNDDDB Query

SBS conducted a query of the CNDDDB GIS data to determine if BUOW have been reported to occur within five miles of the Property. The results of the query are presented in section 7.3.3.1 below.

7.3.2.2 Field Survey Date and Weather Conditions

The Step I: Habitat Assessment was conducted by biologist Tim Searl on December 7, 2020. The Step II surveys were conducted by Tim Searl on March 1, March 24, April 9, and May 8, 2021. Detailed survey information and conditions are presented in *Table 4 - BUOW Assessment Conditions* (Page 29).

Table 4 – BUOW Assessment Conditions

DATE	FIELD PERSONNEL	SURVEY TYPE ⁷	SURVEY TIME	SUNRISE ⁸	TEMPERATURE ⁹	HUMIDITY	CLOUD COVER	WIND SPEED	ANNUAL PRECIPITATION TO-DATE ¹⁰	MOON PHASE
12/7/2020	Tim Searl	HA	06:30-13:00	06:39	51-72	52-14	100-100	0-2	0.40	Waning Gibbous
3/1/2021	Tim Searl	BS, FS	07:00-10:30	06:16	46-63	36-20	0-0	3-4	6.12	Waning Gibbous
3/24/2021	Tim Searl	BS, FS	06:30-10:00	06:46	41-57	96-48	20-20	0-2	9.03	Waxing Gibbous
4/9/2021	Tim Searl	BS, FS	05:45-10:30	06:24	50-70	96-55	30-0	0-3	9.03	Waning Crescent
5/8/2021	Tim Searl	BS, FS	06:00-10:15	05:52	55-70	94-56	0-0	0-2	9.44	Waning Crescent

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⁷ HA: Habitat Assessment; BS: Burrow Survey; FS: Focused Survey

⁸ Sunrise and Moon Phase was obtained from the Winchester, California Weather Underground Website (Weather Underground, 2021)

⁹ Temperature (Degrees Fahrenheit), Humidity (percent), and Wind Speed (mean miles per hour) were obtained in the field with a Kestrel 3500 weather meter

¹⁰ Annual Precipitation (July 01 to June 30) To-Date was obtained from the Riverside County Flood Control and Water Conservation District's Rain Gauge Map Website for Winchester – Station No. 248 (Riverside County Flood Control and Water Conservation District, 2021).

7.3.2.3 Field Assessment

Step I: Habitat Assessment

Initially, the Site and surrounding area was observed from a vehicle while parked (i.e., windshield survey) to observe general habitat conditions. Subsequent to performing the “windshield survey,” a pedestrian survey of the Project area was conducted. Transects were spaced at no more than approximately 20 to 40-feet to allow for 100% visual coverage. Field observations such as plant communities, vegetation height and density, topography, and soil suitability were noted. Habitat suitability for BUOW was classified as Low¹¹, Moderate¹², or High¹³.

Step II Part A: Focused Burrow Survey

Potential BUOW burrows (i.e., California ground squirrel burrows) and burrow surrogates (i.e., earthen berms, cement culverts, asphalt piles, rock piles, and openings underneath cement or asphalt pavement) detected as part of a focused burrow survey are mapped in the field utilizing Collector. Data collected for each burrow location includes type of burrow or burrow surrogate, a range of the number of burrows (i.e., single burrow vs. burrow complex), number of burrows, presence or absence of BUOW sign (i.e., feathers, wash, pellets, etc.), and pertinent ecological notes.

Step II Part B: Focused Burrowing Owl Surveys

If BUOW are detected the location is recorded using Collector. Additional data recorded includes the number of adults and juveniles, detection location (i.e., burrow site, perch, etc.), and any pertinent ecological and/or behavioral observations.

7.3.2 Existing Conditions and Results

7.3.3.1 CNDDDB Query

According to the CNDDDB, a total of 49 records of BUOW have been reported within five miles of the Project. 23 of the 49 records were designated as “Sensitive” by the CNDDDB, and therefore, the specific location data for those records were suppressed and only the 7.5 Minute USGS Quad Name was given. The nearest documented occurrence of the remaining 26 records was approximately 1.5-miles southwest of the Project in 2007. *Figure 14 - BUOW Query Results* (Page 31) depicts the locations for the 26 records.

7.3.3.2 Assessment Results

The results of the BUOW assessment are detailed below. The assessment results (i.e., suitable habitat, potential owl burrows, transects) are depicted on *Figure 15 – BUOW Assessment Results* (Page 32). Representative photographs of the Site and surrounding area are presented in Appendix D.

