

# Pura Vineyards

## Property Management Plan

### Project Location

7590 State Hwy 29 Kelseyville, CA

### Project Parcels

Lake County APNs

007-108-04 and 007-018-05

### Project Property

Lake County APNs

007-108-02, 007-018-04, 007-018-11,  
007-108-04, and 007-018-05

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## Appendices

Appendix A, Cultural Resource Assessment - Confidential

Appendix B, Biological Resources Report

Appendix C, SWRCB Notice of Applicability

Appendix D, Well Completion Report

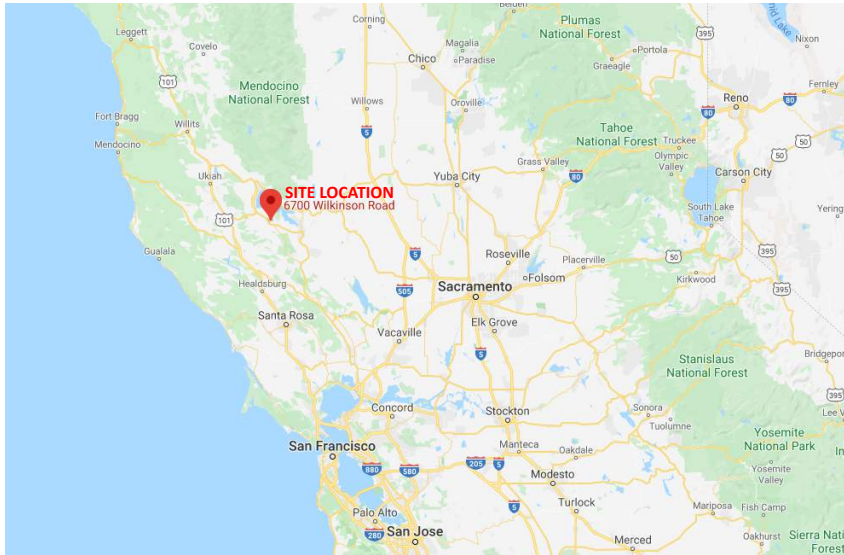
## 1. PURPOSE AND INTENT OF THE PROPERTY MANAGEMENT PLAN

The intent of the Property Management Plan (PMP) is to identify and locate all existing cannabis and non-cannabis related uses on the property and describe how all cannabis and non-cannabis related uses will be managed in the future. The Property Management Plan demonstrates how the operation of the commercial cannabis cultivation site will not harm the public health, safety, and welfare or the natural environment of Lake County.

In the following sections, **bold** and *italicized* text indicates Property Management Plan content requirements cited from the Lake County's Commercial Cannabis Cultivation Application Package, Appendix I guidance.

# PURA VINEYARDS (COVER PAGE) APN(S): 007-029-04, 007-029-05

## VICINITY MAP •NOT TO SCALE•



### PROJECT INFORMATION:

**LAT/LONG:** AREA 1 (38.951961, -122.808249), AREA 2 (38.951147, -122.808514), AREA 3 (38.949996, -122.808522)  
**APN:** 007-029-04, 007-029-05  
**APPLICANT:** Pura Vineyards, LLC  
**PARCEL SIZE:** ±79.225 TOTAL ACRES  
**COMMERCIAL CANNABIS BOUNDARY SIZE:** ±32.82 ACRES  
**APPLICATION TYPE:** TYPE 2 OUTDOOR (x65)  
**ZONING:** RL-RURAL LAND

### AGENT INFORMATION:

Phua Penney  
Vantage Solutions, LLC  
3400 Cottage Way, Suite G2 #673  
Sacramento, CA 95825  
916-461-3021



## AERIAL MAP



PROPERTY LINES AND BUILDING LOCATIONS ARE APPROXIMATE  
AND BASED ON AERIAL MAPS AND GPS DATA TAKEN IN THE FIELD.

### SHEET INDEX:

CP - COVER PAGE  
PD1 - PROPERTY DIAGRAM OVERVIEW  
PD2 - PROPERTY DIAGRAM DETAILS  
PD3 - SECURITY DIAGRAM DETAILS  
PR1 - PREMISE DIAGRAM (ALL AREAS)  
PR2 - PREMISE DIAGRAM (CULTIVATION AREA 1)  
PR3 - PREMISE DIAGRAM (CULTIVATION AREA 2)  
PR4 - PREMISE DIAGRAM (CULTIVATION AREA 3)  
PR5 - BARN DIAGRAMS



### PROJECT INFORMATION

**BUSINESS ENTITY:** PURA VINEYARDS, LLC  
**ADDRESS:** 6700 Wilkinson Rd Kelseyville, CA 95451  
**SHEET INFO:** COVER PAGE

### REVISIONS

NO.	NOTES	DATE

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**CP**







PROJECT INFORMATION

BUSINESS ENTITY: PURA VINEYARDS, LLC  
ADDRESS: 6700 Wilkinson Rd Kelseyville, CA 95451  
SHEET INFO: PROPERTY DIAGRAM OVERVIEW

REVISIONS

NO.	NOTES	DATE

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PD1







CULTIVATION INFORMATION					
OUTDOOR CULTIVATION AREA:					
CA	SQ FT	CA	SQ FT	CA	SQ FT
Area (1) - License #1	9,940	Area (2) - License #22	9,940	Area (3) - License #46	9,960
Area (1) - License #2	9,940	Area (2) - License #23	9,940	Area (3) - License #47	9,960
Area (1) - License #3	9,940	Area (2) - License #24	9,940	Area (3) - License #48	9,960
Area (1) - License #4	9,940	Area (2) - License #25	9,940	Area (3) - License #49	9,960
Area (1) - License #5	9,940	Area (2) - License #26	9,940	Area (3) - License #50	9,960
Area (1) - License #6	9,940	Area (2) - License #27	9,940	Area (3) - License #51	9,960
Area (1) - License #7	9,940	Area (2) - License #28	9,940	Area (3) - License #52	9,960
Area (1) - License #8	9,940	Area (2) - License #29	9,940	Area (3) - License #53	9,960
Area (1) - License #9	9,940	Area (2) - License #30	9,940	Area (3) - License #54	9,960
Area (1) - License #10	9,940	Area (2) - License #31	9,940	Area (3) - License #55	9,960
Area (1) - License #11	9,940	Area (2) - License #32	9,940	Area (3) - License #56	9,960
Area (1) - License #12	9,940	Area (2) - License #33	9,940	Area (3) - License #57	9,960
Area (1) - License #13	9,940	Area (2) - License #34	9,940	Area (3) - License #58	10,000
Area (1) - License #14	9,940	Area (2) - License #35	9,940	Area (3) - License #59	10,000
Area (1) - License #15	9,940	Area (2) - License #36	9,940	Area (3) - License #60	10,000
Area (1) - License #16	9,940	Area (2) - License #37	9,940	Area (3) - License #61	10,000
Area (1) - License #17	9,940	Area (2) - License #38	9,940	Area (3) - License #62	10,000
Area (1) - License #18	9,940	Area (2) - License #39	9,940	Area (3) - License #63	10,000
Area (1) - License #19	9,940	Area (2) - License #40	9,940	Area (3) - License #64	10,000
Area (1) - License #20	9,940	Area (2) - License #41	9,940	Area (3) - License #65	10,000
Area (1) - License #21	9,940	Area (2) - License #42	9,940		
		Area (2) - License #43	9,940		
		Area (2) - License #44	9,940		
		Area (2) - License #45	9,940		
TOTAL OUTDOOR CANOPY AREA = 646,820 SQ FT					

CULTIVATION BUILDINGS AND USE: (Shared Space)			
BUILDINGS	USE	SIZE	GPS
BARN #1	Office	30'x40'	38.952285, -122.810547
BARN #2	Admin Hold & Harvest Storage	40'x60'	38.952226, -122.810324
BARN #3	Admin Hold & Harvest Storage	40'x60'	38.952152, -122.810034
STORAGE SHED #1	Pesticide and Agricultural-Chemical Storage Area	20'x20'	38.952573, -122.810403
STORAGE SHED #2	Pesticide and Agricultural-Chemical Storage Area	20'x20'	38.952456, -122.810457

WATER STORAGE AND USE:				
TYPE	LAT/LONG	QUANTITY	GALLONS	TOTAL GALLONS
HDPE TANK	39.058172, -122.779435	10	5,000	50,000
HDPE TANK	39.056641, -122.778572	10	5,000	50,000
HDPE TANK	39.05401, -122.77734	10	5,000	50,000
TOTAL AMOUNT OF WATER STORAGE = 150,000 GALLONS				

WATER SOURCE(S):		POWER SOURCE: GRID - Electrical Panel	
TYPE	LAT/LONG		
WELL #1 - Irrigation Well	38.947931, -122.808611		
WATER CROSSINGS:		COMPOST AREA: (Shared Space)	
NO WATERCOURSES LOCATED ON PROPERTY		AREA	TOTAL SQFT
Nearest watercourse 475 feet from closest parcel boundary.		#1	10,987
		#2	16,385
		#3	10,352
OFFSITE ACTIVITIES:		IMMATURE PLANT AREA:	
1. Processing		Each license premise contains its own	
2. Packaging		immature plant area. See Map.	



**VANTAGE**  
SOLUTIONS

**PROJECT INFORMATION**

**BUSINESS ENTITY:** PURA VINEYARDS, LLC  
**ADDRESS:** 6700 Wilkison Rd Kelseyville, CA 95451  
**SHEET INFO:** PROPERTY DIAGRAM DETAILS

**REVISIONS**

NO.	NOTES	DATE

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**PD2**



#### SECURITY INFORMATION:

##### FENCING AREA SIZE:

CULTIVATION AREA 1	269,000 SQFT
CULTIVATION AREA 2	312,000 SQFT
CULTIVATION AREA 2	260,000 SQFT
<b>TOTAL FENCING AREA = 841,000 SQFT</b>	

##### FENCING:

- The cultivation area shall be enclosed by a fence.
- Posts shall be set in the ground. The posts may be steel tubing, timber, or concrete and may be driven into the ground or set in concrete.
  - End, corner, or gate posts must be set in concrete footing or otherwise anchored to prevent leaning under the tension of a stretched fence.
  - Posts set between the terminal posts shall be set at intervals not to exceed 10 feet. A top horizontal rail will be used between all posts.
  - The fence shall be attached to the posts and top horizontal rails.
  - No barbed wire, razor wire, or similar design will be used.
  - The cultivation area shall be screened from public view. Methods of screen may include, but not limited to: topographic barriers, vegetation, or solid (opaque) fences.

##### PERIMETER ACCESS POINTS:

The property is fenced and all entrances/exits have a locked gate. The gate shall be equipped with a commercial-grade lock to prevent access by unauthorized personnel.

##### SECURITY ALARM SYSTEMS:

See Section 8.1.3 of Property Management Plan for details.



#### PROJECT INFORMATION

BUSINESS ENTITY: PURA VINEYARDS, LLC  
 ADDRESS: 6700 Wilkinson Rd Kelseyville, CA 95451  
 SHEET INFO: SECURITY DIAGRAM DETAILS

#### REVISIONS

NO.	NOTES	DATE

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 PD3**



PURA VINEYARDS  
(PREMISE DIAGRAM - ALL AREAS)  
APN(S): 007-029-04, 007-029-05

CULTIVATION AREA 1 (License #1-21)  
208,740 SQFT - AGGREGATE CANOPY AREA



CULTIVATION AREA 2 (License #22-45)  
238,560 SQFT - AGGREGATE CANOPY AREA



Each site diagram is scaled to fit the entire area in view.

CULTIVATION AREA 3 (License #46-65)  
199,520 SQFT - AGGREGATE CANOPY AREA



IMMATURE PLANT AREA:		
C/A	SQ FT	
Area (1) - License #1	994	
Area (1) - License #2	994	
Area (1) - License #3	994	
Area (1) - License #4	994	
Area (1) - License #5	994	
Area (1) - License #6	994	
Area (1) - License #7	994	
Area (1) - License #8	994	
Area (1) - License #9	994	
Area (1) - License #10	994	
Area (1) - License #11	994	
Area (1) - License #12	994	
Area (1) - License #13	994	
Area (1) - License #14	994	
Area (1) - License #15	994	
Area (1) - License #16	994	
Area (1) - License #17	994	
Area (1) - License #18	994	
Area (1) - License #19	994	
Area (1) - License #20	994	
Area (1) - License #21	994	
Area (2) - License #22	994	
Area (2) - License #23	994	
Area (2) - License #24	994	
Area (2) - License #25	994	
Area (2) - License #26	994	
Area (2) - License #27	994	
Area (2) - License #28	994	
Area (2) - License #29	994	
Area (2) - License #30	994	
Area (2) - License #31	994	
Area (2) - License #32	994	
Area (2) - License #33	994	
Area (2) - License #34	994	
Area (2) - License #35	994	
Area (2) - License #36	994	
Area (2) - License #37	994	
Area (2) - License #38	994	
Area (2) - License #39	994	
Area (2) - License #40	994	
Area (2) - License #41	994	
Area (2) - License #42	994	
Area (2) - License #43	994	
Area (2) - License #44	994	
Area (2) - License #45	994	
Area (3) - License #46	960	
Area (3) - License #47	960	
Area (3) - License #48	960	
Area (3) - License #49	960	
Area (3) - License #50	960	
Area (3) - License #51	960	
Area (3) - License #52	960	
Area (3) - License #53	960	
Area (3) - License #54	960	
Area (3) - License #55	960	
Area (3) - License #56	960	
Area (3) - License #57	960	
Area (3) - License #58	1,000	
Area (3) - License #59	1,000	
Area (3) - License #60	1,000	
Area (3) - License #61	1,000	
Area (3) - License #62	1,000	
Area (3) - License #63	1,000	
Area (3) - License #64	1,000	
Area (3) - License #65	1,000	



