ATTACHMENT 11: BIOLOGICAL RESOURCES ASSESSMENT AND WILDLIFE MOVEMENT PLAN DATED JANUARY 2022

5645 Santa Rosa Road Cannabis Cultivation Project

Biological Resources Assessment

prepared for

Central Coast Agriculture, Inc.
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Buellton, California 93427
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prepared by

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April 2020 | Revised January 2022

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1 Introduction

1.1 Project Information

Project Name

5645 Santa Rosa Road Cannabis Cultivation Project

Applicant Name

Central Coast Agriculture, Inc.

Planning and Development Case Number

19LUP-00000-00480

Title of Project

5645 Santa Rosa Road Cannabis Cultivation Project

1.2 Project Location

The study area is located south of California State Route (SR) 246 and the Santa Ynez River and west of Buellton, California. Its street address is 5645 Santa Rosa Road in unincorporated Santa Barbara County, California, 93436 (Figure 1). It includes one assessor's parcel (Assessor's Parcel Number [APN]: 083-150-013) totaling approximately 100.92 acres. The study area is within the United States Geological Survey (USGS) *Santa Rosa Hills* and *Solvang*, California 7.5-minute topographic quadrangles in Township 6N, Range 32-33W, Section 11 of the San Bernardino Meridian (Earth Point 2018; USGS 2018). Its global positioning system (GPS) location is approximately centered at: (latitude: 34.608211° N, longitude: -120.311298° E).

1.3 Brief Project Description Statement

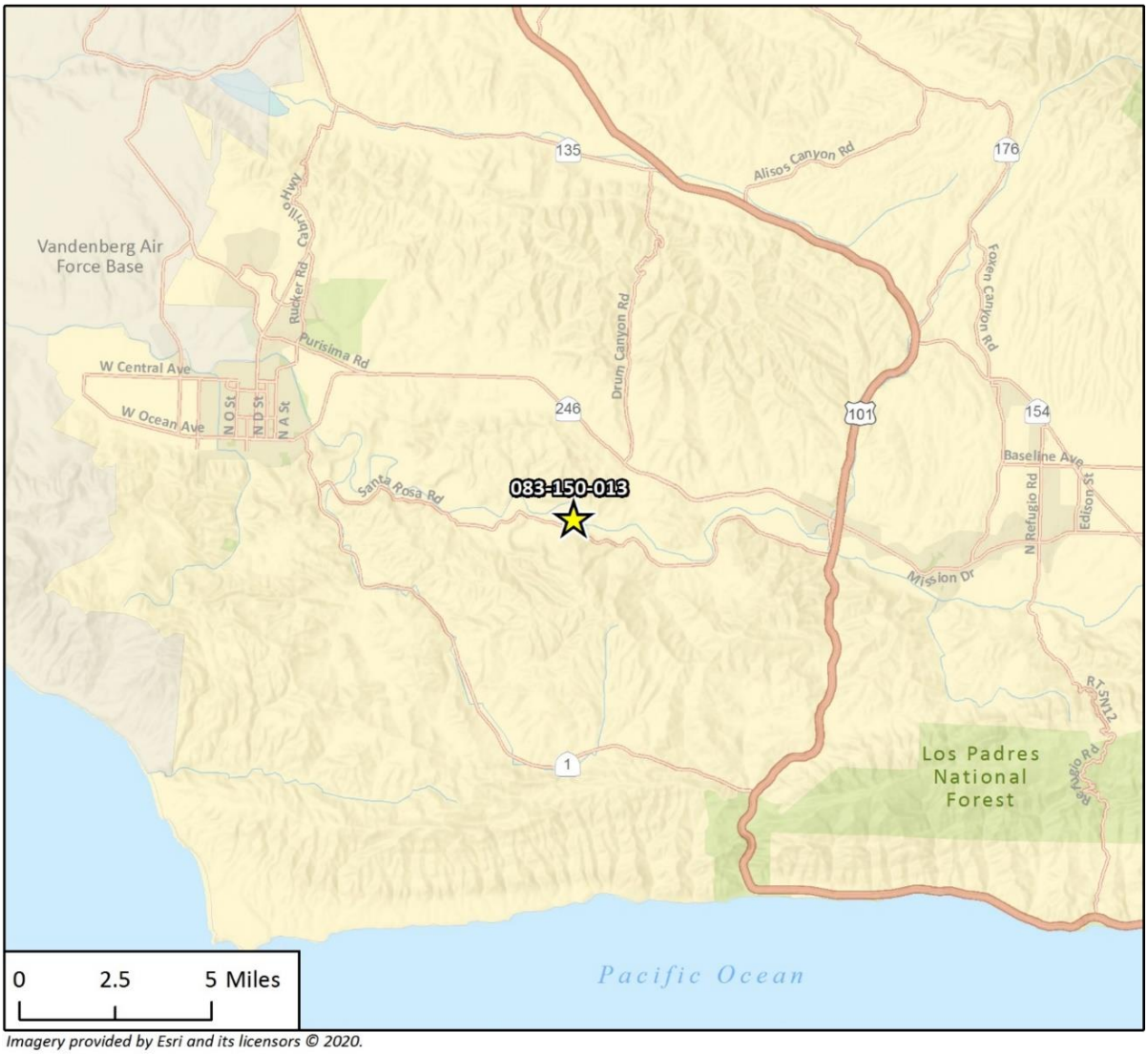
The proposed project encompasses the development and implementation of activities associated with cannabis cultivation. Specifically, the project will include approximately 24.45 acres of previously disturbed land zoned as agriculture to cannabis cultivation. As the study area is currently zoned for agriculture, the project is required to obtain a Land Use Permit from Santa Barbara County for the cultivation of cannabis. The proposed project includes retaining existing and current cannabis cultivation consisting of approximately 20 acres of outdoor cultivation in existing hoop structures, in addition to 4 acres of existing outdoor cultivation areas without hoop structures and 19,440 square feet (sq. ft.) of indoor nursery cultivation within an existing permitted 14-ft. tall greenhouse with blackout screening, and the construction four new 5,000-gallon water tanks and three new 10,000-gallon water tanks.

Type of Report and Scope

Central Coast Agriculture, Inc. (CCA) retained Rincon Consultants Inc. (Rincon) to prepare the following biological resources assessment (BRA) to document existing conditions, evaluate the potential for project-related impacts to biological resources and recommend measures to avoid,

minimize, and mitigate impacts to such resources prior to, during, and following implementation of the proposed project. For the purposes of this report, the entire 100.92-acre parcel at 5645 Santa Rosa Road will be referred to as the study area. The project, inclusive of all project components, is referred to globally as the project site. This document has been prepared to meet the mitigation and development standards outlined in Appendix H: Cannabis Activities Additional Standards of the County of Santa Barbara (County) Land Use Development Code (LUDC) (County 2020) and Final Environmental Impact Report for the Cannabis Land Use Ordinance and Licensing Program (FEIR) (County 2017), as well as the County Environmental Thresholds and Guidelines Manual (County 2008).

Figure 1 Regional Location Map



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Study Area

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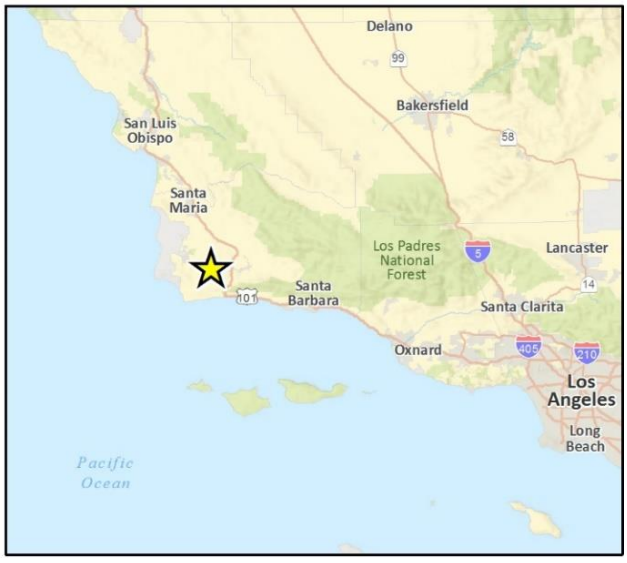


2 Project Description

CCA is requesting a Land Use Permit from the County of Santa Barbara (County) for the cultivation of cannabis. The proposed project includes retaining approximately 24.45 acres of existing and current cannabis cultivation zoned as agriculture II (AG-II). The project site is currently cultivating cannabis, per the County's temporary use permit authorization. The study area encompasses one 100.92-acre parcel (APN 083-150-013) (Figure 2). The project site includes existing and current cannabis cultivation consisting of approximately 20 acres of outdoor cultivation in existing 12 ft.-tall hoop structures, 4 acres of outdoor cultivation without hoop structures, and, a 19,440 sq ft of indoor nursery cultivation within an existing permitted 14 ft.-tall greenhouse with blackout screening. Plants will be grown in the ground and in pots, and plant waste will be hauled off or composted on site in a fenced area.

The proposed project does not include the pruning, damage, or removal of native trees, or the clearing of any native or sensitive vegetation. All areas proposed for cultivation have been used for fruit and vegetable cultivation since 1994, at a minimum. All activities involving typical ground disturbance associated with farming practices are considered routine activities and would be conducted in flat areas that have been tilled and planted regularly for a minimum of 20 years. Other routine activities include utilizing a water truck for daily dust control during the cultivation season (March to November), running a box scraper along the access road every two to three weeks year-round, and weeding as needed with hand tools. Landscaping includes 12,813 sq ft. of trees, shrubs, and grasses that will be planted along Santa Rosa Road. The proposed project includes grading of approximately 1,000 cubic yards of grading for over-excavation and re-compaction to pave the access road to the greenhouse.

The proposed project includes hoop structures approximately 14 ft in height and a nursery greenhouse approximately 14 ft in height. The project site also has one permitted 867 sq. ft. accessory agricultural structure that was later converted to an accessory dwelling unit (ADU) without permits. The ADU will be converted back to an agricultural accessory structure as part of the proposed project. The project site also has one as-built 120 sq. ft. agricultural accessory structure used as equipment storage. Five as-built storage containers not affiliated with the cannabis operation, two of which are 160 sq. ft. and three of which are 320 sq. ft. will be permitted as part of the Land Use Permit. The proposed project includes removing two existing refrigerated agricultural storage containers. One of the existing agricultural storage containers is 384 sq ft, and the other is 500 sq ft.

During harvest periods, cannabis will be weighed and staged in a 2,500-sq.-ft. temporary shade structure that will be used only during harvest periods and taken down immediately after harvest (depicted as cannabis staging and pick up area for transport offsite on Figures 2 through 4). Within 24 hours of harvesting, the harvested material will be loaded onto trucks and transported offsite for processing. No cannabis will be stored in the 2,500-sq.-ft. shade structure. No equipment or materials storage will be allowed under hoop structures or in the Santa Ynez River buffer area. A new 400-sq.-ft. security building with two restrooms will be located near the nursery area. The proposed project site is currently partially developed with a 1,900 sq ft existing single family dwelling that predates permit requirements and is considered legal, non conforming.

An existing agricultural water well will provide water for the proposed cannabis activities. There are seven existing 5,000-gallon water tanks, three of which serve the 1,900-sq.ft. single family dwelling

built in 1920 and are not part of the proposed project. There will be one new 5,000-gallon tank installed for landscape irrigation. Three new 10,000-gallon water tanks will be installed for fire suppression. Three new 5,000-gallon water tanks will be installed for cannabis crop irrigation. In total, the subject parcel will have 14 water tanks, and eleven of those tanks will be used for the cannabis operation. The Project site will have a total of four wells to serve different components of the site. An existing agricultural well located in the northeastern portion of the parcel will provide water for the cannabis activities. A new well located in the northeastern portion of the parcel will serve the new restroom building and single-family dwelling. An existing well located in the northeastern portion of the parcel that currently serves the dwellings and small orchard will no longer be used for the dwelling and will continue to be used for irrigating the small orchard. An existing well located in the southwestern portion of the parcel will provide back-up water for the cannabis operation. Wastewater treatment for the existing single-family dwelling and new restroom building will be provided by two proposed septic systems. Power will be provided by PG&E and one mobile generator for use only in emergencies. Fire protection will be provided by the County Fire Department and law enforcement will be provided by the County Sheriff's Department.

Hoop structures would be setback a minimum of 100 ft and outdoor cultivation activities would be setback a minimum of 50 ft from the edge of riparian vegetation or top of bank (whichever is more protective) and cultivation areas would also be setback a minimum of 150 ft from the mapped Santa Ynez River high flow water level that occurs every 1.5-2 years in accordance with State Water Resources Control Board (SWRCB) Cannabis Cultivation Policy riparian setback requirements. As communicated by CDFW, a 100-ft setback from the Santa Ynez River is suitable. Within the 100-ft setback, 50 ft will be utilized for outdoor cannabis cultivation. Vehicular use has been revised to minimize use of areas adjacent to Santa Ynez River, in particular where there is less than 100-ft of combined setback (northeastern end of the project site). In addition, a 10-ft buffer is proposed along the northeastern project site to limit potential debris from entering the riparian area of the Santa Ynez River.

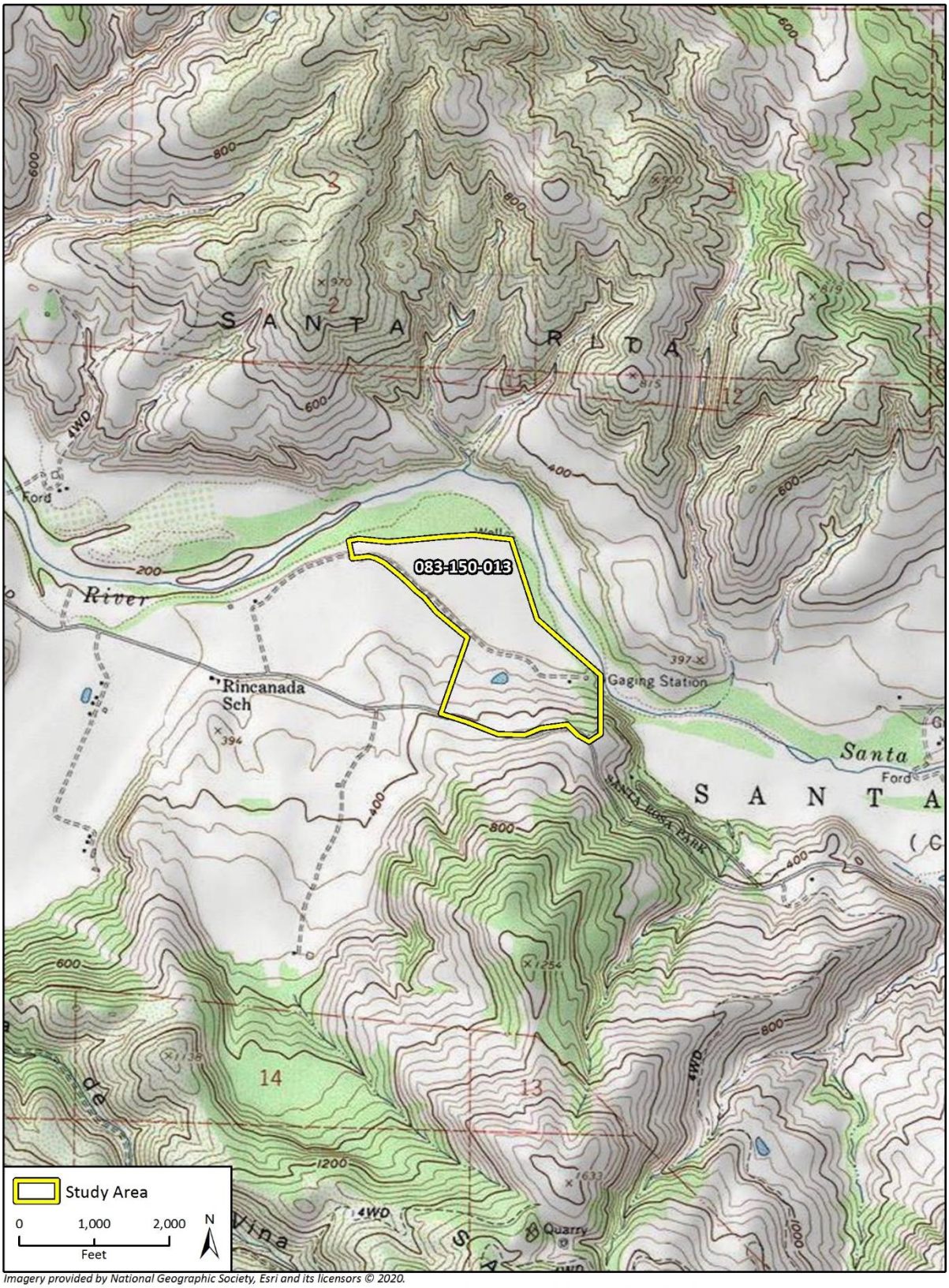
The perimeter of the cannabis cultivation area is fenced with an existing 6-ft-high no-climb wire fence. The proposed project includes the installation of fully shielded downward-facing security lights, one at the parcel entrance gate, an entrance gate to the cultivation area, a restroom building, and on a camera pole near the temporary shade structure. The lights will be a maximum of 8-ft. tall and will be on a motion sensor and will remain illuminated for five minutes after activation. There will be perimeter security cameras with night vision silent alarm motion detection and two 24-hour roving security guards. The proposed cannabis operation will involve up to 55 employees during harvest which will occur twice per year, once in June or July and once in October or November, and lasts up to 3 weeks each time. There will be up to 10 employees on site year around. Work shifts will be staggered throughout the day and employees will be provided with incentives to carpool in order to reduce peak hour trips. Additionally, one employee of the operation may live in the existing single-family dwelling. Portable (chemical) toilets are provided for the employees during the harvest periods. The hours of operation year-round will be 7:00 am to 7:00 pm. Access will continue to be provided via an existing paved 20-ft-wide driveway from Santa Rosa Road, portions of which will be re-surfaced and widened as part of the proposed project. There will be 35 parking spaces including one ADA compliance space and 5 carpool spaces.

The use of farm equipment would occur only within the existing fence surrounding the project site, in previously disturbed areas, and on designated access roads. Heavy equipment use includes a tractor, box truck, and F450 with a trailer. Traffic along access roads is significantly reduced during the winter and spring period of November 15 to April 1, as most cultivation activities take place

during the summer and early fall months. All access roads are designed for minimal use in the winter to prevent erosion. The only use of heavy equipment in the winter period will be to plant, mow, and till a beneficial use cover crop. Tilling of cannabis waste will occur in the designated compost area and will use a tractor with tilling equipment attached.

All project components are shown on Figure 3.