Step I: Habitat Assessment

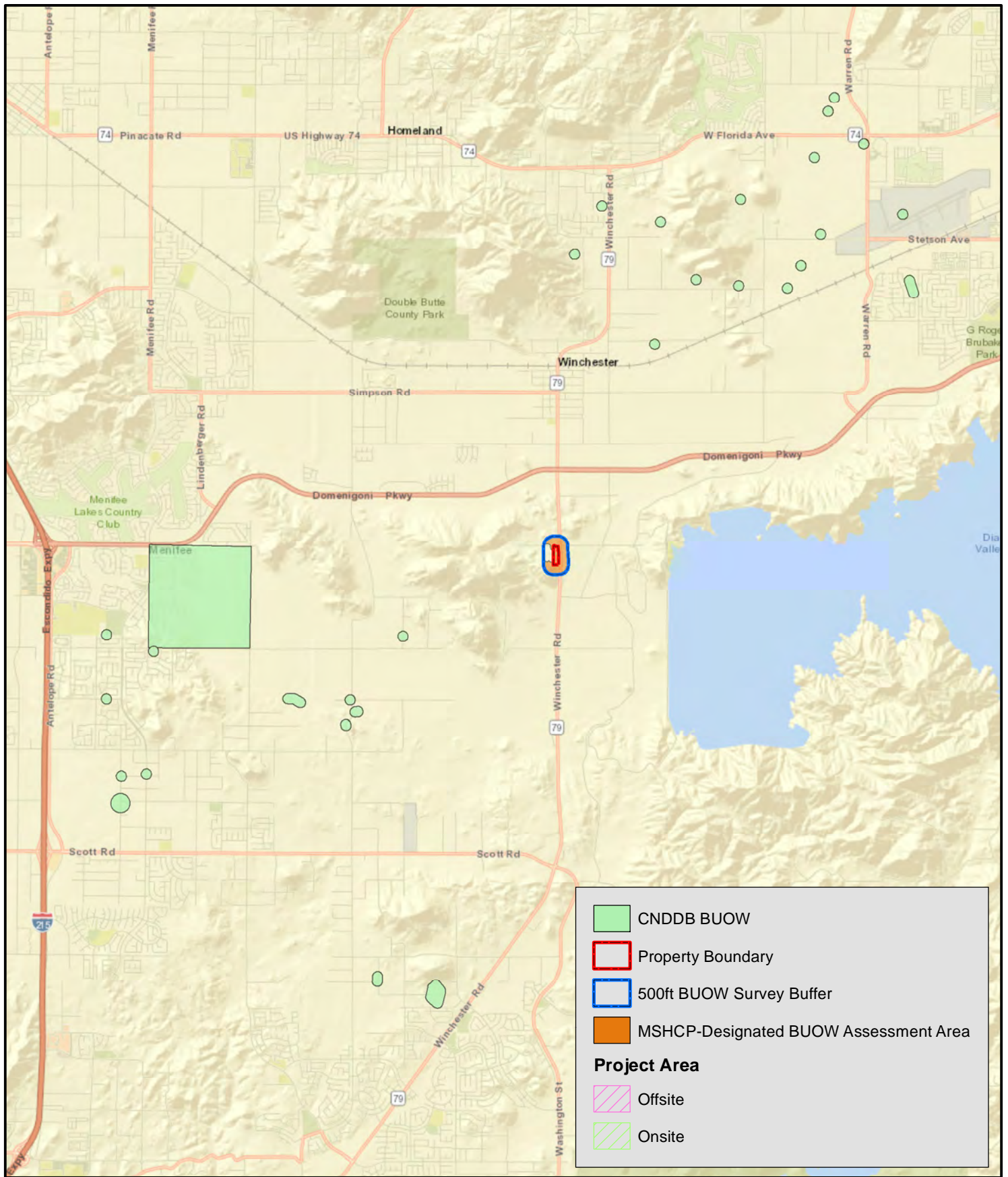
The MSHCP-designated BUOW Assessment Area within 500-feet of the Project supported 18.30-acres of suitable habitat, including 4.19-acres of low-quality habitat on the Property. The offsite Project area did not support suitable BUOW habitat.

The Property habitat consisted primarily of dense non-native grasses, and was confined by a stand of ornamental trees and disturbed rural residential lots to the west and Hwy 79 to the east. A stand of

¹¹ Structurally suitable; however, factors such as compacted soils, trees, dense scrub, human activity (i.e., disking, historical use), domesticated dogs/cats, etc. have degraded the quality of the habitat.