PROJECT INFORMATION

BUSINESS ENTITY: PURA VINEYARDS, LLC  
ADDRESS: 6700 Wilkison Rd Kelseyville, CA 95451  
SHEET INFO: PREMISE DIAGRAM - ALL AREAS

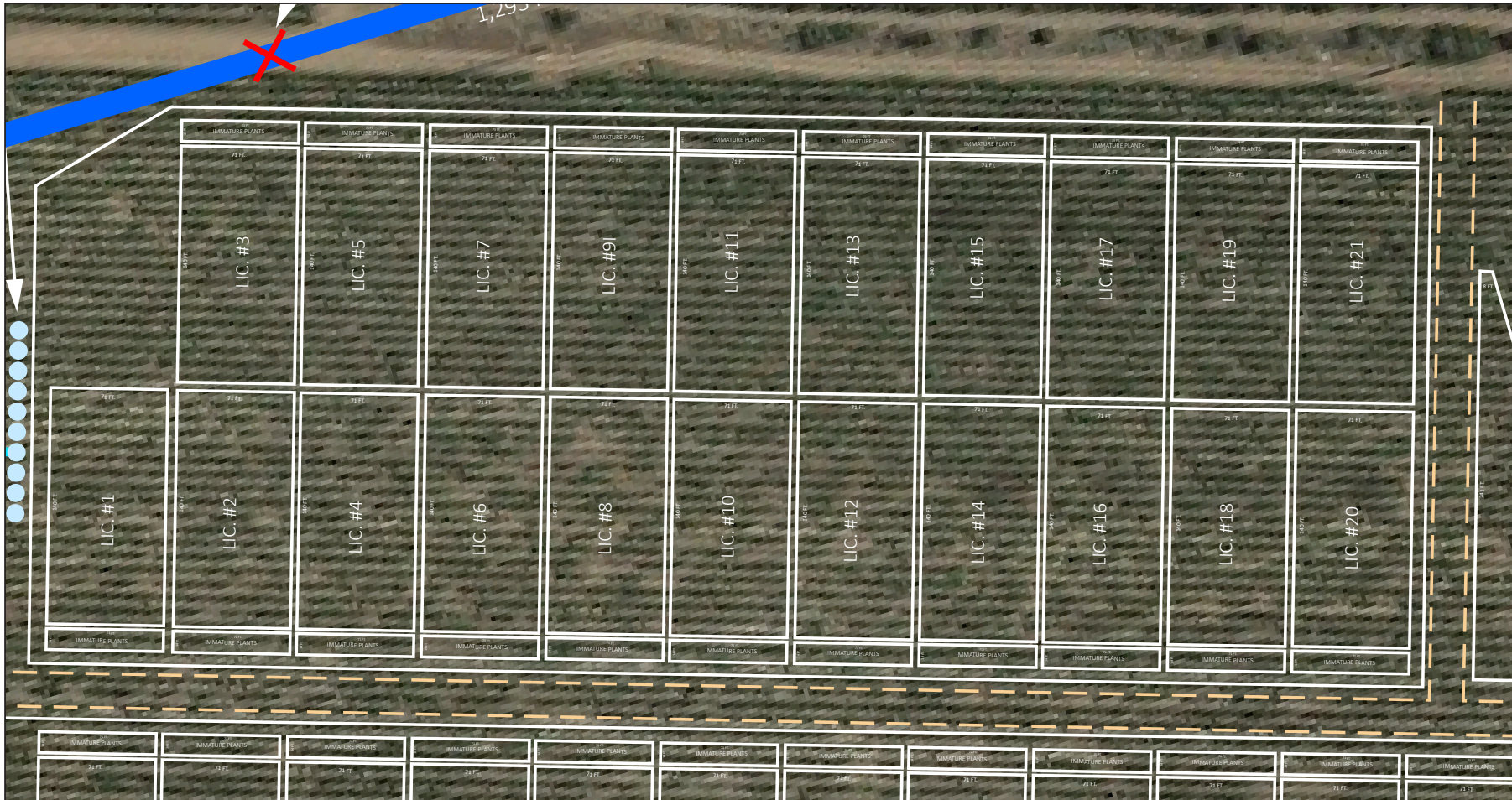
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PR1



**PURA VINEYARDS**  
**(PREMISE DIAGRAM - AREA 1)**  
 APN(S): 007-029-04, 007-029-05



**CULTIVATION AREA 1 (License #1-21)**  
 208,740 SQFT - AGGREGATE CANOPY AREA

*Each site diagram is scaled to fit the entire area in view.*

Off Site Activities Include:  
 -Processing  
 -Packaging

See PR5 - Premise - BARN DIAGRAMS:  
 -Drying, Storage, Admin Hold  
 See PD2 - PROPERTY DIAGRAM DETAILS for Composting Areas



**PROJECT INFORMATION**

BUSINESS ENTITY: PURA VINEYARDS, LLC  
 ADDRESS: 6700 Wilkinson Rd Kelseyville, CA 95451  
 SHEET INFO: PREMISE DIAGRAM (CULTIVATION AREA 1)

**REVISIONS**

NO.	NOTES	DATE

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**PR2**



Not to scale

**Pura Vineyards**



APN(S): 007-029-04, 007-029-05

APN(S): 007-029-04, 007-029-05



CULTIVATION AREA 2 (License#22-45)

238,560 SQFT - AGGREGATE CANOPY AREA

*Each site diagram is scaled to fit the entire area in view.*

Off Site Activities Include:

- Processing
- Packaging

See PR5 - Premise - BARN DIAGRAMS:

- Drying, Storage, Admin Hold

See PD2 - PROPERTY DIAGRAM DETAILS for Composting Areas



PROJECT INFORMATION

PURA VINEYARDS, LLC

PURA VINEYARDS, LLC  
6700 Wilkinson Rd Kelseyville, CA 95451

PREMISE DIAGRAM (CULTIVATION AREA 2)

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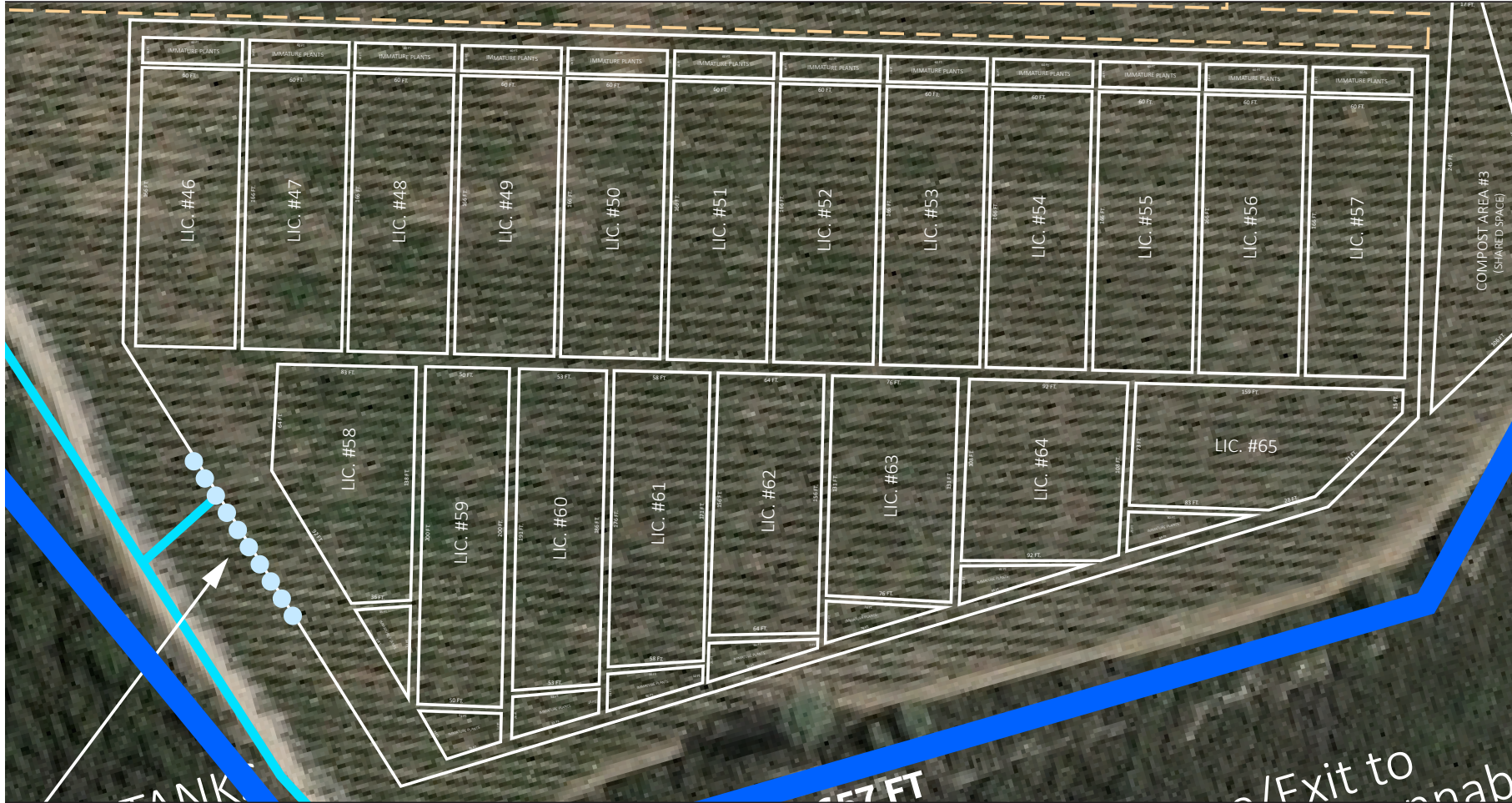


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## Pura Vineyards



**PURA VINEYARDS**  
**(PREMISE DIAGRAM - AREA 3)**  
 APN(S): 007-029-04, 007-029-05



**CULTIVATION AREA 3 (License #46-65)**  
 199,520 SQFT - AGGREGATE CANOPY AREA

*Each site diagram is scaled to fit the entire area in view.*

Off Site Activities Include:  
 -Processing  
 -Packaging

See PR5 - Premise - BARN DIAGRAMS:  
 -Drying, Storage, Admin Hold  
 See PD2 - PROPERTY DIAGRAM DETAILS for Composting Areas



**PROJECT INFORMATION**

**BUSINESS ENTITY:** PURA VINEYARDS, LLC  
**ADDRESS:** 6700 Wilkison Rd Kelseyville, CA 95451  
**SHEET INFO:** PREMISE DIAGRAM (CULTIVATION AREA 3)

**REVISIONS**

NO.	NOTES	DATE

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**PR4**

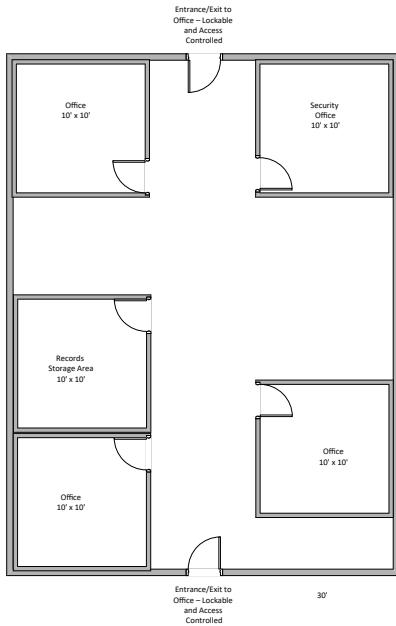


## PURA VINEYARDS (BARN DIAGRAMS)

APN(S): 007-029-04, 007-029-05

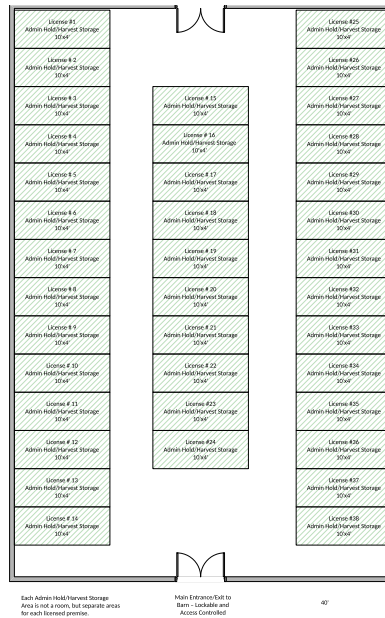
BARN #1 (OFFICE)

PERIMETER 30' x 40' = 1,200 SQFT



BARN #2  
(ADMIN HOLD/STORAGE)

PERIMETER 40' x 60' = 2,400 SQFT

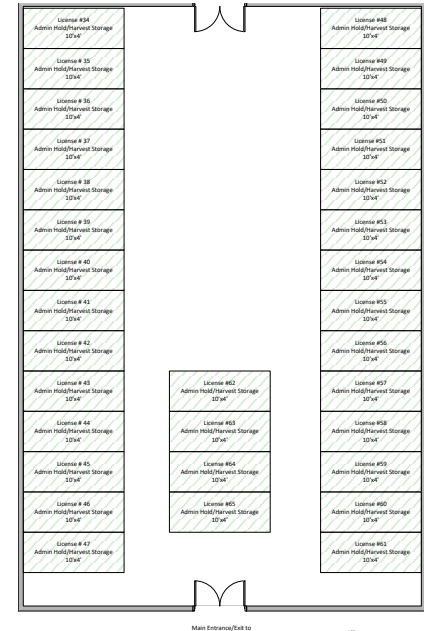


Each Admin Hold/Harvest Storage Area is not a room, but separate area for each licensed premise.