Figure 2 Project Site and Study Area Topographic Map



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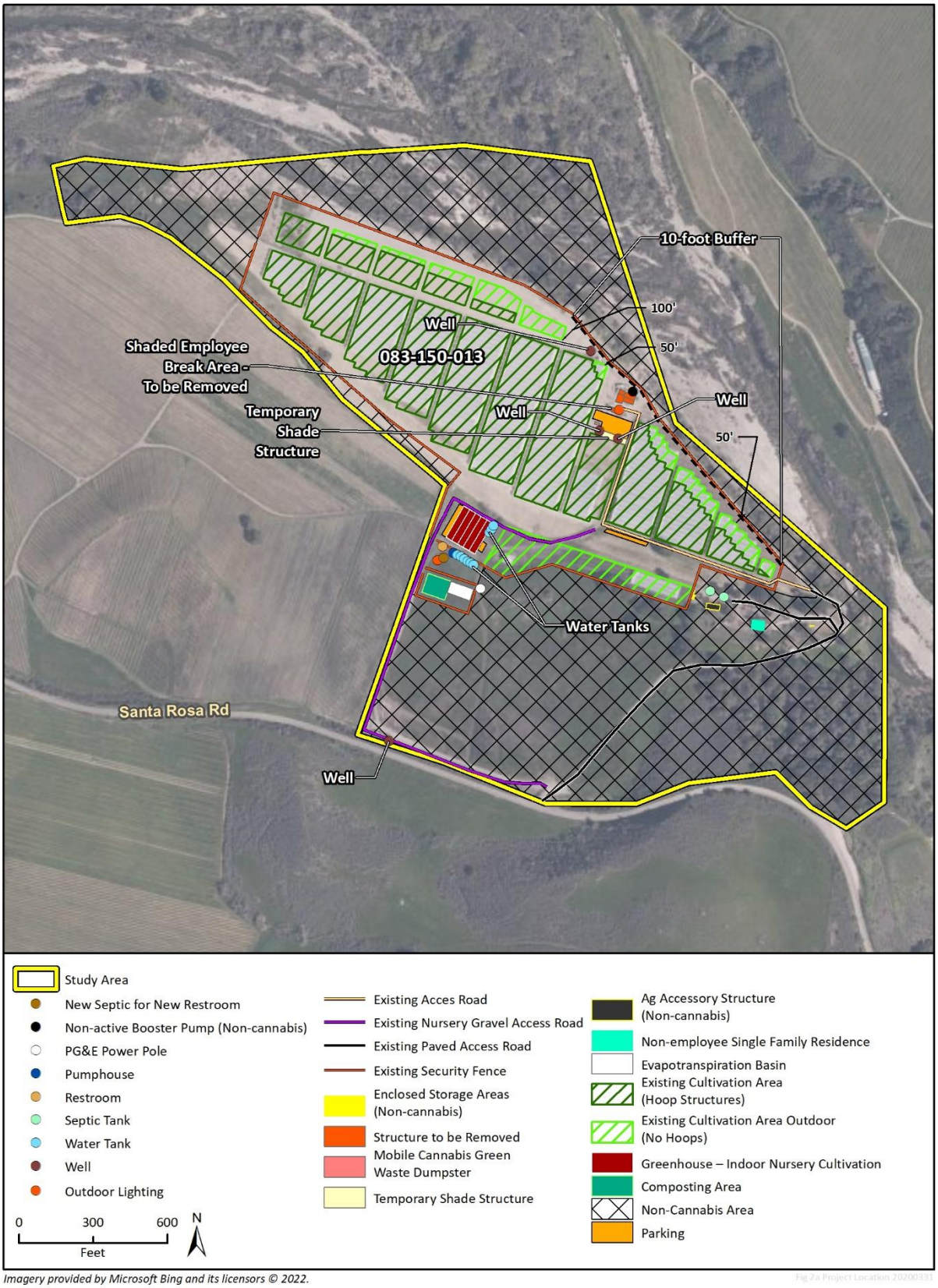
Santa Rosa Hills Quadrangle. T06N R33W S11,12. The topographic representation depicted in this map may not portray all of the features currently found in the vicinity today and/or features depicted in this map may havechanged since the original topographic map was assembled.

Fig 3a Topo

Figure 3 Site Plan Figure



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3 Regulatory Framework

Regulated or sensitive resources studied and analyzed herein include special status plant and animal species, nesting birds and raptors, sensitive plant communities, jurisdictional waters, wildlife movement corridors, and locally protected resources, such as protected trees. Regulatory authority over biological resources is shared by federal, state, and local authorities. Primary authority for regulation of general biological resources lies within the land use control and planning authority of local jurisdictions, in this instance the County.

3.1 Environmental Statutes

For the purpose of this BRA, potential impacts to biological resources were analyzed based on the following statutes (Appendix A):

- California Environmental Quality Act (CEQA)
- Federal Endangered Species Act (ESA)
- California Endangered Species Act (CESA)
- Federal Clean Water Act (CWA)
- California Fish and Game Code (CFGC)
- Migratory Bird Treaty Act (MBTA)
- The Bald and Golden Eagle Protection Act
- Porter-Cologne Water Quality Control Act (Porter-Cologne Act)

3.2 California Environmental Quality Act

This BRA is intended to support the County's review of the proposed project. The County completed a county-wide FEIR for its Cannabis Land Use Ordinance and Licensing Program in 2017 and as a result, individual cannabis projects are not subject to individual review under CEQA. However, the project must comply with the Santa Barbara County LUDC and the Santa Barbara County Code of Ordinances (SBCO).

The guidelines for determining CEQA significance are followed in this BRA as it is a useful and defined process for the evaluation and grouping of resource impacts to facilitate detailed discussion of impacts that may occur with this project. The following threshold criteria, as defined by the CEQA Guidelines Appendix G Initial Study Checklist, were used to evaluate potential effects to biological resources. Based on these criteria, the proposed project would have a significant effect on biological resources if it would:

a) *Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or U.S. Fish and Wildlife Service (USFWS).*

b) *Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFW or USFWS.*

c) Have a substantial adverse effect on State or federally protected wetlands (including marsh, vernal pool, and coastal areas) through direct removal, filling, hydrological interruption, or other means.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

f) Conflict with the provisions of an adopted habitat Conservation plan, natural community conservation Plan, or other approved local, regional or state habitat conservation plan.

In addition, in accordance with the CEQA thresholds adopted by the County in its Environmental Thresholds and Guidelines Manual (County 2018) (incorporated herein by reference), the project would have a significant effect on biological resources if it would:

- Substantially reduce or eliminate species diversity or abundance.
- Substantially reduce or eliminate quantity or quality of nesting areas.
- Substantially limit reproductive capacity through losses of individuals or habitat.
- Substantially fragment, eliminate, or otherwise disrupt foraging areas and/or access to food sources.
- Substantially limit or fragment range and movement (geographic distribution or animals and/or seed dispersal routes).
- Substantially interfere with natural processes, such as fire or flooding, upon which the habitat depends.

3.3 Cannabis Regulatory Review

The following regulations were reviewed for their applicability to the proposed project.

- Santa Barbara County LUDC-in particular:
  - Chapter 35.21 - Agricultural Zones
  - Section 35.42.075 - Cannabis Regulations
  - Section 35.42.140 - Greenhouses, Hoop Structures, and Shade Structures
    - Attachment A - Guidelines for Applying Streams and Creeks Setbacks to Exempt Hoop Structures and Shade Structures (2019)
  - Section 35.30.070 - Fences and Walls
  - Appendix H - Cannabis Activities Additional Standards (2020)
- Final EIR for the Cannabis Land Use Ordinance and Licensing Program (2017)
- SWRCB General Waste Discharge Requirements and Waiver of Waste Discharge Requirements for Discharges of Waste Associated with Cannabis Cultivation Activities (Order WQ 2019-0001 DWQ [SWRCB 2019])

Santa Barbara County LUDC 35.42.075-Cannabis Regulations

Fencing and Security Plan

Where fencing would separate an agricultural area from undeveloped areas with native vegetation and/or Habitat Management Plan easement area, said fencing shall use material or devices that are not injurious to wildlife and enable wildlife passage.

Tree Protection Plan

Applicants who apply for a cannabis license for a site that would involve pruning, damage, or removal of a native tree or shrub, are shall be required to submit for the Planning and Development Department approval a Tree Protection Plan (TPP) prepared by a Planning and Development Department-approved arborist/biologist and designed to determine whether avoidance, minimization or compensatory measures are necessary.

Habitat Protection Plan

Applicants who apply for a cannabis license for a site that would involve clearing of established sensitive native vegetation, are required to or other sensitive vegetation shall submit a Habitat Protection Plan (HPP) to the County Planning and Development Department. The plan shall apply within areas that have been identified as having a medium to high potential of being occupied by a special status wildlife species, nesting, or a federal or state-listed special status plant species. The plan shall be prepared by a Planning and Development Department-approved biologist and designed to determine whether protected species, habitat, or sensitive communities may be present, and whether avoidance, minimization or measures are necessary. Focused species-specific surveys shall be required to whether a sensitive species or nesting bird may be present and shall be conducted at the appropriate time of year and time of day when that species is active or otherwise identifiable. Where warranted by the findings of initial review, protocol level surveys may also be required. In addition, the HPP shall determine whether specific restoration measures are required where disturbance associated with previous cannabis activities on the property being considered for permitting or licensing has occurred.

Wildlife Movement Plan

If fencing is required for outdoor cultivation sites, the applicant shall prepare a Wildlife Movement Plan for all cannabis cultivation sites proposed. The Wildlife Movement Plan shall analyze proposed fencing in relation to the surrounding opportunities for migration, identify the type, material, length, and design of proposed fencing, and shall propose nondisruptive, wildlife-friendly fencing, such as post and rail fencing, wire fencing, and/or high tensile electric fencing, to allow passage by smaller animals and prevent movement in and out of cultivation sites by larger mammals, such as deer.

Santa Barbara County LUDC 35.42.140-Greenhouses, Hoop Structures, and Shade Structures

In addition, as stated in the countywide FEIR for the Cannabis Land Use Ordinance and Licensing Program, all developments within the county are required to comply with the County Setback Ordinance, which includes the following measure, applicable to the study area.

Streams and Creeks

Within the rural areas, hoop structures and shade structures shall be setback 100 ft from the top-of-bank or edge of riparian vegetation of streams and creeks, whichever is more protective of the resource.

State Water Resources Control Board

In 2019, the SWRCB adopted Order WQ 2009-0001-DWQ-*General Waste Discharge Requirements and Waiver of Waste Discharge Requirements for Discharges of Waste Associated with Cannabis Cultivation Activities* (Cannabis General Order). The Cannabis General Order dictates general waste discharge requirements for discharges into state-jurisdictional waters associated with cannabis cultivation activity.

Attachment A of the Cannabis General Order states that cannabis cultivators shall comply with the minimum riparian setbacks for all land disturbance, cannabis cultivation activities, and facilities (e.g., material or vehicle storage). The minimum riparian setbacks include: 150 ft for perennial watercourses (Class I), 100 ft for intermittent watercourses (Class II), 50 ft for ephemeral watercourses (Class III), and edge of established riparian vegetation zone for man-made watercourses that support native aquatic species (Class IV). RWQCBs may adopt site-specific waste discharge requirements (WDRs).

4 Methods

4.1 Literature and Database Review

Queries of the U.S. Fish and Wildlife Service (USFWS) *Information for Planning and Consultation System* (IPaC; 2018a), USFWS Critical Habitat Portal (2018b) and California Department of Fish and Wildlife (CDFW) *California Natural Diversity Database* (CNDDB; 2018b) were conducted with a 5-mile radius. A list of special status plant species was also queried from California Native Plant Society (CNPS), with a nine USGS 7.5-minute quadrangle search (CNPS 2018). The queries were conducted to obtain comprehensive information regarding state and federally listed species, as well as other special status species, considered to have potential to occur. In addition, the following resources were reviewed for information about the study area:

- Aerial photographs of the study area and vicinity (Google Earth 2020) (UCSB 2020)
- United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS) *Web Soil Survey* (2018a)
- National Hydrography Dataset (USGS 2018)
- National Wetlands Inventory (USFWS 2018c)
- Rare Plants of Santa Barbara County (Santa Barbara Botanic Garden 2012)
- California Tiger Salamander Habitat Map (USFWS 2010) and Final Recovery Plan for the Santa Barbara County Distinct Population Segment of the California Tiger Salamander (*Ambystoma californiense*) (USFWS 2016)

4.2 Field Reconnaissance Survey

Rincon Senior Biologist Julie Love and Associate Biologist Charis Van Der Heide conducted a field reconnaissance survey on November 1, 2018 (see Table 1 for survey details). Ms. Love and Ms. Van Der Heide surveyed the entire study area on foot and recorded all botanical and wildlife resources encountered on site. The survey was conducted to document the existing site conditions and to evaluate the potential for presence of sensitive biological resources, including sensitive plant and animal species, sensitive plant communities, and habitat for nesting birds protected by federal and state laws. During the survey, an inventory of all plant and animal species observed was compiled and an evaluation of potentially jurisdictional aquatic features was conducted.

Table 1 Field Reconnaissance Survey

Date	Personnel	Time	Weather Conditions	Survey Type
11/1/2018	Julie Love Charis van der Heide	1315 - 1650	68-72°F, winds 1-3 mph, 5% cloud cover	Biological Reconnaissance and Jurisdictional Delineation Survey

Plant species nomenclature and taxonomy followed *The Jepson Manual: Vascular Plants of California, Second Edition* (Baldwin et al. 2012) and the Jepson eFlora (Jepson Flora Project eds. 2018). All plant species encountered were noted and identified to the lowest taxonomic level possible given the condition of the materials during the site visit. The vegetation classification

system used for this analysis is based on *A Manual of California Vegetation, Second Edition* (MCV2; Sawyer et al. 2009), but has been modified as needed to accurately describe the existing habitats observed on site. These vegetation communities were mapped onto aerial imagery depicting the study area and then later digitized using ArcGIS® (ESRI 2018).

Wildlife identification and nomenclature followed standard reference texts, including Sibley Birds West: Field Guide to Birds of Western North America (Sibley 2016), Field Guide to Western Reptiles and Amphibians (Stebbins 2003), and Mammals of North America (Bowers et al. 2004). The habitat requirements for each regionally occurring special status species were assessed and compared to the type and quality of the habitats observed within the study area during the field survey. Habitat requirements for avian species referenced the Cornell Lab of Ornithology *Birds of North America* database (Cornell 2019). Several sensitive species were eliminated from consideration as having potential to occur on site due to lack of suitable habitat, lack of suitable soils/substrate, and/or knowledge of regional distribution. The relative density of fossorial mammal burrows and soil characteristics throughout the site were also noted.

Habitats for potentially occurring special status species were assessed and compared to the type and quality of the habitats observed within the study area. California Natural Communities List and the Sensitive Natural Communities Lists (CDFW 2020) were reviewed for the presence of sensitive natural communities.

4.3 Jurisdictional Delineation

During the field reconnaissance survey, Ms. Love and Ms. Van Der Heide conducted a jurisdictional delineation of the study area on November 1, 2018. The entire study area was surveyed on foot for potential wetland and non-wetland jurisdictional areas, including streambeds, and riparian resources. Current methods and guidelines and state policies and guidelines were used to identify and delineate potentially state-jurisdictional aquatic resources, such as streams and wetlands. The study area was surveyed for any streams and other hydrologic features that might constitute waters of the state, as well as having a defined channel, bed and banks and any associated riparian habitat that could be subject to CDFW jurisdiction under the CFGC and/or Regional Water Quality Control Board (RWQCB) jurisdiction under the Porter-Cologne Act. Potential jurisdictional features that might constitute waters of the U.S. were noted but not formally delineated due to access issues. Results were further refined and characterized during an August 2020 survey as described in Section 4.4 and Section 6.3.

Extents of potential jurisdictional features, centerlines, and photo locations were mapped using a Trimble GEO7X series GPS unit with sub-meter accuracy and were also plotted on aerial photographs. Note that final jurisdictional determinations of the boundaries of waters and riparian habitats are made by each agency, typically at the time that authorizations to impact such features are requested.

4.4 Agency Consultation

On August 19, 2020 Rincon biologist Jaime McClain and Ms. Love conducted a site visit with CCA and CDFW between the hours of 1200 to 1500. The intent of the site visit was to document existing conditions and determine adequate buffers from potential jurisdictional features and sensitive resources. As a part of the site visit, recommendations from CDFW were provided to CCA, which

were incorporated into the project and summarized in the Wildlife Movement Plan as applicable (Appendix E).

5 Environmental Setting

This section summarizes the general environmental setting, vegetation communities present, and plants and animals observed within the study area. Representative photographs of the study area are provided in Appendix B and a complete list of all plant and animal species observed on site during the field survey is presented as Appendix C.

5.1 Climate and Topography

The study area is located in central Santa Barbara County near Buellton and is characterized by long, hot, dry summers and short, wet winters. On average, temperatures range from 49 degrees Fahrenheit to 93 degrees Fahrenheit during the summer, with an average of 71 degrees Fahrenheit, and from 39 degrees Fahrenheit to 75 degrees Fahrenheit during the winter months, with an average temperature of 57 degrees Fahrenheit. On average, the warmest month is July and the coolest month is December. The average annual precipitation in Buellton is 18 inches, with most of the precipitation typically occurring from December to March and highest rainfall typically occurring in February (National Oceanic and Atmospheric Administration [NOAA] 2018).

The topography of the study area is flat, with a small hill occurring within the southeastern portion. Elevation within the study area ranges from 232 to 493 feet above mean sea level. Adjacent land use includes active agricultural land to the west, east, and south, and undisturbed riparian corridor and the Santa Ynez River to the north.

A review of historical imagery (Appendix G) has been provided. The imagery depicts activities related to agriculture uses, including clearing, grading, trimming, moving, tilling, and maintenance. The historical imagery depicts these activities as early as 1928, further review of Google Earth time lapse imagery shows regular maintenance occurring within the project site continuous until present day.

5.2 Hydrology and Watershed

The study area is in the Santa Ynez watershed (Hydrologic Unit Code [HUC] 18060010) (USGS 2018). The Santa Ynez River flows in a westerly direction in the northern portion of the study area and meets the Pacific Ocean approximately 17 miles west of the study area. The National Wetlands Inventory (NWI) indicates that the portion of the Santa Ynez River within the study area is a palustrine wetland adjacent to a second riverine system. The palustrine system is non-tidal and dominated by trees, shrubs, and emergent mosses or lichens. The water regime can be seasonally or temporarily flooded where surface water is present for brief or extended periods during the growing season, but the water table usually lies well below the ground surface for most of the season. The riverine system includes all wetlands and deepwater habitats contained within a channel. The system includes channels that contain flowing water only part of the year and when the water is not flowing, it may remain in isolated pools or surface water may be absent (USFWS 2018c).

The Santa Ynez River is one of the largest rivers on the Central Coast of California. It is 92 miles long, flowing through the Santa Ynez Valley. The river contains breeding populations of the federally listed endangered southern California steelhead DPS (*Oncorhynchus mykiss irideus*) and critical

habitat for the federally and state listed endangered southwestern willow flycatcher (*Empidonax traillii extimus*).

One potentially jurisdictional hydrologic feature is present within the study area (discussed further in Section 6.3): 1) the Santa Ynez River. A historic non-jurisdictional detention basin has been mapped on site by NWI. However, upon further investigation, the feature is no longer present and is therefore not considered to be jurisdictional (discussed further in Section 6.3) (Appendix B).

5.3 Soils

Information about the soil types present in the study area is presented below. Based on the literature review, seven soil map units are located within the study area: *Corducci-Typic Xerofluvents 0 to 5 percent slopes, occasionally flooded, MLRA 14* (300) underlies the majority of the study area adjacent to the Santa Ynez River (28 percent). Corducci-typic xerofluvents are derived from metamorphic and sedimentary rocks in drainageways. Typical vegetation includes, mule fat, arroyo willow, and mixed grasses and forbs; evident in riparian areas. Typic xerofluvents is rated as a hydric soil. The next greatest soil type is *Mocho Fine Sandy Loam, 0-2 percent slopes* (Mu) which underlies the central portion of the study area (15 percent). Mocho fine sandy loam consists of very deep, well drained soils that formed in alluvium derived mostly from sandstone and shale rock sources. The typical depth to water table is greater than 80 inches and flooding is rare. The available water storage in a typical soil profile is very high – about 17.7 inches. Mu is rated as a hydric soil. The third greatest soil type present is *Gazos Clay Loam, 15 to 30 percent slopes* (GsE) which underlies the southern study area (14 percent). Gazos clay loam consists of well-drained clay loams with a texture of silty clay underlain by shale bedrock at a depth of 20 to 30 inches. These soils occur on rounded hills in the upland covered with annual grasses and forbs. Permeability is moderately slow, with surface runoff medium to high, and the erosion hazard moderate to high. GsE soil is not hydric. The next greatest percentage and located in the project site is *Mocho Sandy Loam*, overflow (Mr) (21 percent. Mocho sandy loam is adjacent to channels of large drainageways and is inundated during severe floods. It consists of well-drained silty clay loams developed from recently deposited alluvium. Areas consisting of mocho sandy loam typically are characterized by areas used for a variety of irrigated and dryland crops where permeability is moderately rapid. Mr is rated as a hydric soil. The remining soil types collectively comprise less than 30 percent and include *Gazos clay loam 30 to 45 percent slope* (GsF) (9 percent), *Gazos clay loam 9 to 15 percent slopes* (GsD) (4 percent), and *Ballard Fine Sandy Loam 0 to 2 percent slopes* (BaA) (2 percent).