¹² Structurally suitable with less of the above degrading factors, but still not “preferred” BUOW habitat.

¹³ Preferred habitat of open, treeless areas, with low growing/sparse vegetation supporting high densities of fossorial mammals.



	CNDDDB BUOW
	Property Boundary
	500ft BUOW Survey Buffer
	MSHCP-Designated BUOW Assessment Area
Project Area	
	Offsite
	Onsite

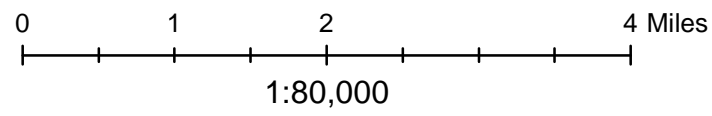


FIGURE 14
BUOW Query
Results

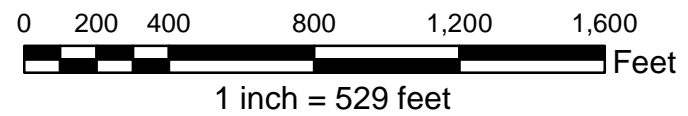
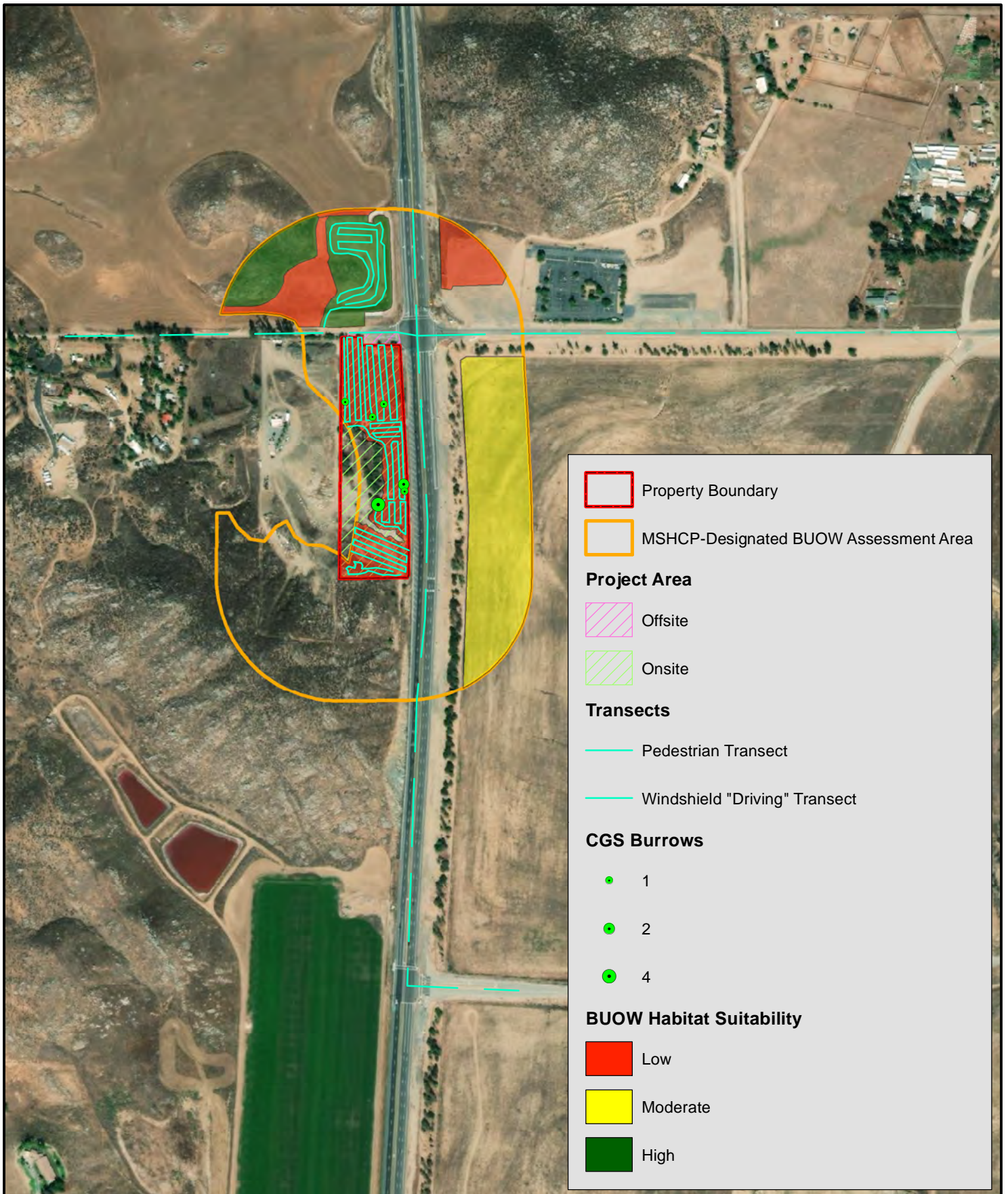