Main Entrance/Exit  
Barn - Lockable and  
Access Controller

BARN #3  
(ADMIN HOLD/STORAGE)

PERIMETER 40' x 60' = 2,400 SQFT



Each Admin Hold/Harvest Storage Area is not a room, but separate areas for each licensed premise.

Main Entrance/Exit 5  
Barn – Lockable and  
Access Controlled

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PR5



Not to scale

## Pura Vineyards

PROJECT INFORMATION

PURA VINEYARDS, LLC

6700 Wilkinson Rd Kelseyville, CA 95451

## PREMISE DIAGRAM - BARNS DIAGRAMS

**BUSINESS ENTITY:** \_\_\_\_\_  
**ADDRESS:** \_\_\_\_\_

ADDRESS: \_\_\_\_\_

SHEET INFO: \_\_\_\_\_

SHEET INFO: \_\_\_\_\_ PRE



License # on Map	Corresponding Application Number	License # on Map	Corresponding Application Number
License #1	LCA20-0001461	License #33	LCA20-0001493
License #2	LCA20-0001462	License #34	LCA20-0001494
License #3	LCA20-0001463	License #35	LCA20-0001495
License #4	LCA20-0001464	License #36	LCA20-0001496
License #5	LCA20-0001465	License #37	LCA20-0001497
License #6	LCA20-0001466	License #38	LCA20-0001498
License #7	LCA20-0001467	License #39	LCA20-0001499
License #8	LCA20-0001468	License #40	LCA20-0001500
License #9	LCA20-0001469	License #41	LCA20-0001501
License #10	LCA20-0001470	License #42	LCA20-0001502
License #11	LCA20-0001471	License #43	LCA20-0001503
License #12	LCA20-0001472	License #44	LCA20-0001504
License #13	LCA20-0001473	License #45	LCA20-0001505
License #14	LCA20-0001474	License #46	LCA20-0001506
License #15	LCA20-0001475	License #47	LCA20-0001507
License #16	LCA20-0001476	License #48	LCA20-0001508
License #17	LCA20-0001477	License #49	LCA20-0001509
License #18	LCA20-0001478	License #50	LCA20-0001510
License #19	LCA20-0001479	License #51	LCA20-0001511
License #20	LCA20-0001480	License #52	LCA20-0001512
License #21	LCA20-0001481	License #53	LCA20-0001513
License #22	LCA20-0001482	License #54	LCA20-0001514
License #23	LCA20-0001483	License #55	LCA20-0001515
License #24	LCA20-0001484	License #56	LCA20-0001516
License #25	LCA20-0001485	License #57	LCA20-0001517
License #26	LCA20-0001486	License #58	LCA20-0001518
License #27	LCA20-0001487	License #59	LCA20-0001519
License #28	LCA20-0001488	License #60	LCA20-0001520
License #29	LCA20-0001489	License #61	LCA20-0001521
License #30	LCA20-0001490	License #62	LCA20-0001522
License #31	LCA20-0001491	License #63	LCA20-0001523
License #32	LCA20-0001492	License #64	LCA20-0001524
		License #65	LCA20-0001525



### 3. PROJECT DESCRIPTION

The Pura Vineyards project is located approximately 2.5 miles southeast of the community of Kelseyville, CA, at 6700 Wilkinson Road in unincorporated Lake County. The proposed project includes a total of five (5) individual, contiguous assessors parcels (APN), with a total area of 314.48 acres (project property): This includes APNs 007-018-02 (60.7 acres), 007-018-04 (59.09 acres), 007-018-11 (115.46 acres), 007-029-04 (19.84 acres), 007-029-05 (59.39 acres). Within the project property, cultivation is proposed on only two of the parcels 007-029-04 and 007-029-05 that total 79.23 acres. Within these parcels, the fenced cultivation area including area for support facilities, prefabricated structures (shed, barns, etc.) would occupy a total of 32.82 acres (project site). Within this area, cultivation is proposed in three outdoor cultivation areas (CAs) comprising approximately 646,820 sf or 14.84 acres of cultivation. This application does not propose cultivation or cultivation related activities on any of the remaining parcels. The remaining parcels provide land to meet the County requirement of 20 acres of uncultivated land for every 1 acre of proposed cultivation. See [Figure 3-1: Regional Location Map](#) and [Figure 3-2: Project Vicinity Map](#).

Lake County Zoning Ordinance, Article 27, subsection (a) in part regulates cannabis cultivation in Lake County. The total acres within the subject property is sufficient to support the new A-Type 3 medium outdoor cultivation licenses. The applicant is not within an “exclusion overlay district” (Lake County, 2020) that would preclude the cultivation of cannabis. The applicant registered on April 21, 2021 with the State Water Resources Control Board (SWRCB) under the Cannabis General Order Application Number 427010 and was classified as a ‘Tier 2’ low risk activity. The applicant was issued waste discharge identification (WDID) 5S17CC427010. Accordingly, the applicant will be required to and would comply with the Central Valley Regional Water Quality Control Board (CVRWQCB) orders, regulations, and procedures as appropriate.

The project would include 65 new outdoor cultivation licenses. According to Lake County Ordinance 3084 Amended Chapter 21, Article 27, of the Lake County Code the total area within the project property (314.48 acres) is sufficient to support the new 65 outdoor cultivation licenses.

APN 007-018-11 is located in northeasterly portion of the project property and contains portions of an existing vineyard as well as areas with chaparral (chamise/scrub oak) habitat. The topography in this area ranges from being generally flat in the area occupied by the vineyard, to undeveloped areas with natural habitat with greater than 30 percent slopes. The areas containing the vineyard were previously converted to be used for this agricultural product, do not contain any native vegetation or habitat and general lack a complex vegetative community structure.

APN 007-018-04 is located within the central portion of the project property. This parcel is generally characterized by flat to moderately sloping terrain but has areas with steeper slopes greater than 30 percent. The dominant vegetation within this area contains vineyards. The balance of this area generally consists of chaparral habitat. The vineyards are in areas with minimal topographic relief or variation.

APN 007 018-002 is located within the westerly portion of the project property. The easterly half of this parcel is dominated by chaparral habitat and the westerly portions contain an orchard, gray pine forest, and mixed oak woodland forest. The orchard is similar to the vineyard areas as it provides limited resources and diverse structure for wildlife and is utilized primarily by species tolerant of human activities. The gray pine vegetation habitat is characterized by an open-to-dense canopy of gray pine with a diverse understory of shrubs. The oak woodland forest is located within the westernmost portion of APN 007-

018-002, and contains interior live oak, which is the primary species in the canopy, but also has occasional gray pine and exceptionally large common mazanita.

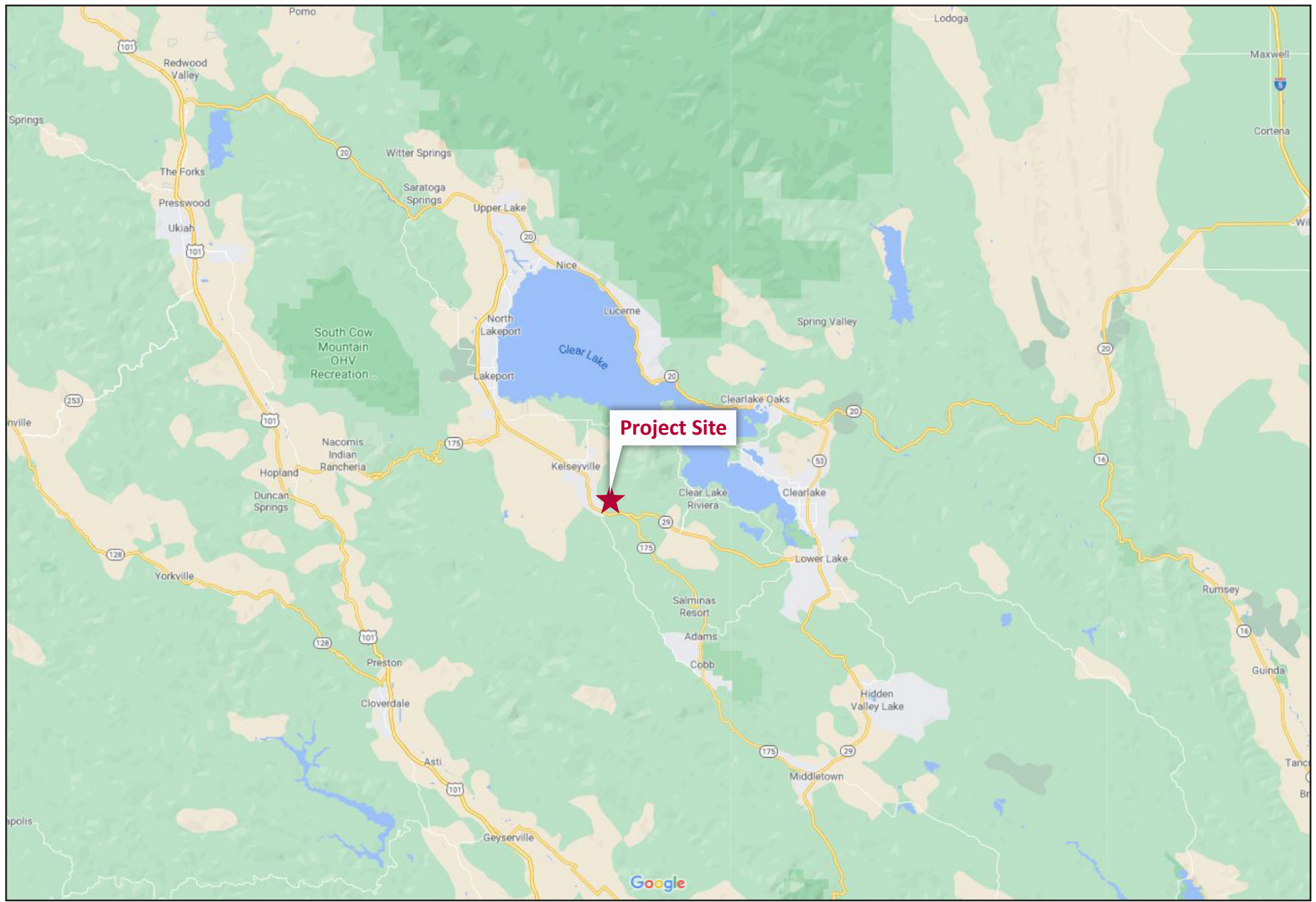
APN 007-029-04 and 007-02905 are located in the central portion of the overall project property and contain the project site. The dominant use on these parcels is an existing vineyard with minor areas consisting of chaparral habitat. Cultivation would require removal of the existing grape vines and other vegetative materials within the proposed area of disturbance. The proposed project would result in the removal of approximately 15.25 acres of the existing 120-acre vineyard. The proposed cultivation areas would be located on gently sloping and flat terrain and would not be located on land containing any ephemeral streams, waters, sensitive habitats, or wetlands.

As discussed above, cultivation is proposed to occur in three outdoor cultivation areas described below:

Cultivation Area 1 – CA 1 would be located in the northerly portion of APN 007-029-04 and is adjacent to the northern boundary of CA 2. CA 1 would total approximately 4.79 acres or 208,740 sf of cultivation canopy. CA 1 is proposed to contain 21 individual garden areas that would be applied to the proposed 21 cannabis licenses (license #1 through #21). Each garden in CA 1 would be 9,940 sf (71' x 140'). Total canopy area in CA 1 would be 208,740 sf. CA 1 also would contain a 994 sf (71' x 14') area used for new plantings of immature plants that would later be transplanted to the gardens where they would grow to maturity and be harvested. CA 1 would occur entirely within the existing agricultural vineyard and all areas under cultivation would be fenced.

Cultivation Area 2 – CA 2 would be located within the southerly portion of APN 007-029-04, within the northerly portion of APN 007-029-005, and adjacent to the southern boundary of CA 1. CA 2 is proposed to contain 24 individual garden areas that would be applied to the proposed 24 cannabis licenses (license #22 through #45). Each garden in CA 2 would be 9,940 sf (71' x 140'). Total canopy area in CA 2 would be 238,560 sf. CA 2 also would contain a 994 sf (71' x 14') area used for new plantings of immature plants that would later be transplanted to the gardens where they would grow to maturity and be harvested. CA 2 would occur entirely within the existing agricultural vineyard and all cultivation would be fenced.

Cultivation Area 3 – CA 3 would be located within the northerly portion of APN 007-029-005 and adjacent to the southern boundary of CA 2. CA 3 is proposed to contain 20 individual garden areas that would be applied to the proposed 20 licenses (license #46 through #65). Garden areas for licenses #46 through #57 within the northern portion of CA 3 would be 9,960 sf (60' x 160'). The garden areas for licenses #58 through #65 within the southern half of CA 3 would be irregularly shaped to avoid disturbance to the adjacent undeveloped and undisturbed areas containing chaparral habitat. Garden areas #58 through #65 would be 10,000 sf, and would be generally rectangular or square with some angled sides. Total canopy area in CA 3 would be 260,000 sf. Adjacent to northern portions gardens #46 through #65 would be smaller areas 960 sf (16' x 60'), and adjacent to the southern portions of gardens #58 through #65 would be irregularly shaped smaller garden areas used for immature plants. These areas would be between approximately 1,000 to 1,100 sf. Immature plants would be tended for later transplanting to the garden areas where they would grow to maturity and be harvested. CA 3 would occur entirely within the existing agricultural vineyard and all cultivation would be fenced.



