



NATURAL RESOURCES ASSESSMENT, INC.

**Ethanac Motorcycle Park
CUP 190014 and CEQ 190083
General Biological Assessment
Riverside County, California**

Prepared for:

**Milestone MX Inc.
12685 Holly Street
Riverside, California 92509**

Prepared by:

**Natural Resources Assessment, Inc.
3415 Valencia Hill Drive
Riverside, CA 92507**

October 28, 2020

Project Number: LIL19-103

*3415 Valencia Hill Drive
Riverside, California 92507*

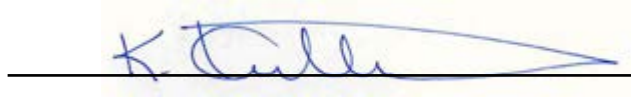
naturalresourcesassessment.com

Telephone 951 686 4483

Fax 951 686 8418

CERTIFICATION

I hereby certify that the statements furnished below and in the attached exhibits 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.



Karen Kirtland

NATURAL RESOURCES ASSESSMENT, INC.

October 28, 2020

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1.0 Introduction

Natural Resources Assessment, Inc. (NRAI) was contacted by Lilburn Corporation on behalf of Milestone MX Inc. to conduct a general biological assessment of a proposed development project in Riverside County, California.

The purpose of the assessment was to identify the biological resources within the property boundaries and to determine what sensitive resources may be present.

2.0 Site Location and Property Description

The project is located on Assessor's Parcel Numbers (APN) 345-020-011 and 016) west of the City of Perris and Interstate 215 in Riverside County, California (Figures 1 and 2). The project area consists of 92.7 acres located at the western terminus of Ethanac Road west of State Route 74.

The project site is located in the southwest quarter of Section 10, Township 5 south, Range 4 west, San Bernardino baseline and meridian.

T JS 63 MX, Inc. (Project Applicant), has submitted a Conditional Use Permit Application (No. 190094) for the development of a recreational motocross park to be known as "JS 63 MX" on a 93.4-acre site. The project site consists of two Assessor's Parcels (APN No.'s 345-020-011, 345-020-016) and is located at 21220 Ethanac Road in unincorporated Riverside County. The proposed project includes a total of 10 structures, five racetracks, five associated parking areas, and an R.V. parking area for overnight dry-camping use (Figure 3). There are three existing structures on-site and the remainder of the project site is vacant.

The existing structures on-site include: a 3,110 square-foot residential structure; a 5,780 square-foot building to be re-purposed as an event hall; and a 636 square-foot building to be re-purposed for storage. Seven new structures are proposed and include: an 800 square-foot building consisting of bathrooms and showers; a 3,000 square-foot building for administration use; a 14,000 square-foot, two-story building for a Pro-Race Shop; a 5,000 square-foot, two-story building for a Pro-Race Shop; a 600 square-foot building to be used as a bike wash; a 3,750 square-foot garage; and a 1,200 square-foot building consisting of restrooms and a snack bar for pre-packaged food and beverage sales.

The residential structure on the project site will be used by a caretaker living on the property to ensure 24/7 control of operating hours and noise levels during quiet hours. A licensed EMT will be on-site at all hours of operation and will be given a utility task vehicle (UTV) to remain mobile and respond to call for medical aid. AMS ambulance service will also be on-site during large race events to provide an added level of emergency care and transport to local hospital facilities. There will be one point of access from Ethanac Road with sufficient width and open/clear access for emergency vehicles. This design is based on operations of two other tracks in Riverside County and provides sufficient emergency access. Turnarounds and guided path of entry will also be provided. Safety flaggers will be positioned at every track and communicate to the EMT via radio. Flaggers also keep riders from exiting the specific riding areas.

The five proposed tracks include: the Side x Side/Quad Track (approximately 4,000 feet in length) on the southwestern corner of the site in an "L" shape, the Beginner/Peewee Track (approximately 1,600 feet in length) on the southern area above the Super Moto Track in an oval shape, the SX Track Pad (approximately 1,200 feet in length) in the center of the site in a rounded shape, the Veteran Track (approximately 2,400 feet in length) on the northern portion of the site in a "C" shape, and the Main Track (approximately 2,500 feet in length) on the farthest north portion of the site in a rounded shape. All tracks will be 25 feet in width.

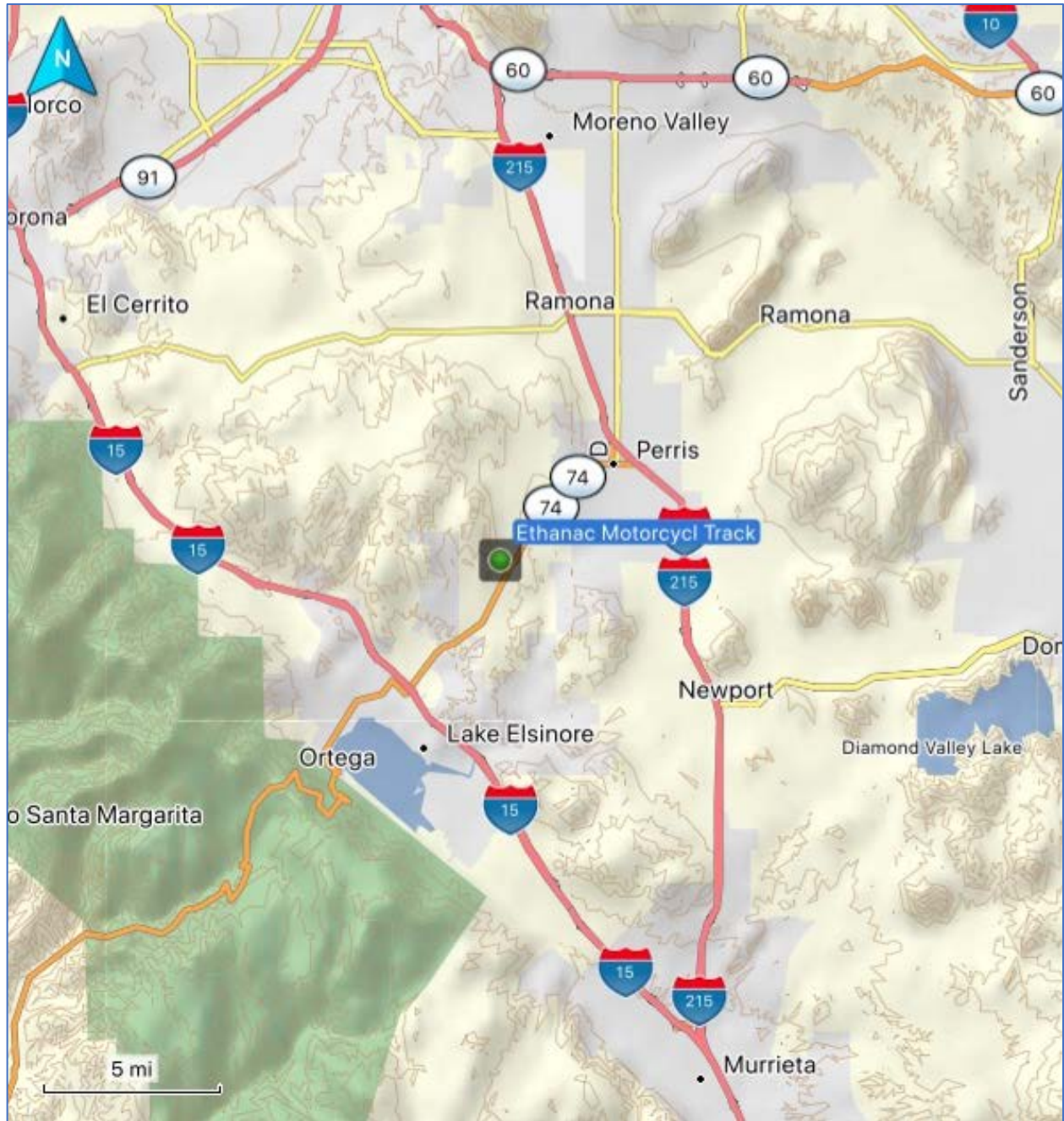


Figure 1. State and Regional Location of the Milestone MX Property.