FIGURE 15
BUOW Assessment
Results

ornamental trees was also present along the northern border. The high-quality habitat north of the Project consisted of a dry detention basin, and small hills comprised of numerous rock outcroppings. The low-quality habitat to the north was an active agricultural field planted with wheat (*Triticum aestivum*). The low-quality habitat northeast of the intersection of Hwy 79 and Newport Road was a maintained vacant lot. The moderate-quality habitat east of Hwy 79 was a mowed, manufactured slope.

The Step II Part A: Focused Burrow Survey

The Property supported very few potential owl burrows with all those detected being CGS burrows. A total of 10 CGS burrows were detected on the Property. No burrow surrogates were detected.

The high-quality habitat offsite to the north and the moderate-quality habitat to the east both supported CGS populations; however, individual burrows were not mapped in these locations due to these areas being offsite.

Step II Part B: Focused Burrowing Owl Surveys

No BUOW or BUOW sign was detected over the course of the protocol surveys. BUOW were absent within 500-feet of the Project.

7.3.3 Impacts

No Project impacts will occur to BUOW with the implementation of the required 30-Day BUOW Pre-Construction Survey due to the presence of structurally suitable habitat.

7.3.4 Mitigation

BUOW mitigation is not anticipated; however, if BUOW have colonized the Property prior to the initiation of project-related construction, the Applicant should immediately inform the Riverside County Environmental Programs Department (EPD), RCA and Wildlife Agencies (i.e., CDFW and USFWS), and would need to coordinate further with EPD, RCA and the Wildlife Agencies, including the possibility of preparing a Burrowing Owl Protection and Relocation Plan, prior to initiating ground disturbance.

7.4 Mammals

The Property and offsite Project area were not located within a designated assessment area for Mammals.

8.0 INFORMATION ON OTHER SPECIES

8.1 Delhi Sands Flower Loving Fly

The Property and offsite Project area were not located within an area with Delhi sands.

8.2 Species Not Adequately Conserved

No species listed in MSHCP Table 9-3 (Dudek & Associates, Inc., 2003) were detected on or near the Site.

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

Section 6.1.4 of the MSHCP provides recommendations and guidelines to minimize potential “edge effects”¹⁴ resulting from locating development projects in close proximity to the MSHCP Reserve

¹⁴ Edge effects are defined by the MSHCP as “Adverse direct and indirect effects to species, Habitats and Vegetation Communities along the natural urban/wildlands interface. May include predation by mesopredators (including native and non-native predators), invasion by exotic species, noise, lighting, urban runoff and other anthropogenic impacts (trampling of vegetation, trash and toxic materials dumping, etc.)”

Assembly and other conservation areas. Measures, such as buffers and/or barriers, are typically put in place to control drainage, toxics, lighting, noise, and invasives.

The Property was not located within a Criteria Cell, and the nearest being Criteria Cell #4980 located approximately 2.60-miles south of the Site. The Project will not have adverse edge effects on the targeted ARL within Criteria Cell #4980. Compliance with MSHCP Section 6.1.4 is not required for the Project; however, the Project will still implement applicable BMPs.

10.0 BEST MANAGEMENT PRACTICES (VOLUME I, APPENDIX C)

The following BMPs, taken directly from the MSHCP (Dudek & Associates, Inc., 2003), should be implemented to the extent feasible.

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 site boundaries within which the project activities must be accomplished.
2. Water pollution and erosion control plans shall be developed and implemented in accordance with RWQCB requirements.
3. The footprint of disturbance shall be minimized to the maximum extent feasible. Access to sites shall be via pre-existing access routes to the greatest extent possible.
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 reviewed by the biologist prior to initiation of work.
5. Projects 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.
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.
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.
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 located 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 [USFWS], and CDFG [CDFW], RWQCB and shall be cleaned up immediately and contaminated soils removed to approved disposal areas.