5.4 Vegetation/Land Cover Types

The study area is within the Transverse Ranges Subregion (TR) geographic subregion of California. The TR subregion comprises the mountain ranges that are oriented in the east-west direction and is characterized as lower elevations by chaparral and at higher elevations by oak forest and dry montane forests of white fir, incense cedar, or pines. The TR is divided into three districts that are progressively higher, hotter, and drier eastward. The project site lies in the *Western Transverse Ranges District* (WTR) (Baldwin et al. 2012).

The study area consists mostly of agricultural lands, including several existing buildings and structures associated with on site agricultural operations, as well as residences and areas consisting of existing structures, roads, and greenhouses. A few natural vegetation communities are present in limited quantities throughout the project site as described below.

The study area is documented to contain a variety of plant species as compiled in Appendix D. Only common plant species were observed on site, no special status species were observed. However, one CDFW sensitive natural community was present on site. Vegetation communities and land cover types detected in the study area are summarized in Table 2 and displayed graphically in Figure 4. A description of natural communities and land covers are discussed below.

Table 2 Vegetation Communities and Land Covers within the Study Area

	CDFW Sensitive Natural Community[1] Designation (Yes/No)	Study Area (acres)	If Sensitive Resource; Minimum Distance from Project Site (feet)
Natural Communities			
Black cottonwood forest (*Populus trichocarpa – Salix lasiolepis* association)	Yes	16.42	Yes; 50
Coast live oak woodland (*Quercus agrifolia*/grass association)	No	11.98	No; N/A
Coyote brush scrub (*Baccharis pilularis* association)	No	1.09	No; N/A
Ruderal – Sandbar willows	No	2.67	No; N/A
Anthropogenic Land Covers			
Agricultural	–	40.15	No; N/A
Orchard	–	1.98	No; N/A
Ruderal	–	26.48	No; N/A

[1] Natural Community is included on the CDFW Sensitive Natural Communities List (2020)

Natural Communities

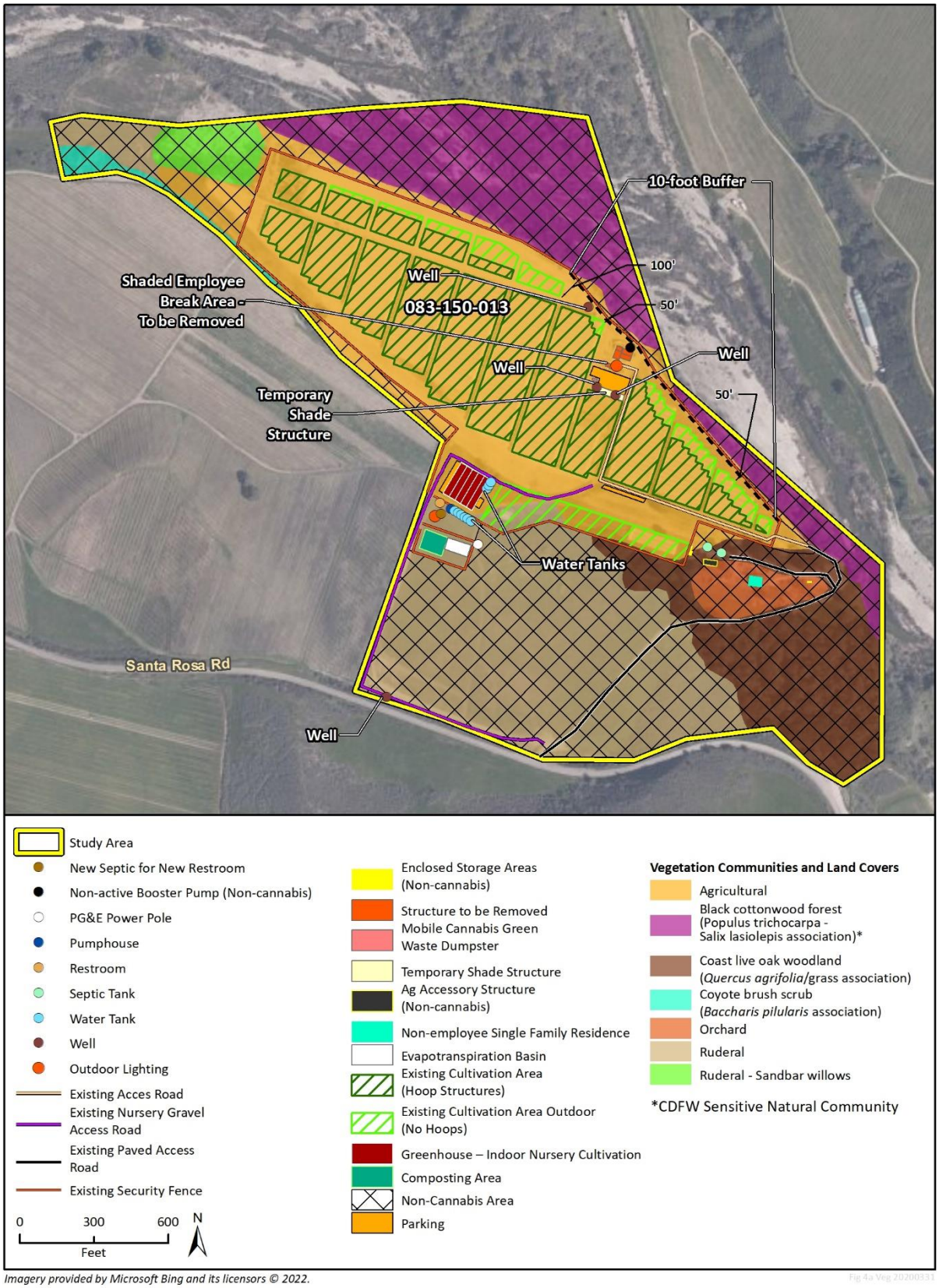
Black Cottonwood Forest

Black cottonwood forest (*Populus trichocarpa* Forest and Woodland Alliance) is ranked as G5S3 and is considered a CDFW sensitive natural community. MCV2 classifies black cottonwood forest's tree canopy as intermittent or continuous with black cottonwood (*Populus trichocarpa*) dominant or co-dominant with Fremont cottonwood (*Populus fremontii*), box elder (*Acer negundo*), white fir (*Abies concolor*), white alder (*Alnus rhombifolia*), bigleaf maple (*Acer macrophyllum*), coast live oak (*Quercus agrifolia*), and a variety of willow species (*Salix* spp.) The canopy is intermittent to continuous with an open to continuous shrub layer of willow species (Sawyer et al. 2009). On site, the black cottonwoods are co-dominant with arroyo willows (*Salix lasiolepis*); therefore, the *Populus trichocarpa* Forest and Woodland Alliance is further characterized as a *Populus trichocarpa – Salix lasiolepis* association.

Coast Live Oak Woodland

Coast live oak woodland (*Quercus agrifolia* Forest and Woodland Alliance) is a native community. MCV2 classifies coast live oak woodlands as dominated by coast live oak in the tree canopy (Sawyer et al. 2009). On site, no shrub layer is present, and the herbaceous layer is sparse consisting of non-native grasses; therefore, the *Quercus agrifolia* Forest and Woodland Alliance is further characterized as a pure stand *Quercus agrifolia*/grass association.

Figure 4 Vegetation Communities and Land Cover Types in the Study Area



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Coyote Brush Scrub

Coyote brush scrub (*Baccharis pilularis* Shrubland Alliance) is a native vegetation community. MCV2 classifies coyote brush scrub as disturbed areas dominated by coyote brush (*Baccharis pilularis*) in the shrub canopy (Sawyer et al. 2009). On site, emergent blue elderberry individuals are also present in the shrub canopy. Invasive non-native herbs and grasses dominate the herbaceous layer, including the following: summer mustard (*Hirschfeldia incana*), bull thistle (*Cirsium vulgare*), amaranth (*Amaranthus* sp.), tocalote (*Centaurea melitensis*), and non-native grasses. The *Baccharis pilularis* Shrubland Alliance is further characterized as a *Baccharis pilularis* association.

Ruderal – Sandbar Willows

The ruderal – sandbar willows community is characterized as a highly disturbed ruderal area with individual clusters of native sandbar willows. These areas are dominated by ruderal and non-native grass species in the herbaceous layer, with small clusters of sandbar willows not dense enough to constitute a sandbar willow thicket.

During the August 19, 2020 field survey, it was determined that this vegetation community was no longer present within the existing project site. This vegetation community is located behind the existing fence and is spatially separated horizontally and vertically from the existing riparian vegetation associated with the Santa Ynez River.

Anthropogenic Land Covers

Agricultural

Agriculture land cover is characterized by lands that support an active agricultural operation – in this case, current cannabis cultivation is present on site, consisting of hoop houses and outdoor cultivation. These areas are irrigated artificially.

Orchard

Orchard land cover is characterized by lands that support an active agricultural operation – specifically, orchards. Within the study area, orchards are comprised of artificially irrigated habitat dominated by mostly fruit trees with canopies that are low and bushy with an open understory. An existing house is also present within the orchard land cover.

Ruderal

Ruderal land cover is characterized by pre-dominantly non-native species (e.g., thistles, non-native grasses) introduced and established through human action. These areas have been physically disturbed and are no longer recognizable as a native or naturalized vegetation community. These areas are not typically artificially irrigated but receive water from precipitation or runoff.

5.5 General Wildlife

Wildlife activity was low during the field reconnaissance survey. Agricultural areas on site offer little to no habitat value for wildlife, except for common species that are adapted to disturbed conditions, i.e., western fence lizard (*Sceloporus occidentalis*), American crow (*Corvus brachyrhynchos*), etc. Intact native vegetation on the periphery of the study area supports a suite of common avian, mammalian, and reptilian wildlife, and has potential to support sensitive wildlife species. A complete list of species observed can be found in Appendix C. Special status species with potential to occur are discussed below in Section 6.

6 Sensitive Biological Resources

Local, state, and federal agencies regulate special status species and other sensitive biological resources and require an assessment of their presence or potential presence to be conducted on site prior to the approval of any proposed development on a property. This section discusses sensitive biological resources observed in the study area and evaluates the potential for the project site to support other sensitive biological resources. Assessments for the potential occurrence of special status species are based upon known ranges, habitat preferences for the species, species occurrence records from the CNDDB, species occurrence records from other sites in the vicinity of the survey area, previous reports for the project vicinity, and the condition of habitats present on the site. The potential for each special status species to occur in the survey area was evaluated according to the following criteria:

- **Not Expected.** Habitat on and adjacent to the site is clearly unsuitable for the species requirements (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime).
- **Low Potential.** Few of the habitat components meeting the species requirements are present, and/or the majority of habitat on and adjacent to the site is unsuitable or of very poor quality. The species is not likely to be found on the site.
- **Moderate Potential.** Some of the habitat components meeting the species requirements are present, and/or only some of the habitat on or adjacent to the site is unsuitable. The species has a moderate probability of being found on the site.
- **High Potential.** All of the habitat components meeting the species requirements are present and/or most of the habitat on or adjacent to the site is highly suitable. The species has a high probability of being found on the site.
- **Present.** Species is observed on the site or has been recorded (e.g., CNDDB, other reports) on the site recently (within the last 5 years).

The literature review resulted in a total of 86 plant and animal species that are known to occur in the region. Of these, 14 species (3 plants and eleven animals) were evaluated as having potential to occur in the study area. A complete list of species evaluated for this project can be found in Appendix D.

6.1 Special Status Species

For the purpose of this study, special status species are defined as those plants and wildlife listed, proposed for listing, or candidates for listing as threatened or endangered by the USFWS or National Marine Fisheries Service (NMFS) under the ESA; those listed or candidates for listing as rare, threatened, or endangered by the CDFW under the CESA; animals designated as “Species of Special Concern” by the CDFW or “Fully Protected” under the CFGC; and plants recognized on the California Rare Plant Rank (CRPR) lists.

Additionally, raptors and other nesting birds protected by the MBTA and the CFGC Sections 3503 and 3503.5 are also discussed in this section.

Special Status Plant Species

Based on the literature review, a number of special status plant species have been previously documented in the regional vicinity of the study area (regional vicinity refers to a multi-quad search radius as defined in Section 4.1). Based on the evaluation of the findings of the literature review, the study area has the potential to support the following special status plant species:

- La Graciosa thistle (*Cirsium scariosum* var. *loncholepis*), Federally Endangered (FE), State Threatened (ST), CRPR 1B.1; low potential
- Seaside bird's-beak (*Cordylanthus rigidus* ssp. *littoralis*), SE, CRPR 1B.1; low potential
- Black-flowered figwort (*Scrophularia atrata*), CRPR 1B.2; low potential

No special status plant species have a moderate or high potential to occur within the study area. No special status plant species were observed during the reconnaissance-level surveys. However, note that the surveys were not protocol-level botanical surveys and did not include systematic transects over the entire study area. In addition, some species are annual and may not be evident and identifiable outside of blooming periods. Their potential to occur within the study area is based on the presence of suitable habitat, the proximity of the study area to documented occurrences, and the observation dates of the occurrences as described in Appendix D.

Special Status Animal Species

Based on the literature review, thirty-three special status wildlife species have been previously documented in the regional vicinity of the project site. Based on the evaluation of the findings of the literature review, the study area has a low to medium potential to support the following ten to eleven special status animal species.

- California tiger salamander (*Ambystoma californiense*), Federally Endangered (FE) and State Threatened (ST); no to low potential
- California red-legged frog (*Rana draytonii*), Federally Threatened (FT), Species of Special Concern (SSC); low potential
- Western spadefoot (*Spea hammondii*), SSC; low potential
- Western pond turtle (*Actinemyes marmorata pallida*), SSC; moderate potential
- Steelhead, FE; low potential
- Northern California legless lizard (*Anniella pulchra*), SSC; low potential
- Blainville's horned lizard (*Phrynosoma blainvillii*), SSC; low potential
- Southwestern willow flycatcher (*Empidonax traillii extimus*), FE and State Endangered (SE); low potential
- Least Bell's vireo (*Vireo bellii pusillus*), FE and State Endangered (SE); low potential
- Yellow-breasted chat (*Icteria virens*), SSC; low
- Yellow warbler (*Setophaga petechia*), SSC; low

The following analysis of potential for occurrence is based on the presence of suitable habitat, the proximity of the study area to CNDDB documented occurrences, and the observation date of the CNDDB occurrences.

California Tiger Salamander

The Santa Barbara County Distinct Population Segment (DPS) of the California tiger salamander, a federally endangered and state threatened species, is endemic to the northern portion of Santa Barbara County. This species was documented in the CNDDB within two miles of the study area in 2008 and no sighting has been recorded in recent years. The study area is located outside and on the other side of the Santa Ynez River of all known occurrences and the Santa Rita metapopulation area, as well as being located at least two miles from known or potential breeding ponds (USFWS 2016). The California tiger salamander requires a combination of seasonal pond habitat for breeding and upland (underground) habitat for the rest of its life cycle. A majority of the know California tiger salamander occurrences in Santa Barbara County currently occur on private lands. The likelihood of California tiger salamander occurring on the southern side of the Santa Ynez River in the study area is highly unlikely and therefore, the California tiger salamander is not expected to occur in the study area.

California Red-legged Frog

California red-legged frog, a federally threatened species, occurs in lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. This species requires 11-20 weeks of permanent water for larval development and must have access to estivation habitat. This species was documented in the CNDDB within two miles of the study area in 2008 and no sighting has been recorded in recent years. Additionally, federally designated critical habitat is located within 5 miles of the study area. Suitable habitat is not located within the project site due to agricultural disturbances. Suitable habitat is located within the portion of the Santa Ynez River that is located within the study area.

There are no known occurrences for California red legged frog occur south of the study area and no suitable breeding sites (permanent sources of water). The active floodplain of the Santa Ynez River is approximately 500 ft from the project site and separated by dense riparian vegetation. The top of bank of the Santa Ynez River is approximately 15 to 20 ft higher in elevation than the active floodplain. In addition, a natural berm is present adjacent to the existing fencing which may create a natural barrier to limit dispersal into the project site and aid in guiding individuals to remain along the Santa Ynez River and adjacent riparian habitat. The existing fencing is not considered a movement barrier considering no known breeding habitat or occurrences for California red legged frog occur south of the Santa Ynez River and the species is not expected to occur in the project site during upland dispersal.

Western Spadefoot

Western spadefoot, a SSC, is a species of spadefoot toad that is almost completely terrestrial, entering water only to breed. Pools that are suitable for breeding do not contain bullfrogs, fish, or crayfish and hold water for at least thirty (30) days to support successful completion of larval development (Morey and Reznick 2004). Outside the breeding season, western spadefoot spends the majority of time underground to avoid desiccation. They prefer open areas with sandy or gravelly soils in a variety of habitats, including annual grassland and coastal scrub, and in the vicinity of a suitable breeding pond. This species was documented in the CNDDB within 2.5 miles of the study area in 1986. The study area contains marginal aquatic habitat within the detention basin. The continual disturbance and lack of continually ponded water would more than likely preclude western spadefoot from establishing breeding habitat.

Aquatic and Semi-Aquatic Species

The western pond turtle has not been documented by the CNDDB within 5 miles of the study area. However, portions of the Santa Ynez River within the study area, contains suitable habitat for the species. This species is an aquatic turtle that occurs in ponds, marshes, rivers, streams and irrigation ditches that typically support aquatic vegetation. It requires downed logs, rocks, mats of vegetation, or exposed banks for basking. Western pond turtles lay their eggs in nests that are dug along the banks of streams or other uplands in sandy, friable soils. Those that reside in creeks, are also known to over-winter in upland habitats, or during the dry season when waterways dry. Upland movements can be quite extensive and individuals have been recorded nesting or overwintering hundreds of meters from aquatic habitats. The typical nesting season is usually from April through August; however, variation exists, depending upon geographic location. Due to the steep sloped banks of the Santa Ynez River in the study area, suitable nesting sites and upland refuge are limited in adjacent riparian areas. The project site is highly disturbed and does not support suitable habitat such as permanent and intermittent waters or sandy soils and open grassy fields suitable for basking or egg-laying.

The Santa Ynez River contains breeding populations of the federally listed endangered steelhead. Anthropogenic migration barriers on the Santa Ynez River prevent steelhead from accessing a majority of their habitat and has brought the steelhead run close to extinction. The upper Santa Ynez River watershed remains in a relatively natural and protected state within the Los Padres National Forest. High quality habitat also occurs on private land in the lower river and tributaries (Stoecker Ecological 2004). Portions of the Santa Ynez River, approximately 500-ft from the project site, are suitable for steelhead. However, based upon the Hydrologic Overview and Potential Impact Assessment Report (Kear Groundwater 2020), the existing well extracts occurring as a part of the project is negligible within the larger flow system and will not substantially affect instream flows from the baseline condition. This finding is based on the surface flow regime downstream of Bradbury Dam is overwhelmingly controlled by water releases and the current cultivation activities have recently estimated only 1.11 percent of the total usable groundwater is currently extracted (Appendix F). Therefore, no direct or indirect impacts to steelhead are expected to occur as a result of the proposed project.

Northern California Legless Lizard

Northern California legless lizard is a SSC and occurs in moist warm loose soil with plant cover. They prefer soils with high moisture content and can often be found under surface objects such as rocks, boards, and logs. Northern California legless lizard has been documented by the CNDDB within one mile of the study area. Based on the presence of suitable moist soils within the study area, this species has a low potential to occur within the study area. However, the continued tilling and working of the current agricultural land would likely preclude the species from occurring within the project areas.

Blainville's Horned Lizard

Blainville's (coast) horned lizard is a SSC that frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes containing open areas and patches of loose soil. The riparian corridor and Santa Ynez River adjacent to the project site contains suitable habitat for this species. However, there are no CNDDB occurrences of this species within a 5-mile radius . The security fence and berms present along the northern portion of the project site would likely preclude this species from occurring on site.