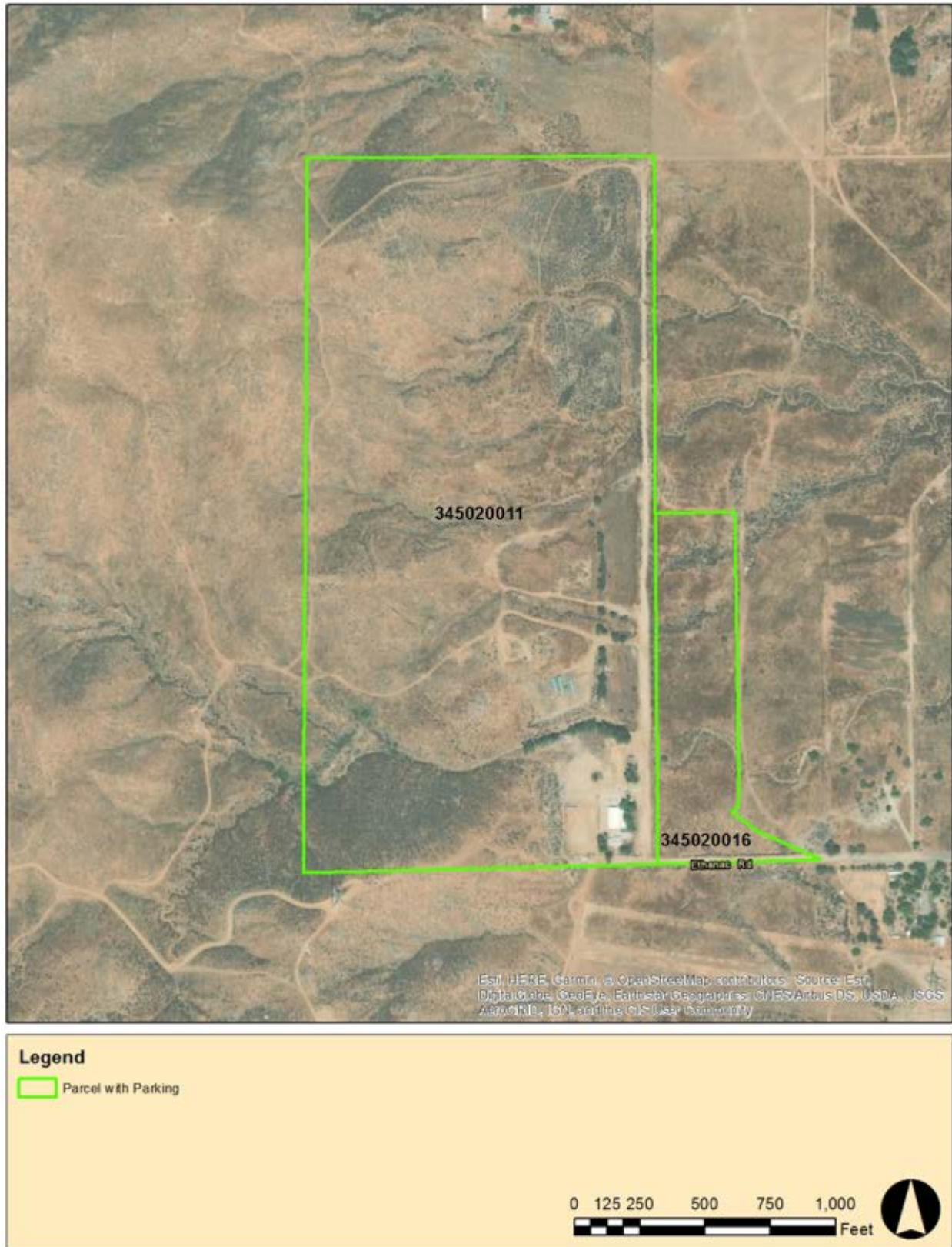


Figure 2. Aerial Showing the Condition of the Property. Date Unknown

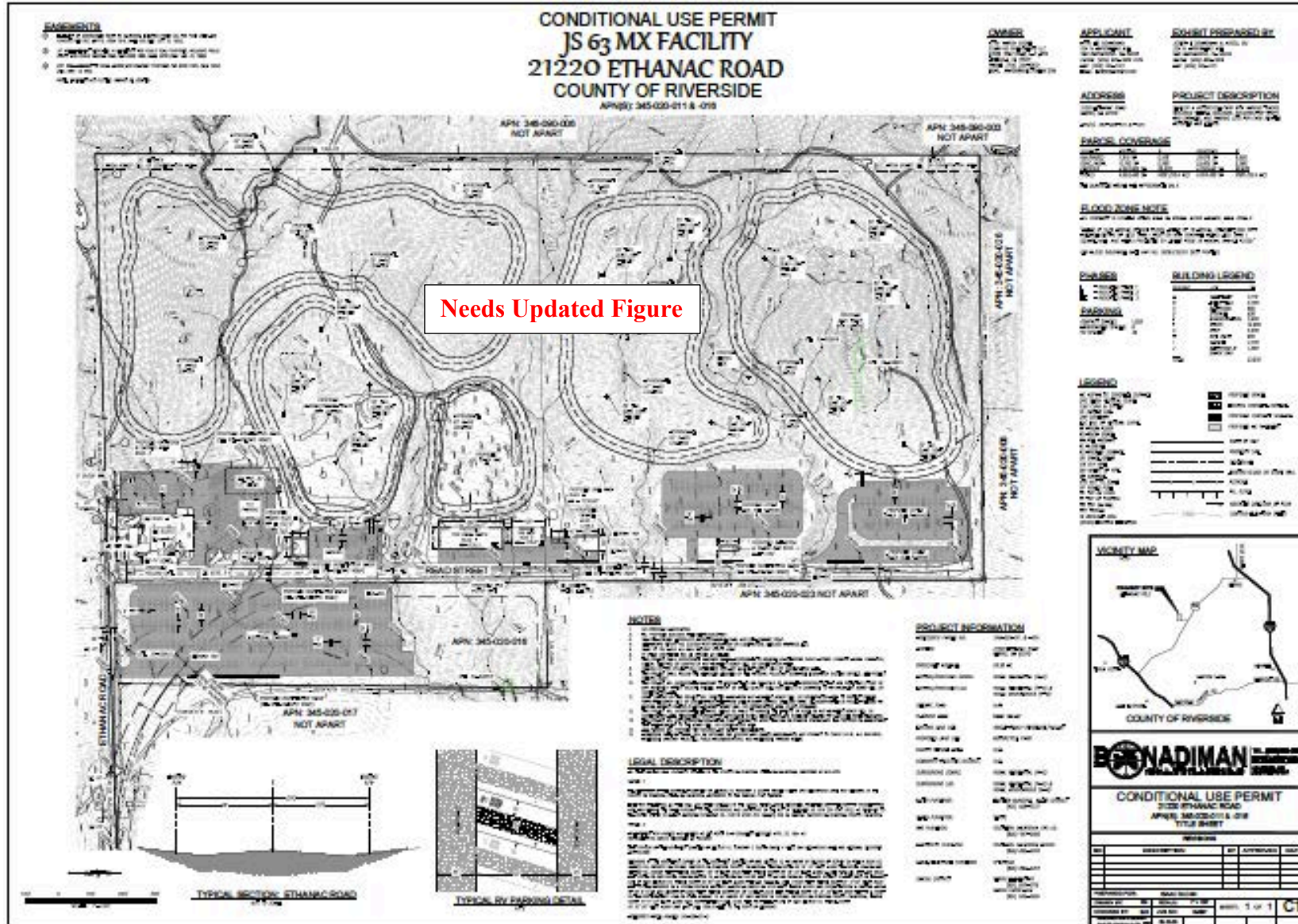


Figure 3. Project Layout

Parking on the project site would include a total of 1,217 spaces within three designated vehicle parking areas. There will be an additional 46 spaces for R.V. parking for day use as well as overnight dry-camping use on the southern portion of the project site.

Hours of operation will be Monday through Sunday from 9:00 a.m. to 4:00 p.m., with three days of night practice until 9:00 p.m., on Monday, Wednesday and Friday. Special events will be held approximately up to eight times per year with start times of 7:30 a.m. and race end times of 9:30 p.m. on weekends only. The Event Hall will be used to host award ceremonies, birthdays and etc. The proposed Pro-Race Shops are ancillary uses related to the park that will be utilized only for riders, for maintenance and repairs as well as riding gear. The bike wash will be card operated for use. Mobile storage units are for riders use to store their equipment on-site and located in the proposed Garage.

Domestic water supply for the facility will be provided by two on-site wells and 43,000 gallons of storage capacity. The Applicant will be applying for a Small Public Water System Permit from Riverside County Environmental Health Services. The system will be designed to provide all project-related domestic, fire flow, and irrigation needs; no additional capacity beyond the project needs will be constructed. Each building on the project site will be connected to the site-wide water distribution piping system.

Wastewater will be treated on-site through a septic system. All buildings will be connected to the system. Utility corridors for water, sewer, electrical, and communications will be designed to be within the existing on-site roads and other disturbed areas.

3.0 Methods

3.1 Data Review

NRAI conducted a data search for information on plant and wildlife species known occurrences within the vicinity of the project. This review included biological texts on general and specific biological resources, and those resources considered to be sensitive by various wildlife agencies, local governmental agencies and interest groups. Information sources included but are not limited to the following:

- Information provided by the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) for the property,
- U.S. Army Corps 404 requirements, State Water Resources Control Board requirements, California Department of Fish and Wildlife 1602 requirements.
- General texts and other documents regarding potential resources on the project. NRAI used the information to focus our survey efforts in the field.

Please see Section 5.0 for a complete listing of documents reviewed.

3.2 Field Surveys

Ms. Karen Kirtland of NRAI conducted an initial site visit with the project proponent, representatives from Lilburn Corporation and CRM Tech on April 19, 2019. Ms. Kirtland and Mr. Ricardo Montijo, subcontractor to NRAI conducted the general biological field survey on May 7, 2019.

Field data locations were mapped using a Global Positioning System (GPS) device. The surveyors walked transects across the property, taking notes of soil conditions, plant cover, plant species mix and species.

The field survey included observations of potential habitat for sensitive species. Sign surveyed for included nests, tracks, scat, burrows, skeletal remains, and visual sightings. Binoculars were used to aid in the identification of wildlife, as well as habitats in inaccessible areas. All species identified by sight, call or sign (burrows, scat, tracks, etc.) were recorded.

4.0 Results

4.1 Weather Conditions

Weather at the beginning of the site visit on April 24, 2019 was 69° Fahrenheit, with no wind and clear skies. By the end of the survey, the temperature was 79° Fahrenheit, no wind and clear skies.

Weather at the beginning of the assessment survey on May 7, 2019 was 56° Fahrenheit, with winds of four miles per hour from the southwest, and partially overcast skies. By the end of the survey, the temperature was 59° Fahrenheit, clear skies and winds from four to five of hours from the southwest.

4.2 Topography and Soils

The topography of the property is mixed. The western half of the western parcel is mountainous, flattening out somewhat in the eastern half. Runoff channels in these mountains cross the flatter area and forms a hill and gully system that extends onto the eastern parcel, with several small gullies forming streams that extend offsite (Figures 4 and 5, Photos 1 and 2).

There are six soil types on the property (Figure 6, Natural Resources Conservation Service 2019¹). The mountainous areas of the site are composed mostly of a single soil type, while the rest of the soil types are found predominately in the lower flat areas and hill and gully system.

Cajalco rocky fine sandy loam (CbF2) is an eroded soil found on 15 to 50 percent slopes. It is a well-drained soil found on hillsides. This soil is derived from residuum weathered from gabbro, and is a non-hydric soil that never ponds or flood. Cajalco rocky fine sandy loam is the dominant soil on the property.

Cajalco fine sandy loam (CaD2) is an eroded soil found on eight to 15 percent slopes. It is a well-drained non-hydric soil that never ponds or floods. This soil is derived from residuum weathered from gabbro and is found on hillsides. On the property it occurs predominately in the eastern part of the western parcel and extending into the eastern parcel. It occurs mostly along the drainages.

Honcut sandy loam (HnC) is found on two to eight percent slopes. It is a well-drained non-hydric soil that never ponds or floods. This soil is an alluvium derived from igneous rock that occurs on alluvial fans. Honcut sandy loam is non-saline to very slightly saline. It occupies the second smallest area on the property, occurring only in the extreme northeast corner of the eastern parcel.

Yokohl loam (YbE3) is a severely eroded soil found on eight to 25 percent slopes. It is formed of alluvium derived from igneous rock, and is found on alluvial fans. This soil is non-hydric, non-saline to very slightly saline. Yokohl loam is well drained and never ponds or floods. It occurs in and around the southernmost drainage on the project site.

¹ <https://websoilsurvey.nrcs.usda.gov/app/>
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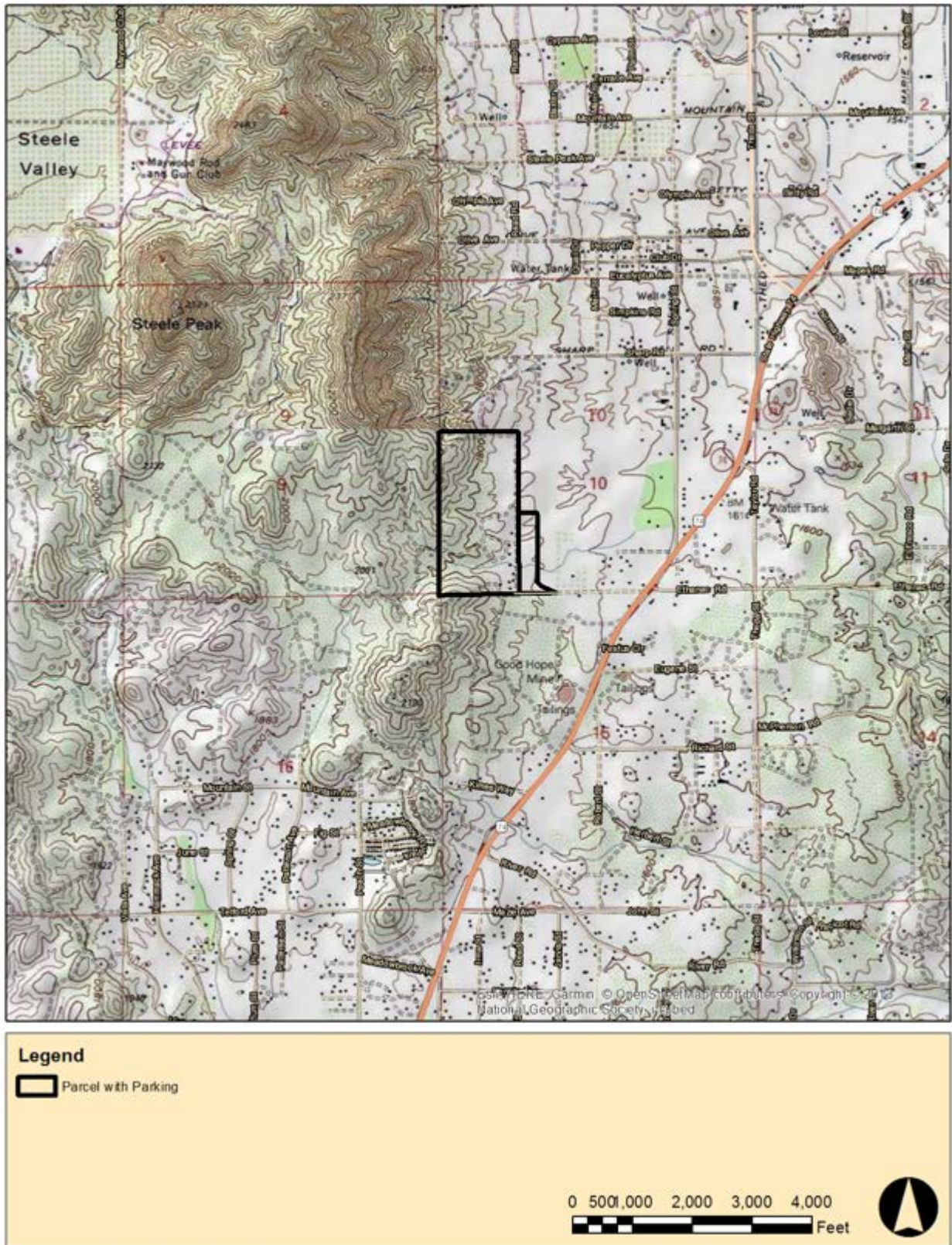


Figure 4. Topography of the Property as Shown on the Perris 7.5' USGS topographic quadrangle.

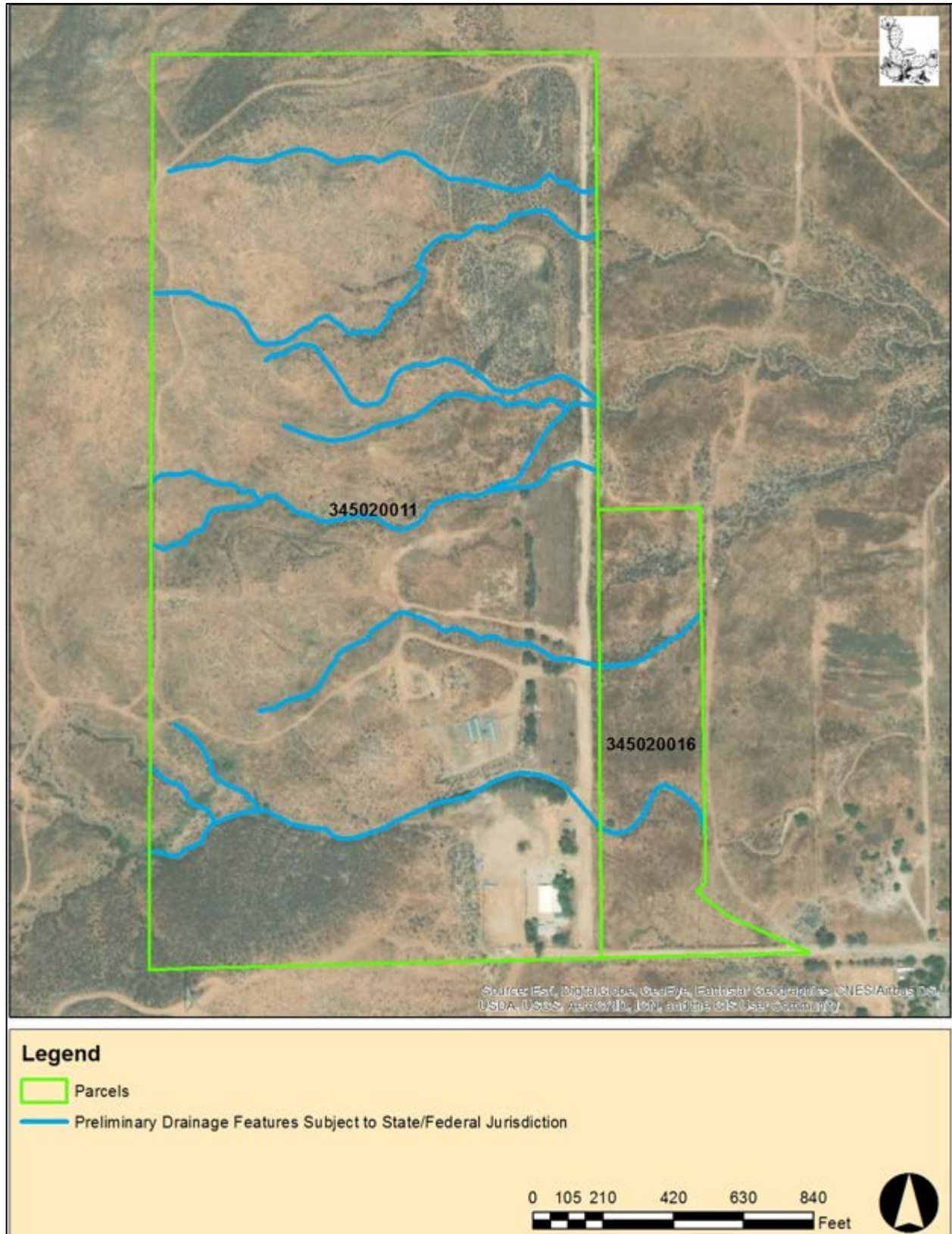


Figure 5. Aerial Topography Showing Mountains and Hill and Gully System.