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.
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 footprint.
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.
12. Exotic species that prey upon or displace target species of concern should be permanently removed from the site to the extent feasible.
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).
14. Construction employees shall strictly limit their activities, vehicles, equipment, and construction materials to the proposed project footprint 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.
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.

11.0 REFERENCES

- California Burrowing Owl Consortium. (1993, April). *Burrowing Owl Survey Protocol and Guidelines*. Retrieved 2021, from California Department of Fish and Wildlife: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83842&inline>
- California Department of Fish and Wildlife. (2012, March 7). *Staff Report on Burrowing Owl Mitigation*. Retrieved 2020, from Survey and Monitoring Protocols and Guidelines: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83843&inline>
- California Department of Fish and Wildlife. (2018, March 20). *Survey and Monitoring Protocols and Guidelines*. Retrieved 2020, from Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959&inline>
- California Department of Fish and Wildlife. (2020, September 9). *California Natural Community List*. Retrieved 2021, from <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=153398&inline>
- California Department of Fish and Wildlife. (2020, September 9). *Natural Communities - List*. Retrieved May 2021, from Ca.gov - California Department of Fish and Wildlife: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=153398&inline>
- California Native Plant Society. (2020). *The CNPS Ranking System*. Retrieved 2020, from California Native Plant Society: <http://www.rareplants.cnps.org/glossary.html#lists>
- Chesser, R. T., K. J. Burns, C. Cicero, J. L. Dunn, A. W. Kratter, I. J. Lovette, P. C. Rasmussen, J. V. Remsen, Jr., D. F. Stotz, and K. Winker. (2019). *Check-list of North American Birds (online)*.

- (American Ornithological Society) Retrieved 2021, from <http://checklist.americanornithology.org/taxa>
- Crother, B. I. (2017). Scientific and Standard English Names of Amphibians and Reptiles of North America North of Mexico, with Comments Regarding Confidence in Our Understanding. *SSAR Herpetological Circular* 43, 1-102. Retrieved 2020, from <https://ssarherps.org/wp-content/uploads/2017/10/8th-Ed-2017-Scientific-and-Standard-English-Names.pdf>
- Dudek & Associates, Inc. (2003). *RCA Documents Library - Multiple Species Habitat Conservation Plan*. Retrieved 2021, from Regional Conservation Authority (RCA) Western Riverside County: <https://www.wrc-rca.org/document-library/>
- Dudek & Associates, Inc. (2004, August 9). *Errata to MSHCP - Clarifications and Corrections to the MSHCP*. Retrieved 2021, from RCA Documents Library: https://www.wrc-rca.org/Permit_Docs/MSHCP/Clarifications_and_Corrections_to_the_MSHCP.pdf
- Environmental Programs Department. (2006, March 29). *Burrowing Owl Survey Instructions For the Western Riverside Multiple Species Habitat Conservation Plan Area*. Retrieved 2021, from Consultant Resources: http://rctlma.org/Portals/3/EPD/consultant/burrowing_owl_survey_instructions.pdf
- Federal Emergency Management Agency. (2021). *FEMA Flood Map Service Center: Welcome!* Retrieved 2021, from <https://msc.fema.gov/portal/home#>
- Gervais, J. A. (2008). Burrowing Owl (*Athene cunicularia*). In W. D. Shuford, & T. Gardali, *California Bird Species of Special Concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California* (Studies of Western Birds 1 ed., pp. 218-226). Camarillo and Sacramento, California: Western Field Ornithologists and California Department of Fish and Game.
- Historic Aerials by Netronline. (2020). *Historic Aerials*. Retrieved 2020, from <https://www.historicaerials.com/>
- Jepson Flora Project (eds.). (2020). *Jepson eFlora*. Retrieved 2021, from <http://ucjeps.berkeley.edu/eflora/>
- Lightner, J. (2006). *San Diego County Native Plants* (2nd Edition ed.). San Diego: San Diego Flora.
- Oscar F. Clarke, et al. (2007). *Flora of the Santa Ana River and Environs: with references to world botany*. Berkeley: Heyday Books.
- Polite, C. (1999, September). *California Wildlife Habitat Relationships System - California Department of Fish and Game California Interagency Wildlife Task Group - Burrowing Owl*. (L. Kiff, Ed.) Retrieved 2021, from Life History Accounts and Range Maps - California Wildlife Habitat Relationships System: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=1871&inline=1>
- Regional Conservation Authority. (2020). *RCA MSHCP Information App*. Retrieved 2021, from <http://wrcrca.maps.arcgis.com/apps/webappviewer/index.html?id=a73e69d2a64d41c29ebd3acd67467abd>
- Riverside County. (1993). *Riverside County Oak Tree Management Guidelines*. Retrieved 2020, from https://planning.rctlma.org/Portals/14/devproc/guidelines/oak_trees/oak_trees.html