Southwestern Willow Flycatcher

The southwestern willow flycatcher (SWFL) is a federally and state endangered species historically found throughout the American southwest. Their breeding habitat occurs in southern California and requires relatively dense riparian tree and shrub communities associated with rivers, swamps, and other wetlands. They are present in breeding territories by mid-May, build their nests and lay eggs in late May and early June and fledges young in early to mid-July. Habitat patches must be at least 0.25 acre in size and at least 30 ft wide. Historically, the SWFL nested in native vegetation including willows, boxelder (*Acer negundo*), and cottonwoods (*Populus* spp.). However, following modern changes to riparian communities, the SWFL still nests in native vegetation, but also uses thickets dominated by non-native tamarisk or in mixed native non-native stands.

The primary cause of this species' decline is removing, thinning, or destroying riparian vegetation, water diversions and groundwater pumping which alters riparian vegetation, overstocking or other mismanagement of livestock, and recreational development. In addition, the SWFL is also subject to brown-headed cowbird (*Molothrus ater*) parasitism. The riparian corridor of the Santa Ynez River in the study area contains marginally suitable habitat for nesting and foraging habitat. The riparian vegetation in the floodplain of the Santa Ynez River is setback 50 ft from cultivation activities and no riparian vegetation is present in the project site. The species would likely not occur in the project site due to the lack of suitable breeding and forging habitat.

Least Bell's Vireo

The least Bell's vireo (LBV) is a federally endangered migratory bird species. They prefer well defined, often linear riparian vegetation primarily in the lower elevation, flatter sections of streams and rivers. The vegetation in vireo home ranges is dominated in the tree and shrub layers by several willow species. Important nesting and foraging shrubs include mulefat, California blackberry (*Rubus ursinus*), California wild rose, and blue elderberry.

The least Bell's vireo (LBVI), has a low potential to occur as a transient, foraging, or migratory species. Suitable breeding habitat is associated with the Santa Ynez River within 500 ft of the project site. However, the nearest CNDDB record exists approximately 4 miles to the east. In general, the project site lacks suitable nesting or breeding habitat for the species. However, the study area does contain foraging and transitory habitat such that species could occur transiently within the study area.

Nesting Birds

The study area and its surrounding have the potential to support several species of migratory and resident raptors. However, no active or previously occupied nests were observed during the reconnaissance surveys. The project site contains suitable nesting habitat for bird species that nest in anthropogenic structures, but largely the project site does not support suitable nesting habitat in the form of shrubs and trees that may support species such as residents and migrants, including yellow-breasted chat and yellow warbler. Within the study area, the portion within the Santa Ynez River contains suitable habitat for nesting birds; however, the suitable habitat is located at least 100 ft up to 500 ft from cannabis cultivation areas. Agriculture areas likely preclude most nesting birds, and those species that require dense riparian vegetation, due to the frequent activities associated with agricultural operations.

Designated Critical Habitat

A search of the USFWS critical habitat mapper (USFWS 2018b) revealed that federally designated critical habitat occurs within the study area for southwestern willow flycatcher (*Empidonax traillii extimus*), and is adjacent to critical habitat for steelhead, and is within five miles of critical habitat for the following species: California tiger salamander (*Ambystoma californiense*) and California red-legged frog. Critical habitat for southwestern willow flycatcher and steelhead is mapped within the Santa Ynez River and associated riparian corridor. To avoid potential impacts, all project components are setback at least 50 ft from the riparian corridor and the designated critical habitat and therefore, the project will not impact designated critical habitat.

6.2 Sensitive Plant Communities

Natural communities are evaluated using NatureServe's Heritage Methodology, the same system used to assign global and state rarity ranks for plant and wildlife species in the CNDDB. For rarity, the ranking incorporates the knowledge of range and distribution of a given type of vegetation, and the proportion of occurrences that are of good ecological integrity. Evaluation is conducted at both the Global (full natural range within and outside of California) and State (within California) levels – resulting in a single G (global) and S (state) rank, ranging from 1 (very rare and threatened) to 5 (demonstrably secure) (CDFW 2018e). There can be exceptions to this rule; namely, CDFW includes a sensitive designation denoted by "yes" or "no". For this reason, demonstrably secure communities can also be considered sensitive. Further, when addressing impacts to wetlands, State CEQA guidelines may group riparian habitat with sensitive natural communities. The current Sensitive Natural Communities List (CDFW 2020) was referenced to determine that the following vegetation communities located within the study area are sensitive: Black cottonwood forest (G5/S3). This sensitive resource is located at least 50 ft from the northern edge of the project site and cultivation area. The remaining communities are not sensitive.

6.3 Jurisdictional Waters

Based upon the findings of Rincon's jurisdictional delineation, one potentially jurisdictional hydrologic feature is present within the study area: 1) the Santa Ynez River (Figure 5 and Table 3).

Santa Ynez River

As described in Section 5.2, within the study area the Santa Ynez River, a sensitive resource and perennial watercourse, is characterized by the NWI as a riverine and palustrine wetland system. The river is located along the northern border of the study area. The riparian vegetation is comprised of mature Black cottonwood forest. The portion of the river located within the study area is an active floodplain; no water was present at the time of the surveys. The floodplain terrace is situated approximately 10 to 15 ft below the terrace upon which the project site is located. The state-jurisdictional boundary is mostly defined by the top of bank, with a few riparian trees extending the jurisdictional area further (Appendix B).

The Santa Ynez River is considered a water of the U.S. Conservatively, the entire portion of the river located within the study area was determined to be possible waters of the U.S. The CDFW-jurisdictional streambed is mostly defined by the top of bank, with a few riparian trees extending the jurisdictional area further. The extent of the CDFW-jurisdictional streambed was determined to

be coterminous with waters of the state. The Santa Ynez River is expected to be subject to U.S Army Corps of Engineers (USACE), RWQCB and CDFW jurisdictions as summarized in Table 3.

All project components are setback a minimum of 500 ft from the Santa Ynez River, as defined from the bank full stage defined by the high flow water levels that occur every 1 to 2 years or from the top edge of the waterbody bank incised channel, whichever is more conservative. Along the north and northeastern portion of the cultivation area, a natural berm is existing between the existing six-ft no-climb mesh fence and riparian area associated with the Santa Ynez River. In some areas along the Santa Ynez River, a 100-ft buffer or greater exists between the edge of riparian vegetation and existing cultivation. Within the 100-ft buffer, 50-ft of outdoor cannabis cultivation and 40-ft for an emergency access road is proposed. Along the northeastern portion of the cultivation area there is less than a 100-ft buffer, and in this area, a 10-ft visual stream avoidance buffer is proposed. The stream avoidance buffer will be comprised of seven-ft tall T-posts with an attached cable to restrict access to the riparian area associated with the Santa Ynez River.

Non-jurisdictional Historic Detention Basin

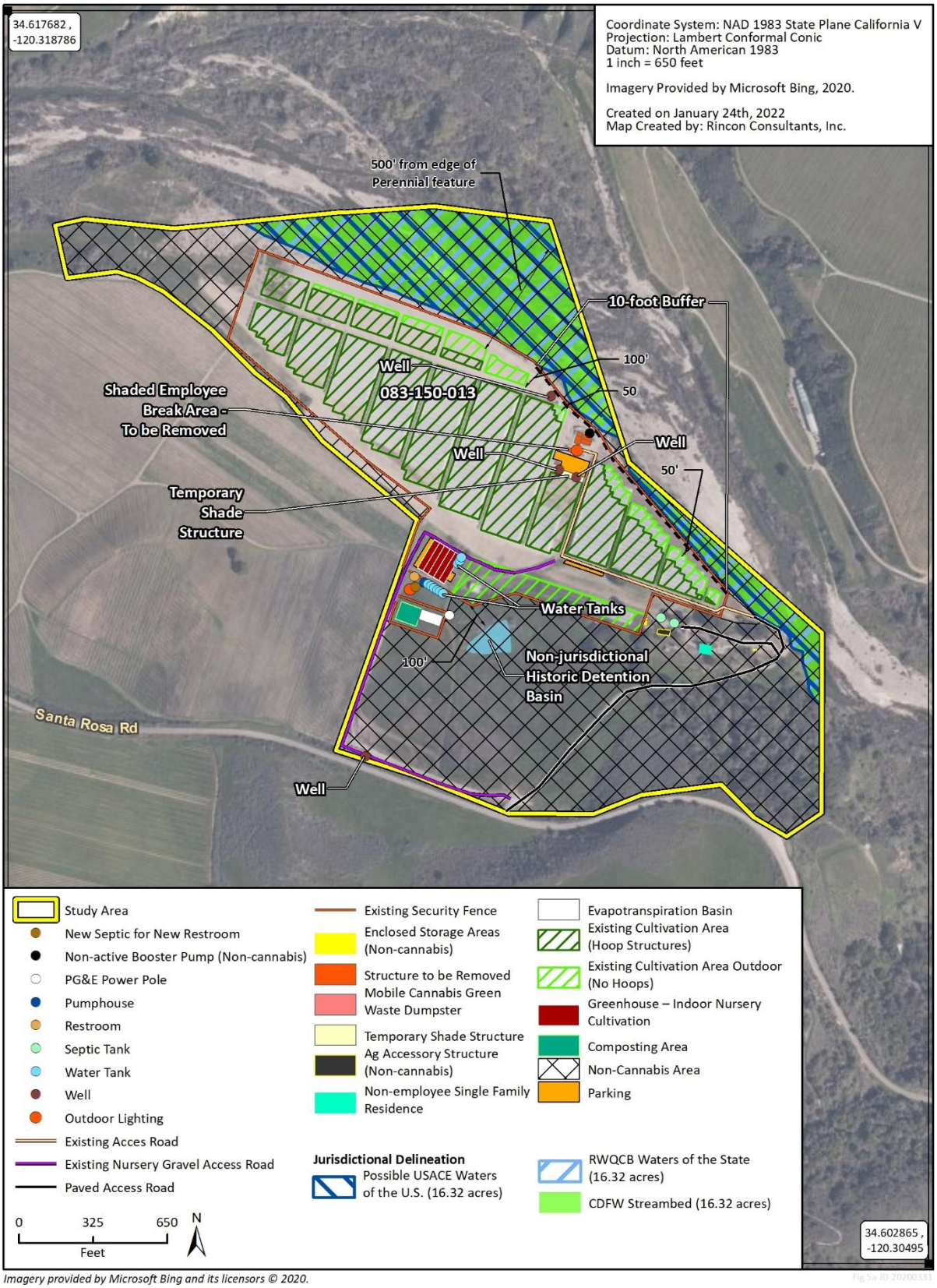
A historic detention basin is mapped by NWI in the middle portion of the study area. The detention basin is characterized by NWI as a freshwater pond. However, additional investigation concluded that the feature is no longer present and is therefore not considered to be jurisdictional. The vegetation is comprised of ruderal species that have colonized the area after the basin was leveled and removed. The feature does not exhibit a defined bed, bank, channel, or OHWM indicative of a jurisdictional feature. Review of historical aerial photographs confirms that the feature was likely used as an agricultural detention basin since at least 1943 but has not been used in recent years (Appendix B and Appendix G).

Table 3 Summary of Jurisdictional Areas within the Study Area

Feature	Waters of the U.S.		Non-wetland Waters of the State (acres/square feet/linear feet)	CDFW Jurisdictional Streambed (acres/square feet/linear feet)	Minimum Distance from Project Site (feet)
	Non-wetland Waters of the U.S. (acres/square feet/linear feet)	Wetland Waters of the U.S. (acres/ linear feet)			
Santa Ynez River	16.42/2,494	–/–	16.42/2,494	16.42/2,494	Perennial feature – 500 Ephemeral feature – 50
Non-jurisdictional Historic Detention Basin	–/–	–/–	–/–	–/–	100

[1]Note that each agency categorizes different feature types within their jurisdiction slightly differently, thus acreages are presented separately by type and are not intended to be additive between columns. The CDFW jurisdictional streambed category includes riparian canopy where present.

Figure 5 Potentially Jurisdictional Features within the Study Area



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6.4 Wildlife Movement

Wildlife movement corridors, or habitat linkages, are generally defined as connections between habitat patches that allow for physical and genetic exchange between otherwise isolated animal populations. Such linkages may serve a local purpose, such as providing a linkage between foraging and denning areas, or they may be regional in nature. Some habitat linkages may serve as migration corridors, wherein animals periodically move away from an area and then subsequently return. Others may be important as dispersal corridors for young animals. A group of habitat linkages in an area can form a wildlife corridor network.

The habitats within the link do not necessarily need to be the same as the habitats that are being linked. Rather, the link merely needs to contain sufficient cover and forage to allow temporary inhabitation by ground-dwelling species. Typically, habitat linkages are contiguous strips of natural areas, though dense plantings of landscape vegetation can be used by certain disturbance-tolerant species. Depending upon the species using a corridor, specific physical resources (such as rock outcroppings, vernal pools, or oak trees) may need to be located within the habitat link at certain intervals to allow slower-moving species to traverse the link. For highly mobile or aerial species, habitat linkages may be discontinuous patches of suitable resources spaced sufficiently close together to permit travel along a route in a short period of time.

Wildlife movement corridors can be both large and small scale. Regionally, the study area is not located within an Essential Connectivity Area (ECA) as mapped in the report California Essential Habitat Connectivity Project: A Strategy for Conserving a Connected California (CDFW 2010). ECAs represent principle connections between Natural Landscape Blocks. ECAs are regions in which land conservation and management actions should be prioritized to maintain and enhance ecological connectivity. ECAs are mapped based on coarse ecological condition indicators, rather than the needs of particular species and thus serve the majority of species in each region.

No mapped wildlife movement corridors are present within the study area. However, the portion of study area that is undeveloped and supports natural vegetation allow for local movement of wildlife along the Santa Ynez River and the southeastern hillside. The river segment within the northern and eastern portion of the study area provide suitable small-scale wildlife movement corridors for wildlife to travel locally and are important in linking non-contiguous or fragmented wildlife habitats. The project site itself, which occupies much of the study area, lacks the features that would make it attractive as a wildlife movement route, topographic or vegetative cover or water sources for example. Additionally, the project site is surrounded by a 6-ft, 3-inch mesh, no-climb wire fence. A seven-ft high stream avoidance buffer fence and natural berm along the northeast perimeter further separates the project site from the remaining study area. The existing fencing and natural berm minimize the potential for wildlife to enter the project site and instead use the Santa Ynez River and adjacent riparian areas for wildlife movement.

6.5 Resources Protected by Local Policies and Ordinances

The project would need to comply with the FEIR measures and General Plan, including the County LUDC. The FEIR identifies mitigation measures for unique, rare, threatened, or endangered plant or wildlife species; habitats or sensitive natural communities; movement or patterns of native resident

or migratory species; and compliance with adopted local plans, policies, or ordinances for protection and conservation of biological resources.

Regarding tree protection, the FEIR analyzed the Program impacts and mitigation measures to be consistent with the Santa Barbara County Comprehensive Plan Conservation Element: Oak Tree Protection in the Inland Rural Areas of Santa Barbara County, the County's Environmental Thresholds and Guidelines Manual (County 2018), and the County Deciduous Oak Tree Protection and Regeneration Ordinance (County 2003). Per the FEIR; if project activities would involve pruning, damage, or removal of a native tree; a Tree Protection plan shall be prepared by a Planning and Development Department-approved arborist to determine whether avoidance, minimization, or compensatory measures are necessary.

The Coast live oak woodland is located upslope from the paved access road with an approximate 200-ft elevation gain. No trees or driplines of individual trees are located directly adjacent to the access road. The access road is existing, and no changes will occur to the road (e.g., grading or recontouring). The existing ADU structure is located adjacent to two individual coast live oak trees. However, no changes to the ADU are proposed. The trunk diameters of the trees at standard height (4.5 ft above ground) were not recorded because the trunks are located outside of the project components. Several emergent sandbar willow shrubs are located within the study area. However, they are at least 25 ft from the project site.

The project site does not contain native vegetation that has a medium to high potential of being occupied by special status wildlife species, nesting birds, or a federal or state-listed special status plant species. Perimeter fencing, present around the entire project site, has the potential to further restrict wildlife movement. Regarding compliance with other local ordinances, the project may utilize pesticides, rodenticides, herbicides, insecticides, fungicides, disinfectants, and fertilizers that require compliance with the Cannabis General Order.

The Santa Ynez River is identified as an environmentally sensitive habitat. The project will not interrupt major wildlife travel corridors and the project will allow for wildlife movement, where practical. As shown in Appendix G, the project site has been regularly tilled and planted since 1928 and natural stream channel processes will not be impacted by the project. Project components will be setback at least 500 ft from the active channel of the Santa Ynez River. In addition, a 10-ft-wide stream avoidance buffer will be erected in areas that do not provide at least a 100-ft buffer from the adjacent riparian vegetation. This adjusted setback was confirmed with CDFW on August 19, 2020. The project, is compliant with the policies outlined in the Community Plan; no removal of riparian plants or native protected trees are proposed and efforts will be made to avoid and preserve the habitat in which sensitive plants and/or animal species are located to the maximum extent feasible.

7 Impact Analysis and Mitigation Measures

This section provides project-specific information regarding potential impacts that have the potential to result from proposed cannabis cultivation activities in the study area and provides resource-specific recommendations for reducing these impacts, where applicable. Mitigation measures are below are adapted from and/or consistent with the mitigation measure in the adopted FEIR and as recommended specifically for the project.

7.1 Special Status Plants, Vegetation Communities, and Wildlife

7.1.1 Special Status Plant Species and Vegetation Communities

Three special status plant species were determined to have a low potential to occur within the study area considering the presence of suitable habitat and soil conditions – specifically, within areas associated with suitable habitat (e.g., riparian corridor of the Santa Ynez River). No direct impacts are anticipated to suitable habitat, as no construction activities are proposed outside of the existing fence the surrounds the project site. No direct impacts to vegetation communities associated with suitable habitats for these plant species are anticipated and no direct impacts to special status plant species are expected.

The proposed project is not anticipated to result in direct impacts to sensitive plant communities identified by the CNDDB and the List of Vegetation Alliances and Associations (CDFW 2020). No sensitive natural communities would be adversely affected by the proposed project (e.g., black cottonwood forest). All proposed cultivation would be setback a minimum of 50 ft from the edge of riparian vegetation and hoop structures will be setback 100 ft from these areas; additional avoidance and minimization will be incorporated into the project as outlined in BIO-1 Wildlife Movement Plan (Appendix E) to further avoid impacts to special status plant species and vegetation communities.

7.1.2 Special Status Animal Species

Ten to eleven special status animal species have a potential to occur in the study area based upon known ranges, habitat preferences for the species, and species occurrence records in the vicinity of the study area as documented in the CNDDB.

California Red-legged Frog, Western Spadefoot, Northern California Legless Lizard, and Blainville's Horned Lizard

Direct impacts to California red-legged frog, western spadefoot, northern California legless lizard, and Blainville's horned lizard could occur in the form of injury or mortality through initial ground-disturbance activities and/or removal of suitable habitat if required by the project. Indirect impacts to these species could occur in the form of noise from use of heavy equipment and/or vehicles that result in altered behavior and other species-specific patterns of activity. The project involves routine agriculture uses and if ground disturbance or vegetation removal that is not considered routine (i.e., removal of hoop structure covers, which occurs annually prior to the rain season) is proposed, additional avoidance and minimization will be incorporated into the project as outlined in BIO-1

Wildlife Movement Plan (Appendix E) to further avoid impacts to special status wildlife species. Routine activities associated with cannabis cultivation will occur in compliance with local and state policies and no impacts to special status species or their habitat is expected. However, to further reduce any potential impacts to the species, a Wildlife Movement Plan (Appendix E) has been prepared for the project.

Aquatic and Semi-Aquatic Species

Western pond turtles are found in permanent and intermittent waters of rivers and creeks and can spend upwards to 200 days out of water. Males may be found on land for up to ten months annually, while females can be found on land during all months of the year due to nesting and overwintering. The project does not propose the removal of native vegetation or the development of upland habitat adjacent to the Santa Ynez River. The routine operational activities, such as watering, harvesting, and tilling soil, will remain consistent with what is currently occurring at the project site. In addition, the existing six-foot fence surrounding the project site acts as an exclusion buffer for any wildlife that cannot fit through a three-inch opening, while allowing passage of smaller wildlife species. The fence line excludes the segments of the Santa Ynez River that lie within the northern portion of the study area, thus minimizing the potential for wildlife to enter the project site and encouraging use of the Santa Ynez River corridor for wildlife movement. The Santa Ynez River contains suitable habitat for the species and the project site does not contain any primary constituent elements (PCEs) required for the species. Therefore, the project is not expected to impact western pond turtles. However, to further reduce any potential impacts to the species, a Wildlife Movement Plan (Appendix E) has been prepared for the project.