Photo 1. General overview of the property from west to east. Looking south to southeast.



Photo 2. Overview of the six northern drainages to their joining together off site (in the background). Looking east southeast.

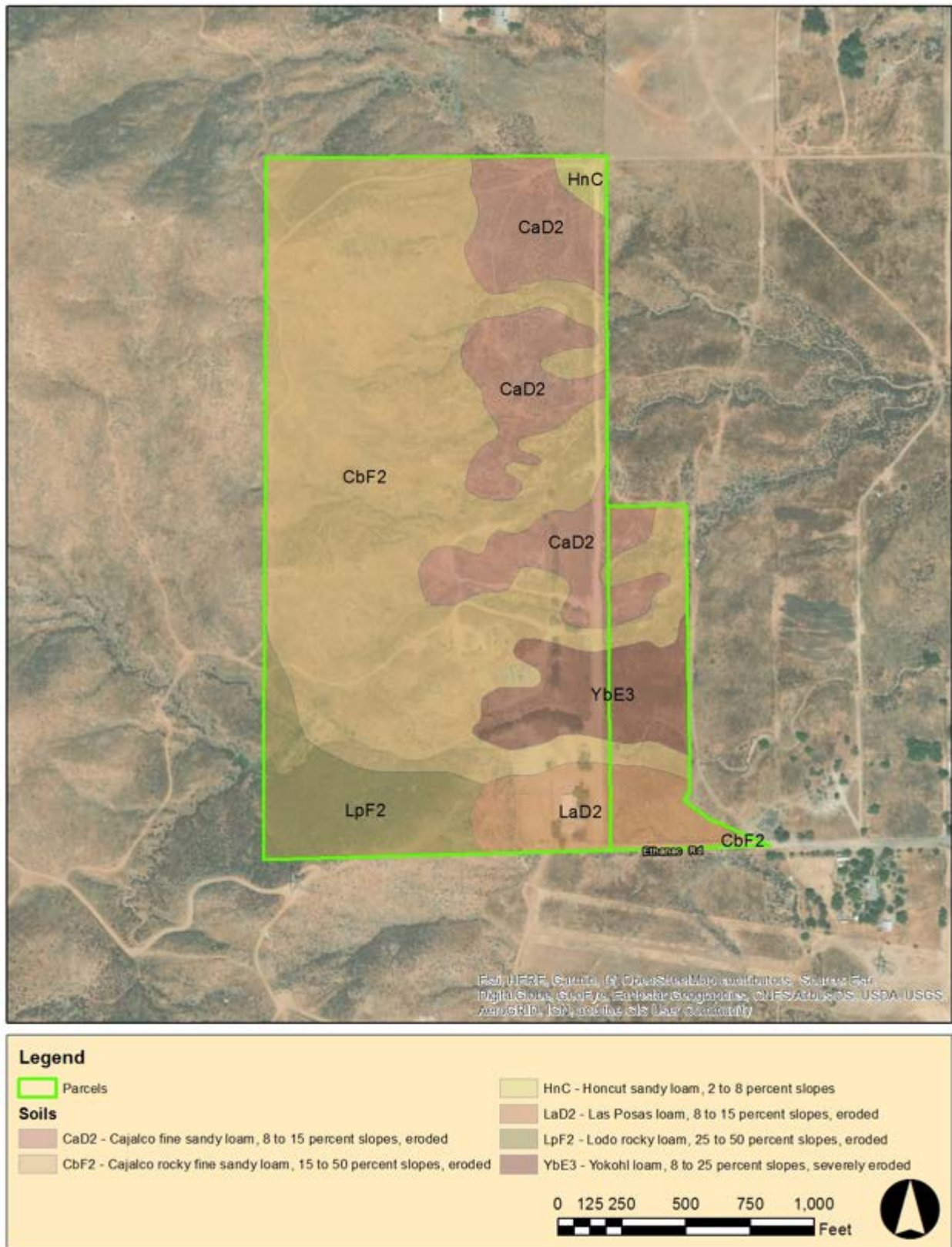


Figure 6. Composition of the Property Soils

Lodo rocky loam (LpF2) is an eroded soil found on 25 to 50 percent hill slopes. It is formed of metamorphosed residuum that has weathered from sandstone. This soil is somewhat excessively drained, non-hydric and never ponds or floods. Lodo rocky loam occurs on the steeper hillsides in the southern area of the project site.

Las Posas loam (LaD2) is an eroded soil found on eight to 15 percent hill slopes. It is formed from residuum weathered from gabbro. This soil is well-drained, non-hydric that never ponds or floods. Los Posas loam occurs at the base of the mountain slopes in the southern section of the project site.

4.3 Land Uses

A review of aerial imagery from Google Earth indicates that that flatter areas of the project have been subjected to various uses starting at least in 1994 (earliest available photograph), when the lower slopes and flat areas of the western parcel were graded. These graded areas were abandoned by at least 2002. By 2005, a second use of these areas appears to be some form of agricultural production. Activity ceased by at least 2013.

The MSHCP mapped chaparral growing on the mountainous areas of the project site in 1994. A mix of disturbed/developed and coastal sage scrub was mapped on the lower slopes and in the hill and gully area.

In 2002, the MSHCP remapped the mountainside vegetation as coastal sage scrub, interspersed with grassland. A small area of disturbed/developed was identified around the buildings along the southern border.

In 2012, the MSHCP mapped a reduced amount of coastal sage scrub on the project site, and an increase amount of grassland and disturbed/developed areas.

These changes reflect both a greater understanding of the plant communities and changes made by fire and human effects over time.

4.4 Vegetation Communities

There are four vegetation communities present on the property (Figure 7). Coastal sage scrub occurs on the mountainside and most of the flatter areas in the western parcel and extends down along the drainages to the east and onto the eastern parcel. Annual grassland occurs mostly in the flatter areas, and disturbed/developed areas (mostly bare soil) occur along the main north-south road and around the property buildings. Landscaping with non-native species also occurs around the property buildings.

At the time of the survey, herbaceous cover is estimated at almost 100 percent on the flatter portions of the property, and approximately 70 percent on the steeper slopes. Shrub cover is approximately 40 percent on the steep mountainsides and approximately 20 percent on the flatter portions of the project site.

The plant communities along the drainages are dominated by coastal sage scrub mixed with occasional open areas of annual grassland. The bottom of most of the drainages are eroded bare soil (Photo 3).

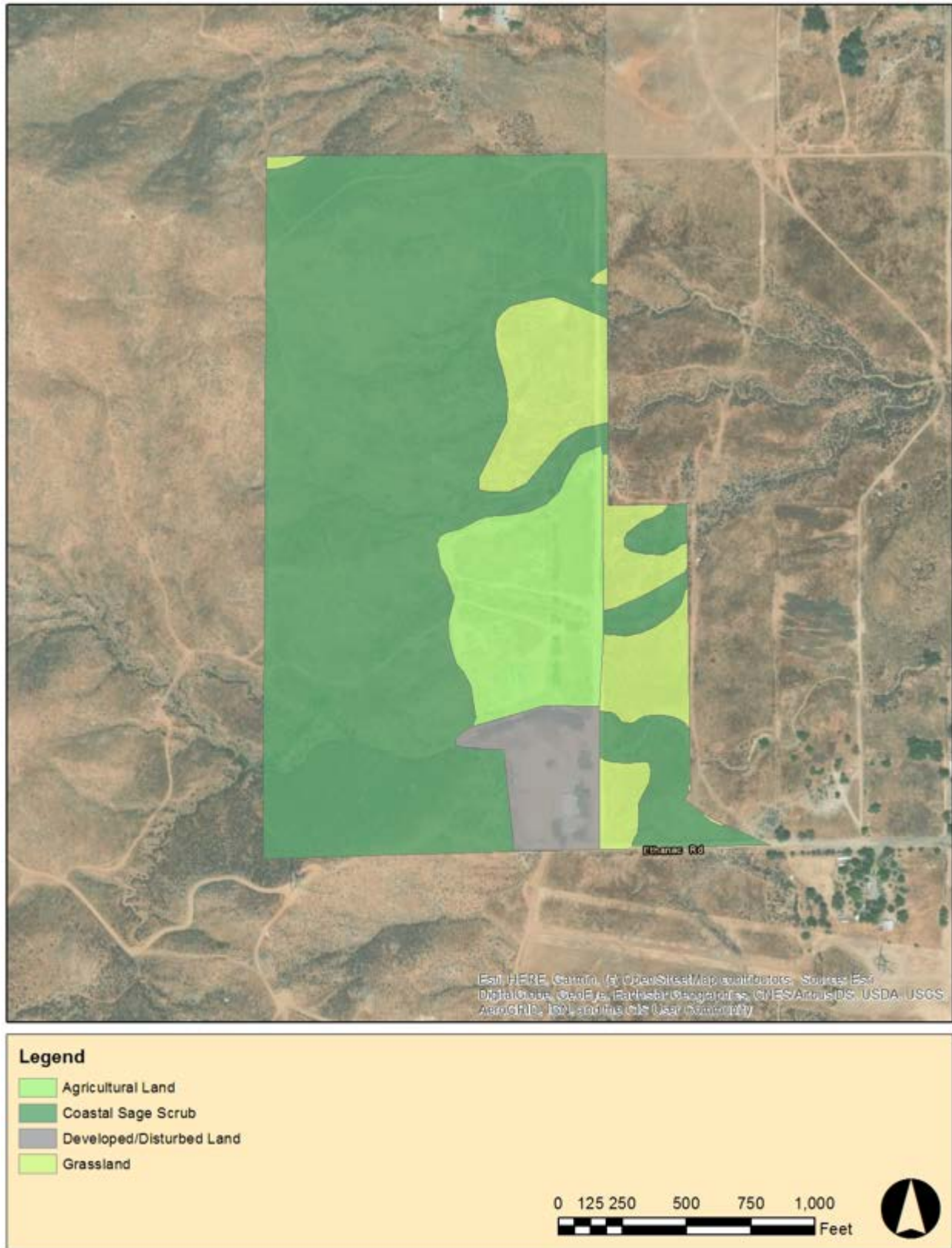


Figure 7. Vegetation Communities of the Property as of 2017.



Photo 3. Dry bottom drainage on the western parcel.

4.4.1 Annual Grassland

The grassland plant community found on site is comprised of a mix of native grasses such as purple needlegrass (*Stipa pulchra*), silver puffs (*Uropappus lindleyi*), slender fescue (*Vulpia octoflora*) and non-native grasses such as Mediterranean grass (*Schismus barbatus*) and red brome (*Bromus madritensis* var. *rubens*).

Native herbaceous plant species observed in the annual grasslands include splendid Mariposa lily (*Calochortus splendens*), blue dicks (*Dichelostema capitatum*), needle goldfields (*Lasthenia gracilis*) and common lupine (*Lupinus bicolor*). Non-native herbaceous plants include short-pod mustard (*Hirschfeldia incana*), red-stemmed filaree (*Erodium cicutarium*), London rocket (*Sisymbrium irio*) and stinknet (*Onicosiphon piluliferum*).

This plant community is found in the flatter parts of the property, as well as on the lower slopes (Photo 4).

4.4.2 Coastal Sage Scrub

The coastal sage scrub on site is dominated by California buckwheat (*Eriogonum fasciculatum*), California sagebrush (*Artemisia californica*) and desert brittlebush (*Encelia farinosa*). Shrub density varies from open (less than 20 percent) to almost closed (approximately 70 percent) (Photo 5). Other shrub species found in this plant community include black sage (*Salvia mellifera*), deerweed (*Acmispon glaber*), chaparral beard tongue (*Keckiella cordifolia*) and cudweed aster (*Corethrogyne filaginifolia*).

Native wildflowers observed in the coastal sage scrub include whispering bells (*Emmenanthe pendulifera*), splendid Mariposa lily, San Bernardino larkspur (*Delphinium parryi* ssp. *parryi*), and caterpillar phacelia (*Phacelia cicutaria*).