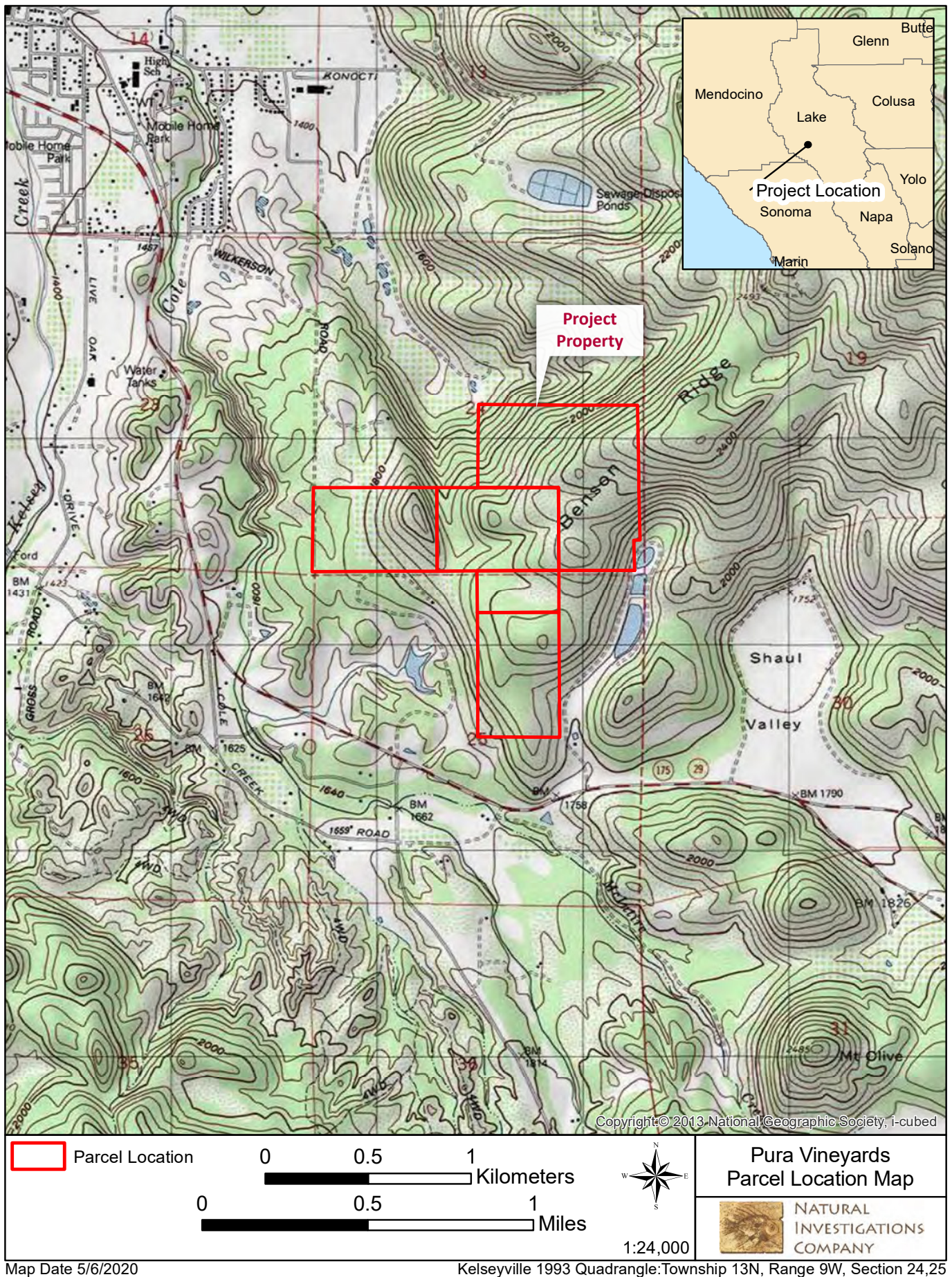
Source: Google Maps 2020

**FIGURE 3-1:** Regional Location Map

April 2021

**PURA VINEYARDS**  
Property Management Plan





**FIGURE 3-2: Project Location and Topographic Map**

April 2021

**PURA VINEYARDS**  
Property Management Plan



Immature Plant Gardens – As discussed above, the project includes smaller planting area used for immature plants. These areas would not be used for flowering plants but to begin the growth process of immature plants that would be transplanted to the gardens where they can grow to maturity prior to harvesting. These areas would be used to initially cultivate seedlings and/or clone plants that would be transplanted to the cultivation areas prior to flowering.

Composting – Composting would occur in three areas at the westerly side of each of the listed CAs. The three composting areas within CA1, CA2, and CA3, would be 10,987 sf, 16,385 sf, and 10,352 sf, respectively. Depending on the productivity of the composting processes, compost may be used in any of the CAs.

Prefabricated Structures – Prefabricated structures needed for ancillary operations (administration, storage, drying, etc.) and to support the cultivation operations would be located within the northwesterly portion of APN 007-029-004. This would include a three barns (one barn would be 30'x40', and two barns would be 40'x60'). The interior of these structures would be used for office space, administration, and admin storage for the individual garden areas. The proposed project also includes two storage sheds (each 20'x20'), freezer containers for product storage. Minor construction activities including clearing and grading would be needed for installation of support facilities and structures.

Site Access – State Highway 29 (SH-29) is the primary roadway within the vicinity of the proposed project and provides access to the project site from APN 007-030-20 that fronts on the roadway. This parcel is not a part of the overall project property or project site, but would be used to access the cultivation areas via an unpaved existing private road. The driveway approach on SH-29 at postmile 31.74 (Rt) would be improved with a 20-foot-wide access gate to meet Caltrans standards for a commercial driveway. This improvement was made per Caltrans request and will be maintained by the applicant. Accordingly, the project has access to a public road and has a legally recorded easement for this parcel that allows access for all project activities including but not limited to, delivery trucks, emergency vehicles, sheriff and other law enforcement officers, and government employees who are responsible for inspection or enforcement actions.

All interior roadways will be improved and maintained if/as needed in compliance all Federal, State and local agency requirements and maintained so as to prevent road surface and fill material from discharging to any surface water body. No surface waterbodies are located in proximity to any project area, but this also would prevent any overland flows or from ditches.

Lighting – The project will include outdoor lighting within the project site. All outdoor lighting will be focused on the project site and not onto adjacent properties. All lighting equipment will comply with the recommendations of darksky.org and provisions of Section 21.48 of the County Zoning Ordinance. Artificial light shall be completely shielded between sunset and sunrise.

## 4. AIR QUALITY

**Intent:** All cannabis permittees shall not degrade the County's air quality as determined by the Lake County Air Quality Management District (LCAQMD).

*a) In this section, permittees shall identify any equipment or activity that which may cause, or potentially cause the issuance of air contaminants including odors, and shall identify measures to be taken to reduce, control or eliminate the issuance of air contaminants, including odors.*

The Lake County Air Quality Management District (LCAQMD) is a full attainment district for all criteria pollutants and has not adopted specific emissions thresholds for project analysis. The LCAQMD does not have any attainment plans because it is in attainment of all criteria pollutants. As shown in the discussion below, the project would comply with LCAQMD rules and regulations and construction and operation of the proposed project would not exceed established emission thresholds. Therefore, implementation of the proposed project would not obstruct implementation of an air quality plan and impacts would be less significant.

*Gasoline and diesel-powered equipment:* The proposed cultivation operation would include the operation of gasoline- or diesel-fueled equipment (e.g., irrigation pumps, loaders, ventilation fans, and potentially gasoline-fueled landscaping equipment) and truck or vehicle trips to and/or from the site by vendors and workers, which would result in direct emissions of criteria air pollutant from fuel combustion. All equipment will be properly maintained to ensure efficient operations. Generators would serve as a backup energy source in the event of a power outage or emergency. It should be noted that the generation of carbon dioxide would be offset by the outdoor cultivation of plants, which naturally remove carbon dioxide in the air. Proposed processing operations would not require use of additional gasoline or diesel-powered equipment that may result in criteria pollutant emissions.

*Fugitive dust:* The proposed cultivation operation may generate small amounts of fugitive dust through ground-disturbing activities during initial cultivation and harvest such as ground tilling, uncovered soil or compost piles, and vehicle or truck trips on unpaved roads. Fugitive dust will be controlled by wetting soils with a mobile water tank and hose, by delaying ground disturbing activities until site conditions are not windy. Additionally, access roads, and parking areas of the subject cultivation operations areas will be graveled and maintained to minimize dust. Lastly, the driveway from SH-29 is currently paved to standards and the widening area also would be paved.

*Odors:* No significant odor impacts are anticipated from the proposed cultivation and processing operations, due to the adequate operational setbacks from public roads, property lines, and distance to neighboring residences/outdoor activity areas. Further, there is a limited residential population within the area that could be impacted by project-related odors. The nearest residence is approximately 1,080 feet to the south. If an odor control plan is required, it would contain measures that would ensure the proposed project would not propagate objectionable odors which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or the public, or that endanger the comfort, repose, health, or safety of any of those person or the public.

b) *All cannabis permittees shall obtain an Authority to Construct permit pursuant to LCAQMD Rules and Regulations, prior to the construction of the facility described in the Property Management Plan.*

See below.

c) *All cannabis permittees shall obtain Authority to Construct Permit pursuant to LCAQMD Rules and Regulations, if applicable, to operate any article, machine, equipment or other contrivance which causes or may cause the issuance of an air contaminant.*

See below.

d) *All permittees shall maintain an Authority to Construct or Permit to Operate for the life of the project, until the operation is closed, and equipment is removed.*

Any person or organization proposing to construct, modify, or operate a facility or equipment that may emit pollutants from a stationary source into the atmosphere must first obtain an Authority to Construct from the Lake County Air Quality Management District (LCAQMD). The proposed project would not require demolition of existing structures and the project would require minor earthwork to enable placement of prefabricated structures including sheds, barns, water tanks, and metal shipping/storage containers for materials storage, administration, and drying of cannabis product. Placement of prefabricated structures would require minor site disturbance and would not require use of large-scale construction equipment with the potential to result in substantial emissions. Further, the project operations would require limited use of gasoline and diesel-powered equipment in case of emergencies. Therefore, the project would not contribute significantly to regional emissions or cause an issuance of air containment. Notwithstanding, the proposed project would be required to obtain an Authority to Construct Permit in accordance with applicable LCAQMD requirements.

e) *The applicant shall prepare an odor response program that includes (but is not limited to)*

*a. Designating an individual(s) who is/are responsible for responding to odor complaints 24 hours per day/seven (7) days a week, including holidays.*

John Manolian and Francis Herbert will serve as Community Liaisons/Emergency Contacts and primary point of contact for responding to odor complaints 24-hours a day, seven days:

- John Manolian – (707) 362-1326; [jmanolian@puracali.com](mailto:jmanolian@puracali.com)
- Francis Herbert – (707) 391-7256; [francis@puracali.com](mailto:francis@puracali.com)

*b. Providing property owners and residents of property within a 1,000-foot radius of the cannabis facility, with the contact information of the individual responsible for responding to odor complaints.*

The Community Liaisons will provide property owners and residents within a 1000-foot radius of the proposed cannabis facility with their contact information by Certified Mail after Lake County issues the building permits. The Community Liaison/Emergency Contacts will encourage neighbors to contact them to resolve any operating problems before contacting County Officials/Staff.

*c. Policies and procedures describing the actions to be taken when an odor complaint is received, including the training provided to the responsible party on how to respond to an odor complaint.*



It should be noted that the odor from the cultivation of cannabis is greatest during the flowering period of the plant. In an outdoor full season growing situation, the odor emanating from the growing operations will occur primarily during September and October and will cease once the plants are harvested. Odor complaints will be followed up immediately with an assessment of the odor-producing situation; depending on the time of year, different solutions may be employed to remedy the situation.

The Community Liaison/Emergency Contact will follow a standard operating procedure that includes:

1. Receipt of the complaint and logging the complaint.
2. Follow up with the concerned party to ensure that steps are being taken to mitigate the issue.
3. Perform a root cause analysis to identify the issue.
4. Provide immediate corrections (e.g. purchasing air neutralizers) per the suggestion of LCAQMD.
5. Consult with LCAQMD specialists as necessary.
6. Follow up with concerned party to determine if odor nuisance is corrected.
7. Provide corrective actions to prevent the issue from reoccurring.
8. Monitor corrections and corrective actions to ensure the issue has been resolved.

*d. The description of potential mitigation methods to be implemented for reducing odors, including add-on air pollution control equipment.*

The project would include outdoor cannabis cultivation, and mitigating odor impacts through add-on pollution-control equipment would not be feasible in this regard. However, the project will include adequate setbacks from neighboring properties and structures to limit off-site odor. The proposed drying sheds would have the potential to result in off-site odors, however, these structures would similarly have adequate setbacks from neighboring properties and structures. Additionally, these structures, as needed, would include activated carbon filters to minimize potential odors. All packaging and processing activities are proposed to occur at an off-site licensed facility and no potential odor impacts would result in this regard.

*e. Contingency measures to mitigate/curtail odor and other emissions in the event the methods described above are inadequate to fully prevent offsite nuisance conditions.*

In the event the methods above are inadequate to fully prevent offsite nuisance conditions, the Applicant will conduct supplemental investigation of the odor source, collaborate with relevant parties, and organize a specific response plan.

## 5. CULTURAL RESOURCES

**Intent: All permittees shall protect the cultural, historical, archaeological, and paleontological resources on the lot of record where the permitted activity is located.**

A Cultural Resource Evaluation was conducted for the project site in May 2020. The purpose of the investigation was to locate, describe, and evaluate any archaeological or historical resources that may be present in the project site. In addition, the author was to assess the impact that might occur as a result of ground disturbance activities associated with cannabis cultivation and processing. Findings of this report are provided below, and a full report is provided in Appendix A of this Property Management Plan.