The Santa Ynez River contains breeding populations of steelhead. As a part of the propose project, a hydrologic study was conducted by Kear Groundwater (Kear Groundwater 2020) (Appendix F). The project has one operational shallow groundwater well used for cannabis cultivation at the project site and produces groundwater from unconsolidated sand and gravel alluvial aquifers that are, in least in part, in hydraulic connection with the Santa Ynez flow system. The report presents that based on the surface flow regime downstream of Bradbury Dam is controlled by water releases, groundwater levels have been historically stable in the portion of the groundwater sub-basin that the project overlies, and the study area cover about 1 percent of the total surface area of the sub-basin. For these reasons, the report concludes that alluvial groundwater extraction for cannabis cultivation at the project site is unlikely to “substantially affect instream flows” along the local reaches of the Santa Ynez River. Therefore, it is expected that the project will not impact steelhead associated with the Santa Ynez River and no avoidance or minimization measures are recommended.

Southwestern Willow Flycatcher and Least Bell’s Vireo

Direct impacts to SWFL and LBVI could occur if heavy equipment and vehicular transport is used near riparian areas during the species breeding season. All cultivation will be setback at least 50 ft from riparian areas in compliance with local and state policies. No direct impacts, including removal of riparian vegetation is proposed as a part of the project. Indirect impacts may include noise impacts but with proposed setbacks and with noise levels remaining below <65 dB at the fence line during normal operations (noise records provided by CCA), no impacts are expected to these species; however, to further reduce any potential impacts to the species, a Wildlife Movement Plan (Appendix E) has been prepared for the project to avoid any potential impacts to these species.

Other Nesting Birds

The project has potential to result in direct impacts to nesting birds, if nests are intentionally removed, and indirect impacts through noise or other anthropogenic factors, including special status birds (yellow-breasted chat and yellow warbler), if they are nesting within the project site and/or immediate vicinity during cultivation/staging activities. The project site does not contain suitable breeding habitat for nesting birds aside from non-sensitive nesting birds that utilize anthropogenic structures and that may not be disturbed by on-going agricultural operations. The project is set back at least 50 ft from riparian vegetation associated with the Santa Ynez River and no riparian vegetation is proposed for removal as part of the project. The project activities area considered routine operation and noise levels are not likely to change, if a nest is built around the project site the species is likely accustom to routine noise disturbances and the project would not likely impact the nest. Native or migratory species of nesting birds are protected under the MTBA and CFGC. Take of these species is prohibited by federal and state law and must be avoided. To reduce any potential impacts to the species, a Wildlife Movement Plan (Appendix E) has been prepared for the project.

7.1.3 Mitigation Measures

The following mitigation measure BIO-1 (BIO-3 from the FEIR for the Cannabis Land Use Ordinance and Licensing Program) is recommended to avoid impacts to special status birds, other nesting birds, and other special status wildlife species that may occur on site.

BIO-1 (FEIR MM BIO-3) Wildlife Movement Plan

The proposed project is considered routine cultivation activities and would not substantially interfere with wildlife movement on a local or regional scale or considerably reduce opportunities for wildlife movement. However, to avoid impacts to sensitive wildlife species that may be present seasonally or transitionally on site, a Wildlife Movement Plan (WMP) is required. Included in the Wildlife Movement Plan are additional measures to avoid and minimize impacts to special status birds, other nesting birds, and other special status plant and wildlife species and their habitats. Measures include avoidance and minimization such as establishing riparian setbacks, avoidance to special status species, general BMPs, consultation with USFWS and CDFW, a Workers Environmental Awareness Program (WEAP), seasonal avoidance, buffer avoidance, and compliance with the Cannabis General Order. A WMP (adapted from and in compliance with the FEIR for the Program) has been prepared for the project (Appendix E).

7.2 Jurisdictional Waters, Including Wetlands

The study area includes one hydrologic feature that exhibit beds and banks, the Santa Ynez River, which is expected to be under USACE jurisdiction pursuant to the Clean Water Act, CDFW jurisdiction pursuant to Section 1600 et seq. of the CFGC, and RWQCB jurisdiction pursuant to the Clean Water Act and Porter-Cologne Act as described in Section 6.3. However, the hydrologic feature is not expected to be directly impacted by project related activities.

As noted previously in Section 3, the SWRCB Cannabis General Order dictates general waste discharge requirements for discharges into state-jurisdictional waters associated with cannabis cultivation activity (SWRCB 2019). The requirements within the Cannabis General Order will be incorporated and implemented through any waste discharge requirements addressing cannabis cultivation activities adopted by the RWQCB. Attachment A of the Cannabis General Order states

that cannabis cultivators shall comply with the minimum riparian setbacks for all land disturbance, cannabis cultivation activities, and facilities (e.g., material or vehicle storage). The minimum riparian setbacks include: 150 ft for perennial watercourses (Class I), 100 ft for intermittent watercourses (Class II), 50 ft for ephemeral watercourses (Class III), and edge of established riparian vegetation zone for man-made watercourses that support native aquatic species (Class IV). RWQCBs may adopt site-specific WDRs.

The County LUDC development standards for hoop structures state that within rural areas, hoop structures shall be setback 100 ft from the top of bank or edge of riparian vegetation of streams and creeks, whichever is more protective of the resource. As such, the setback for hoop structures on the project site would be 100 ft from the edge of riparian vegetation of the ephemeral drainages. For other project activities (e.g., material or vehicle storage and other cannabis cultivation activities) the setback would be 50 ft from the edge of riparian vegetation of the ephemeral drainages.

Areas within the Ordinary High Water Mark (OHWM), top of banks, and associated riparian vegetation would likely be subject to state regulations under CDFW and RWQCB jurisdictions. However, as stated above, project activities would be set back from the perennial feature associated with the Santa Ynez River to comply with the County and Cannabis General Order requirements and no impacts to jurisdictional areas are expected. A Wildlife Movement Plan has been prepared to reduce any potential indirect impacts to jurisdictional waters (Appendix E).

7.3 Wildlife Movement

There are no major wildlife movement corridors within the study area. The smaller on site hydrologic features may provide a suitable small-scale corridor for wildlife to travel locally. However, the project is not anticipated to adversely affect the wildlife utilization and movement along the Santa Ynez River or adjacent riparian vegetation.

The proposed project does not include the introduction of barriers to movement of any resident or migratory fish or wildlife species; nor will it deteriorate any existing fish or wildlife habitat. The proposed project is in compliance with local conservation and biological resources protection polices, thereby reducing potential impacts to wildlife movement associated with the proposed project. The proposed project additionally complies with local requirements regarding lighting of cultivation sites and it would therefore not impact wildlife movement due to artificial lighting. Based on the literature review and field survey performed for this study and presented in this report, the project site does not have a high presence of potentially sensitive biological resources; therefore, a Habitat Protection Plan is not recommended. However, a Wildlife Movement Plan has been prepared (Appendix E).

7.4 Local Policies and Ordinances

The project is designed to meet the mitigation/development standards outlined in the Santa Barbara County LUDC to ensure its consistency with local policies including Appendix H of the LUDC and the County of Santa Barbara Environmental Thresholds and Guidelines Manual.

The project site does not contain native vegetation or other sensitive vegetation that would be a medium to high potential of being occupied by special status wildlife species, nesting birds, or Federal or State-listed special status plant species. Therefore, a Habitat Protection Plan is not

anticipated to be required by the County or regulatory agencies for additional avoidance, minimization, or compensatory measures are necessary for the protection of special status species.

The FEIR for the Cannabis Land Use Ordinance and Licensing Program analyzed the program impacts and mitigation measures for consistency with the Santa Barbara County Comprehensive Plan Conservation Element: Oak Tree Protection in the Inland Rural Areas of Santa Barbara County, the County's Environmental Thresholds and Guidelines Manual (County 2008), and the County Deciduous Oak Tree Protection and Regeneration Ordinance (County 2003) (added for reference but not applicable to this project).

No native trees are anticipated to be pruned, damaged, or removed by project activities. No native trees are located within the cultivation areas. All coast live oak trees along the access route are upslope of the access road and will not be impacted by access to the cultivation site. Several black cottonwood trees are located outside of the cultivation site and separated by an existing fence and berm. No driplines are overhanging the access road or cultivation site. The access roads are existing and will be maintained for the proposed project; no changes will occur to the roads (e.g., grading, recontouring). No new impacts will occur to the native trees from continued use of the existing access roads. The perimeter fencing (wire fence on T-posts) is adjacent to native trees and aid in the protection of sensitive communities.

No direct impacts to natural or sensitive vegetation communities are anticipated for the project. No trenching or grading is proposed around the native trees or riparian vegetation. No Tree Protection Plan is recommended for the project.

7.5 Habitat Conservation Plans

The project is not located within a Habitat Conservation Plan, Natural Community Conservation Plan, or other approval habitat conservation plan area. The project would not involve clearing native vegetation or other sensitive vegetation within areas that have been identified as having a medium to high potential of being occupied by a special status wildlife species, nesting bird, or a federal or state listed special status species. No mitigation measures are recommended.

8 Conclusion

The proposed project encompasses the development and implementation of activities associated with cannabis cultivation within the project site. In particular, the project proposes to convert previously disturbed land zoned agriculture II to cannabis cultivation.

A few natural vegetation communities are present in limited quantities throughout the study area. There is a low potential for three special status plant species to occur on site; however, no direct or indirect impacts are anticipated to occur to these species as a result of the proposed project. No impacts to the sensitive natural communities are anticipated and all cultivation will be setback 50 ft from the edge of riparian vegetation and hoop structures will be setback 100 ft from these areas.

Ten to eleven special status wildlife species have a potential to occur on site. However, direct and indirect impacts to these species are not expected with proposed avoidance and minimization measures incorporated into the project. Recommendations incorporated herein include BMPs and adequate setbacks to prevent impacts to sensitive habitats that may provide suitable habitat for special status species.

One potentially jurisdictional hydrologic feature is present within the study area: 1) the Santa Ynez River, a potential CDFW-jurisdictional streambed and water of the U.S./state. The project site is located outside of this potentially jurisdictional area and no work is expected to occur within the feature. Avoidance and minimization measures presented within the Wildlife Movement Plan (Appendix E) will limit direct impacts. Indirect impacts to potentially jurisdictional features are not expected with avoidance and minimization measures pertaining to BMPs incorporated into the project.

Cannabis cultivation activities will be confined to portions of the project site that are currently used for agricultural and active cannabis cultivation. Based on the proposed project description and biological resources review summarized in this study, a Wildlife Movement Plan (Appendix E) is required.

Table 4 below provides a summary of avoidance and minimization measures.

Table 4 Recommended Avoidance and Minimization Measures

Biological Resources	Avoidance and Minimization Measure
Special Status Plant Species and Sensitive Habitats	Direct impacts to sensitive habitats have been avoided through the design of the project and implementation of the SWRCB Cannabis General Order and the County LUDC; additional avoidance and minimization measures are outlined in the Wildlife Movement Plan (Appendix E).
Special Status Animal Species	Direct impacts to special status animal species have been avoided through the design of the project and implementation of the SWRCB Cannabis General Order and the County LUDC; additional avoidance and minimization measures are outlined the Wildlife Movement Plan (Appendix E).
Jurisdictional Waters, Including Wetlands	Direct impacts to jurisdictional areas have been avoided through the design of the project and implementation of the SWRCB Cannabis General Order and the County LUDC; additional avoidance and minimization measures are outlined in BIO-1 Wildlife Movement Plan (Appendix E).
Wildlife Movement	There are no major wildlife movement corridors within the project site; a Wildlife Movement Plan (Appendix E) has been prepared for the project.
Regulatory Measures	**Avoidance and Minimization Measure**
Santa Barbara County Code-County Land Use and Development Code; Cannabis Activities Additional Standards (Appendix H)	Tree Protection Plan (not recommended)
Santa Barbara County Code-County Land Use and Development Code; Cannabis Activities Additional Standards (Appendix H)	Habitat Protection Plan (not recommended)
Santa Barbara County Code-County Land Use and Development Code; Cannabis Activities Additional Standards (Appendix H)	BIO-1 Wildlife Movement Plan (Appendix E)
State Water Resources Control Board General Waste Discharge Requirements and Waiver of Waste Discharge Requirements for Discharges of Waste Associated with Cannabis Cultivation Activities	BIO-1 Wildlife Movement Plan (Appendix E)

SWRCB- General Waste Discharge Requirements and Waiver of Waste Discharge Requirements for Discharges of Waste Associated with Cannabis Cultivation Activities, 2019.

Source: Santa Barbara County Code-County Land Use and Development Code-Appendix H, 2000

9 Limitations, Assumptions, and Use Reliance

This Biological Resources Assessment has been performed in accordance with professionally accepted biological investigation practices conducted at this time and in this geographic area. The biological investigation is limited by the scope of work performed. Reconnaissance biological surveys for certain taxa may have been conducted as part of this assessment but were not performed during a particular blooming period, nesting period, or particular portion of the season when positive identification would be expected if present, and therefore, cannot be considered definitive. The biological surveys are limited also by the environmental conditions present at the time of the surveys. In addition, general biological surveys do not guarantee that the organisms are not present and will not be discovered in the future within the site. In particular, mobile wildlife species could occupy the site on a transient basis or re-establish populations in the future. Our field studies were based on current industry practices, which change over time and may not be applicable in the future. No other guarantees or warranties, expressed or implied, are provided. The findings and opinions conveyed in this report are based on findings derived from site reconnaissance, jurisdictional areas, review of CNDDB RareFind5, and specified historical and literature sources. Standard data sources relied upon during the completion of this report, such as the CNDDB, may vary with regard to accuracy and completeness. In particular, the CNDDB is compiled from research and observations reported to CDFW that may or may not have been the result of comprehensive or site-specific field surveys. Although Rincon believes the data sources are reasonably reliable, Rincon cannot and does not guarantee the authenticity or reliability of the data sources it has used. Additionally, pursuant to our contract, the data sources reviewed included only those that are practically reviewable without the need for extraordinary research and analysis.

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Appendix A

Regulatory Setting

Regulatory Setting

Special status habitats are vegetation types, associations, or sub-associations that support concentrations of special status plant or animal species, are of relatively limited distribution, or are of particular value to wildlife.

Listed species are those taxa that are formally listed as endangered or threatened by the federal government (e.g., U.S. Fish and Wildlife Service [USFWS]), pursuant to the Federal Endangered Species Act (FESA) or as endangered, threatened, or rare (for plants only) by the State of California (i.e., California Fish and Game Commission), pursuant to the California Endangered Species Act or the California Native Plant Protection Act. Some species are considered rare (but not formally listed) by resource agencies, organizations with biological interests/expertise (e.g., Audubon Society, CNPS, The Wildlife Society), and the scientific community.

The following is a brief summary of the regulatory context under which biological resources are managed at the federal, state, and local levels. A number of federal and state statutes provide a regulatory structure that guides the protection of biological resources. Agencies with the responsibility for protection of biological resources within the project site include:

- U.S. Army Corps of Engineers (wetlands and other waters of the United States);
- Santa Barbara Regional Water Quality Control Board (waters of the State);
- U.S. Fish and Wildlife Service (federally listed species and migratory birds);
- California Department Fish and Wildlife (riparian areas, streambeds, and lakes; state-listed species; Species of Special Concern; nesting birds);
- County of Santa Barbara

U.S. Army Corps of Engineers

Under Section 404 of the Clean Water Act, the U.S. Army Corps of Engineers (USACE) has authority to regulate activities that could discharge fill of material into wetlands or other “waters of the United States.” Perennial and intermittent creeks are considered waters of the United States if they are hydrologically connected to other jurisdictional waters (typically a navigable water). The USACE also implements the federal policy embodied in Executive Order 11990, which is intended to result in no net loss of wetland value or acres. In achieving the goals of the Clean Water Act, the USACE seeks to avoid adverse impacts and offset unavoidable adverse impacts on existing aquatic resources. Any fill of wetlands that are hydrologically connected to jurisdictional waters would require a permit from the USACE prior to the start of work. Typically, when a project involves impacts to waters of the United States, the goal of no net loss of wetland acres or values is met through avoidance and minimization to the extent practicable, followed by compensatory mitigation involving creation or enhancement of similar habitats.

Regional Water Quality Control Board

The State Water Resources Control Board (SWRCB) and the local Regional Water Quality Control Board (RWQCB) have jurisdiction over “waters of the State,” pursuant to the Porter-Cologne Water Quality Control Act, which are defined as any surface water or groundwater, including saline waters, within the boundaries of the State. The SWRCB has issued general WDRs regarding discharges to “isolated” waters of the State (Water Quality Order No. 2004-0004-DWQ, Statewide General Waste

Discharge Requirements for Dredged or Fill Discharges to Waters Deemed by the U.S. Army Corps of Engineers to be Outside of Federal Jurisdiction). The RWQCB administers actions under this general order for isolated waters not subject to federal jurisdiction, and is also responsible for the issuance of water quality certifications pursuant to Section 401 of the Clean Water Act for waters subject to federal jurisdiction.

United States Fish and Wildlife Service

The USFWS implements the Migratory Bird Treaty Act (16 United States Code [USC] Section 703-711) and the Bald and Golden Eagle Protection Act (16 USC Section 668). The USFWS and National Marine Fisheries Service (NMFS) share responsibility for implementing the Federal Endangered Species Act (FESA) (16 USC § 153 et seq.). Generally, the USFWS implements the FESA for terrestrial and freshwater species, while the NMFS implements the FESA for marine and anadramous species. Projects that would result in "take" of any federally threatened or endangered species are required to obtain permits from the USFWS or NMFS through either Section 7 (interagency consultation with a federal nexus) or Section 10 (Habitat Conservation Plan [HCP]) of the FESA, depending on the involvement by the federal government in permitting and/or funding of the project. The permitting process is used to determine if a project would jeopardize the continued existence of a listed species and what measures would be required to avoid jeopardizing the species. "Take" under federal definition means to harass, harm (which includes habitat modification), pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. Proposed or candidate species do not have the full protection of the FESA; however, the USFWS and NMFS advise project applicants that they could be elevated to listed status at any time.

California Department of Fish and Wildlife

The California Department of Fish and Wildlife (CDFW) derives its authority from the Fish and Game Code of California. The California Endangered Species Act (CESA) (Fish and Game Code Section 2050 et. seq.) prohibits take of state listed threatened or endangered. Take under CESA is restricted to direct mortality of a listed species and the law does not prohibit indirect harm by way of habitat modification. Where incidental take would occur during construction or other lawful activities, CESA allows the CDFW to issue an Incidental Take Permit upon finding, among other requirements, that impacts to the species have been minimized and fully mitigated.

The CDFW also enforces Sections 3511, 4700, 5050, and 5515 of the Fish and Game Code, which prohibits take of species designated as Fully Protected. The CDFW is not allowed to issue an Incidental Take Permit for Fully Protected species; therefore, impacts to these species must be avoided.

California Fish and Game Code sections 3503, 3503.5, and 3513 describe unlawful take, possession, or destruction of native birds, nests, and eggs. Section 3503.5 of the Code protects all birds-of-prey and their eggs and nests against take, possession, or destruction of nests or eggs. Section 3513 makes it a state-level office to take any bird in violation of the federal Migratory Bird Treaty Act. CDFW administers these requirements.