Photo 4. Annual grassland dominated by goldfields (foreground), with coastal sage scrub on the mountainsides in the background.



Photo 5. Coastal sage scrub habitat on the mountain slopes of the western parcel.

4.4.3 Disturbed/Developed

Disturbed/Developed is mostly characterized by a predominance of weeds such stinkweed, London rocket, foxtail barley (*Hordeum murinum*), annual yellow sweetclover (*Melilotus indicus*), and red brome (*Bromus madritensis* ssp. *rubens*). Large areas of bare ground are also found in this vegetation community.

This vegetation type occurs along the edges of roads and in areas where previous disturbance has occurred, such as the sites graded in 1994 and subsequent years (Photo 6).

4.4.4 Landscape

Landscape is characterized by a pre-ponderance of non-native plants that are intentionally planted. Species found on site include red gum eucalyptus (*Eucalyptus camalduensis*), tuna (*Opuntia ficus-indica*), athel (*Tamarix aphylla*) and Canary Island pine (*Pinus canariensis*). This vegetation type is generally restricted to around buildings and other structures, although some species such as athel can spread and invade surrounding native habitats (Photo 7).

A list of all plant species observed is provided in Appendix A.

4.5 Wildlife

During the field surveys, several wildlife species and sign (burrows, scat, feathers, droppings, tracks, etc.) were observed on the property. The following discussion lists some of the species observed and where they were seen.

Reptile species observed throughout the site include side-blotched lizard (*Uta stansburiana*) and western fence lizard (*Sceloporus occidentalis*). California kingsnake (*Lampropeltis getula*) was observed in the coastal sage scrub plant community (Photo 8).

Bird species observed include western meadowlark (*Sturnella neglecta*) mostly in annual grassland. Western kingbird (*Tyrannus verticalis*) was observed in both open coastal sage scrub and annual grassland. Lesser nighthawk (*Chordeiles acutipennis*) was observed in openings in coastal sage scrub. House finch (*Haemorhous neomexicana*) and common raven (*Corvus corax*) were observed throughout the property.

Signs of mammal species observed include Botta's pocket gopher (*Thomomys bottae*) mostly seen in annual grassland. Audubon's cottontail (*Sylvilagus audubonii*) was observed in annual grassland and coastal sage scrub. While coyote (*Canis latrans*) sign was observed only in the coastal sage scrub, coyotes would use all of the habits on site, including landscaping and disturbed/developed.

A list of all wildlife species observed is provided in Appendix A.

4.6 MSHCP Consistency Analysis

Section 6 of the MSHCP states that all projects must be reviewed for compliance with plan policies pertaining to Riparian/Riverine resources, Criteria resources, Narrow Endemic Plant Species, urban/wildlands interface, and additional survey needs as applicable.

For this project, the MSHCP required an assessment for the presence of burrowing owl habitat, riverine and riparian habitats, as well as vernal pools, fairy shrimp habitat and jurisdictional waters.



Photo 6. Disturbed/developed around existing structures on the western parcel.



Photo 7. Landscaping around an old storage building on the western parcel.



Photo 8. California kingsnake found in the coastal sage scrub habitat on the mountains of the western parcel.

4.6.1 Criteria Area and Narrow Endemic Plant Species

No Criteria Area Plant Species or Narrow Endemic Plant Species surveys required for the project.

4.6.2 Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools (Section 6.1.2)

4.6.2.1 Riparian/Riverine Areas

Riparian/Riverine Areas are defined by the MSHCP as “lands which contain Habitat dominated by tress [sic], 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”.

Findings

The property has several drainages (Figure 5). Potential jurisdictional water features were identified and preliminarily delineated via a desktop analysis that employed Google Earth (2018) and ESRI ArcGIS (2018, 2019) imagery. This included the use of historical imagery from Google Earth that allowed the examination of historic waterflow fluctuations. The desktop delineation was then verified during the field surveys.

The drainage features on the project site are in the San Jacinto River Sub-watershed of the Santa Ana River Watershed. The San Jacinto River Sub-watershed’s headwaters are in the San Jacinto Mountains of San Bernardino County and mouth is in Lake Elsinore (County of Riverside 2017).

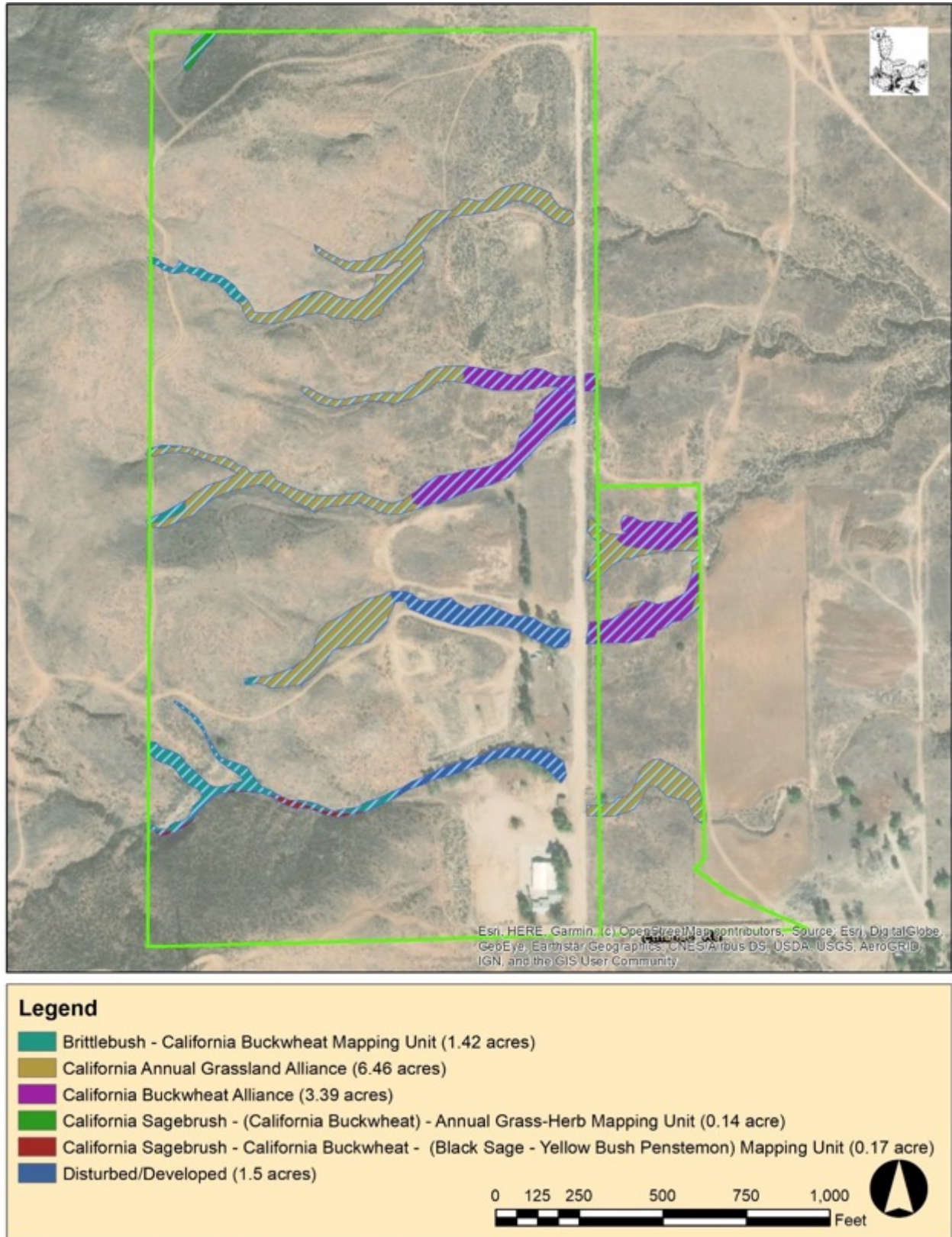


Figure 8. Jurisdictional Areas and Associated Vegetation/

The San Jacinto River segment closest to the subject drains to Canyon Lake and Lake Elsinore. The mainstem is located 1.3 miles east of the eastern project boundary (Figure 9). We examined water movement between the project site and the San Jacinto River (analysis area) to determine if there is connectivity between waters on the project site and the San Jacinto River.

Topography depicted as elevation contours indicates that flow is from west to east through the property and slightly northeast beyond it (Figure 10). Prior to 1966, there were several west-east oriented drainage features that extended through the property (Figures 11 and 12). Development that followed removed sections of the drainages and eliminated hydrologic connectivity between these features and the San Jacinto River in the analysis area (Figure 13).

Water conveyance over the analysis area presented a challenge to past projects that were approved over existing drainages. This produced ponding or flooding in this area and there is evidence that water flowing from the west will infrequently flood where even minor elevation changes (roads) present an impediment to overland flow. This is evident at the southwest corner of Theda Street and Sharp Road where flows normally ablate and deposit fine sediment (Figure 14; Photo 9). In wetter years drainage flows may reach the east side of Theda Street, not through any established drainage or channel but by flowing over it. In August 2017, for example, in the area of Sharp Road and Spring Street debris flows created hazardous driving conditions and a hard closure was put into effect on Sharp, between Spring and Theda streets.²

Riverside County Department of Transportation officials also closed Theda Street, between Olive Avenue and Sharp Road, due to flooding.

A review of Federal Emergency Management Agency (FEMA) Flood Information Rate Maps (FIRM) for this area shows that FEMA has not yet assigned a specific flood hazard (Zone D – Undetermined Flood Hazard) for this area, acknowledging that there is a possible flood risk here. Flooding only occurs during heavier rainfall years when rerouted drainages are unable to direct waters adequately to the San Jacinto River via removed historic drainages. Man-made structures and roads between Theda Street and Spring Road east of the Project Site obstruct flows and cause occasional flooding.

There is no direct connection between the drainages on the property and the San Jacinto River. A recent study suggests that because the San Jacinto River has a low gradient, it limits discharge velocity along the channel and decreases the erosive energy maintaining a stable riverine system (Santa Ana Region MS4 Permittees 2016). Historical aerial photographs evaluated for that study show no significant change over a 52-year study reach (Santa Ana Region MS4 Permittees 2016).

None of the drainages connect downstream to riparian vegetation (Figure 15).

As part of the jurisdictional water site evaluation, the field team walked the drainages to the terminus with the property boundaries and beyond. None of these drainages support riparian vegetation. None of these drainages support fresh water flow except during and immediately after rainfall. There is only upland vegetation along the drainages (Figure 8). These stands of upland vegetation extends downstream from the property boundary.

Based on information provided by the Regional Conservation Authority (RCA), these drainages meet the definition of riverine waters, but because they lack connections to riparian resources, they are not protected MSHCP riverine resources.

² <https://www.nbclosangeles.com/news/monsoon-damages-neighborhoods-floods-inland-empire-corona/21174/>
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Figure 9. Project Site in Relation to the San Jacinto River.

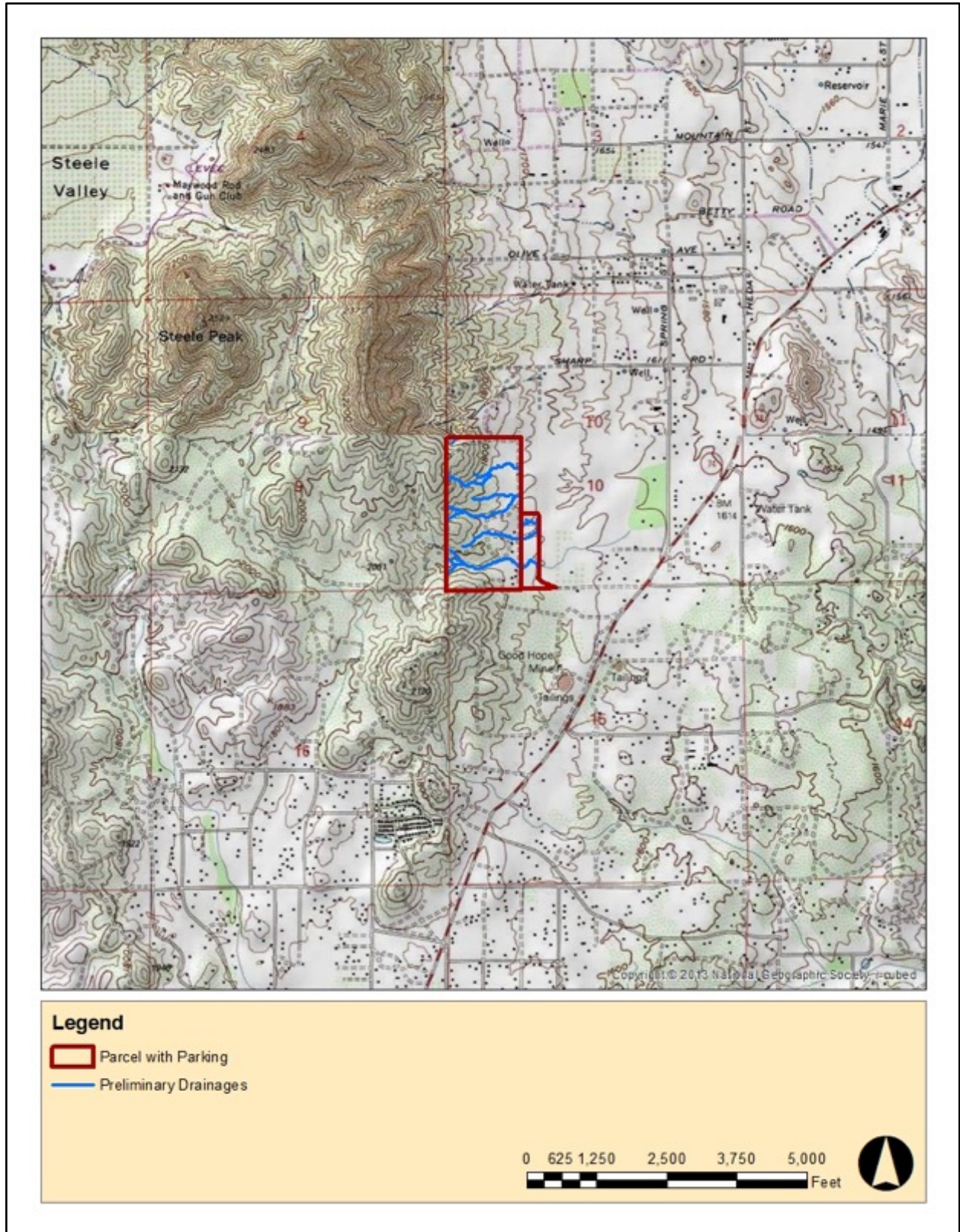


Figure 10. Topographic Map and Preliminary Waters Features on the Property.