*a) This section shall describe the procedures to be followed if cultural, historical, archaeological, and paleontological resources are found on the property.*

Potential construction activities associated with site development would be performed in accordance with all applicable local, State, and federal regulatory systems, including but not limited to those related to cultural resources. Local agencies would be responsible for ensuring that site development complies with applicable regulations, including the State CEQA Guidelines, through review and issuance of local permit, license, or other authorization for cannabis cultivation site development activities.

Cultivation is proposed on lands previously plowed or tilled for other agricultural activities. The proposed project would require minor ground disturbance and soil movement to level and prepare the ground surface for the parking area, placement of prefabricated sheds, barns, and freezer containers, and for installation of the water tanks. Because the site is relatively flat and level in these areas minimal ground disturbance would be required. Therefore, while it is considered unlikely, site preparation could encounter buried historic or archaeological resources or human remains. An employee training program to educate employees in recognition of potentially significant artifacts would be implemented. In the case that potentially valuable cultural resources are discovered, the following procedures would apply:

1. Suspend cultivation immediately within a radius of 50-feet
2. Evaluate all identified cultural resources for CRHR eligibility. Resource evaluations shall be conducted by individuals who meet the U.S. Secretary of the Interior's professional standards in archaeology, history, or architectural history, as appropriate.
3. If any of the resources meet the eligibility criteria identified in PRC Section 5024.1 or State CEQA Guidelines Section 21083.2(g), mitigation measures will be developed and implemented in accordance with State CEQA Guidelines Section 15126.4(b) before cultivation resumes.

As part of the Cultural Resource Assessment for the proposed project, a records search of the California Historical Resource Information System (CHRIS) was conducted. The results indicated that the project site had not been inspected for cultural resources in the past; however, 3 prehistoric sites have been recorded within a 1-mile radius. No work is proposed within the boundary of the prehistoric sites. If ground disturbance becomes necessary within this area, a data recovery plan would be developed and carried out as required.

### Accidental Discovery

In keeping with the State CEQA Guidelines, if archaeological remains are uncovered, work at the place of discovery should be halted immediately until a qualified archaeologist can evaluate the finds (§15064.5

[f]). Prehistoric archaeological site indicators include obsidian and chert flakes and chipped stone tools; grinding and mashing implements (e.g., slabs and hand stones, and mortars and pestles); bedrock outcrops and boulders with mortar cups; and locally darkened midden soils. Midden soils may contain a combination of any of the previously listed items with the possible addition of bone and shell remains, and fire-affected stones. Historic period site indicators generally include fragments of glass, ceramic, and metal objects; milled and split lumber; and structure and feature remain such as building foundations and discrete trash deposits (e.g., wells, privy pits, dumps).

The following actions are promulgated in the CEQA Guidelines Section 15064.5(d) and pertain to the discovery of human remains:

*If human remains are encountered, excavation or disturbance of the location must be halted in the vicinity of the find, and the county coroner contacted. If the coroner determines the remains are Native American, the coroner will contact the Native American Heritage Commission (NAHC). The NAHC will identify the person or persons believed to be most likely descended from the deceased Native American. The most likely descendent makes recommendations regarding the treatment of the remains with appropriate dignity.*

*b) The Department will consult with appropriate Tribe(s) regarding the potential of such resources being located on the lot of record. Based on that consultation, the Department may require a cultural resource study of the property to determine the extent such resources exist on the lot of record. The applicant will be responsible for paying the cost of such a study.*

See below.

*c) Based on that study and in consultation with the appropriate Tribe(s), the Department may require its findings and recommendations to be included in this section.*

The Cultural Resources Report for the project property is located in Attachment B. As part of the Cultural Resource Evaluation, a request was sent to the California NAHC on April 30, 2020 for a review of the Sacred Lands File. It was discovered that there were no tribal cultural sites recorded for the area (see Attachment B). An email was also sent to Mr. Ron Montez, Tribal Historic Preservation Officer of the Big Valley Habenapo Tribe for his input on the project area.

As part of the Initial Study being prepared for the project, tribal consultation was conducted Pursuant to Assembly Bill (AB) 52. The following Native American tribes were contacted in July 2020:

- Big Valley Rancheria
- Cortina Rancheria
- Elem Colony
- Hopland Band of Pomo
- Koi Nation
- Mishewal-Wappo
- Middletown Rancheria
- Redwood Valley
- Robinson Rancheria
- Scotts Valley Band of Pomo
- Upper Lake Habematolel
- Yocha Dehe

If as a result of tribal consultation completed to satisfy AB 52, the presence of a tribal monitor is requested by interested tribes, the Applicant agrees to add tribal monitoring into mitigation measures into the CEQA document.

## 6. ENERGY USAGE

**Intent: Permittees shall minimize energy usage.**

### Energy Sources

Outdoor cannabis cultivation practices involve a lower energy demand than indoor cultivation within structures that use artificial light. The proposed project would require the use of prefabricated structures for storage, administrative uses, etc., but indoor cultivation would not occur. Thus, the proposed project would not result in a substantial increase in energy demand. The project would include the use of prefabricated structures for ancillary operations (administration, storage, drying, etc.) to support the cultivation operations. This would include a three barns, two storage sheds, and fourteen freezer containers for product storage. Additionally, thirty - 5,000-gallon high density polyethylene (HDPE) tanks would be placed within the cultivation areas (10 in each area) to store water that would be pumped from an existing groundwater well.

The proposed project would use an existing on-grid power source provided by Pacific Gas & Electric (PG&E) for lights and electrical equipment to include the security system, security lighting, and well pumps. Additionally, energy resources would be required for the refrigerated storage needed to preserve the cannabis. As a part of the proposed project, all plans will be verified to comply with PG&E requirements should any work occur in close proximity to a PG&E transmission line. This will include, but is not limited to, setbacks, limits to grading, access, inspections, loading of roadways, excavation, boring, and fencing. All elements would be considered prior to any work that could affect PG&E lines or facilities. Gasoline and/or diesel fuel will be used to power backup generators for emergency use.

*a) Provide energy calculations as required by the California Building Code.*

Pura Vineyards - Energy Demand				
Appliance	Quantity	Watts per Unit	Time Running (hours/day)	Annual Demand (watts)
Water Pump	1	3000	24	864,000
Fan		40	12	-
Freezers		1000		-
Dehumidifier		1900	12	-
Security Camera	13	6	24	44,928
Computer	1	120	8	23,040
Security System	1	450	24	259,200
Security Lights		60	1	-
Printer	1	45	0.5	180
<b>Total Energy Demand</b>				<b>1,191,348</b>

*b) Identify energy conservation measures to be taken and maintained including providing proof of compliance with CCR Title 3, Division 8, Chapter 8305 the Renewable Energy Requirements.*

### Energy Conservation Measures

The project will implement the following Energy Conservation Best Practices:

- Turn off lights and unnecessary electronics when possible;
- All lighting will be motion activated;
- All lighting will use energy efficient LED light bulb;
- Use energy efficiency features in all technology including computers, data storage, or other devices which consume energy; and
- Replace and recycle old electronics;

The proposed outdoor cannabis cultivation operation is not subject to requirements of CCR Title 3, Division 8, Chapter 8305, which only applies to Indoor and Tier 2 Mixed-Light cultivation operations.

*c) If alternative energy sources are to be used, describe those sources and the amount of electricity that will be provided.*

No alternative energy sources are used or are proposed to be used on this project site at this time.

*d) For indoor cannabis cultivation licensees, ensure that electrical power used for commercial cannabis activity shall be provided by any combination of the following:*

- 1) On-grid power with 42 percent renewable source.*
- 2) Onsite zero net energy renewable source providing 42 percent of power.*
- 3) Purchase of carbon offsets for any portion of power above 58 percent not from renewable sources.*
- 4) Demonstration that the equipment to be used would be 42 percent more energy efficient than standard equipment, using 2014 as the baseline year for such standard equipment.*

The proposed cannabis cultivation operation includes outdoor operations. No indoor cultivation facilities are proposed on the project property.

*e) Describe what parameters will be monitored and the methodology of the monitoring program.*

To monitor the proposed cultivation operation's energy consumption, and to provide Lake County officials with accurate energy use records, the Applicant will:

- Log and maintain monthly fuel consumption records;
- Maintain accurate record keeping regarding performance of the proposed cultivation operation; and
- Make records and relevant data available to Lake County officials.

## 7. FERTILIZER USAGE

**Intent:** To ensure consistency of fertilizer storage and use with other sections of the Property Management Plan. This section shall describe how cultivation and nursery permittees will comply with the following fertilizer application and storage protocols:

*a) Complying with all fertilizer label directions;*

Fertilizers shall be applied at agronomic rates specified on the product label. The permittee will keep a log of the fertilizer use for annual reporting. All labels will be kept, and directions followed when amendments and fertilizers are applied.

*b) Storing fertilizers in a secure building or shed;*

All fertilizers used on site will be stored in the proposed structure for Pesticide and Agricultural-Chemical Storage. The storage structures would have a minimum of 100 feet of defensible spaces and fuel reduction around structures, as required by CCR 1271 and PRC 4291.3. Any liquid fertilizers will be stored in separate secondary containment that is of sufficient volume and material to adequately contain any spills or leaks. All fertilizers shall be stored in their original container, and with their original labels. Fertilizers shall not be placed in a new container to conserve space, or for any other reason. In the event that a label becomes illegible, the product shall be disposed of according to the hazardous waste policies of the local waste management service, and shall be replaced with a new product to prevent the misuse of any chemical.

During the off season all fertilizers will be stored in a covered building. The structure will be located greater than 100 feet from any watercourse; refer to [Section 2.0](#).

*c) Containing any fertilizer spills and immediately clean up any spills;*

All fertilizers/nutrients will be stored in their manufacturer's original containers/packaging in an on-site storage shed to prevent possible exposure to the environment. A spill cleanup kit containing absorbent materials such as vermiculite designed for spill containment and spill cleanup equipment will be maintained within the fertilizer materials storage area and adjacent to the fertilizers/nutrients mixing/preparation area, for use in the event of an accidental spill. In case of a major spill of fertilizers or petroleum products, the permittee shall immediately notify:

- The Department of Toxic Substance Control (916) 255-6610
- The California Office of Emergency Services at (800) 852-7550 and initiate cleanup activities for all spills that could enter surface waters or degrade groundwater.
- The Lake County Fire Protection District Headquarters Station at 707-994-0733
- The California Department of Fish and Wildlife within 24 hours at 707-445-6493

*d) Applying the minimum amount of product necessary;*

Nutrient solutions with nitrogen (N), phosphorus (P), and potassium (K) values, will be applied on an "as needed" basis for vegetative growth and overall plant health. Natural fertilizers and single ingredient soil amendments will be used. Fertilizers will only be applied as necessary. Treatments shall start with the

least amount suggested according to the products directions, and shall only increase in amount or application number if there is a sign of a need for more. No greater than 319 pounds of nitrogen per acre per year shall be applied.

*e) Preventing offsite drift;*

All fertilizers/nutrients will primarily be applied in a liquid or solid form directly to the growing medium. To prevent offsite drift of any chemicals used on site, the applicator shall take special care to read all directions for each chemical. If applying pesticides with a sprayer, the nozzle pressure shall be adjusted so that bigger droplets are used. Chemicals shall only be applied during calm weather and not applied in foggy or windy conditions. When spraying, the applicator shall direct the nozzle away to prevent any overspray from making its way to surface water systems.

*f) Not spraying directly to surface water or allow fertilizer product to drift to surface water. Spray only when wind is blowing away from surface water bodies;*

See below.

*g) Not applying fertilizer when they may reach surface water or groundwater; and*

See below.

*h) Not using fertilizer within 100 feet of any spring, top of bank of any creek or seasonal stream, edge of lake, delineated wetland or vernal pool. For purposes of determining the edge of Clear Lake, the setback shall be measured from the full lake level of 7.79 feet on the Rumsey Gauge.*

All fertilizers/nutrients will be mixed/prepared at least 100 feet from surface water resources and will not be applied or allowed to drift offsite or within riparian setbacks (minimum 100 feet). It should be noted all cultivation areas are located greater than 100 feet from any surface water and there are no waters immediately adjacent to the cultivation areas or project site. Fertilizers/nutrients will not be applied at a rate greater than 319 pounds of nitrogen per acre per year (requirement of the State Water Resource Control Board's Cannabis General Order).

Fertilizers/nutrients will only be sprayed when wind is blowing away from surface water bodies. Chemicals shall not be applied in the direction of any watercourse and should never be applied directly into a watercourse. Care shall be taken to only apply chemicals on a still day to prevent the wind from transferring chemical droplets to any surface waters.

Additionally, the Applicant has enrolled in the SWRCB Waste Discharge Requirements for Cannabis Cultivation Order WQ 2017-0023-DWQ. Ongoing compliance with this Order will ensure that cultivation operations will not significantly impact water resources by using a combination of Best Management Practices (BMPs), buffer zones, sediment and erosion controls, inspections and reporting, and regulatory oversight.

**This section shall include a map of the parcel where the cultivation site is located showing any spring, top of bank of any creek or seasonal stream, edge of lake, delineated wetland or vernal pool on the lot of record of land or within 100 feet of the lot of record and a 100-foot setback from any identified spring, top of bank or any creek or seasonal stream, edge of lake, delineated wetland or vernal pool. This map shall include the location of where fertilizers will be stored and used.**

Review of the United States Fish and Wildlife Service (USFWS) National Wetland Inventory reported no water features within the project property; refer to Exhibit 8-4 below. Additionally, the field survey conducted as part of the Biological Resource Assessment determined that the project site and project property do not contain any channels, wetlands, vernal pools or other isolated wetlands. The nearest receiving water bodies are over 1,000 feet away and vegetated buffers exist in between the project site and these areas. Therefore, no work or fertilizer application would occur within 100-feet of identified hydrologic features. Similarly, fertilizer will be stored on-site, more than 100 feet from waterways.