Species of Special Concern (SSC) is a category used by the CDFW for those species which are considered to be indicators of regional habitat changes or are considered to be potential future protected species. Species of Special Concern do not have any special legal status except that which may be afforded by the Fish and Game Code as noted above. The SSC category is intended by the CDFW for use as a management tool to include these species in special consideration when decisions are made concerning the development of natural lands. The CDFW also has authority to

administer the Native Plant Protection Act (NPPA) (Fish and Game Code Section 1900 et seq.). The NPPA requires the CDFW to establish criteria for determining if a species, subspecies, or variety of native plant is endangered or rare. Effective in 2015, CDFW promulgated regulations (14 CCR 786.9) under the authority of the NPPA, establishing that the CESA's permitting procedures would be applied to plants listed under the NPPA as "Rare." With this change, there is little practical difference for the regulated public between plants listed under CESA and those listed under the NPPA.

Perennial, intermittent, and ephemeral streams and associated riparian vegetation, when present, also fall under the jurisdiction of the CDFW. Section 1600 *et seq*. of the Fish and Game Code (Lake and Streambed Alteration Agreements) gives the CDFW regulatory authority over activities that divert, obstruct, or alter the channel, bed, or bank of any river, stream or lake.

County of Santa Barbara

The project is subject to the Cannabis Land Use ordinances and development standards for the County. Specifically, the County has amended Section 35-1 of the County Land Use and Development Code to implement new development standards, permit requirements and procedures regarding commercial cannabis activities.

The project is also subject to the County Comprehensive Plan Conservation Element: Oak Tree Protection in the Inland Rural Areas of Santa Barbara County as adopted in 2003, and republished in 2009 outlines protection goals, development standards, policies and implementing actions to promote the conservation, protection, and regeneration of native oak populations and oak woodlands (County 2009).

- Oak Tree Protection Policy 1 states that "native oak trees, native oak woodlands and native oak savannas shall be protected to the maximum extent feasible in the County's rural and/or agricultural lands. Regeneration of oak trees shall be encouraged."
- Development Standard 1 (Protection of all species of mature oak trees) states that "development shall avoid removal of or damage to mature oak trees, to the maximum extent feasible." Mature oak trees are defined as live oak trees six inches or greater in diameter at breast height (DBH). "Native oak trees that cannot be avoided shall be replanted on site or on a receiver site known to be capable of supporting the particular oak tree species. Replanting shall conform to the County's Standard Conditions and Mitigation Measures."

The County's Environmental Thresholds and Guidelines Manual (County 2008) states that individual native specimen trees (mature trees that are healthy and structurally sound and have grown into the natural stature particular to the species) are potentially significant. In general, the loss of 10 percent or more of the trees (by number or by canopy cover) of biological value on a study area is considered potentially significant.

In addition, the project shall comply with any applicable policies in the Santa Ynez Valley and Community Plan (Community Plan) (County of Santa Barbara 2009), including the County Flood Control Ordinance regarding development in floodways and floodplains, which includes specific setback requirement for development (200 ft from top of the bank of the Santa Ynez River and 50 ft from top of bank of stream and creeks). The local policies presented in the Community Plan restate the importance for the protection of resources through buffers, pollution prevention, restoration, and education policies

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Appendix B

Site Photographs

Photograph 1. Disturbed agriculture land in project site (aspect west; November 1, 2018)

Photograph 2. Coast live oak woodland in southern study area along access road (aspect south; November 1, 2018)

Photograph 3. Agriculture operation in proejct site (aspect northwest; November 1, 2018)

Photograph 4. Ruderal – sandbar willow habitat in northwest study area (aspect west; November 1, 2018)

Photograph 5. Disturbed agricultural land in project site (aspect northeast; November 1, 2018)

Photograph 6. Peremiter fence along northern portion of project site seperating project components from riparian vegetation (aspect northwest; December 17, 2019) Photo courtesty of Central Coast Agricutlure, Inc.

Photograph 7. Location of non-jurisdcitonal historic detention basin in central study area, existing hoop houses in the project area in the background (aspect northwest; August 19, 2020)

Photograph 8. Perimeter fence along northwestern portion of project site seperating cannabis area from riparian vegetation (aspect north; August 19, 2020)

Photograph 9. Perimeter fence along northwestern portion of project site seperating cannabis area from riparian vegetation. Note ruderal sandbar willows in background (aspect north; August 19, 2020)

Photograph 10. Perimeter fence along northeast portion of proejct area seperating cannabis area from riparian vegetation. Note six-ft-tall fence and natural berm (aspect west; August 19, 2020)

Appendix C

Floral and Faunal Compendium

Plant Species Observed in Study Area [November 1, 2018]

Scientific Name	Common Name	Origin
Acer negundo	boxelder	Native
Amaranthus sp.	amaranth	Introduced
Ambrosia psilostachya	ragweed	Native
Amsinckia sp.	Fiddleneck[2]	Native
Annona cherimola	cherimoya	Introduced
Artemisia californica	California sagebrush	Native
Asparagus officinalis	asparagus	Introduced
Baccharis pilularis	coyote brush	Native
Brachypodium distachyon	annual false-brome	Introduced, Cal-IPC[1] Moderate
Cannabis sp.	cannabis	Introduced
Centaurea melitensis	tocalote	Introduced, Cal-IPC Moderate
Chenopodium album	lambs quarters	Introduced
Cirsium vulgare	bull thistle	Introduced, Cal-IPC Moderate
Convolvulus arvensis	field bindweed	Introduced
Cynodon dactylon	Bermuda grass	Introduced, Cal-IPC Moderate
Datura wrightii	Jimsonweed	Native
Elymus triticoides	beardless wild rye	Native
Eschscholzia californica	California poppy	Native
Erodium cicutarium	Coastal heron's bill	Introduced, Cal-IPC Limited
Ericameria ericoides/linearfolia	mock heather	Native
Eriogonum fasciculatum	California buckwheat	Native
Heterotheca grandifolia	telegraph weed	Native
Heliotropium curassavicum	Chinese parsely	Native
Hirschfeldia incana	short-pod mustard	Introduced, Cal-IPC Moderate
Isocoma menziesii	Menzie's goldenbush	Introduced, Cal-IPC Moderate
Lactuca serriola	prickly lettuce	Introduced
Lepidospartum squamatum	scalebroom	Native
Malva parviflora	cheeseweed mallow	Introduced
Olea europaea	olive	Introduced; Cal-IPC Limited
Polygonum argyrocoleon	Persian knotweed	Introduced
Populus fremontii	Fremont cottonwood	Native
Populus trichocarpa	black cottonwood	Native
Punica granatum	pomegranate	Native
Quercus agifolia	coast live oak	Native
Raphanus sativus	wild radish	Native
Rumex acetosella	common sheep sorrel	Introduced, Cal-IPC Moderate
Salix exigua	narrowleaf willow	Native
Salix laevigata	polished willow	Native
Salix lasiolepis	arroyo willow	Native

Scientific Name	Common Name	Origin
Sambucus nigra	elderberry	Native
Sonchus asper	spiny sowthistle	Introduced
Toxicodendron diversilobum	poison oak	Native
Xanthium spinosum	spiny cocklebur	Native

[1]Cal-IPC – California Invasive Plant Council (Cal-IPC 2018)

[2]Common *Amsinckia* sp.

Animal Species Observed Within the Study Area [November 1, 2018]

Scientific Name	Common Name	Status	Native or Introduced
Birds			
Buteo jamaicensis	red-tailed hawk	None	Native
Sayornis saya	say's Phoebe	None	Native
Melozone fusca	canyon towhee	None	Native
Psaltriparus minimus	bushtit	None	Native
Sturnus vulgaris	European starling	None	Introduced
Zonotrichia leucophrys	white-crowned sparrow	None	Native
Cathartes aura	turkey vulture	None	Native
Aphelocoma californica	California scrub jay	None	Native
Haemorhous mexicanus	house finch	None	Native
Fulica americana	American coot[1]	None	Native
Melanerpes formicivorus	acorn woodpecker	None	Native
Geothlypis trichas	common yellowthroat	None	Native
Falco sparverius	American kestrel	None	Native
Reptiles			
Sceloporus occidentalis	Western fence lizard	None	Native
Mammals			
Thomomys bottae	pocket gopher	None	Native

[1] Flyover

Appendix D

Special Status Species Evaluation Tables

Special Status Natural Communities in the Regional Vicinity of the Study Area

Plant Community	G-Rank/ S-Rank	Anticipated Impact	Rationale
Central Coast Arroyo Willow Riparian Forest	G3/S3.2	Not Expected	Not present in study area.
Central Maritime Chaparral	G2/S2.2	Not Expected	Not present in study area.
Southern California Steelhead Stream	GNR/SNR	Not Expected	Present in study area; although, the project will not occur within the Santa Ynez River and will not require the diversion of surface waters.
Southern Coast Live Oak Riparian Forest	G4/S4	Not Expected	Present in study area; although, impacts are anticipated to be avoided. See Sections 4.2 and 5.2.
Southern Cottonwood Willow Riparian Forest	G3/S3.2	Not Expected	Present in study area; although, impacts are anticipated to be avoided. See Sections 4.2 and 5.2.
Southern Vernal Pool	GNR/SNR	Not Expected	Not present in the study area.
Southern Willow Scrub	G3/S2.1	Not Expected	Not present in study area.
Valley Needlegrass Grassland	G3/S3.1	Not Expected	Not present in the study area.

G-Rank/S-Rank = Global Rank and State Rank as per NatureServe and CDFW's CNDDB RareFind3 (CDFW 2018b).

Special Status Plant Species in the Regional Vicinity of the Study Area

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Site	Habitat Suitability/ Observations
Plants and Lichens				
Abronia maritima red sand-verbena	None/None G4/S3? 4.2	Coastal dunes. Dune plant. 0-100 m. perennial herb. Blooms Feb-Nov	Not Expected	No coastal dune habitat present in the study area.
Agrostis hooveri Hoover's bent grass	None/None G2/S2 1B.2	Chaparral, cismontane woodland, closed-cone coniferous forest, valley and foothill grassland. Sandy sites. 60-765 m. perennial herb. Blooms Apr-Jul	Not Expected	No suitable habitat present; not observed during the field survey. The CNDDB does not document the species within 5-miles of the study area.
Amsinckia douglasiana Douglas' fiddleneck	None/None G4/S4 4.2	Valley and foothill grassland, oak woodland. Monterey shale; dry habitats. 0-1950 m. annual herb. Blooms Mar-May	Not Expected	No suitable habitat present; not observed during the field survey. The CNDDB does not document the species within 5-miles of the study area.
Ancistrocarphus keilii Santa Ynez groundstar	None/None G1/S1 1B.1	Chaparral, cismontane woodland. Sandy soils. 40-130 m. annual herb. Blooms Mar-Apr	Not Expected	Although one historic CNDDB record (1929) indicates this species was present within the Santa Ynez River and general vicinity, the site is highly disturbed and does not provide suitable habitat. Not observed during the field survey.

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Site	Habitat Suitability/ Observations
Arctostaphylos crustacea ssp. eastwoodiana Eastwood's brittle-leaf manzanita	None/None G4T2/S2 1B.1	Chaparral. In maritime chaparral on sandy soils, in the La Purisima Ridge, Burton Mesa, and Point Sal areas. 150-245 m. perennial evergreen shrub. Blooms Mar	Not Expected	No suitable habitat present; not observed during the field survey. The CNDDB does not document the species within 5-miles of the study area.
Arctostaphylos pechoensis Pecho manzanita	None/None G2/S2 1B.2	Closed-cone coniferous forest, chaparral, coastal scrub. Grows on siliceous shale with other chaparral associates. 60-855 m. perennial evergreen shrub. Blooms Nov-Mar	Not Expected	No suitable habitat present; not observed during the field survey. The CNDDB does not document the species within 5-miles of the study area.
Arctostaphylos purissima La Purisima manzanita	None/None G2/S2 1B.1	Chaparral, coastal scrub. Sandstone outcrops, sandy soil. 60-470 m. perennial evergreen shrub. Blooms Nov-May	Not Expected	No suitable habitat present; not observed during the field survey.
Arctostaphylos refugioensis Refugio manzanita	None/None G3/S3 1B.2	Chaparral. On sandstone. 60-765 m. perennial evergreen shrub. Blooms Dec-Mar(May)	Not Expected	No suitable habitat present; not observed during the field survey. The CNDDB does not document the species within 5-miles of the study area.
Arctostaphylos rudis sand mesa manzanita	None/None G2/S2 1B.2	Chaparral, coastal scrub. On sandy soils in Lompoc/Nipomo area. 20-335 m. perennial evergreen shrub. Blooms Nov-Feb	Not Expected	No suitable habitat present; not observed during the field survey.
Arenaria paludicola marsh sandwort	Endangered/ Endangered G1/S1 1B.1	Marshes and swamps. Growing up through dense mats of Typha, Juncus, Scirpus, etc. in freshwater marsh. Sandy soil. 3-170 m. perennial stoloniferous herb. Blooms May-Aug	Not Expected	No suitable habitat present; not observed during the field survey. The CNDDB does not document the species within 5-miles of the study area.
Astragalus didymocarpus var. milesianus Miles' milk-vetch	None/None G5T2/S2 1B.2	Coastal scrub. Clay soils. 50-385 m. annual herb. Blooms Mar-Jun	Not expected	Although one historic CNDDB record (1935) exists approximately 4 miles northeast of the study area, highly disturbed marginally suitable habitat is present in the study area. Not observed during the field survey.
Atriplex coulteri Coulter's saltbush	None/None G3/S1S2 1B.2	Coastal bluff scrub, coastal dunes, coastal scrub, valley and foothill grassland. Ocean bluffs, ridgetops, as well as alkaline low places. Alkaline or clay soils. 2-460 m. perennial herb. Blooms Mar-Oct	Not Expected	No suitable habitat present; not observed during the field survey. The CNDDB does not document the species within 5-miles of the study area.

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Site	Habitat Suitability/ Observations
Atriplex pacifica south coast saltscale	None/None G4/S2 1B.2	Coastal scrub, coastal bluff scrub, playas, coastal dunes. Alkali soils. 1-400 m. annual herb. Blooms Mar-Oct	Not Expected	No suitable habitat present; not observed during the field survey. The CNDDB does not document the species within 5-miles of the study area.
Atriplex serenana var. davidsonii Davidson's saltscale	None/None G5T1/S1 1B.2	Coastal bluff scrub, coastal scrub. Alkaline soil. 0-460 m. annual herb. Blooms Apr-Oct	Not Expected	No suitable habitat present; not observed during the field survey. The CNDDB does not document the species within 5-miles of the study area.
Calochortus catalinae Catalina mariposa-lily	None/None G3G4/S3S4 4.2	Valley and foothill grassland, chaparral, coastal scrub, cismontane woodland. In heavy soils, open slopes, openings in brush. 15-700 m. perennial bulbiferous herb. Blooms (Feb)Mar-Jun	Not Expected	No suitable habitat present; not observed during the field survey. The CNDDB does not document the species within 5-miles of the study area.
Calochortus fimbriatus late-flowered mariposa-lily	None/None G3/S3 1B.3	Chaparral, cismontane woodland, riparian woodland. Dry, open coastal woodland, chaparral; on serpentine. 270-1435 m. perennial bulbiferous herb. Blooms Jun-Aug	Not Expected	Study area is out of the elevation range for this species. The CNDDB does not document the species within 5-miles of the study area.
Ceanothus cuneatus var. fascicularis Lompoc ceanothus	None/None G5T4/S4 4.2	Chaparral. Sandy soils. 5-400 m. perennial evergreen shrub. Blooms Feb-Apr	Not Expected	Highly disturbed marginally suitable habitat present in the study area. Not observed during the field survey. The CNDDB does not document the species within 5-miles of the study area.
Cercocarpus betuloides var. blancheae island mountain-mahogany	None/None G5T4/S4 4.3	Chaparral, closed-cone coniferous forest. 30-600 m. perennial evergreen shrub. Blooms Feb-May	Not Expected	No suitable habitat present; not observed during the field survey. The CNDDB does not document the species within 5-miles of the study area.
Chorizanthe rectispina straight-awned spineflower	None/None G2/S2 1B.3	Chaparral, cismontane woodland, coastal scrub. Often on granite in chaparral. 45-1040 m. annual herb. Blooms Apr-Jul	Not Expected	No suitable habitat present; not observed during the field survey. The CNDDB does not document the species within 5-miles of the study area.
Cirsium rhothophilum surf thistle	None/ Threatened G1/S1 1B.2	Coastal dunes, coastal bluff scrub. Open areas in central dune scrub; usually in coastal dunes. 3-60 m. perennial herb. Blooms Apr-Jun	Not Expected	Study area is out of the elevation range for this species. The CNDDB does not document the species within 5-miles of the study area.

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Site	Habitat Suitability/ Observations
Cirsium scariosum var. loncholepis La Graciosa thistle	Endangered/ Threatened G5T1/S1 1B.1	Coastal dunes, coastal scrub, brackish marshes, valley and foothill grassland, cismontane woodland. Lake edges, riverbanks, other wetlands; often in dune areas. Mesic, sandy sites. 4-220 m. perennial herb. Blooms May-Aug	Low Potential	Disturbed elements of suitable habitat as well as sandy soils present. Highly suitable adjacent habitat. Low value habitat within study area. Not observed during the field survey. The CNDDB does not document the species within 5-miles of the study area.
Cladium californicum California saw-grass	None/None G4/S2 2B.2	Meadows and seeps, marshes and swamps (alkaline or freshwater). Freshwater or alkaline moist habitats. -20-2135 m. perennial rhizomatous herb. Blooms Jun-Sep	Not Expected	Low value habitat within project site. Not observed during the field survey. The CNDDB does not document the species within 5-miles of the study area.
Cordylanthus rigidus ssp. littoralis seaside bird's-beak	None/ Endangered G5T2/S2 1B.1	Closed-cone coniferous forest, chaparral, cismontane woodland, coastal scrub, coastal dunes. Sandy, often disturbed sites, usually within chaparral or coastal scrub. 30-520 m. annual herb (hemiparasitic). Blooms Apr-Oct	Low Potential	CNDDB records exist approximately 2 miles north of (1956) and 1 mile west of (1973) the study area. Highly disturbed coyote brush scrub with sandy soils present providing elements of marginally suitable habitat. Not observed during the field survey.
Deinandra increscens ssp. villosa Gaviota tarplant	Endangered/ Endangered G4G5T2/S2 1B.1	Coastal scrub, valley and foothill grassland, coastal bluff scrub. Known from coastal terrace near Gaviota; sandy blowouts amid sandy loam soil; grassland/coast scrub ecotone. 10-430 m. annual herb. Blooms May-Oct	Not Expected	No suitable habitat present; not observed during the field survey. The CNDDB does not document the species within 5-miles of the study area.
Deinandra paniculata paniculate tarplant	None/None G4/S4 4.2	Coastal scrub, valley and foothill grassland, vernal pools. Usually in vernally mesic sites. Sometimes in vernal pools or on mima mounds near them. 25-940 m. annual herb. Blooms (Mar)Apr-Nov	Not Expected	No suitable habitat found in the study area. Not observed during the field survey. The CNDDB does not document the species within 5-miles of the study area.
Delphinium parryi ssp. blochmaniae dune larkspur	None/None G4T2/S2 1B.2	Chaparral, coastal dunes (maritime). On rocky areas and dunes. 18-305 m. perennial herb. Blooms Apr-Jun	Not Expected	Although one historic CNDDB record (1929) exists approximately 2 miles north of the study area, no suitable chaparral or coastal dune habitat present. Not observed during the field survey.