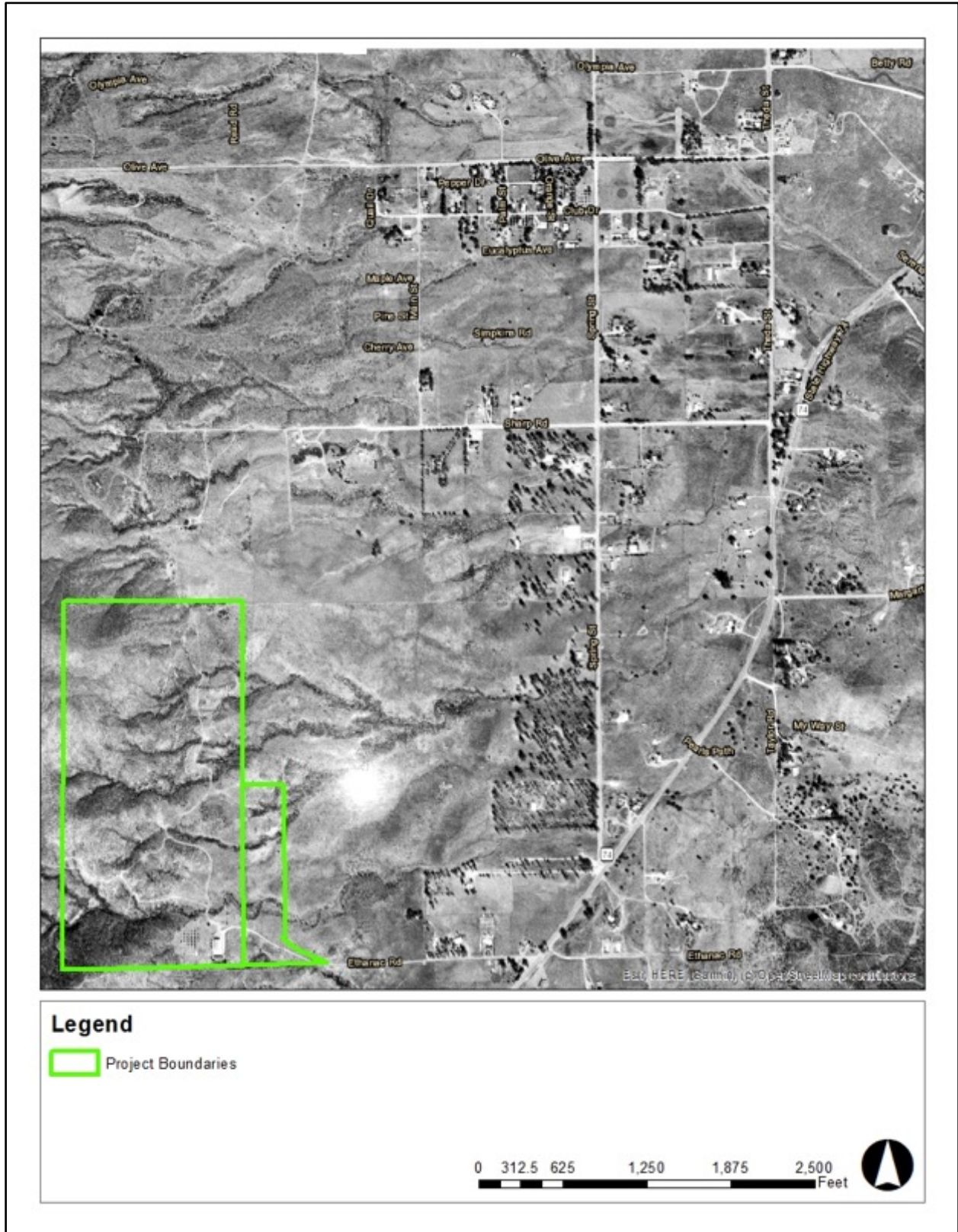


Figure 11. Aerial Photograph of the Property and Analysis Area in 1966.

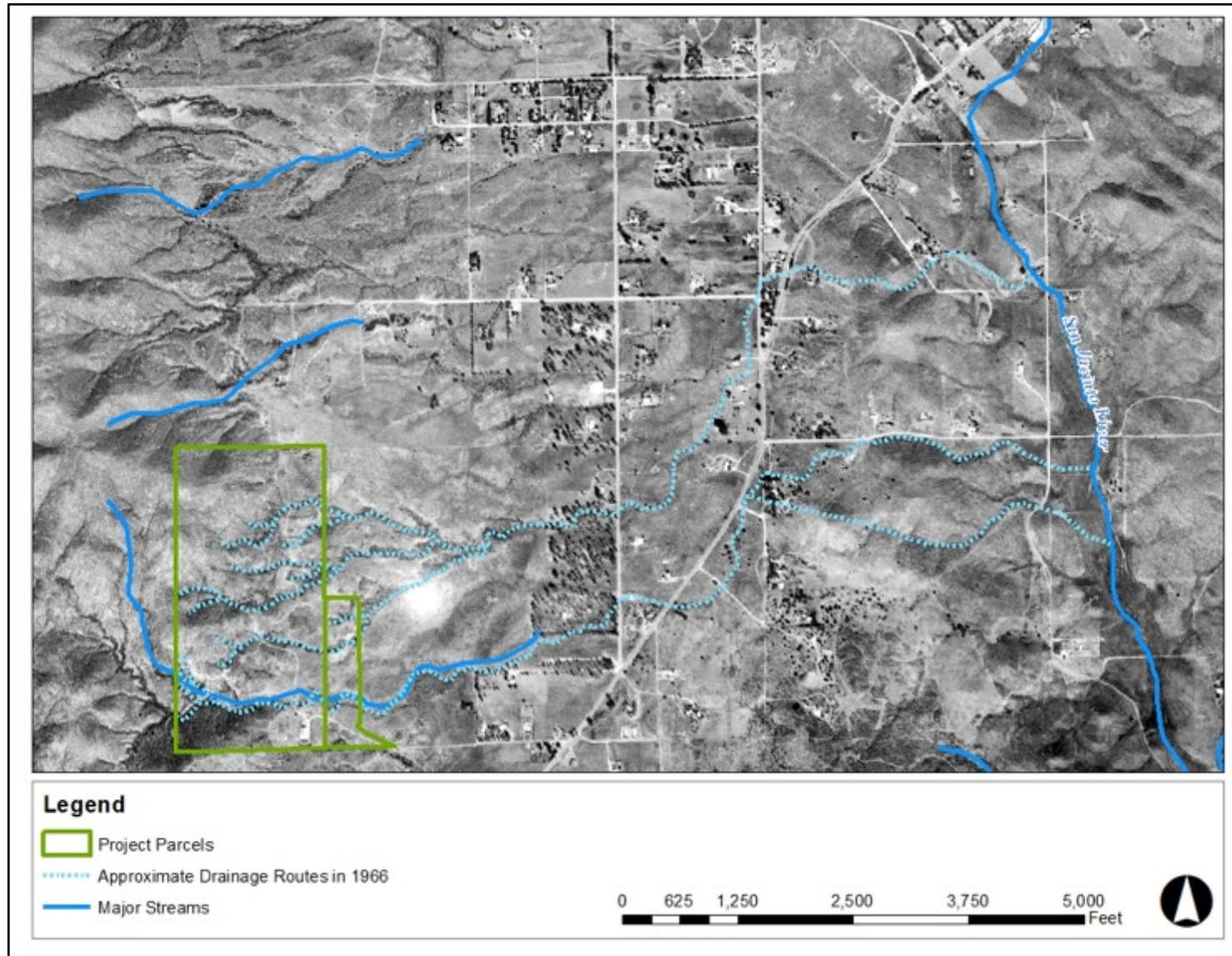


Figure 12. Drainages Mapped from the 1966 Aerial Photograph.



Figure 13. Modified Drainages



Figure 14. Modified Drainage and Deposited Alluvium from Flooding.

Photo 9. Southwestern Corner of Sharp Road and Theda Street (Photo faces slightly southwest)



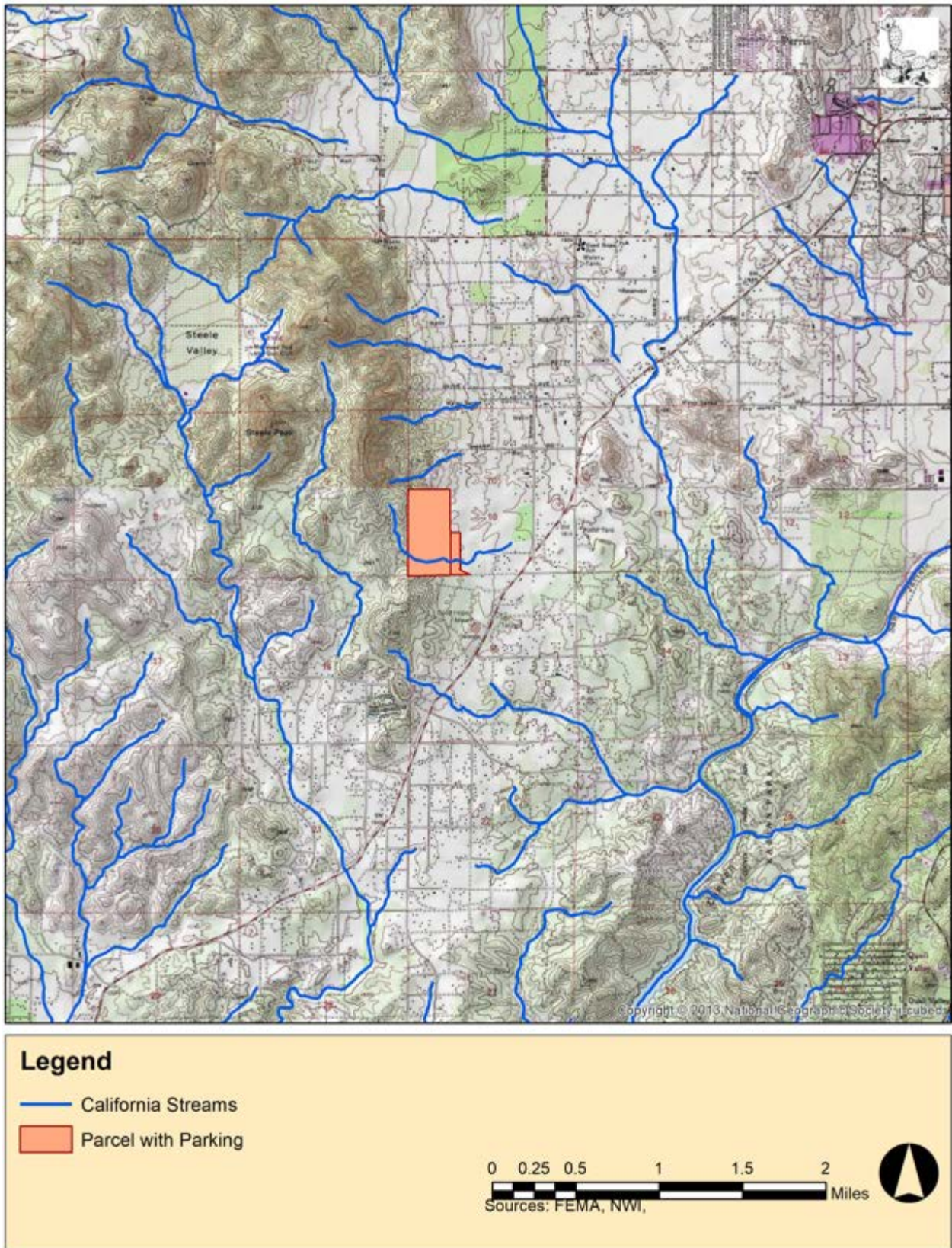


Figure 15. Regional Waters.

4.6.2.2 Vernal Pools

Vernal pools are defined by the MSHCP as “seasonal wetlands that occur in depression areas that have wetlands indicators of all three parameters (soils, vegetation and hydrology) during the wetter portion of the growing season but normally lack wetlands indicators of hydrology and/or vegetation during the drier portion of the growing season . . . 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” (Riverside County Transportation and Land Management Agency³).

Findings

The field team surveyed for vernal pools. Our surveys were conducted after a wet winter during which the Perris area received average rainfall. Ponding or pooling or evidence of such areas would have been observable. No vernal pools or indications of vernal pools such as flat, unvegetated areas showing evidence of previous ponding, no patterns of inundation or distinct water-dependent plant species.