**A description what parameters will be monitored, and the methodology of the monitoring program shall be included in this section.**

The proposed project will maintain an accurate log of all fertilizer/nutrient procurement and usage of the proposed cultivation operation. The log will detail the date, fertilizer type, amounts applied, method, the operator applying, and any additional inputs or amendments. This log will be kept within the on-site storage shed and will be made available to State and County officials upon request.



## 8. FISH AND WILDLIFE PROTECTION

**Intent: To minimize adverse impacts on fish and wildlife.**

A Biological Resources Assessment (BRA) was prepared for the project property in May 2020. The BRA provides a description of existing biological resources on the project site and identifies potentially significant impacts that could occur to sensitive biological resources resulting from construction of the proposed cannabis cultivation operation. Key findings of the report are summarized below, and the full report is provided in Appendix B of this Property Management Plan.

**In this section permittees shall include:**

*a) A description of the fish and wildlife that are located on or utilize on a seasonal basis the lot of record where the permitted activity is located;*

Figure 7-2 shows special-status wildlife species occurrences within 10 miles of the project site. No critical habitat for any federally-listed species occurs within the project site or the surrounding project property. The CNDDDB showed there is no special-status habitats within the project site or surrounding project property. The CNDDDB did show the following special-status wildlife species with potential to occur within the project property: western pond turtle (*Emys marmorata*). This species, however, requires aquatic, vernal pool, and serpentine habitat. None of these habitats are found within the project site.

Additionally, a USFWS species list was generated online using the USFWS' IPaC Trust Resource Report System. This list is generated using a regional and/or watershed approach and does not necessarily indicate that the project property provides suitable habitat. The following species were identified: Northern Spotted Owl (*Strix occidentalis caurina*), California Red-legged Frog (*Rana draytonii*), Delta Smelt (*Hypomesus transpacificus*), Conservancy Fairy Shrimp (*Branchinecta conservancy*), Burke's Goldfields (*Lasthenia burkei*), Few-flowered Navarretia (*Navarretia leucocephala* ssp. *pauciflora*), Many-flowered Navarretia (*Navarretia leucocephala* ssp. *pliantha*), Slender Orcutt Grass (*Orcuttia tenuis*).

Due to lack of suitable habitat and/or lack of recent occurrences in the project vicinity, the identified special-status plant and animal species with potential to occur in the region are not expected to occur on the project site. If future construction activities would grading or other soil-disturbing activities in undisturbed chaparral, gray pine woodland, oak woodland habitat, or trees are proposed for removal a rare plant survey would be required as well as a pre-construction nesting bird survey.

*b) A description of the habitats found on the lot of record. These habitats shall be located on a map;*

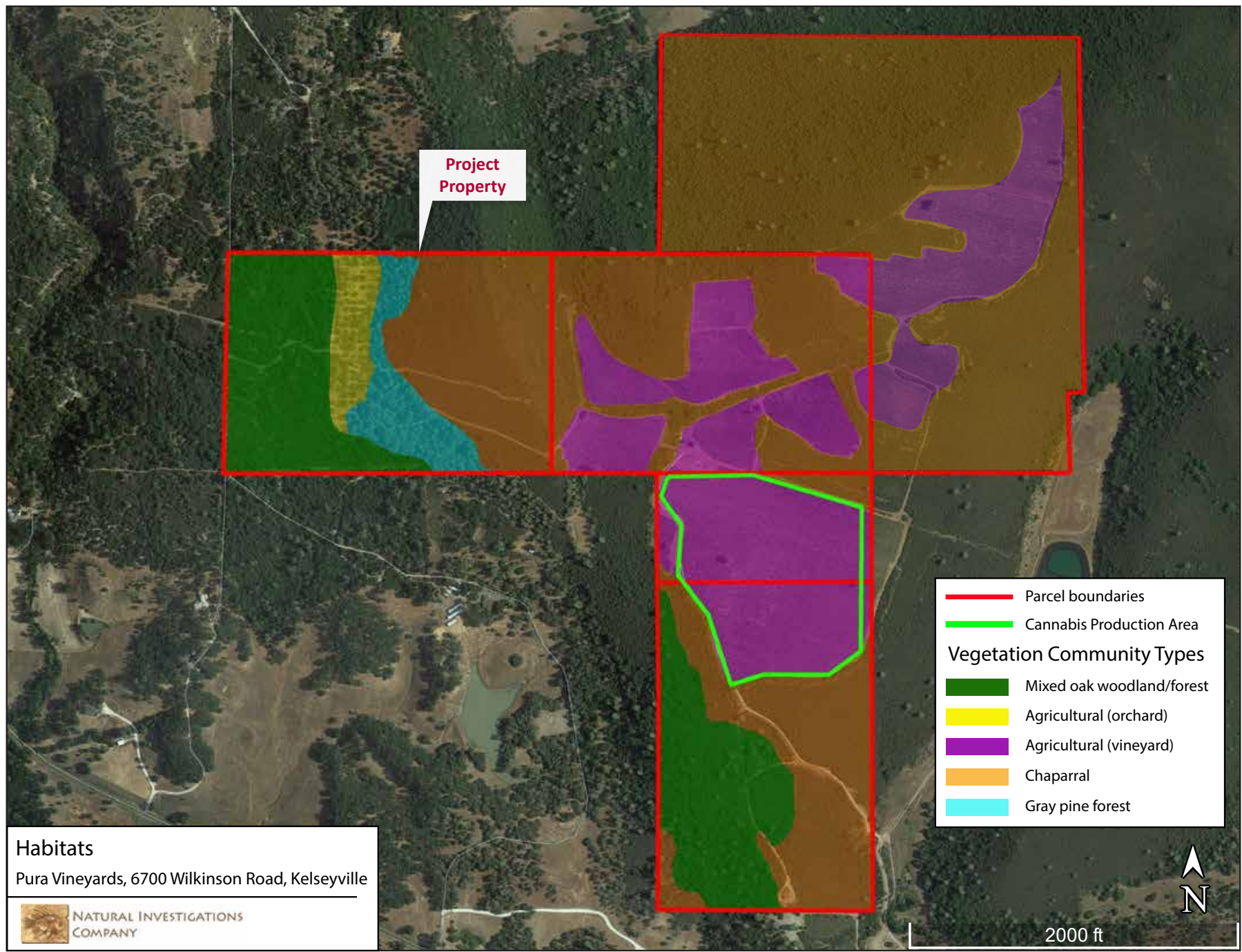
Figure 8-1 identifies habitat types found on the overall project area. The project site only contains Agricultural habitat, this and the other habitats occurring within the overall project property are described below.

**Agricultural (Vineyard and Orchard):** Consist of converted natural habitat in agricultural production as vineyard or orchard. Vegetation in this habitat type consists primarily of agricultural lacking a consistent community structure. This habitat type provides limited resources for wildlife and is utilized primarily by species tolerant of human activities. The disturbed and altered condition, and routine work efforts within these areas greatly reduces the habitat value and ability to sustain rare plants or diverse wildlife assemblages. This habitat is classified as Holland vegetation type – "Urban".

**Chaparral (Chamise/Scrub Oak):** Much of northern and eastern portions of the Study Area are dominated by shrub-covered slopes and ridges. Stands of chaparral within the Study Area are dominated by a rich diversity of species. Typical shrubs encountered within the chaparral include manzanita (*Arctostaphylos* spp.) chamise (*Adenostoma fasciculatum*), California scrub oak (*Quercus berberidifolia*), leather oak (*Quercus durata*), California lilac (*Ceanothus* spp.), western redbud (*Cercis occidentalis*), yerba santa (*Eriodictyon californicum*), toyon (*Heteromeles arbutifolia*), poison-oak (*Toxicodendron diversilobum*), Fremont's silk tassel (*Garrya fremontii*) and bush monkey flower (*Diplacus aurantiacus*). Occasional gray pine (*Pinus sabiniana*) and interior live oak (*Quercus wislizeni*) are found within the chaparral habitat. Because of the dense canopy of shrubs, very few herbs and grasses were observed in the ed as the Holland Type "Northern Mixed Chaparral" or "37.101.19 *Adenostoma fasciculatum*-*Arctostaphylos manzanita*".

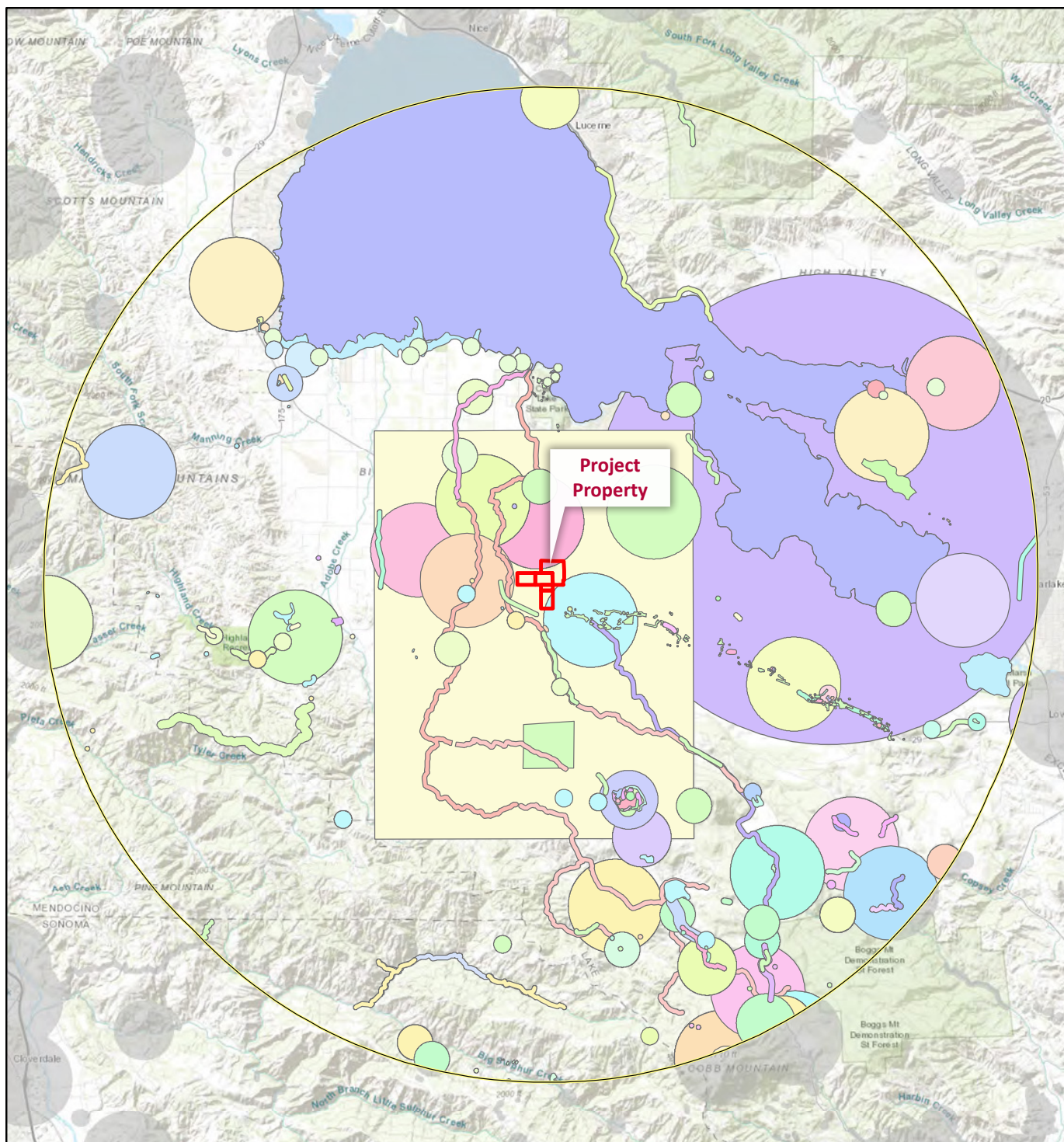
**Gray Pine Woodland/Forest.** A narrow ribbon of pine dominated vegetation is found within the western portion of the overall project area. This habitat is characterized by an open-to-dense canopy of gray pine with a diverse understory of shrubs including chamise, manzanita, toyon, leather oak, poison-oak, California lilac (*Ceanothus* spp.) and California bay (*Umbellularia californica*). The herbaceous layer within this habitat consists of a variety of native and non-native herbs and grasses. This vegetation can be classified as the Holland Type "Non-Serpentine Gray Pine Woodland" or "87.130.07 *Pinus sabiniana* – *Adenostoma fasciculatum*".

**Oak Woodland/Forest:** Oak woodland habitat is found along the western portions of the overall project area. Interior live oak is the primary species in the canopy, with occasional gray pine and exceptionally large common manzanita (*Arctostaphylos manzanita* ssp. *manzanita*). The shrub layer within the oak woodland is composed largely of common manzanita, California scrub oak, leather oak, toyon and poison oak. The trees and shrubs form a dense canopy, which limits the amount of light available to species in the herb layer. This vegetation can be classified as the land Type "Interior Live Oak Woodland" or "71.080.00 *Interior Live Oak Woodland*".