- Riverside County. (2020, December). *Geographic Information Services*. Retrieved 2021, from GIS Data: <https://gis.rivcoit.org/GIS-Data-2>
- Riverside County Flood Control and Water Conservation District. (2021). *Rain Gauge Map*. Retrieved 2020, from Year to-date Summary: <http://content.rcflood.org/data/248.ytd.jpg>
- Sawyer, J. O., Keeler-Wolf, T., & Evens, J. M. (2009). *A Manual of California Vegetation* (2nd Edition ed.). Sacramento: California Native Plant Society.
- U. S. Fish and Wildlife Service - Pacific Region. (2019). *Little Known but Important Features of the Endangered Species Act*. Retrieved 2021, from Distinct Population Segments, 4(d) Rules, and Experimental Populations: <https://www.fws.gov/pacific/news/grizzly/esafacts.htm>
- U. S. Fish and Wildlife Service. (2021). *National Wetlands Inventory*. Retrieved 2021, from surface waters and wetlands mapper: <https://www.fws.gov/wetlands/data/mapper.html>
- United States Department of Agriculture Natural Resources Conservation Service. (2019). (USDA) Retrieved March 12, 2019, from Web Soil Survey: <http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>
- United States Department of Agriculture Natural Resources Conservation Service. (2021). (USDA) Retrieved 2021, from Web Soil Survey: <http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>
- Weather Underground. (2021). *Winchester, CA*. Retrieved 2020, from <https://www.wunderground.com/weather/us/ca/winchester/33.59,-117.12>
- Wilson, D. E., & Reeder, D. M. (2005). *Mammal Species of the World. A Taxonomic and Geographic Reference (3rd Edition)*. (2. p. Johns Hopkins University Press, Producer) Retrieved 2021, from <https://www.departments.bucknell.edu/biology/resources/msw3/>

12.0 CERTIFICATION

I hereby certify that the statements furnished above, the associated figures, and the attached appendices present 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.

Signed: Tim Searl Date: June 3, 2021
Tim Searl, Owner/Biologist, Searl Biological Services
Permit Number: TE02351A-1

FIGURE DISCLAIMER

Figures and data are to be used for reference purposes only. Map features are approximate, and are not necessarily accurate to surveying or engineering standards. Tim Searl, SBS makes no warranty or guarantee as to the content (the source is often third party), accuracy, timeliness, or completeness of any of the data provided, and assumes no legal responsibility for the information contained on any of the Figures associated with this report.

APPENDIX A

Grading and Site Plan

APPENDIX B

Plants Observed

The plants listed below were detected on the Property during field surveys conducted on December 7, 2020, March 1, March 24, April 9, and May 8, 2021. Nomenclature follows *The Jepson Online Interchange*. Introduced species are indicated with an (I).

COMMON NAME	SCIENTIFIC NAME
Borage Family	Boraginaceae
common fiddleneck	<i>Amsinckia menziesii</i>
common phacelia	<i>Phacelia distans</i>
Buckwheat Family	Polygonaceae
California buckwheat	<i>Eriogonum fasciculatum</i>
long-stem wild buckwheat	<i>Eriogonum elongatum</i> var. <i>elongatum</i>
Goosefoot Family	Chenopodiaceae
tumbleweed (I)	<i>Salsola tragus</i>
Gourd Family	Cucurbitaceae
chilicothe	<i>Marah macrocarpa</i>
Grass Family	Poaceae
cheat grass (I)	<i>Bromus tectorum</i>
rattail sixweeks grass (I)	<i>Festuca myuros</i>
red brome (I)	<i>Bromus rubens</i>
ripgut grass (I)	<i>Bromus diandrus</i>
wall barley (I)	<i>Hordeum murinum</i>
Legume Family	Fabaceae
deerweed	<i>Acmispon glaber</i>
Mallow Family	Malvaceae
cheeseweed (I)	<i>Malva parviflora</i>
Mint Family	Lamiaceae
horse nettle (I)	<i>Marrubium vulgare</i>
vinegar weed	<i>Trichostema lanceolatum</i>
Mustard Family	Brassicaceae
black mustard (I)	<i>Brassica nigra</i>
eastern rocket (I)	<i>Sisymbrium orientale</i>
Myrtle Family	Myrtaceae
blue gum (I)	<i>Eucalyptus globulus</i>
Nettle Family	Urticaceae
dwarf nettle (I)	<i>Urtica urens</i>
Nightshade Family	Solanaceae
tree tobacco (I)	<i>Nicotiana glauca</i>
Olive Family	Oleaceae
olive (I)	<i>Olea europaea</i>
shamel ash (I)	<i>Fraxinus uhdei</i>
Palm Family	Arecaceae
Mexican fan palm (I)	<i>Washingtonia robusta</i>
Protea Family	Proteaceae
silk oak (I)	<i>Grevillea robusta</i>
Spurge Family	Euphorbiaceae
doveweed	<i>Croton setiger</i>
Sumac Family	Anacardiaceae
Peruvian pepper tree (I)	<i>Schinus molle</i>