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Site	Habitat Suitability/ Observations
Delphinium umbraculorum umbrella larkspur	None/None G3/S3 1B.3	Cismontane woodland, chaparral. Mesic sites. 215-2075 m. perennial herb. Blooms Apr-Jun	Not Expected	Study area is out of the elevation range for this species. The CNDDB does not document the species within 5-miles of the study area.
Diplacus vandenbergensis Vandenberg monkeyflower	Endangered/ None G1/S1 1B.1	Cismontane woodland, chaparral, coastal dunes. Sandy, often disturbed areas. 75-120 m. annual herb. Blooms Apr-Jun	Not Expected	One historical CNDDB record (1931) exists approximately 2 miles north of the study area. Highly disturbed marginally suitable habitat found in the study area. Not observed during the field survey.
Erigeron blochmaniae Blochman's leafy daisy	None/None G2/S2 1B.2	Coastal dunes, coastal scrub. Sand dunes and hills. 0-185 m. perennial rhizomatous herb. Blooms Jun-Aug	Not Expected	No suitable habitat present; not observed during the field survey. The CNDDB does not document the species within 5-miles of the study area.
Erigeron sanctarum saints' daisy	None/None G3/S3 4.2	Chaparral, cismontane woodland, coastal scrub. 160-300 m. perennial rhizomatous herb. Blooms Mar-Jul	Not Expected	Study area is out of the elevation range for this species. The CNDDB does not document the species within 5-miles of the study area.
Eriodictyon capitatum Lompoc yerba santa	Endangered/ Rare G2/S2 1B.2	Closed-cone coniferous forest, chaparral. Sandy soils on terraces. 60-505 m. perennial evergreen shrub. Blooms May-Sep	Not Expected	No suitable habitat present; not observed during the field survey. The CNDDB does not document the species within 5-miles of the study area.
Eriogonum elegans elegant wild buckwheat	None/None G3G4/S3S4 4.3	Cismontane woodland, valley and foothill grassland. Usually in sandy or gravelly substrates; often in washes, sometimes roadsides. 200-1525 m. annual herb. Blooms May-Nov	Not Expected	Study area is out of the elevation range for this species. The CNDDB does not document the species within 5-miles of the study area.
Erysimum capitatum var. lompocense San Luis Obispo wallflower	None/None G5T3/S3 4.2	Chaparral, coastal scrub. Sandy hillsides and mesas. 60-500 m. perennial herb. Blooms Feb-May	Not Expected	No suitable habitat present; not observed during the field survey. The CNDDB does not document the species within 5-miles of the study area.
Fritillaria ojaiensis Ojai fritillary	None/None G2?/S2? 1B.2	Broadleafed upland forest (mesic), chaparral, lower montane coniferous forest, cismontane woodland. Usually loamy soil. Sometimes on serpentine; sometimes along roadsides. 100-1140 m. perennial bulbiferous herb. Blooms Feb-May	Not Expected	No suitable habitat present; not observed during the field survey. The CNDDB does not document the species within 5-miles of the study area.

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Site	Habitat Suitability/ Observations
Horkelia cuneata var. puberula mesa Horkelia	None/None G4T1/S1 1B.1	Chaparral, cismontane woodland, coastal scrub. Sandy or gravelly sites. 15-1645 m. perennial herb. Blooms Feb-Jul(Sep)	Not Expected	No suitable habitat present; not observed during the field survey.
Horkelia cuneata var. sericea Kellogg's horkelia	None/None G4T1?/S1? 1B.1	Closed-cone coniferous forest, coastal scrub, coastal dunes, chaparral. Old dunes, coastal sandhills; openings. Sandy or gravelly soils. 5-430 m. perennial herb. Blooms Apr-Sep	Not Expected	No suitable habitat present; not observed during the field survey. The CNDDB does not document the species within 5-miles of the study area.
Layia heterotricha pale-yellow layia	None/None G2/S2 1B.1	Cismontane woodland, coastal scrub, pinyon and juniper woodland, valley and foothill grassland. Alkaline or clay soils; open areas. 90-1800 m. annual herb. Blooms Mar-Jun	Not Expected	No suitable habitat present; not observed during the field survey. The CNDDB does not document the species within 5-miles of the study area.
Lepidium virginicum var. robinsonii Robinson's pepper-grass	None/None G5T3/S3 4.3	Chaparral, coastal scrub. Dry soils, shrubland. 4-1435 m. annual herb. Blooms Jan-Jul	Not Expected	No suitable habitat present; not observed during the field survey. The CNDDB does not document the species within 5-miles of the study area.
Lonicera subspicata var. subspicata Santa Barbara honeysuckle	None/None G5T2?/S2? 1B.2	Chaparral, cismontane woodland, coastal scrub. 5-825 m. perennial evergreen shrub. Blooms May-Aug(Dec-Feb)	Not Expected	No suitable habitat present; not observed during the field survey. The CNDDB does not document the species within 5-miles of the study area.
Micropus amphibolus Mt. Diablo cottonweed	None/None G3G4/S3S4 3.2	Valley and foothill grassland, cismontane woodland, chaparral, broadleafed upland forest. Bare, grassy or rocky slopes. 45-825 m. annual herb. Blooms Mar-May	Not Expected	No suitable habitat present; not observed during the field survey. The CNDDB does not document the species within 5-miles of the study area.
Mimulus subsecundus one-sided monkeyflower	None/None G3G4Q/S3S4 4.3	Lower montane coniferous forest, chaparral. One site states: "on rock talus outcrop, south-facing slope, in herbaceous community. 450-915 m. annual herb. Blooms May-Jul	Not Expected	Study area is out of the elevation range for this species. The CNDDB does not document the species within 5-miles of the study area.
Monardella hypoleuca ssp. hypoleuca white-veined monardella	None/None G4T3/S3 1B.3	Chaparral, cismontane woodland. Dry slopes. 50-1280 m. perennial herb. Blooms (Apr)May-Aug(Sep-Dec)	Not Expected	Although one CNDDB record (1969) exists approximately 5 miles southwest of the study area, the species prefers dry and undisturbed slopes. No suitable habitat present. Not observed during the field survey.

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Site	Habitat Suitability/ Observations
Monardella sinuata ssp. sinuata southern curly-leaved monardella	None/None G3T2/S2 1B.2	Coastal dunes, coastal scrub, chaparral, cismontane woodland. Sandy soils. 20-305 m. annual herb. Blooms Apr-Sep	Not Expected	Although, multiple CNDDB records (2009-2012) exist approximately 3 miles north of the study area, species prefers dry and undisturbed slopes. No suitable habitat present. Not observed during the field survey.
Mucronea californica California spineflower	None/None G3/S3 4.2	Chaparral, cismontane woodland, coastal dunes, coastal scrub, valley and foothill grassland. Sandy soil. 0-1400 m. annual herb. Blooms Mar-Jul(Aug)	Not Expected	No suitable habitat present; not observed during the field survey. The CNDDB does not document the species within 5-miles of the study area.
Nasturtium gambelii Gambel's water cress	Endangered/ Threatened G1/S1 1B.1	Marshes and swamps. Freshwater and brackish marshes at the margins of lakes and along streams, in or just above the water level. 5-330 m. perennial rhizomatous herb. Blooms Apr-Oct	Not Expected	No suitable habitat present; not observed during the field survey. The CNDDB does not document the species within 5-miles of the study area.
Ophioglossum californicum California adder's-tongue	None/None G4/S4 4.2	Chaparral, vernal pool areas, valley and foothill grassland. Grassy pastures, vernal pool margins, chaparral. Mesic sites. 60-525 m. perennial rhizomatous herb. Blooms (Dec)Jan-Jun	Not Expected	No suitable habitat found within the study area. Not observed during the field survey. The CNDDB does not document the species within 5-miles of the study area.
Phacelia hubbyi Hubby's phacelia	None/None G4/S4 4.2	Chaparral, coastal scrub, valley and foothill grassland. Gravelly, rocky areas and talus slopes. 0-1000 m. annual herb. Blooms Apr-Jul	Not Expected	No suitable habitat present; not observed during the field survey. The CNDDB does not document the species within 5-miles of the study area.
Phacelia ramosissima var. austrolitoralis south coast branching phacelia	None/None G5?T3/S3 3.2	Chaparral, coastal scrub, coastal dunes, coastal salt marsh. Sandy, sometimes rocky sites. 5-300 m. perennial herb. Blooms Mar-Aug	Not Expected	Marginally suitable habitat present; not observed during the field survey. The CNDDB does not document the species within 5-miles of the study area.
Prunus fasciculata var. punctata sand almond	None/None G5T4/S4 4.3	Chaparral, coastal scrub, cismontane woodland, coastal dunes. Sandy flats. 15-200 m. perennial deciduous shrub. Blooms Mar-Apr	Not Expected	No suitable habitat present; not observed during the field survey. The CNDDB does not document the species within 5-miles of the study area.

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Site	Habitat Suitability/ Observations
Sanicula hoffmannii Hoffmann's sanicle	None/None G3/S3 4.3	Broadleafed upland forest, coastal scrub, coastal bluff scrub, chaparral, cismontane woodland, lower montane coniferous forest. Cool slopes in deep soil, often in moist shaded serpentine soils, or in clay soils. 30-300 m. perennial herb. Blooms Mar-May	Not Expected	No suitable habitat present; not observed during the field survey. The CNDDB does not document the species within 5-miles of the study area.
Scrophularia atrata black-flowered figwort	None/None G2?/S2? 1B.2	Closed-cone coniferous forest, chaparral, coastal dunes, coastal scrub, riparian scrub. Sand, diatomaceous shales, and soils derived from other parent material; around swales and in sand dunes. 10-445 m. perennial herb. Blooms Mar-Jul	Low Potential	Two CNDDB records (1954, 1962) approximately 4.5 miles southwest of the study area as well as multiple Calflora records (1984, 1987) adjacent to the Santa Ynez River watershed. Adjacent habitat provides marginally suitable riparian scrub. Disturbed sandy soils present. Low value habitat within project site and not observed during the field survey.
Senecio aphanactis chaparral ragwort	None/None G3/S2 2B.2	Chaparral, cismontane woodland, coastal scrub. Drying alkaline flats. 20-855 m. annual herb. Blooms Jan-Apr(May)	Not Expected	No suitable habitat present; not observed during the field survey. The CNDDB does not document the species within 5-miles of the study area.
Thelypteris puberula var. sonorensis Sonoran maiden fern	None/None G5T3/S2 2B.2	Meadows and seeps. Along streams, seepage areas. 60-930 m. perennial rhizomatous herb. Blooms Jan-Sep	Not Expected	No suitable habitat present; not observed during the field survey. The CNDDB does not document the species within 5-miles of the study area.
Invertebrates				
Ammopelmatus muwu Point Conception jerusalem cricket	None/None G1/S1	Coastal dunes at Point Conception.	Not Expected	No suitable habitat present; not observed during the field survey.
Bombus caliginosus obscure bumble bee	None/None G4?/S1S2	Coastal areas from Santa Barbara County to north to Washington state. Food plant genera include Baccharis, Cirsium, Lupinus, Lotus, Grindelia and Phacelia.	Not Expected	CNDDB species record within a 5-mile radius of the study area. *Baccharis* genera present in and adjacent to the study area providing suitable habitat. However, the project site provides no habitat.

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Site	Habitat Suitability/ Observations
Branchinecta lynchi vernal pool fairy shrimp	Threatened/ None G3/S3	Endemic to the grasslands of the Central Valley, Central Coast mountains, and South Coast mountains, in astatic rain-filled pools. Inhabit small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools.	Not Expected	No vernal pools present within the study area.
Danaus plexippus pop. 1 monarch - California overwintering population	None/None G4T2T3/S2S3	Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico. Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby.	Not Expected	Coast live oak trees present in and adjacent to the study area. Marginally suitable habitat due to large agricultural area with lack of nectar sources. Not observed during the field survey.
Trimerotropis occulens Lompoc grasshopper	None/None G1G2/S1S2	Known only from Santa Barbara and San Luis Obispo counties.	Not Expected	No CNDDB records documented in the study area.
Fish				
Eucyclogobius newberryi tidewater goby	Endangered/ None G3/S3 SSC	Brackish water habitats along the California coast from Agua Hedionda Lagoon, San Diego County to the mouth of the Smith River. Found in shallow lagoons and lower stream reaches, they need fairly still but not stagnant water and high oxygen levels.	Not Expected	No suitable habitat present; not observed during the field survey.
Gasterosteus aculeatus williamsoni unarmored threespine stickleback	Endangered/ Endangered G5T1/S1 FP	Weedy pools, backwaters, and among emergent vegetation at the stream edge in small Southern California streams. Cool (<24 C), clear water with abundant vegetation.	Not Expected	No suitable habitat present; not observed during the field survey.
Oncorhynchus mykiss irideus pop. 10 steelhead - southern California DPS	Endangered/ None G5T1Q/S1	Federal listing refers to populations from Santa Maria River south to southern extent of range (San Mateo Creek in San Diego County). Southern steelhead likely has greater physiological tolerances to warmer water and more variable conditions.	Not Expected	Not expected within the project site due to lask of stream habitat. A small portion of the study area is within southern California DPS critical habitat; however, not expected to encounter this species as no activities will be conducted in standing or flowing water. Not observed during the field survey.
Amphibians				

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Site	Habitat Suitability/ Observations
Ambystoma californiense California tiger salamander	Endangered/ Threatened G2G3/S2S3 WL	Central Valley DPS federally listed as threatened. Santa Barbara and Sonoma counties DPS federally listed as endangered. Need underground refuges, especially ground squirrel burrows, and vernal pools or other seasonal water sources for breeding.	Not Expected to Low Potential	Species has been documented by the CNDDB within 2 miles of the study area along the north side of the Santa Ynez River. No vernal pools present in the study area; Adjacent habitat is marginally suitable and low value habitat present in the project site.
Rana boylii foothill yellow-legged frog	None/ Candidate Threatened G3/S3 SSC	Partly-shaded, shallow streams and riffles with a rocky substrate in a variety of habitats. Needs at least some cobble-sized substrate for egg-laying. Needs at least 15 weeks to attain metamorphosis.	Not Expected	No suitable habitat present; not observed during the field survey.
Rana draytonii California red-legged frog	Threatened/ None G2G3/S2S3 SSC	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11-20 weeks of permanent water for larval development. Must have access to estivation habitat.	Low potential	Marginally suitable habitat and no PCE's present within the project site. Not observed during the field survey. Critical habitat is located within 5 miles.
Spea hammondii western spadefoot	None/None G3/S3 SSC	Occurs primarily in grassland habitats, but can be found in valley-foothill hardwood woodlands. Vernal pools are essential for breeding and egg-laying.	Low potential	Species has been documented by the CNDDB within 5 miles of the study area. The project site does not contain essential grassland vernal pool habitat.
Taricha torosa Coast range newt	None/None G4/S4 SSC	Coastal drainages from Mendocino County to San Diego County. Lives in terrestrial habitats & will migrate over 1 km to breed in ponds, reservoirs & slow moving streams.	Not Expected	Species has not been documented by the CNDDB within 5 miles of the study area. No suitable habitat present; not observed during the field survey.

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Site	Habitat Suitability/ Observations
Reptiles				
Anniella pulchra northern California legless lizard	None/None G3/S3 SSC	Sandy or loose loamy soils under sparse vegetation. Soil moisture is essential. They prefer soils with high moisture content.	Low Potential	CNDDB species record within a 2-mile radius of the study area. Study area contains disturbed soils providing marginally suitable habitat. Project site does not support suitable habitat. Not observed during the field survey.
Emys marmorata western pond turtle	None/None G3G4/S3 SSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 ft elevation. Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	Moderate Potential	No CNDDB occurrences within 5-miles of the study area. However, the Santa Ynez River provides suitable habitat for the species.. No suitable habitat present in the project area; not observed during the field survey.
Phrynosoma blainvillii coast horned lizard	None/None G3G4/S3S4 SSC	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	Low Potential	Marginally suitable habitat present within the project site due to agriculture operations. Not observed during the field survey. More suitable habitat in the adjacent river. No CNDDB occurrences within 5-miles of the study area.
Salvadora hexalepis virgultea coast patch-nosed snake	None/None G5T4/S2S3 SSC	Brushy or shrubby vegetation in coastal Southern California. Require small mammal burrows for refuge and overwintering sites.	Not Expected	Species has not been documented by the CNDDB within 5-miles of the study area. No suitable habitat present; not observed during the field survey.
Thamnophis hammondii two-striped gartersnake	None/None G4/S3S4 SSC	Coastal California from vicinity of Salinas to northwest Baja California. From sea to about 7,000 ft elevation. Highly aquatic, found in or near permanent fresh water. Often along streams with rocky beds and riparian growth.	Not Expected	Permanent fresh water is not present within the study area. No CNDDB occurrences within 5-miles of the study area.

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Site	Habitat Suitability/ Observations
Birds				
Agelaius tricolor tricolored blackbird	None/ Threatened G2G3/S1S2 SSC	Highly colonial species, most numerous in Central Valley & vicinity. Largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey within a few km of the colony.	Not Expected	No suitable habitat in project site. Adjacent habitat provides marginally suitable nesting and foraging habitat. Not observed during the field survey. No CNDDB occurrences within 5-miles of the study area.
Aimophila ruficeps canescens southern California rufous-crowned sparrow	None/None G5T3/S3 WL	Resident in Southern California coastal sage scrub and sparse mixed chaparral. Frequents relatively steep, often rocky hillsides with grass and forb patches.	Not Expected	Suitable habitat is not present in the study area. Species has not been documented by the CNDDB within a five-mile radius of the study area.
Buteo regalis ferruginous hawk	None/None G4/S3S4 WL	Open grasslands, sagebrush flats, desert scrub, low foothills and fringes of pinyon and juniper habitats. Eats mostly lagomorphs, ground squirrels, and mice. Population trends may follow lagomorph population cycles.	Not Expected	No suitable habitat in project site. Adjacent habitat provides marginally suitable nesting and foraging habitat. Not observed during the field survey. No CNDDB occurrences within 5-miles of the study area.
Empidonax traillii extimus southwestern willow flycatcher	Endangered/ Endangered G5T2/S1	Riparian woodlands in Southern California.	Low Potential	The species has been documented by the CNDDB within 4-miles of the project site. Adjacent habitat associated with the Santa Ynez River provides suitable foraging habitat; although, not observed during the field survey. The project site contains low value habitat for the species.
Falco peregrinus anatum American peregrine falcon	Delisted/ Delisted G4T4/S3S4 FP	Near wetlands, lakes, rivers, or other water; on cliffs, banks, dunes, mounds; also, human-made structures. Nest consists of a scrape or a depression or ledge in an open site.	Not Expected	The CNDDB has not documented the species within the study area. Adjacent habitat provides marginally suitable nesting and foraging habitat. No suitable habitat in project site. Not observed during the field survey.

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Site	Habitat Suitability/ Observations
Icteria virens yellow-breasted chat	None/None G5/S3 SSC	Summer resident; inhabits riparian thickets of willow and other brushy tangles near watercourses. Nests in low, dense riparian, consisting of willow, blackberry, wild grape; forages and nests within 10 ft of ground.	Low Potential	The CNDDB does not document this species in the study area. However, the species has been documented along the Santa Ynez River (Lehman 2020). The study area has marginally suitable habitat, no dense riparian vegetation present. The species may occur transiting the project site but is not likely to nest in the project site.
Progne subis purple martin	None/None G5/S3 SSC	Inhabits woodlands, low elevation coniferous forest of Douglas-fir, ponderosa pine, and Monterey pine. Nests in old woodpecker cavities mostly; also in human-made structures. Nest often located in tall, isolated tree/snag.	Not Expected	The study area does not provide suitable habitat. Not observed during the field survey. No CNDDB occurrences within 5-miles of the study area.
Setophaga petechia yellow warbler	None/None G5/S3S4	Riparian plant associations in close proximity to water. Also nests in montane shrubbery in open conifer forests in Cascades and Sierra Nevada. Frequently found nesting and foraging in willow shrubs and thickets, and in other riparian plants including cottonwoods, sycamores, ash, and alders.	Low Potential	The CNDDB does not document this species in the study area. However, the species has been documented along the Santa Ynez River (Lehman 2020). Migrants may occur in the study area but the project site does not contain suitable habitat for breeding.
Vireo bellii pusillus least Bell's vireo	Endangered/ Endangered G5T2/S2	Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 ft. Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, Baccharis, mesquite.	Low Potential	Adjacent habitat provides suitable foraging habitat and low value nesting habitat; not observed during the field survey. No suitable habitat in project site. No CNDDB occurrences within 5-miles of the study area.
Mammals				
Antrozous pallidus pallid bat	None/None G5/S3 SSC	Deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	Not Expected	No suitable habitat in project site. The study area provides marginally suitable roosting and foraging habitat. Not observed during the field survey. No CNDDB occurrences within 5-miles of the study area.