**FIGURE 8-1:** Vegetation Community Types





Parcel Location     10 Mile Buffer

1:190,000    1 inch = 3 miles

0    3    6 Miles



**Notes:**

1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. Natural Investigations Company can not guarantee the accuracy and content of electronic files. The master file is stored by Natural Investigations Company and will serve as the official record of this communication.
3. It is unlawful to copy or reproduce all or any part thereof, whether for personal use or resale, without permission. Data Sources: California Department of Fish and Wildlife. 2020. RareFind 5.x, California Natural Diversity Data Base. Biogeographic Data Branch, Sacramento, California. (updated monthly by subscription service)

## Special-Status Species Occurrences Map

### Pura Vineyards

Kelseyville 1993 Quadrangle: Township 13N, Range 9W, Section 24,25



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**FIGURE 8-2: Special-Status Species Map**

**PURA VINEYARDS**  
Property Management Plan

*c) A description of the watershed in which the permitted activity is located. A map shall be provided showing the full watershed;*

Mapped limits of potential jurisdictional features are provided below in [Figure 8-3](#) and [Figure 8-4](#) below. The USFWS National Wetland Inventory (NWI) showed there are no water features within the project site or within the surrounding project property.

An informal assessment for the presence of potential-jurisdictional water resources within the project property was also conducted during the field survey conducted as part of the BRA. For purposes of the BRA, non-wetland waters were classified using the California Forest Practice Rules. The California Forest Practice Rules define a Class I watercourse as 1) a watercourse providing habitat for fish always or seasonally, and/or 2) providing a domestic water source; a Class II watercourse is 1) a watercourse capable of supporting non-fish aquatic species, or 2) a watercourse within 1000 feet of a watercourse that seasonally or always has fish present; a Class III watercourse is a watercourse with no aquatic life present and that shows evidence of being capable of transporting sediment to Class I and Class II waters during high water flow conditions.

The field survey determined that the project site and surrounding project property do not contain any channels or wetlands. There are no vernal pools or other isolated wetlands in the project property. The topography is generally too steep, and the soils too well drained, to contain standing surface water resources.

*d) A map showing the location of any conservation easements or wildlife corridors proposed.*

Wildlife movement corridors link remaining areas of functional wildlife habitat that are separated primarily by human disturbance, but natural barriers such as rugged terrain and abrupt changes in vegetation cover are also possible. Areas with wilderness and undeveloped within the County have been fragmented by urbanization, which can disrupt migratory species and separate interbreeding populations. Corridors also allow migratory movements and act as links between these separated populations.

Although there are no designated wildlife corridors within the project site or overall project area, the open space within the project property provides relatively unrestricted animal movement. Neither the project property including the proposed cultivation areas are located within any adopted Habitat Conservation Plan (HCP) or Natural Community Conservation Plan (NCCP).

Site preparation for cultivation and installation of prefabricated structures may interfere with the movement of native wildlife within the area. The project would require fencing that would act as a local barrier to wildlife movement, predominantly, larger non-avian species. The project, however, would only fence the necessary area around the cultivation area and the balance of the overall project area would remain in its current condition. Fencing would surround the project site, and the balance of the overall project area would remain undeveloped and available for wildlife movement. The proposed project also does not include high intensity uses that are substantially disruptive to wildlife or wildlife movement.



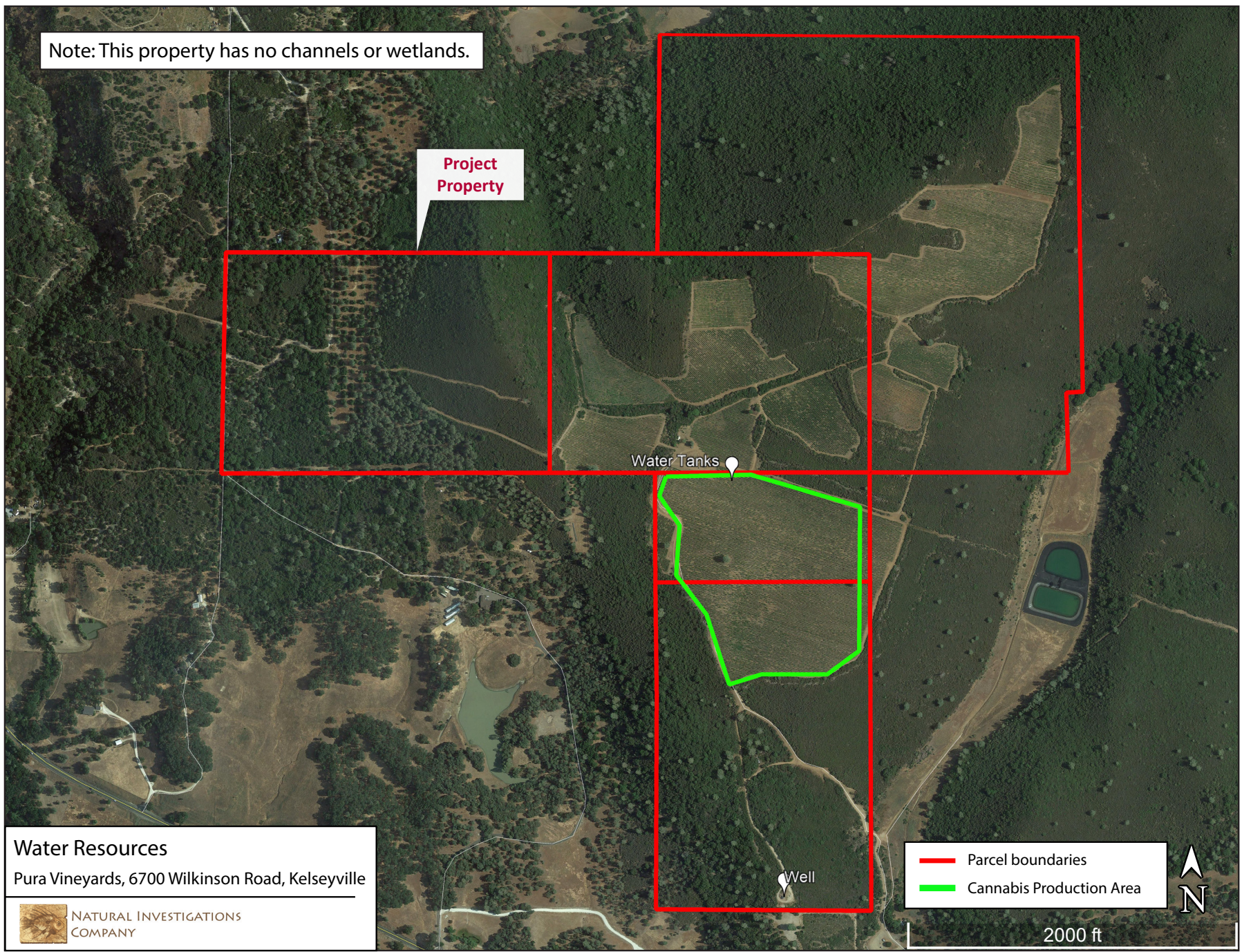
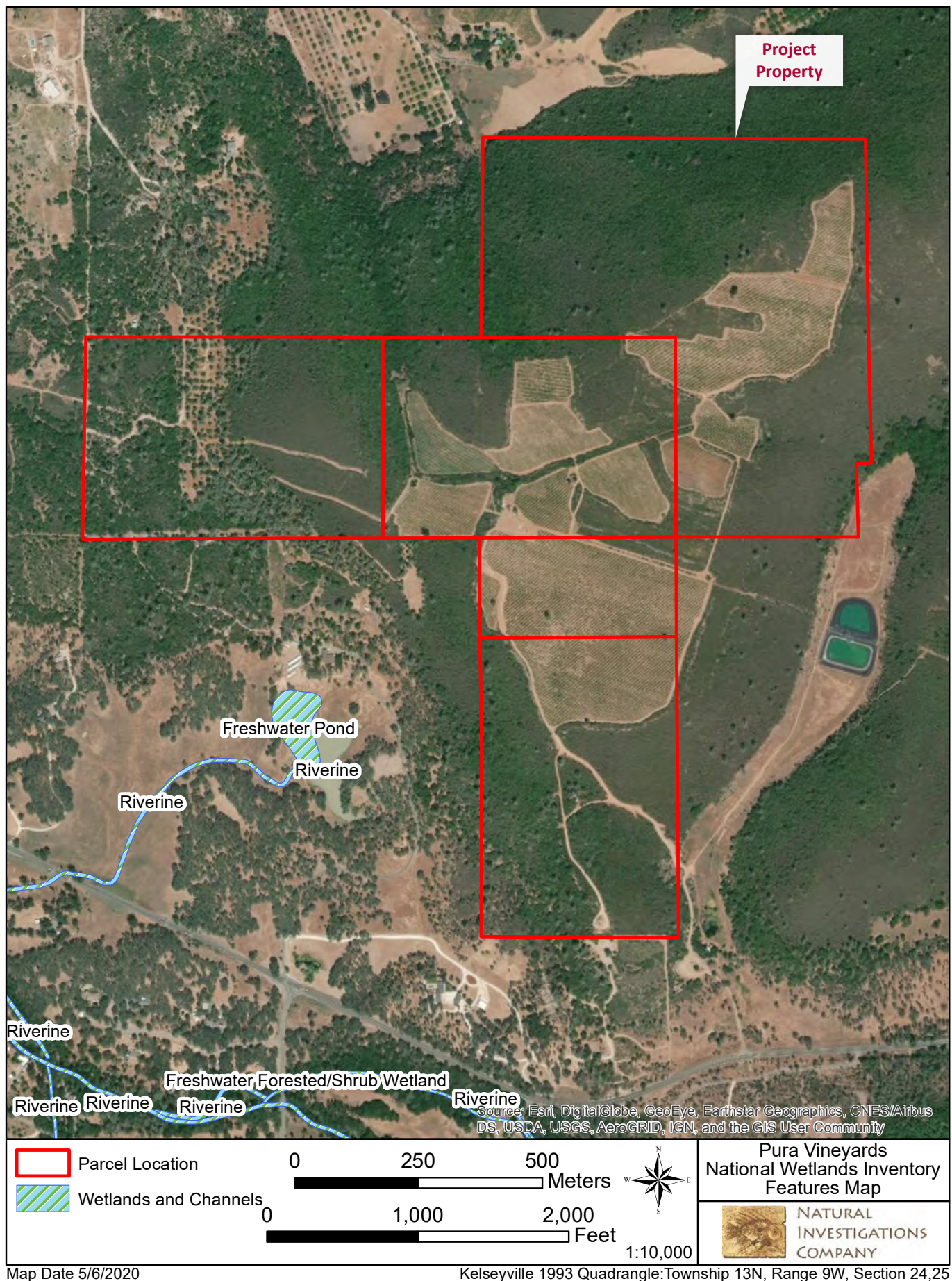


FIGURE 8-3: Water Resources Map





April 2021

**FIGURE 8-4:** Wetland Inventory Map

## 8. OPERATIONS MANUAL

**Intent:** To describe the operating procedures of the commercial cannabis cultivation site to ensure compliance with all permits, protect the public health, safety and welfare, as well as the natural environment of Lake County.

**This section shall include the following:**

- a) Authorization for the County, its agents, and employees, to seek verification of the information contained within the development permit or use permit applications, the Operations Manual, and the Operating Standards at any time before or after development or use permits are issued;*

The project applicant authorizes the County of Lake, its agents, and employees, to seek verification of the information contained within the Use Permit Applications package, the Operations Manual, and the Operating Standards for the proposed cannabis cultivation operation at 6700 Wilkinson Road at any time before or after Use Permits are issued. All information contained in the Use Permit applications package is currently available for viewing; and will remain viewable in a physical and digital format given to the County of Lake and its agents/employees; copies will be maintained at the project site.

- b) A description of the staff screening processes;*

All permit holder(s) and employees will undergo a background check by the Lake County Sheriff Department. An individual may fail the background check if employee has been convicted of an offense that is substantially related to the qualifications, functions, or duties of the business or profession for which the application is made, except that if the sheriff determines that the applicant or permittee is otherwise suitable to be issued a license and granting the license would not compromise public safety, the sheriff shall conduct a thorough review of the nature of the crime, conviction, circumstances, and evidence of rehabilitation of the applicant, and shall evaluate the suitability of the applicant or permittee be issued a license based on the evidence found through the review. In determining which offenses are substantially related to the qualifications, functions, or duties of the business or profession for which the application is made, the sheriff shall include, but not be limited to, the conditions described in Section 26057 of the California Business and Professions Code.

1. All persons employed by the applicant must be at least 21 years of age.
2. All persons employed by the applicant shall undergo a background check by the Lake County Sheriff Department.
3. All agents, officers, or other persons acting for or employed by a licensee shall display a laminated or plastic-coated identification badge issued by the licensee at all times while engaging in commercial cannabis activity.
4. All employees will be properly on boarded by the HR team. The on boarding process includes adding the employee to the HR payroll software at which time, the following tasks will be performed:
  - a. The software will generate and assign a random and unique employee number for each employee. This employee number will never be reused and will be retired at the time of employment termination from the company.



- b. HR will assign a job title and job description. This will allow assignment to a role in the control access group.
- c. HR will create a NFC card that will also be used as the employee badge and will meet the following requirements.
  - i. The identification badge shall, at a minimum, include the licensee’s “doing business as” name and license number, the employee’s first name, an employee number exclusively assigned to that employee for identification purposes, and a color photograph of the employee that clearly shows the full front of the employee’s face and that is at least 1 inch in width and 1.5 inches in height.

*c) The hours and days of the week when the facility will be open;*

Main operating/business hours for Pura Vineyards cannabis operations are from 7 AM to 7 PM, Monday through Saturday and 12 PM to 5 PM on Sunday. Deliveries and pick-ups would occur between 9 AM to 7 PM, Monday through Saturday and 12 PM to 5 PM on Sunday.

At least one staff member will be onsite twenty-four (24) hours a day and seven (7) days a week for security purposes throughout the cultivation season. The proposed cultivation operation will be closed to the public.