COMMON NAME	SCIENTIFIC NAME
Sunflower Family	Asteraceae
annual bur-sage	<i>Ambrosia acanthicarpa</i>
brittle bush	<i>Encelia farinosa</i>
California cudweed	<i>Pseudognaphalium californicum</i>
Canada horseweed	<i>Erigeron canadensis</i>
common sunflower	<i>Helianthus annuus</i>
fascicled tarweed	<i>Deinandra fasciculata</i>
prickly lettuce (I)	<i>Lactuca serriola</i>
small wirelettuce	<i>Stephanomeria exigua</i> subsp. <i>deanei</i>
stinknet (I)	<i>Oncosiphon pilulifer</i>
tochalote (I)	<i>Centaurea melitensis</i>
western ragweed	<i>Ambrosia psilostachya</i>

APPENDIX C

Wildlife Observed

Birds

The bird species listed below were detected visually or aurally either on, above, or near the Project during field surveys conducted on December 7, 2020, March 1, March 24, April 9, and May 8, 2021. The list below is presented in alphabetic order. Nomenclature for the Family (i.e., Icteridae), Common Name, and Scientific Name follow the American Ornithological Society *Checklist of North and Middle American Birds*. Introduced species are indicated with an (I).

COMMON NAME	SCIENTIFIC NAME
Blackbirds	Icteridae
Western Meadowlark	<i>Sturnella neglecta</i>
Crows and Jays	Corvidae
Common Raven	<i>Corvus corax</i>
Fringilline and Cardueline Finches and Allies	Fringillidae
House Finch	<i>Haemorhous mexicanus</i>
Hawks, Kites, Eagles, and Allies	Accipitridae
Red-tailed Hawk	<i>Buteo jamaicensis</i>
Ibises and Spoonbills	Threskiornithidae
White-faced Ibis	<i>Plegadis chihi</i>
Long-tailed Tits and Bushtits	Aegithalidae
Bushtit	<i>Psaltriparus minimus</i>
Mockingbirds and Thrashers	Mimidae
Northern Mockingbird	<i>Mimus polyglottos</i>
New World Sparrows	Passerellidae
California Towhee	<i>Melospiza crissalis</i>
Lark Sparrow	<i>Chondestes grammacus</i>
Savannah Sparrow	<i>Passerculus sandwichensis</i>
White-crowned Sparrow	<i>Zonotrichia leucophrys</i>
Old World Sparrows	Passeridae
House Sparrow (I)	<i>Passer domesticus</i>
Pigeons and Doves	Columbidae
Eurasian Collared-Dove (I)	<i>Streptopelia decaocto</i>
Mourning Dove	<i>Zenaidura macroura</i>
Shrikes	Laniidae
Loggerhead Shrike	<i>Lanius ludovicianus</i>
Starlings	Sturnidae
European Starling (I)	<i>Sturnus vulgaris</i>
Tyrant Flycatchers	Tyrannidae
Black Phoebe	<i>Sayornis nigricans</i>
Cassin's Kingbird	<i>Tyrannus vociferans</i>
Say's Phoebe	<i>Sayornis saya</i>
Wood Warblers	Parulidae
Yellow-rumped Warbler	<i>Setophaga coronata</i>
Wrens	Troglodytidae
Bewick's Wren	<i>Thryomanes bewickii</i>

Mammals

The mammals listed below were observed on or near the Site through sign and/or physical sightings during field surveys conducted on December 7, 2020, March 1, March 24, April 9, and May 8, 2021. The list below is presented in alphabetic order. Nomenclature for the Family (i.e., Canidae), Common Name, and Scientific Name follow *Wilson & Reeder's Mammal Species of the World*.