The property does not support conditions suitable for the formation of vernal pools. The soils are unsuitable for the formation of long-term ponds, and no obligate wetland perennial plant species typical of vernal pools were observed. No impacts to vernal pools are expected.

4.6.2.3 Riverside Fairy Shrimp

Riverside fairy shrimp (*Streptocephalus woottoni*) are known only from ephemeral pools in farmlands and similar open, flat terrain. Fairy shrimp are confined to temporary pools that fill in spring and evaporate by late spring to early summer.

The Riverside fairy shrimp is known only from southern Orange and western Riverside and San Diego Counties. Ongoing farming and development in these areas has resulted in the loss and degradation of these habitats. Therefore, the USFWS has listed the Riverside fairy shrimp as endangered.

Findings

As described in the vernal pool section, the property does not provide conditions suitable for the formation of pools. The soils are unsuitable for the formation of long-term ponds, and no obligate wetland perennial plant species typical of suitable pools were observed. There are no other sources of standing water, such as cattle ponds or watering holes, or evidence of such ponding, that would provide suitable habitat for the Riverside fairy shrimp. No impacts to this species are expected.

4.6.3 Additional Survey Needs and Procedures (Section 6.3.2)

4.6.3.1 Burrowing Owl

The burrowing owl (*Athene cunicularia hypugaea*) is a resident species in lowland areas of southern California (Garrett & Dunn 1980). It prefers open areas for foraging and burrowing, and is found widely scattered in open desert scrub. This species is scarce in coastal areas, being found mainly in agricultural and grassland habitats. The largest remaining numbers are in the Imperial Valley, where it is common in suitable habitat adjacent to the agricultural fields.

³ <http://www.rctlma.org>

The burrowing owl prefers large flat open areas for nesting and hunting (Garrett & Dunn 1981). This species lives in burrows constructed by other ground-dwelling species in grassy or sparse shrubby habitat. Burrowing owls also take over other types of burrows, including manmade objects such as pipes. This species forages low over the ground surface for insect prey, and seldom flies very high in the air.

Burrowing owls are declining in coastal habitats due to development of these areas. The California Department of Fish and Wildlife (CDFW) has designated the burrowing owl as a California Species of Special Concern (CSC) (California Department of Fish and Wildlife 2019). Burrowing owls are also protected by owl-specific protections in the California Fish and Game Code.

Findings

Habitat for burrowing owl was assessed over the entire property in accordance with MSHCP “Burrowing Owl Survey Instructions” Step I Survey. The assessment included looking for burrowing owl burrows, whitewash, pellets, animal remains and other burrowing owl indicators.

The property provides marginal habitat for the burrowing owl, but no suitable burrows were observed at the time of the survey. California ground squirrel burrows were observed, but they were in active use by that species.

Our survey was conducted at a time when burrowing owls should have been observable if present. No sign of burrowing owl was seen and this species was not present at the time of the survey.

However, there is a small likelihood that burrowing owls may use or occupy the flatter portions of the property over time, especially because the surrounding properties provide suitable habitat for burrowing owl.

NRAI subsequently conducted the complete breeding season surveys of Steps IIa and IIb. Step III, Report is being completed and will be submitted (Natural Resources Assessment, Inc. 2020a) No burrowing owls were observed during the protocol surveys.

NRAI recommends implementation of the following measures:

- A pre-construction burrowing owl breeding bird survey following the recommended guidelines of the MSHCP will be required to determine if nesting is occurring.
- Occupied nests will not be disturbed during the nesting season (February 1 through August 31) unless a qualified biologist verifies through non-invasive methods that either (a) the adult birds have not begun egg-laying and incubation; or (b) the juveniles from the occupied nests are foraging independently and are capable of independent survival.
- If the biologist is not able to verify one of the above conditions, then no disturbance shall occur during the breeding season within a distance determined by the qualified biologist for each nest or nesting site. For the burrowing owl, the recommended distance is a minimum of 160 feet.

4.6.4 Project Relationship to Reserve Assembly, Mead Valley Area Plan (Section 3.3.9)

Reserve assembly is the identification of specific areas necessary to assemble a sufficiently large and diverse parcel to protect the resources of concern for that reserve. Each Area has a designated conservation plan and is therefore referred to as an Area Plan. The smallest unit is the Cell, which individually form the basis for Cell Groups that make up Area Plans.

The MSHCP defines [Criteria] Cells as “A unit within the Criteria Area generally 160 acres in size, approximating one quarter section”, and Cell Groups as “An identified grouping of Cells within the Criteria Area”.

All the Cells were identified during the preparation of the MSHCP and form the basis for identifying areas of sensitivity. Areas outside Cells are generally not considered to have a high sensitivity for the species identified by the MSHCP, although they could have resources such as riparian habitat that are protected or sensitive and require additional analysis.

Findings

The property is located within the MSHCP Conservation Area. The western parcel lies adjacent to Criteria Cell 3564, which is located in Cell Group J, Subunit 3, Good Hope East for the Mead Valley Area Plan.

Conservation for Cell Group J and Criteria Cell 3564 is defined as follows;

“Conservation within this Cell Group will contribute to assembly of Proposed Linkage 3 and of Proposed Core 1. Conservation within this Cell Group will focus on assembly of coastal sage scrub habitat to the west and chaparral habitat to the east. Areas conserved within this Cell Group will be connected to coastal sage scrub habitat proposed for conservation in Cell #3473 to the north, #3667 in the Elsinore Area Plan to the south, and in Cell Group G in the Elsinore Area Plan to the west. Conservation within this Cell Group will range from 55%-65% of the Cell Group focusing in the eastern portion and western edge of the Cell Group.”

A Linkage is defined as:

“A connection between Core Areas with adequate size, configuration and vegetation characteristics to generally provide for “Live-In” Habitat and/or provide for genetic flow for identified Planning Species. Areas identified as Linkages in MSHCP may provide movement Habitat but not Live-In Habitat for some species, thereby functioning more as movement corridors. Since it is expected that every Linkage will provide Live-In Habitat for at least one species, and since the term “corridor” may be easily confused with the term as it is applied to transportation Corridors ... the term Linkage is used here.”

The western parcel is also immediately southeast of the Steele Peak Reserve, which is a Public/Quasi-Public Conserved Land. Public/Quasi-Public Conserved lands are defined as a “Subset of MSHCP Conservation Area lands totaling approximately 347,000 acres of lands known to be in public/private ownership and expected to be managed for open space value and/or in a manner that contributes to the Conservation of Covered Species (including lands contained in existing reserves). . .”

The western parcel will not have direct impacts to the Criteria Cell 3564 or the Steele Peak Reserve. There will be indirect impacts from noise, lighting, invasive plants, and possibly toxic materials such as herbicides and pesticides used in landscaping and maintenance, as well as non-hazardous oils and fuels used during project operations. These indirect impacts are discussed under the following section.

4.6.5 Guidelines Pertaining to the Urban/Wildland Interface (Section 6.1.4).

The Urban/Wildland Interface guidelines of the MSHCP address indirect effects associated with locating development in the MSHCP Conservation Area near wildlands or other open space areas, including Criteria Cells and other protected open space.

According to the MSHCP, the project would have indirect impacts to the adjacent Criteria Cell 3564, which is located in Cell Group J, Subunit 3, Good Hope East for the Mead Valley Area Plan. The western parcel is

also immediately southeast of the Steele Peak Reserve, which is a Public/Quasi-Public Conserved Land. The indirect impacts would be from noise, lighting, dust, invasive plants, and possibly toxic materials such as herbicides and pesticides used in landscaping and maintenance, as well as vehicular residues such as non-hazardous oils and fuels used during project operations.

All project disturbances are confined to the project boundaries. There are no offsite disturbances proposed.

4.6.5.1 Drainage

Drainage from adjacent development areas into MSHCP-protected areas includes runoff of water, soil, as well as inorganic and organic matter.

Project development of the western parcel includes off-road motorcycle tracks that do not extend to the top of the mountains. All the drainages on site flow to the east and northeast. No flow, natural or otherwise, is expected to impact Criteria Cell 3564 and the Steele Peak Reserve, which lie to the west and northwest of the western parcel.

Regarding open space to the north, south and east, although no direct or indirect impacts are expected, NRAI recommends standard water quality measures required for all projects be implemented for this project. Project design shall incorporate measures, including measures required through the National Pollutant Discharge Elimination System (NPDES) requirements, to ensure that all measures shall be put in place to avoid discharge of untreated surface runoff from developed and paved areas. Stormwater systems shall be designed to prevent the release of toxins, chemicals, petroleum products, exotic plant materials or other elements that might degrade or harm biological resources or ecosystem processes in adjacent areas. This can be accomplished using a variety of methods including natural detention basins, grass swales or mechanical trapping devices. Regular maintenance shall occur to ensure effective operations of runoff control systems.

4.6.5.2 Toxics

Operation of motor vehicles in an undeveloped area near adjacent open space has a potential to introduce undesirable petroleum products and solvents into the natural environment. Potentially hazardous materials, such as petroleum products, and other products such as paints, solvents, and cleaning products may be stored on-site. However, all activity involving hazardous substances would be conducted in accordance with applicable local, State, and Federal safety standards. Motor vehicle repairs and maintenance will only be conducted in designated areas, away from sites that risk introducing hazardous materials in areas subject to flooding.

The amount of hazardous materials on the project site is anticipated small and on an as needed basis. The facility would require a business emergency plan for the storage of hazardous materials greater than 55 gallons, 200 cubic feet or 500 pounds, or any acutely hazardous materials or extremely hazardous substances. Therefore, no significant adverse impacts are identified or anticipated, and no mitigation measures are required.

Vehicular routes with dirt surfaces, such as those on a motocross track, are often a significant source of dust. Off-highway Vehicle (OHV) recreation in particular has been identified as the cause of dust plumes covering areas as large as 1,700 km² in areas of low to moderate rainfall (Nakata et al. 1976, Walker et al. 1987, and Farmer 1993). Dust deposited on plants can affect photosynthesis, respiration, transpiration and allow the penetration of phytotoxic gaseous pollutants in plant cells. Dust also affects wildlife respiratory and vision processes which are critical for movement and foraging.

Fugitive dust control is a three-step process of (1) avoidance, (2) minimization; and, (3) mitigation. Good project planning will help minimize dust emissions by modifying or eliminating non-essential or avoidable dust-generating activities. The project proponent will phase the project to reduce dust emissions by capturing, collecting, or containing emissions during track construction and, later, track use. Fugitive dust control will be achieved by wet suppression, construction of wind-suppression devices such as fences, and with vegetation, as appropriate.

4.6.5.3 Lighting

Light pollution is one of the most rapidly increasing types of environmental degradation (Falchi et al. 2011). Nighttime light affects daily and seasonal wildlife cycles. It disturbs nesting and roosting animals and affects the ability for wildlife to detect and consume prey and food items. It may also affect breeding cycles of certain species. Scientific studies estimate that more than 80% of the world's population live under light-polluted skies. In the US, that number exceeds 99%, an reflects a marked increase in just the last few years (Falchi et al 2011, Falchi et al 2016). Floodlights and ceilometers attract and kill large numbers of migratory birds and bats at lighthouses and telecommunication towers (Rich and Longcore eds. 2006).

The proposed motocross track is located in an urbanizing area of the County experiencing increasing levels of light and/or glare associated with higher density residential development. Light and glare from portable lighting fixtures and vehicles entering/exiting the project site would increase lighting sources in the project area. Active land uses adjacent to the project site include residential uses. Light poles around the tracks are proposed for infrequent nighttime events and there would be lighting associated with the on-site buildings and parking areas.

Implementation of the proposed project is not anticipated to induce substantial light or glare or expose residential property to unacceptable levels. Nevertheless, shielding, and careful selection of lights that are not rich in blue light will be incorporated in to ensure ambient lighting in the vicinity of the site is not increased and does not affect wildlife. The project proponent will work with a biologist to submit an on-site lighting plan for review and approval. This on-site lighting plan requires the identification of the type, intensity, and location of each proposed on-site lighting source for track lighting. The submittal of this plan is required as evidence that the proposed on-site lighting sources would meet County lighting standards.

4.6.5.4 Noise

The MSHCP states that "Proposed noise generating land uses affecting the MSHCP Conservation Area shall incorporate setbacks, berms or walls to minimize the effects of noise on the MSHCP Conservation Area resources pursuant to applicable rules, regulations and guidelines related to land use noise standards. For planning purposes, wildlife within the MSHCP Conservation Area should not be subject to noise that would exceed residential noise standards." A Noise Impact Analysis (NIA) was completed by Urban Crossroads on February 7, 2020 (Available at County offices for review), to determine impacts to the MSHCP Conservation Area as a result of noise levels from the proposed project. Since the proposed project includes noise generating motocross activities, operational noise levels have been calculated at the project boundaries in order to estimate the project-related noise levels within the adjacent MSHCP Conservation Area.

According to recent scientific literature (Francis & Barber, 2013; Parris & McCarthy, 2013), species-specific noise effects depend on the noise's acoustic characteristics (frequency, duration, onset, and intensity) and species biology (auditory range, habitat, etc.). Loud noise appears to change sexual signaling in insects (Lampe et al. 2012) and in frogs and toads (Sun and Narins 2005). A recent noise study suggests that noise alone reduces nesting species richness and leads to different avian communities over time (Francis et al.