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Site	Habitat Suitability/ Observations
Corynorhinus townsendii Townsend's big-eared bat	None/None G3G4/S2 SSC	Throughout California in a wide variety of habitats. Most common in mesic sites. Roosts in the open, hanging from walls and ceilings. Roosting sites limiting. Extremely sensitive to human disturbance.	Not Expected	The study area does not provide suitable habitat. Not observed during the field survey. No CNDDB occurrences within 5-miles of the study area.
Lasionycteris noctivagans silver-haired bat	None/None G5/S3S4	Primarily a coastal and montane forest dweller, feeding over streams, ponds & open brushy areas. Roosts in hollow trees, beneath exfoliating bark, abandoned woodpecker holes, and rarely under rocks. Needs drinking water.	Not Expected	The CNDDB has not documented the species within the study area. No suitable roosting or foraging habitat present; not observed during the field survey.
Lasiurus blossevillii western red bat	None/None G5/S3 SSC	Roosts primarily in trees, 2-40 ft above ground, from sea level up through mixed conifer forests. Prefers habitat edges and mosaics with trees that are protected from above and open below with open areas for foraging.	Not Expected	The CNDDB has not documented the species within the study area. No suitable roosting or foraging habitat present; not observed during the field survey.
Lasiurus cinereus hoary bat	None/None G5/S4	Prefers open habitats or habitat mosaics, with access to trees for cover and open areas or habitat edges for feeding. Roosts in dense foliage of medium to large trees. Feeds primarily on moths. Requires water.	Not Expected	The CNDDB has not documented the species within the study area. No suitable roosting or foraging habitat present; not observed during the field survey.
Myotis yumanensis Yuma myotis	None/None G5/S4	Optimal habitats are open forests and woodlands with sources of water over which to feed. Distribution is closely tied to bodies of water. Maternity colonies in caves, mines, buildings or crevices.	Not Expected	The CNDDB has not documented the species within the study area. No suitable roosting or foraging habitat present; not observed during the field survey.
Neotoma lepida intermedia San Diego desert woodrat	None/None G5T3T4/S3S4 SSC	Coastal scrub of Southern California from San Diego County to San Luis Obispo County. Moderate to dense canopies preferred. They are particularly abundant in rock outcrops, rocky cliffs, and slopes.	Not Expected	The CNDDB has not documented the species within the study area. No suitable habitat present; not observed during the field survey.

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Site	Habitat Suitability/ Observations
Taxidea taxus American badger	None/None G5/S3 SSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	Not Expected	Species has been documented by the CNDDB within 3 miles of the study area. The study area, did not have sign or suitably sized burrows indicating the presence of this species during the field survey.

Regional Vicinity refers to within a [5] mile radius of site (CDFW 2018b).

FT = Federally Threatened
FC = Federal Candidate Species
FE = Federally Endangered
FS=Federally Sensitive
SE = State Endangered
ST = State Threatened
SR = State Rare
SS = State Sensitive
SCT = State Candidate Endangered
SCE = State Candidate Threatened
G-Rank/S-Rank = Global Rank and State Rank as per NatureServe and CDFW's CNDDB RareFind3
SC = CDFW Species of Special Concern
FP = Fully Protected

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Appendix E

Wildlife Movement Plan

Wildlife Movement Plan

This Biological Resources Report (BRA) was prepared pursuant to the *Santa Barbara County LUDC 35.42.075 - Cannabis Regulations*. The purpose of this Wildlife Movement Plan (WMP) is to describe and analyze the design and extent of proposed and existing fencing around the project site in relation to surrounding opportunities for wildlife migration.

Description of Proposed and Existing Fencing

An existing six-ft fence comprised of no-climb mesh wire with three-inch openings surrounds the entire cultivation area. Along the north and northeastern portion of the cultivation area, a natural berm is existing between the existing fence and riparian area associated with the Santa Ynez River. In some areas along the Santa Ynez River, a 100-ft buffer or greater exists between the edge of riparian vegetation and existing cultivation. Within the 100-ft buffer, 50-ft of outdoor cannabis cultivation is proposed. Along the northeastern portion of the cultivation area there is less than a 100-ft buffer, and in this area, a 10-ft visual stream avoidance buffer is proposed. The stream avoidance buffer will be comprised of 7-ft tall T-posts with an attached cable to restrict access to the riparian area associated with the Santa Ynez River.

Figure 3 in this BRA depicts the project site plan, including the location of the existing fence line and proposed visual buffer fencing.

Analysis of Project Fencing in Relation to Wildlife Movement

No mapped wildlife movement corridors are present within the study area, nor is it located within an Essential Connectivity Area (ECA), as mapped in the report *California Essential Habitat Connectivity Project: A Strategy for Conserving a Connected California* (Spencer et al. 2010). The project site itself, which occupies much of the study area, lacks the features (such as water sources or native vegetation) that would make it attractive either as breeding habitat or a wildlife movement route. The northern portion of the study area consists of riparian habitat associated with the Santa Ynez River that could provide suitable small-scale wildlife movement corridors and be important in linking non-contiguous or fragmented wildlife habitats.

The stream avoidance buffer fencing proposed for the northeastern end of this project will consist of T-post and single cable fencing that will not prevent the passage of any wildlife and will only serve as a visual aid to ensure that project activities do not occur within areas where there is less than 100-ft of combined riparian buffer. Wildlife movement through the Santa Ynez River or the associated riparian habitat will not be inhibited by proposed project fencing.

The existing six-ft fence and natural berm surrounding the project site minimize the potential for wildlife to enter the project site and instead encourage use of the Santa Ynez River and adjacent riparian areas for wildlife movement. The existing fence line does not create any isolated patches of native habitat for wildlife and the project site does not function as a means of connecting two or more isolated wildlife areas at a regional level.

The proposed project will not introduce any new barriers to movement of any resident or migratory fish or wildlife species; nor will it deteriorate any existing fish or wildlife habitat. Based on the literature review and field survey performed as part of the BRA, the project site does not have a high presence of special status wildlife species. The existing wildlife-friendly fencing allows passage

of the smallest wildlife species while excluding larger animals from entering the project site and encouraging their passage through the adjacent riparian areas associated with the Santa Ynez River. The proposed project is in compliance with local conservation and biological resources protection polices, thereby reducing potential impacts to wildlife movement associated with project activities. The proposed project additionally complies with local requirements regarding lighting of cultivation sites and would therefore not impact wildlife movement due to artificial lighting.

Additional Wildlife Movement Avoidance and Minimization Measures

The proposed project is considered routine cultivation activities and would not substantially interfere with wildlife movement on a local or regional scale or considerably reduce opportunities for wildlife movement. However, to avoid impacts to sensitive wildlife species that may be present on site the following additional avoidance and minimization measures shall be implemented:

BIO-1 Wildlife Movement Plan

- The northern access road, adjacent to the Santa Ynez River should not be used 5 days prior to and 5 days after rain events.
- No pets should be allowed at the project site during cultivation/staging activities.
- Pallets or secondary containment areas for chemicals, drums, or bagged materials shall be used. Should material spills occur, materials and/or contaminants should be cleaned up appropriately.
- All vehicles and equipment shall be in good working condition and free of leaks.
- Cultivation/staging work, with the exception of spraying inside hoop structures, shall be restricted to daylight hours (7:00 AM to 9:00 PM) to avoid impacts to nocturnal and crepuscular (dawn and dusk activity period) species.
- Sensitive natural communities and jurisdictional drainages shall establish appropriate minimum riparian setbacks based on the SWRCB Cannabis General Order and County requirements.
- If any special status wildlife species are observed on site during cultivation/staging activities, the animal shall be allowed to safely leave the site on its own accord. If the individual is listed by the state and/or federal government(s) and remains in the work area, CDFW and/or USFWS should be contacted to ensure proper action.
- Erosion control and landscaping specifications shall allow only natural-fiber, biodegradable meshes and coir rolls, (i.e., no plastic-mesh temporary erosion control measures) to prevent impacts to the environment and to fish and terrestrial wildlife.
- Activities adjacent to the Santa Ynez River should implement best management practices, such as dust control and protecting construction materials from stormwater runoff and ensure accumulated soil and debris does not enter the Santa Ynez River.
- The existing fencing should be periodically checked for maintenance and verify they are capped to limit nesting birds.
- Site runoff has been engineered to not drain into Santa Ynez River. The cultivation areas are designed to retain water with any excess percolating into the ground.
- If rodenticides or other pesticides are used, they shall be wildlife-friendly to the extent feasible to avoid adverse mobilization effects through the food chain. The development and implementation of a Pest Management Plan shall include the techniques, proposed, use, storage and application of pesticides, herbicides, and rodenticides.

- During project activities, all trash that may attract predators should be properly contained, removed from the work site and disposed of regularly. Following construction, all trash and construction debris shall be removed from work areas.
- No project lighting will occur adjacent to Santa Ynez River.

BIO-2 Consultation with USFWS

Informal consultation with USFWS is recommended to confirm *no effect* and/or *may affect, but not likely to adversely affect* determination(s) for California red-legged frog, LBVI, and SWFL. Consultation outcome should be documented and recommendations from the USFWS should be implemented.

BIO-3 Workers Environmental Awareness Program

All personnel associated with the project shall attend a Worker Environmental Awareness Program (WEAP) training, conducted by a qualified biologist, to assist workers in recognizing special status biological resources with the potential to occur in the project site. This training will include information about California red-legged frog, western spadefoot, Northern California legless lizard, western pond turtle, Blainville's horned lizard, protected nesting birds including SWFL and LBVI, special status plants, sensitive habitats, jurisdictional waters, as well as other special status species potentially occurring in the project site.

The specifics of this program will include identification of special status species and habitats, a description of the regulatory status and general ecological characteristics of special status resources, and review of the limits of construction and measures required to avoid and minimize impacts to biological resources within the project site. A fact sheet conveying this information will also be prepared for distribution to all employees, and other personnel involved with construction of the project. All employees will sign a form provided by the trainer documenting they attended the WEAP and understand the information presented. A supervising employee will be responsible for ensuring crew members adhere to the guidelines and restrictions designed to avoid impacts to special status species. If new personnel are added to the project, the supervising employee will ensure the new personnel receive the WEAP training before starting work. In addition, all WEAP materials will be readily available for reference during work hours.

While encounters with special status species are not likely or anticipated, any worker who inadvertently injures or kills a special status species or finds one dead, injured, or entrapped should immediately report the incident to the employee responsible for WEAP trainings. The employee should immediately notify USFWS and/or CDFW within five working days of the incident.

BIO-4 Seasonal Avoidance

The project is considered routine cultivation activities and does not propose vegetation removal or ground disturbance that is not associated with ongoing cultivation activities. Routine maintenance may occur annually or bi-annually which includes the removal and installation of hoop structure covers (plastic covers). The following seasonal avoidance should be incorporated during maintenance activities:

AQUATIC AND SEMI-AQUATIC SPECIES AVOIDANCE

To avoid the dispersal period for California red-legged frog and other aquatic or semi-aquatic species, maintenance activities, including non-emergency driving along the access road adjacent to

the Santa Ynez River, shall be minimized 5 days prior to and 5 days after rain events, or conducted when ponded or flowing water is absent. If maintenance activities must occur during the rainy period or when ponded or flowing water is present, a qualified biological monitor familiar with special status aquatic or semi-aquatic wildlife species with potential to occur in the project site shall conduct a clearance survey to ensure special status species are not present. If any individuals of California red-legged frog or western pond turtle are observed, work within 100 ft of the observation will stop until USFWS and/or CDFW is(are) contacted and a course of action is determined.

AVIAN NESTING AVOIDANCE

During the nesting bird season (generally February 1 through August 31), changes in routine operations should not occur within 100 ft of riparian areas, this includes the removal of hoop structure covers, and road maintenance. If changes in routine operations occur during the nesting season, then a pre-construction nesting bird survey should be conducted no more than seven days prior to initiation of those activities. The nesting bird pre-construction survey should be conducted on foot inside the project footprint, including a 100-ft buffer around the project site, including access roads (300-ft for raptors), and using binoculars to the extent practicable. The survey should be conducted by a biologist familiar with the identification of avian species known to occur in southern California. If nests are found, an avoidance buffer (dependent upon the species, the proposed work activity, and existing disturbances associated with land uses outside of the site) should be determined and demarcated by the biologist with bright orange construction fencing, flagging, or other means to mark the boundary. All personnel should be notified as to the existence of the buffer zone and to avoid entering the buffer zone during the nesting season. No changes in routine activities should occur inside this buffer until a qualified avian biologist has confirmed breeding/ nesting is completed, and the young have fledged the nest.

BIO-5 Buffer Avoidance

The 100-ft of buffer along Santa Ynez River will include 50-ft of cannabis cultivation not in hoop houses. Where more than 50-ft exists, that larger area will continue to exist and is 100-ft or greater in some locations. Parking, vehicle maintenance, storage and other such uses will not occur in these setback areas and should include berming and other appropriate methods to prevent runoff from entering Santa Ynez River. A section of the northeastern end of the project site has less than 100-ft of setback and will have a 10-ft buffer to limit potential debris from entering the riparian area of the Santa Ynez River. Additionally, vehicular use has been revised to minimize use of areas adjacent to Santa Ynez River, in particular where there is less than 100-ft of combined setback at the northeastern end of the project site.

The following mitigation measure is recommended (adapted from and in compliance with the FEIR for the Program).

BIO-6 (FEIR MM HWR-1) Cannabis General Order

The Cannabis General Order includes regulations on the use of pesticides, rodenticides, herbicides, insecticides, fungicides, disinfectants, and fertilizers. The law requires that cannabis cultivators provide evidence of compliance with the SWRCB Requirements (or certification by the appropriate SWRCB stating a permit is not necessary) as part of their application for a California Department of Food and Agriculture (CDFA) cannabis cultivation license.

- **Timing.** The applicant shall provide the Planning and Development Department (P&D) staff evidence of compliance with the SWRCB Requirements (or certification by the appropriate Water Board stating a permit is not necessary) prior to issuance of any applicable permit by the P&D staff and issuance of a license by the County.
- **Monitoring and Reporting.** P&D Permit Compliance ensure compliance through review of license applications and site inspections as needed in compliance with the Cannabis Policy and Cannabis General Order.

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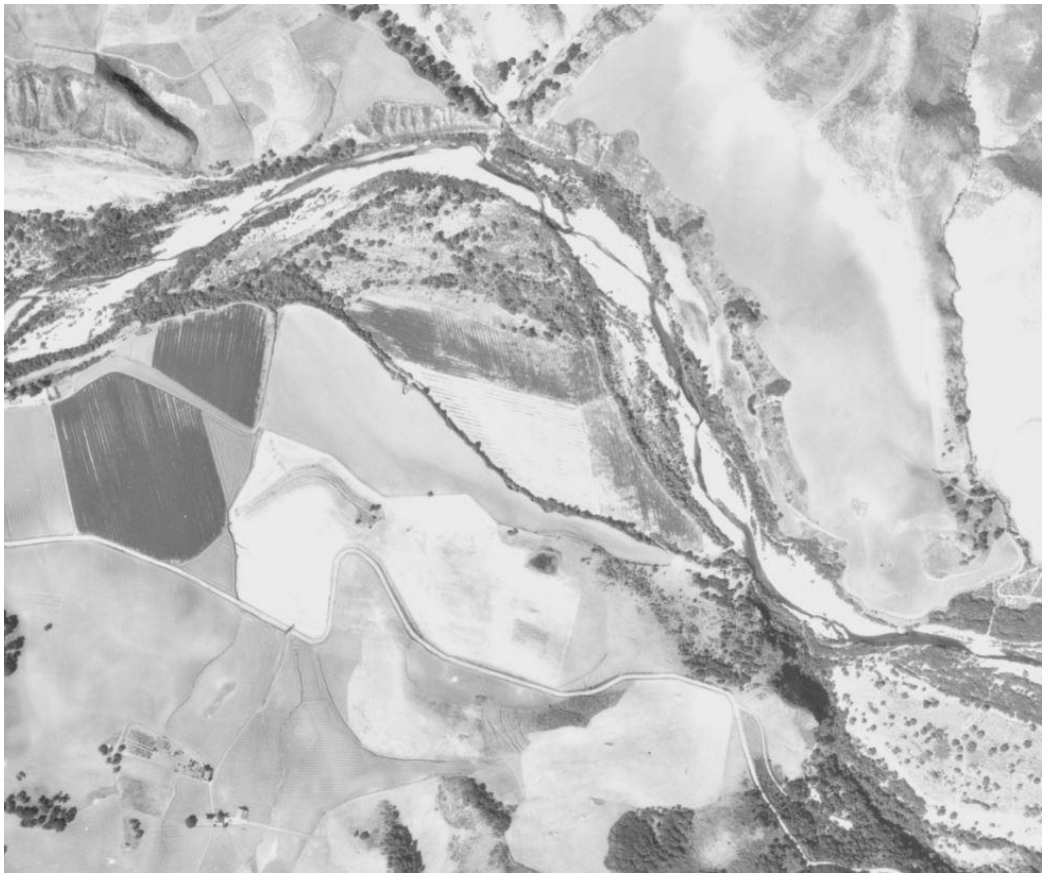
Appendix F

Hydrological Overview and Potential Impact Assessment (Kear Groundwater 2020)

Appendix G

Historical Imagery

Photograph 1. Historic imagery of proejct site; March 11, 1928 (UCSB 2020)

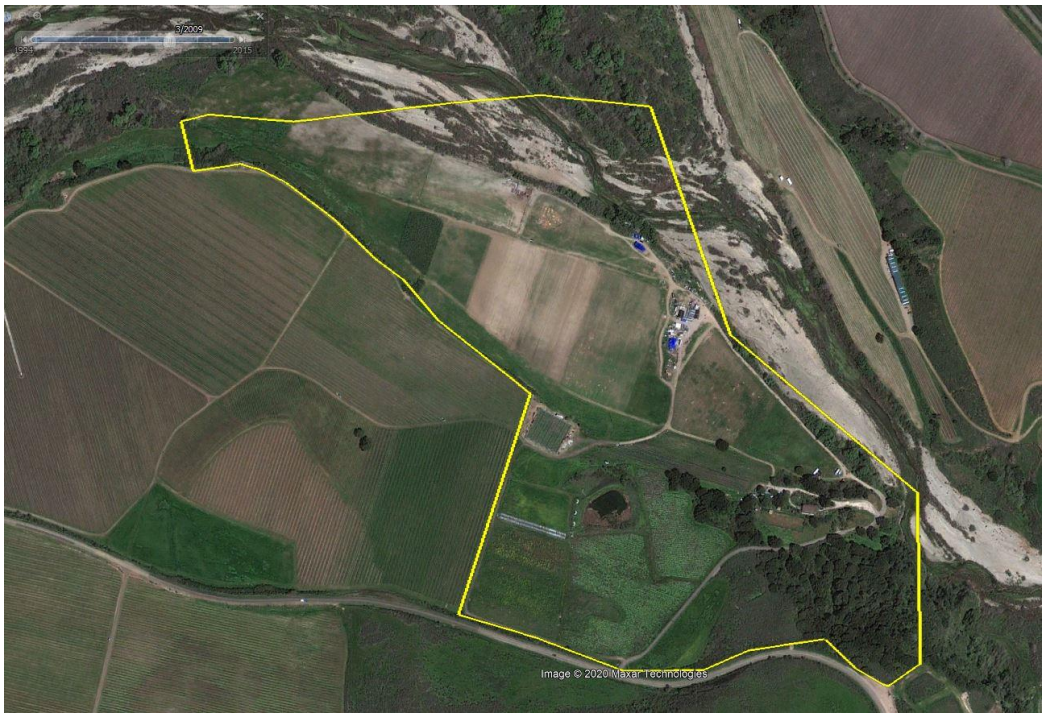


Photograph 2. Historic imagery of proejct site; January 1, 1943 (UCSB 2020)

Photograph 3. Historic imagery of proejct site; February 20, 1954 (UCSB 2020)

Photograph 4. Historic imagery of proejct site; January 5, 1968 (UCSB 2020)

Photograph 5. Historic imagery of proejct site; January 26, 1969 (UCSB 2020)



Photograph 6. Historic imagery of proejct site; March 9, 2009 (Google 2020)

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