COMMON NAME	SCIENTIFIC NAME
Coyotes, dogs, foxes, jackals, and wolves	Canidae
coyote	<i>Canis latrans</i>
Ground Squirrels	Sciuridae
California ground squirrel	<i>Spermophilus beecheyi</i>
Pocket Gophers	Geomyidae
Botta's pocket gopher	<i>Thomomys bottae</i>

Herpetofauna

The herpetofauna listed below were detected during field surveys conducted on December 7, 2020, March 1, March 24, April 9, and May 8, 2021. The list below is presented in alphabetic order. Nomenclature for the Family (i.e., Phrynosomatidae), Common Name, and Scientific Name follow the Society for the Study of Amphibian and Reptiles (SSAR) *Standard English and Scientific Names*.

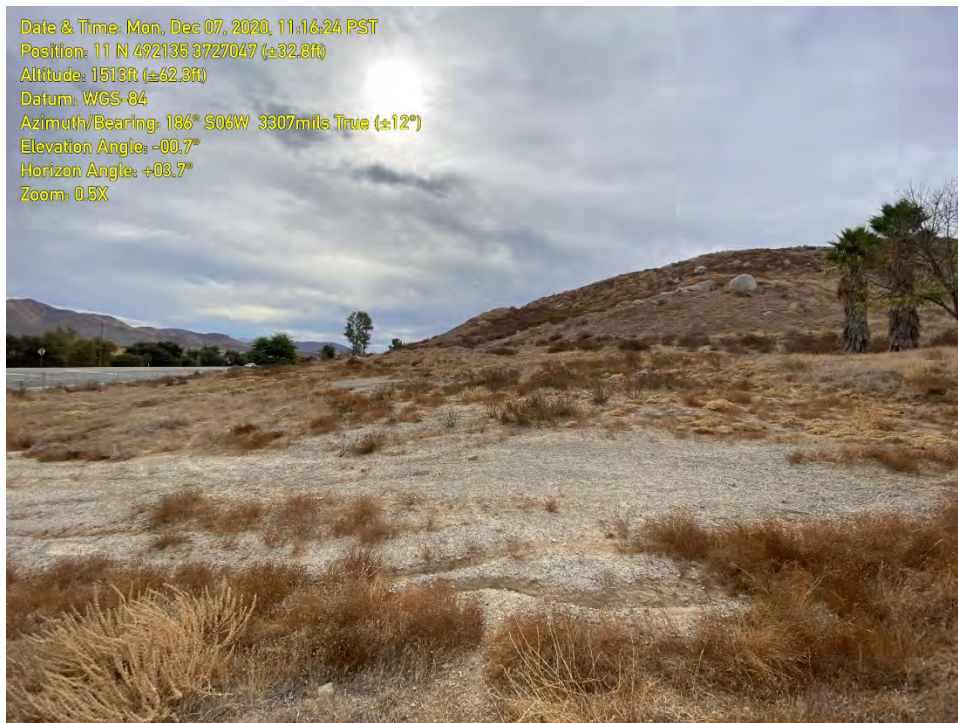
COMMON NAME	SCIENTIFIC NAME
Zebra-tailed, Earless, Fringe-toed, Spiny, Tree, Side-blotched, and Horned Lizards	Phrynosomatidae
Great Basin Fence Lizard	<i>Sceloporus occidentalis longipes</i>
Western Side-blotched Lizard	<i>Uta stansburiana elegans</i>

APPENDIX D

Assessment Photographs



PHOTOGRAPH 1: A southerly view of the Property from the northwest corner.



PHOTOGRAPH 2: The remnant compacted gravel in the southern portion of the Property.



PHOTOGRAPH 3: Partial foundation remaining from a former structure in the central-portion of the Site.



PHOTOGRAPH 4: Dense ripgut grass was dominant on the Property as the surveys progressed.



PHOTOGRAPH 5: A domestic dog in the high-quality BUOW habitat. Domestic dogs and cats are known to prey on BUOW and may potentially preclude their presence.



PHOTOGRAPH 6: A view of the detention basin north of the Property.



PHOTOGRAPH 7: A view of the moderate-quality BUOW habitat east of Hwy 79. The manufactured slope was sloped towards planted native trees and shrubs along Hwy 79, thus reducing the overall habitat suitability for BUOW.