2009). Since birds and other wildlife depend on singing as a form of finding mates and defending territories, these impacts have strong implications for the evolution of signals (Catchpole and Slater 2008). As researchers suggest, differences in the efficacy of signal transmission are likely to have major fitness consequences for birds (Swaddle et al. 2015) and other taxa.

In general, a growing number of studies indicate that animals are stressed by noisy environments (Shannon et al. 2015). The proposed motorcycle track may affect local wildlife by potentially disrupting foraging, roosting, nesting, and other behaviors. Noise impact reduction methods like placing conservation easements around the property boundary to separate the noise from adjacent areas. Within the project area, three viable solutions are noise attenuation through sound absorption, sound deflection and reflection and sound refraction.

Motorcycles can produce noise levels that exceed 95 dBA (decibels), like the noise of a lawn mower or subway train at 200 feet (CDC 2019). According to the noise study conducted for this project, the Project-related operational motocross noise levels the Project-related operational motocross noise levels will satisfy the 65 dBA _{Leq} exterior noise level threshold identified for the proposed MSHCP Conservation Areas. Accordingly, the Project's noise impacts to the adjacent MSHCP Conservation Area would be less than significant.

Sound absorption traps sound vibrations and is particularly for large scale applications. This absorption can be achieved through selective planting that captures noise on all parts of the plant such as leaves, branches, twigs and wood. A natural sound attenuation barrier comprised of rough-barked and thick-leaved species is most effective when located closest to the source of the sound. Large shrubs and small trees are also effective at scattering sound waves.

Sound reflection and deflection causes noise to be bounced away from the receptor often back toward the source. This can be achieved with flexible panels that transform sound waves into other forms of energy and also deflects them in different directions. The more flexible the material, the greater the deflection. Common materials for sound deflection barriers are fiberglass and corrugated metal.

Sound refraction occurs when noise is dissipated, diffused or dispersed by striking a rough surface on any plain. Hard surfaces covered by plants have an effect similar to carpet on a floor. Freeway sound wall barriers are often planted with clinging vines to achieve this effect. Drought tolerant vines and grasses will help with achieving noise refraction on the site.

Limiting operations largely to daylight hours will reduce the potential effect on nocturnal mammals and nocturnal bird species such as owls and nighthawks. The racetrack's schedule of operation will be Monday through Sunday from 9:00 a.m. to 4:00 p.m., with three days of night practice until 9:00 p.m., on Monday, Wednesday, and Friday. Events will be held approximately up to eight times per year with start times of 7:30 a.m. and race end times of 9:30 p.m. on weekends only. This selective use of the track and facilities will help reduce the possible impacts to wildlife from noise.

4.6.5.5 Invasives

Landscaping for the proposed development may have an indirect impact on adjacent lands and Criteria Cell acquisition areas. Invasive species, particularly those that generate airborne seed and pollen, could conceivably spread to adjacent areas.

Invasive plants pose a primary threat to rare and endangered species and the integrity and function of North American ecosystems (Blossey 1999). These species are often perturbation dependent and can

occupy a variety of conditions in natural and semi-natural areas, often outcompeting native species. The California Department of Fish and Wildlife (CDFW), California Invasive Plant Council (Cal-IPC), California Native Plant Society (CNPS) and others work actively to control the widespread proliferation of invasive plants.

The MSHCP addresses invasive species control. In planning and landscaping the project proponent shall avoid the invasive, non-native plant species listed in Appendix B [taken from the MSHCP, attached] and shall require revisions to landscape plans (subject to the limitations of their jurisdiction) to avoid the use of invasive species for the portions of Development that are adjacent to Criteria Cell 3564.

4.6.5.6 Barriers

The MSHCP states that “Proposed land uses adjacent to the MSHCP Conservation Area shall incorporate barriers, where appropriate in individual project designs to minimize unauthorized public access, domestic animal predation, illegal trespass or dumping in the MSHCP Conservation Area. Such barriers may include native landscaping, rocks/boulders, fencing, walls, signage and/or other appropriate mechanisms.”

NRAI recommends barriers along the eastern side of track routes and/or the eastern boundary of the site to minimize unauthorized access and illegal trespassing.

4.6.5.7 Grading/Land Development

The MSHCP requires that “Manufactured slopes associated with proposed site development shall not extend into the MSHCP Conservation Area.

Any grading or development is identified as being already confined within the existing limits of the project.

There will be a single point of access from Ethanac Road with sufficient width and open and clear access for emergency vehicles. This design is based on operations of two other tracks in Riverside County and provides sufficient emergency access. Turnarounds and a guided path of entry will also be provided. The project site is adjacent to the Steele Peak Reserve which currently has no public access and therefore no public views would be obstructed by the proposed project. In order to access the existing roadway network from the proposed project, the Project Applicant shall construct a minimum of one lane of pavement in each direction of travel along Ethanac Road from the project’s western boundary to the SR-74 Highway and Read Street from the project’s northern boundary to Ethanac Road.

The project site does not contain any emergency facilities, nor does it serve as an emergency evacuation route. During construction, the contractor would be required to maintain adequate emergency access for emergency vehicles as required by the County. Post-construction activities at the site would not interfere with an adopted emergency response or evacuation plan. The primary site access is provided via Ethanac Road which would be maintained for ingress/egress at all times. No impacts are identified or anticipated, and no mitigation measures are required.

4.7 Habitat Conservation Plan for the Stephens Kangaroo Rat

The species objectives for the Stephens kangaroo rat (SKR) in the Western Riverside MSHCP were designed to incorporate the objectives and be consistent with the Long-Term Stephens Kangaroo Rat Habitat Conservation Plan (SKR Plan). Any projects that are within the MSHCP boundaries must meet the SKR Plan requirements. The property is located within the SKR fee area. Payment of the fee is required.

4.8 Jurisdictional Waters

4.8.1 Army Corps of Engineers

The Corps regulates discharges of dredged or fill material into waters of the United States. These watersheds include wetlands and non-wetland bodies of water that meet specific criteria. The lateral limit of Corps jurisdiction extends to the Ordinary High-Water Mark (OHWM) and to any wetland areas extending beyond the OHWM; thus, the maximum jurisdictional area is represented by the OHWM or wetland limit, whichever is greater.

Corps regulatory jurisdiction pursuant to Section 404 of the Clean Water Act is founded on a connection or nexus between the water body in question and interstate (waterway) commerce. This connection may be direct, through a tributary system linking a stream channel with traditional navigable waters used in interstate or foreign commerce, or may be indirect, through a nexus identified in the Corps regulations.

Findings

The San Jacinto River ultimately connects through Railroad Canyon to Temescal Creek. Temescal Creek connects to the Santa Ana River, a Corps jurisdictional water. This makes the San Jacinto River a 2nd order tributary to a Corps jurisdictional water and subject to Corps regulations.

There are at least seven well-defined drainages on the property. All but the southernmost drainage combine into a single drainage offsite. Based on our jurisdictional delineation (Natural Resources Assessment, Inc. 2020b) this drainage is cut off by roads and development and does not connect with the San Jacinto River (Figure 4, Photo 2).

The single southern drainage also flows offsite but does not connect with the San Jacinto River.

It is the professional judgment of NRAI that the drainages on site do not come under the jurisdiction of the Corps; however, we recommend a jurisdictional determination be prepared for the project drainages and submitted in informal consultation to the Corps for final determination of federal jurisdiction.

4.8.2 Regional Water Quality Control Board

The Corps has delegated the authority for use of 404 permits to each individual state. The use of a 404 permit in California is regulated by the State Water Resources Control Board (SWRCB) under Section 401 of the Clean Water Act regulations. The Board has authority to issue a 401 permit that allows the use of a 404 permit in the state, with the authority in the state being vested in regional offices known as Regional Water Quality Control Boards (RWQCB).

Under the Porter-Cologne Act of 2003, the SWRCB has extended its responsibilities to include impacts to water quality from non-point source pollution.

In addition, the SWRCB has the responsibility to require that projects address ground water and water quality issues, which would be evaluated as part of the geotechnical and hydrology studies. Their authority extends to all waters of the State (of California).

Findings

The property supports at least seven drainages. It is our professional judgment that at the northern six of these drainages may provide one or more Beneficial Uses (BUs) that might come under RWQCB protection.

NRAI recommends a jurisdictional delineation be conducted along with informal consultation with the RWQCB.

4.8.3 California Department of Fish and Wildlife

The California Department of Fish and Wildlife (CDFW), through provisions of the State of California Administrative Code, is empowered to issue agreements for any alteration of a river, stream or lake where fish or wildlife resources may adversely be affected. Streams (and rivers) are defined by the presence of a channel bed and banks, and at least an intermittent flow of water. Lateral limits of jurisdiction are not clearly defined, but generally include any riparian resources associated with a stream or lake, CDFW regulates wetland areas only to the extent that those wetlands are part of a river, stream or lake as defined by CDFW.

Findings

All the drainages on the property are well-defined and may come under the jurisdiction of the CDFW. There are impacts to all of drainages under the proposal site plan, and we recommend the preparation of a jurisdictional delineation and informal consultation with the CDFW to determine jurisdiction and whether mitigation will be required.

4.9 Raptors, Migratory Birds, and Habitat

Most of the raptor species (eagles, hawks, falcons and owls) are experiencing population declines as a result of habitat loss. Some, such as the peregrine falcon, have also experienced population losses as a result of environmental toxins affecting reproductive success, animals destroyed as agricultural predators (e.g. “chicken hawks”) or collected for falconry, and other direct impacts on individuals. Only a few species, such as the red-tailed hawk and barn owl, have expanded their range in spite of or a result of human modifications to the environment. As a group, raptors are of concern to state and federal agencies.

Raptors and all migratory bird species, whether listed or not, receive protection under the Migratory Bird Treaty Act (MBTA) of 1918⁴. The MBTA prohibits individuals to kill, take, possess or sell any migratory bird, or bird parts (including nests and eggs) except in accordance with regulations prescribed by the Secretary of the Interior Department (16 U. S. Code 703⁵).

Additional protection is provided to all bald and golden eagles under the Bald and Golden Eagle Protection Act of 1940, as amended⁶. State protection is extended to all birds of prey by the California Fish and Game Code, Section 2503.5⁷. No take is allowed under these provisions except through the approval of the agencies or their designated representatives.

Findings

At the time of the survey, the property had suitable nesting habitat for nesting bird species, and active nests were found. Depending upon timing, direct impacts from construction may occur to nesting birds.

⁴ <https://www.fws.gov/birds/policies-and-regulations/laws-legislations/migratory-bird-treaty-act.php>

⁵ <https://www.fws.gov/le/USStatutes/MBTA.pdf>

⁶ <https://www.fws.gov/le/USStatutes/BEPA.pdf>

⁷ <https://law.justia.com/codes/california/2015/code-fgc/division-4/part-2/chapter-1/section-3513>

Construction includes selection of staging areas, demolition, tree, trash and debris removal, placement of equipment and machinery on to the property preparatory to grading, and any other project-related activity that increases noise and human activity on the project site beyond existing levels. Emergency measures are exempt from this definition.

NRAI recommends the following measures shall be implemented to address potential impacts from construction.

- If start of construction occurs between February 1 and August 31, then a qualified biologist shall conduct a breeding bird survey no more than three days prior to the start of construction to determine if nesting is occurring. Depending upon timing, this survey can be conducted concurrent with the burrowing owl surveys.
- If occupied nests are found, they shall not be disturbed unless the qualified biologist verifies through non-invasive methods that either (a) the adult birds have not begun egg-laying and incubation; or (b) the juveniles from the occupied nests are capable of independent survival.
- If the biologist is not able to verify one of the above conditions, then no disturbance shall occur within a distance specified by the qualified biologist for each nest or nesting site. The qualified biologist will determine the appropriate distance in consultation with the California Department of Fish and Wildlife and the U.S. Fish and Wildlife Service.

The site also provides suitable foraging habitat for raptors and migratory bird species.

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Appendix A – Plants and Wildlife Species Observed

* Indicates non-native species

PLANTS

GYMNOSPERMAE - GYMNOSPERMS

CUPRESSACEAE

Juniperus californica

PINACEAE

*Pinus canariensis**

*Pinus halepensis**

CYPRESS FAMILY

California Juniper

PINE FAMILY

Canary Island Pine*

Aleppo Pine*

ANGIOSPERMAE - ANGIOSPERMS

DICOTYLEDONS

ADOXACEAE

Sambucus nigra ssp. *caerulea*

AMARANTHACEAE

Amaranthus blitoides

ANACARDIACEAE

*Schinus molle**

ASTERACEAE

Artemisia californica

*Centaurea melitensis**

Chaenactis gabriuscula

Corethrogyne filaginifolia

Deinandra fasciculata

Deinandra paniculata

Encelia farinosa

Helianthus annuus

Lasthenia gracilis

Logfia filaginoides

*Oncosiphon piluliferum**

Pseudognaphalium californicum

*Sonchus oleraceus**

Stephanomeria virgata

Tetradymia comosa

Uropappus lindleyi

BIGNONIACEAE

*Jacaranda mimosifolia**

DICOTS

MOSCHATTEL FAMILY

Blue Elderberry

AMARANTH FAMILY

Prostrate Amaranth

CASHEW FAMILY

Peruvian Pepper*

SUNFLOWER FAMILY

California Sagebrush

Tocalote*

Common Yellow Chaenactis

Cudweed Aster

Fascicled Tarweed

Panicled Tarweed

Brittlebush

Annual Sunflower

Needle Goldfields

California Cottonrose

Stinknet*

California Cudweed

Sow Thistle*

Twiggy Wreathplant

Cottonthorn

Silver Puffs

BIGNONIA FAMILY

Jacaranda*

BORAGINACEAE

Amsinckia intermedia
Cryptantha intermedia
Emmenanthe penduliflora

Phacelia cicutaria

Phacelia minor

BRASSICACEAE

*Hirschfeldia incana**

*Sisymbrium irio**

CACTACEAE

Cylindropuntia californica var. parkeri

*Opuntia ficus-indica**

CHENOPODIACEAE

*Salsola tragus**

CONVOLVULACEAE

*Convolvulus arvensis**

Cuscuta californica

CRASSULACEAE

Crassula connata

CUCURBITAE

Cucurbita palmata

EUPHORBIACEAE

Croton californicus

Croton setiger

Euphorbia albomarginata

Stillingia linearifolia

FABACEAE

Acmispon glaber

Lepidium nitidum

Lupinus bicolor

*Melilotus indica**

GERANIACEAE

*Erodium cicutarium**

LAMIACEAE

Salvia apiana

Salvia columbariae

MALVACEAE

Malacothamnus fasciculatus

*Malva parviflora**

MONTIACEAE

BORAGE FAMILY

Fiddleneck
Common Cryptantha
Whispering Bells
Caterpillar Phacelia
Wild Canterbury Bells

MUSTARD FAMILY

Short-pod Mustard*
London Rocket*

CACTUS FAMILY

Brown-spined Prickly Pear
Prickly Pear*

CHENOPOD FAMILY

Russian Thistle*

BINDWEED FAMILY

Field Bindweed*
California dodder

STONECROP FAMILY

Sand Pygmyweed

GOURD FAMILY

Coyote Melon

SPURGE FAMILY

California Croton
Doveweed
Rattlesnake Sandmat
Narrow Leaved Stillingia

PEA FAMILY

Deerweed
Shinning Pepperweed
Common Lupine
Annual Sweetclover*

GERANIUM FAMILY

Red-stemmed Filaree*

MINT FAMILY

White Sage
Chia

MALLOW FAMILY

Chaparral Bush Mallow
Cheeseweed*

MONTIA FAMILY

Claytonia perfoliata

MYRTACEAE

*Eucalyptus cameldulensis**

NYCTAGINACEAE

Mirabilis laevis

PAPAVERACEAE

Eschscholzia californica

PLANTAGINACEAE

Antirrhinum coulterianum

Keckiella cordifolia

POLEMONIACEAE

Eriastrum sapphirinum

POLYGONACEAE

Eriogonum fasciculatum var. *foliolosum*

PROTEACEAE

*Grevillea robusta**

RANUNCULACEAE

Delphinium parryi ssp. *parryi*

RUBIACEAE

Galium aparine

SCROPHULARIACEAE

Castilleja exserta ssp. *Exsert*

SOLANACEAE

*Nicotiana glauca**

Solanum xanti

TAMARICACEAE

*Tamarix aphylla**

ZYGOPHYLLACEAE

*Tribulus terrestris**

MONOCOTYLEDONS

ARECACEAE

*Washingtonia robusta**

ASPARAGACEAE

*Agave americana**

LILIACEAE

Calochortus splendens

POACEAE

*Avena barbata**

Miner's Lettuce

MYRTLE FAMILY

Red Gum*

FOUR O' CLOCK FAMILY

Desert Wishbone

POPPY FAMILY

California Poppy

PLANTAIN FAMILY

Coulter's Snapdragon

Climbing Penstemon

PHLOX FAMILY

Sapphire Woollystar

BUCKWHEAT FAMILY

California Buckwheat

PROTEUS FAMILY

Silk Oak*

BUTTERCUP FAMILY

San Bernardino Larkspur

MADDER FAMILY

Cleavers

SNAPDRAGON FAMILY

Purple Owl's Clover

NIGHTSHADE FAMILY

Tree Tobacco*

Nightshade

ATHEL FAMILY

Athel*

CALTROP FAMILY

Puncture Vine*

MONOCOTS

PALM FAMILY

Mexican Fan Palm*

ASPARAGUS FAMILY

Century Plant*

LILY FAMILY

Splendid Mariposa Lily

GRASS FAMILY

Slender Oats*

Bromus madritensis ssp. *rubens**

Festuca octoflora

*Hordeum murinum**

*Hordeum vulgare**

*Schismus barbatus**

Stipa pulchra

THEMIDACEAE

Dichelostemma capitatum

Red Brome*

Six-weeks Fescue

Foxtail Barley*

Barley*

Mediterranean Grass*

Purple Needlegrass

BRODIAEA FAMILY

Blue Dicks

ANIMALS

SNAKES AND LIZARDS - CLASS REPTILIA

Common Name

Scientific Name

ZEBRA-TAILED, SIDE-BLOTCHED, AND HORNED LIZARDS

PHRYNOSOMATIDAE

Western fence lizard

Sceloperus occidentalis

Western Side-blotched Lizard

Uta stansburiana elegans

HARMLESS EGG-LAYING SNAKES

COLUBRIDAE

California Kingsnake

Lampropeltis californiae

BIRDS - CLASS AVES

Common Name

Scientific Name

HAWKS AND EAGLES

ACCIPITRIDAE

Red-tailed Hawk

Buteo jamaicensis

BUSHTITS

AEGITHALIDAE

Bushtit

Psaltriparus minimus

LARKS

ALAUDIDAE

Horned Lark

Eremophila alpestris

NIGHTHAWKS

CAPRIMULGIDAE

Lesser Nighthawk

Chordeiles acutipennis

NEW WORLD VULTURES

CATHARTIDAE

Turkey Vulture

Cathartes aura

DOVES AND PIGEONS

COLUMBIDAE

Rock Pigeon*

*Columba livia**

Eurasian Collared-dove*

*Streptopelia decaocto**

Mourning Dove

Zenaida macroura

CROWS AND JAYS

CORVIDAE

Common Raven

Corvus corax

FALCONS

FALCONIDAE

American Kestrel

Falco sparverius

FINCHES

FRINGILIDAE

House Finch

Lesser Goldfinch

BLACKBIRDS

Bullock's Oriole

Western Meadowlark

MIMIC THRUSHES

Northern Mockingbird

NEW WORLD SPARROWS

Melospiza crissalis

SILKY FLYCATCHERS

Phainopepla

HUMMINGBIRDS

Anna's Hummingbird

WRENS

Bewick's wren

FLYCATCHERS

Say's Phoebe

Western Kingbird

Black Phoebe

Haemorhous mexicanus

Spinus psaltria

ICTERIDAE

Icterus bullockii

Sturnella neglecta

MIMIDAE

Mimus polyglottos

PASSERELLIDAE

California towhee

PTILIGONATIDAE

Phainopepla nitens

TROCHILIDAE

Calypte anna

TROGLOYTIDAE

Thryomanes bewickii

TYRANNIDAE

Sayornis saya

Tyrannus verticalis

Sayornis nigricans

MAMMALS - CLASS MAMMALIA

Common Name

SQUIRRELS

California ground squirrel

GOPHERS

Botta's pocket gopher

RABBITS AND HARES

Black-tailed Hare

Audubon's cottontail

SQUIRRELS

California Kingsnake

DOGS AND RELATIVES

Coyote

Scientific Name

SCIURIDAE

Spermophilus beecheyi

GEOMYIDAE

Thomomys bottae

LEPORIDAE

Lepus californicus

Sylvilagus audubonii

SCIURIDAE

Lampropeltis californiae

CANIDAE

Canis latrans

Appendix B - Plants to be Avoided in Areas Adjacent to Wildlands

BOTANICAL NAME	COMMON NAME
<i>Acacia</i> spp. (all species)	acacia
<i>Achillea millefolium</i>	var. <i>millefolium</i> common yarrow
<i>Ailanthus altissima</i>	tree of heaven
<i>Aptenia cordifolia</i>	red apple
<i>Arctotheca calendula</i>	cape weed
<i>Arctotis</i> spp. (all species & hybrids)	African daisy
<i>Arundo donax</i>	giant reed or arundo grass
<i>Asphodelus fistulosus</i>	asphodel
<i>Atriplex glauca</i>	white saltbush
<i>Atriplex semibaccata</i>	Australian saltbush
<i>Carex</i> spp. (all species*)	sedge
<i>Carpobrotus chilensis</i>	ice plant
<i>Carpobrotus edulis</i>	sea fig
<i>Centranthus ruber</i>	red valerian
<i>Chrysanthemum coronarium</i>	annual chrysanthemum
<i>Cistus ladanifer</i>	(incl. hybrids/varieties) gum rockrose
<i>Cortaderia jubata</i> [syn. <i>C. Atacamensis</i>]	jubata grass, pampas grass
<i>Cortaderia dioica</i> [syn. <i>C. sellowana</i>]	pampas grass
<i>Cotoneaster</i> spp. (all species)	cotoneaster
<i>Cynodon dactylon</i>	(incl. hybrids varieties) Bermuda grass
<i>Cyperus</i> spp. (all species*)	nutsedge, umbrella plant
<i>Cytisus</i> spp. (all species)	broom
<i>Delosperma 'Alba'</i>	white trailing ice plant
<i>Dimorphotheca</i> spp. (all species)	African daisy, Cape marigold
<i>Drosanthemum floribundum</i>	rosea ice plant

BOTANICAL NAME	COMMON NAME
<i>Drosanthemum hispidum</i>	purple ice plant
<i>Eichhornia crassipes</i>	water hyacinth
<i>Elaeagnus angustifolia</i>	Russian olive
<i>Eucalyptus</i> spp. (all species)	eucalyptus or gum tree
<i>Eupatorium coelestinum</i> [syn. <i>Ageratina</i> sp.]	mist flower
<i>Festuca arundinacea</i>	tall fescue
<i>Festuca rubra</i>	creeping red fescue
<i>Foeniculum vulgare</i>	sweet fennel
<i>Fraxinus uhdei</i>	(and cultivars) evergreen ash, shamel ash
<i>Gaura</i> (spp.) (all species)	gaura
<i>Gazania</i> spp. (all species & hybrids)	gazania
<i>Genista</i> spp. (all species)	broom
<i>Hedera canariensis</i>	Algerian ivy
<i>Hedera helix</i>	English ivy
<i>Hypericum</i> spp. (all species)	St. John's Wort
<i>Ipomoea acuminata</i>	Mexican morning glory
<i>Lampranthus spectabilis</i>	trailing ice plant
<i>Lantana camara</i>	common garden lantana
<i>Lantana montevidensis</i> [syn. <i>L. sellowiana</i>]	lantana
<i>Limonium perezii</i>	sea lavender
<i>Linaria bipartita</i>	toadflax
<i>Lolium multiflorum</i>	Italian ryegrass
<i>Lolium perenne</i>	perennial ryegrass
<i>Lonicera japonica</i>	(incl. 'Halliana') Japanese honeysuckle

BOTANICAL NAME	COMMON NAME
<i>Lotus corniculatus</i>	birdsfoot trefoil
<i>Lupinus arboreus</i>	yellow bush lupine
<i>Lupinus texanus</i>	Texas blue bonnets
<i>Malephora crocea</i>	ice plant
<i>Malephora luteola</i>	ice plant
<i>Mesembryanthemum nodiflorum</i>	little ice plant
<i>Myoporum laetum</i>	myoporum
<i>Myoporum pacificum</i>	shiny myoproum
<i>Myoporum parvifolium</i>	(incl. 'Prostratum') ground cover myoporum
<i>Oenothera berlandieri</i>	Mexican evening primrose
<i>Olea europea</i>	European olive tree
<i>Opuntia ficus-indica</i>	Indian fig
<i>Osteospermum spp. (all species)</i>	trailing African daisy, African daisy
<i>Oxalis pes-caprae</i>	Bermuda buttercup
<i>Parkinsonia aculeata</i>	Mexican palo verde
<i>Pennisetum clandestinum</i>	Kikuyu grass
<i>Pennisetum setaceum</i>	fountain grass
<i>Phoenix canariensis</i>	Canary Island date palm
<i>Phoenix dactylifera</i>	date palm
<i>Plumbago auriculata</i>	cape plumbago
<i>Polygonum spp. (all species)</i>	knotweed
<i>Populus nigra 'italica</i>	Lombardy poplar
<i>Prosopis spp. (all species*)</i>	mesquite
<i>Ricinus communis</i>	castorbean
<i>Robinia pseudoacacia</i>	black locust
<i>Rubus procerus</i>	Himalayan blackberry

BOTANICAL NAME	COMMON NAME
<i>Sapium sebiferum</i>	Chinese tallow tree
<i>Saponaria officinalis</i>	bouncing bet, soapwort
<i>Schinus molle</i>	Peruvian pepper tree, California pepper
<i>Schinus terebinthifolius</i>	Brazilian pepper tree
<i>Spartium junceum</i>	Spanish broom
<i>Tamarix spp.</i> (all species)	tamarisk, salt cedar
<i>Trifolium fragiferum</i>	strawberry clover
<i>Tropaeolum majus</i>	garden nasturtium
<i>Ulex europaeus</i>	prickly broom
<i>Vinca major</i>	periwinkle
<i>Yucca gloriosa</i>	Spanish dagger
<p>An asterisk (*) indicates some native species of the genera exist that may be appropriate.</p> <p>Sources: California Exotic Pest Plant Council, United States Department of Agriculture-Division of Plant Health and Pest Prevention Services, California Native Plant Society, Fremontia Vol. 26 No. 4, October 1998, The Jepson Manual; Higher Plants of California, and County of San Diego-Department of Agriculture.</p>	