*d) Description of measures taken to minimize or offset the carbon footprint from operational activities;*

All proposed cannabis cultivation would occur outdoors and would sequester carbon naturally. No artificial lights or HVAC systems would be used for cultivation. This would reduce the project’s demands on energy resources that generate emissions. Further, water efficiency systems, such as timed drip irrigation with rain detection will be implemented to reduce water consumption (demand on groundwater) within the project site and specifically during wet weather events. Eco-friendly packaging material will be used for bulk packaging of cannabis materials and practices focused on reuse, reduction, and recycling will be implemented for all processes.

Equipment necessary for cultivation operations that require grid power or fossil fuels will be regularly maintained to assure efficient energy usage and will adhere to all applicable emissions standards.

*e) Description of chemicals stored, used and any effluent discharged as a result of operational activities;*

Chemicals stored, used, and discharged as a result of operational activities would include chemicals derived from soaps, hydrogen peroxide, gasoline, diesel. Table 9-1: Chemical List identifies chemicals planned for use on site. No effluent will be discharged on the project property and any disposal would occur at licensed facility.

**Table 9-1: Chemical List**

Product Name	Active Ingredient(s)
Azamax	<i>Azadirachtin</i>
Monterey Garden BTI	<i>Bacillus thuringiensis</i>

Dipel WP	<i>Bacillus thuringiensis, var. kurstaki strain ABTS 351</i>
Venerate	<i>Burkholderia spp.</i> strain A396 and spent fermentation media
Grandevo	<i>Chromobacterium subtsugae</i> strain praa4-1 and spent fermentation media
Regalia	<i>Reynoutria sachalinensis</i>
Botaniguard ES	<i>Beauveria bassiana</i>
M-Pede	Potassium salts of fatty acids (49.0percent)
Nuke Em/Flying Skull	Proprietary – product does not contain any critical values that have to be monitored at the workplace
Diatomaceous Earth	n/a
Sulphur	n/a
Alcohol	n/a
Stylet Oil	Paraffinic Oil

f) *The permittee shall establish and implement written procedures to ensure that the grounds of the premises controlled by the permittee are kept in a condition that prevents the contamination of components and cannabis products. The methods for adequate maintenance of the grounds shall include at minimum:*

- i. *The proper storage of equipment, removal of litter and waste, and cutting of weeds or grass so that the premises shall not constitute an attractant, breeding place, or harborage for pests.*

The applicant shall establish and implement written procedures to ensure that the grounds of the premises controlled by the applicant are kept in a condition that prevents the contamination of components and cannabis products.

All non-cannabis related equipment will be stored in the prefabricated storage sheds and/or barns. All equipment will be returned and stored in its proper designated area upon completion of the task for which the equipment was needed. Project personnel will conduct daily scans of the site to ensure that all materials used during the workday have been returned to their designated storage area in an organized manner.

Cannabis plants will be grown in the soil and the non-cannabis vegetation will be mowed as necessary to prevent the creation of a habitat for pests. With the exception of 100-foot defensible space requirements, areas on the parcel not used for cannabis cultivation will be mowed, and as applicable native habitat will be undisturbed to the extent feasible and allowed to remain. Weeds and grasses within the project site will be maintained regularly to ensure safe and sanitary working conditions and minimize areas for pests.

Any refuse created during the workday will be placed in the proper waste disposal receptacle upon completion of the task assigned, or before the end of employee shift. Any refuse which poses a risk for contamination or personal injury shall be disposed of immediately.

- ii. *The proper maintenance of roads, yards, and parking lots so that these areas shall not constitute a source of contamination in areas where cannabis products are handled or transported.*

SH-29 is the primary roadway within the vicinity of the proposed project and provides access to the project site through APN 007-030-20 which is not a part of the project property or project site, but would be used to access the cultivation areas. The existing private road is unpaved and would provide direct access to the interior of the project site. As part of the project the driveway approach on SH-29 at postmile 31.74 (Rt) would be improved to with a 20-foot-wide gate to meets Caltrans standards for a commercial driveway. The gate would be setback from the roadway no less than 30 feet, would be 20 feet wide, and would provide a rapid entry lock for emergency services.

The access road, staging areas, yards, and parking areas will be maintained regularly to fill potholes, reduce dust, and avoid potential soil-borne contamination, reduce harborage of pests, and maintain the cleanliness of the facility. All roads on the property are out-sloped to prevent sediment transport to county storm water systems and/or surface waters.

- iii. *The provision of adequate draining areas in order to prevent contamination by seepage, foot-borne filth, or the breeding of pests due to unsanitary conditions.*

The proposed cannabis cultivation will be grown entirely outdoors in a previously developed vineyard. Drainage features throughout the property, combined with adequate road design shall prevent stormwater and non-stormwater from contaminating surface waters and/or county stormwater systems. Soils within the project area are well drained and do not have drainage issues that would result in contamination by seepage, foot-borne filth, or breeding of pests due to unsanitary conditions.

Riparian buffers shall be maintained with adequate vegetation to filter potential runoff from the cultivation site or related activities. Seasonal inspections shall be made to ensure that management practices are effective and changes shall be made where management practices do not appear to be working. A chemical spill kit shall be easily accessible and maintained by the property manager for use in case of emergency.

- iv. *The provision and maintenance of waste treatment systems so as to prevent contamination in areas where cannabis products may be exposed to such a system's waste or waste by-products.*

The project site does not have an existing onsite wastewater treatment system (OWTS). The project would include Americans with Disability Act (ADA) compliant portable toilets and handwashing stations would be rented and maintained from a licensed providers. These facilities would be provided by the operator for use by all employees. The applicant will coordinate with Lake County Environmental Health Department to ensure the facilities are located, and installed per Lake County technical standards by a qualified professional. Copies of the septic permits will be provided by the property owner to the county. The OWTS shall be inspected and maintained by a qualified professional as required.

Additionally, portable toilets and handwashing stations for use by project employees would be rented and routinely maintained by the operators. No pit-privy or other unpermitted domestic or commercial sewage systems shall be used on the project site.

## 9. PEST MANAGEMENT

**Intent:** To ensure consistency of pest management with the other sections of the Property Management Plan.

**This section shall describe how cultivation and nursery permittees will comply with the following pesticide application and storage protocols:**

*a) Complying with the California Food and Agriculture Code, Division 6 Pest Control Operations and Division 7 Agriculture Chemical; Chapter 1-3.6 and California Code of Regulations, Division 6 Pest Control Operations.*

The project will only use pesticides approved by the California Department of Food and Agriculture (CDFA) and the California Department of Pesticide Regulation (CDPR) for use on cannabis plants. The project will only apply pesticides at a rate consistent with pesticide label directions and will adhere to all State and County pesticide use reporting requirements.

Cultivators would be required to comply with Sections 8313(e) and (f) of the proposed regulations, which require compliance with pesticide laws and regulations (including those related to herbicides) as enforced by CDPR, and for any herbicides exempt from registration requirements, licensees must comply with all herbicide label directions, store chemicals in a secure building or shed, contain any chemical leaks and immediately clean up any spills, apply the minimum amount of product necessary to control the target pest (in this case a plant), and prevent off-site drift. This should minimize the potential for hazardous materials or pesticides to pollute waterbodies or affect aquatic species.

*b) Complying with all pesticide label directions*

Fertilizers, pesticides, herbicides and rodenticides shall be applied at agronomic rates specified on the product label. The permittee will keep a log of their fertilizers, pesticides and herbicides use for annual reporting. All labels will be kept, and directions followed when amendments and fertilizers are applied.

All pesticide product labels will be followed, including precautionary statements for protecting human and environmental health, storage and disposal statements, and directions for use. By law, all pesticide applicators must follow these statements. No restricted materials or pesticides will be used or stored on site.

*c) Storing chemicals in a secure building or shed to prevent access by wildlife;*

All chemicals used on site will be stored in the proposed Pesticide and Agricultural chemical storage container. All liquid chemicals will be stored in separate secondary containment that is of sufficient volume and material to adequately contain any spills or leaks. All pesticides shall be stored in their original container, and with their original labels. Pesticides shall not be placed in a new container to conserve space, or for any other reason. In the event that a label becomes illegible, the product shall be disposed of according to the hazardous waste policies of the local waste management service, and shall be replaced with a new product to prevent the misuse of any chemical.

During the off season all chemicals will be stored in a covered building. The structure will be located greater than 100 feet from any watercourse; refer to [Section 2.0](#).

*d) Containing any chemical leaks and immediately clean up any spills;*

All pesticides will be stored in their manufacturer's original containers/packaging, within a designated storage shed to prevent possible exposure to the environment. All containers will be under 50 gallons and absorbent materials designed for spill containment and spill cleanup equipment will be maintained within the pesticide materials storage area and adjacent to the pesticide mixing/preparation area, for use in the event of an accidental spill.

In case of a major spill of fertilizers or petroleum products, the permittee shall immediately notify:

- The Department of Toxic Substance Control (916) 255-6610
- The California Office of Emergency Services at (800) 852-7550 and initiate cleanup activities for all spills that could enter surface waters or degrade groundwater.
- The Lake County Fire Protection District Headquarters Station at 707-994-0733
- The California Department of Fish and Wildlife within 24 hours at 707-445-6493

*e) Preventing offsite drift;*

To prevent offsite drift of any chemicals used on site, the applicator shall take special care to read all directions for each chemical. If applying pesticides with a sprayer, the nozzle pressure shall be adjusted so that bigger droplets are used. Chemicals shall only be applied during calm weather and not applied in foggy conditions. When spraying, the applicator shall direct the nozzle away from adjacent watercourses to prevent any overspray from making its way to surface water systems. No pesticides will be applied during windy days or within 100 feet of a water body. Pesticides will only be applied when wind is blowing away from surface water bodies on site.

*f) Not applying pesticides when pollinators are present;*

Cannabis is not typically pollinated by insects; however, the surrounding area does have native plants that are attractive to pollinators. Before applying pesticides, the area surrounding the cultivation site should be checked for active pollinators. The project will plan pesticide application schedules to protect honeybees and other pollinators within the project property.

*g) Not allowing drift to flowering plants attractive to pollinators;*

As discussed under Response 9.0(e), the project would implement practices to prevent offsite drift that could affect flowering plants attractive to pollinators. Pesticides will not be applied or allowed to drift onto flowering plants and pollinators during periods when pollinators are present around the proposed cultivation area.

*h) Not spraying directly to surface water or allow pesticide product to drift to surface water. Spray only when wind is blowing away from surface water bodies;**i) Not applying pesticides when they may reach surface water or groundwater;*

As discussed in Section 8.0, the USFWS National Wetland Inventory reported no water features within the project site or the surrounding project property and a field survey determined that the project site and surrounding project property do not contain any channels or wetlands. Further, there are no vernal pools or other isolated wetlands in the project property. The topography is too steep, and the soils too well drained, to contain surface water resources.



Notwithstanding, the project would implement practices to further prevent potential impacts to surface or ground water resources. Care shall be taken to only apply chemicals on a still day to prevent the wind from transferring chemical droplets to any surface waters.

All pesticides will be prepared at least 100 feet from surface water resources and neighboring properties and will not be applied or allowed to drift offsite. No pesticides will be applied within 48 hours of a predicted rainfall event greater than 0.25 inches (requirement of the SWRCB Cannabis General Order).

*j) Using only properly labeled pesticides;*

The proposed cannabis cultivation operation will only use pesticides that are properly labeled and authorized by CDFA for use on cannabis.

*k) Not using pesticides within 100 feet of any spring, top of bank of any creek or seasonal stream, edge of lake, delineated wetland or vernal pool. For purposes of determining the edge of Clear Lake, the setback shall be measured from the full lake level or 7.79 feet on the Rumsey Gauge.*

All pesticides will be prepared at least 100 feet from surface neighboring properties and will not be applied or allowed to drift offsite. While no water resources exist on site or in adjacent areas, the operator will not allow any no pesticides to contact any standing water. No pesticides will be applied within 48 hours of a predicted rainfall event greater than 0.25 inches (requirement of the SWRCB Cannabis General Order).

This section shall include a map of any spring, top of bank of any creek or seasonal stream, edge of lake, delineated wetland or vernal pool on the lot of record of land or within 100 feet of the lot of record and a 100-foot setback from any identified spring, top of bank or any creek or seasonal stream, edge of lake, delineated wetland or vernal pool. This map shall include the location of where pesticides will be stored and used.

Refer to Section 2.0. As discussed in Section 8.0, the USFWS National Wetland Inventory reported no water features within the project site or the surrounding project property and a field survey determined that the project site and surrounding project property do not contain any channels or wetlands.

Pesticide application will not occur within 100 feet of any waterbody and pesticide will be stored in the existing barn on site which is more than 100 feet from water on the lot of record. All storage containers would be less than 50 gallons.

## 10. SECURITY

**Intent: To minimize criminal activity, provide for safe and secure working environments, protect private property, and to prevent damage to the environment. The Applicant shall provide adequate security on the premises, as approved by the Sheriff and pursuant to this section, including lighting and alarms, to ensure the safety of persons and to protect the premises from theft.**

**This section shall include at a minimum a description of the security measures to be taken to:**

*a) Prevent access to the cultivation site by unauthorized personnel and protect the physical safety of employees. This includes, but is not limited to:*

The proposed project includes a robust security protocol to promote both the safety and security of employees but also to secure cannabis products and equipment. Cannabis goods will be stored in limited access areas. Only employees of the licensee and other authorized individuals are allowed access to the limited access areas of the licensed premises.

The proposed project would include the following safety features:

### **Description of Fences:**

The project property is fenced and all entrances/exits have a locked gate. The gate shall be equipped with a commercial-grade lock to prevent access by unauthorized personnel. The only point of entry into canopy space will be the access gate which will remain locked at all times. The cultivation site will be screened from public view by topographic barriers and intervening native vegetation. Additional methods of screening that may be used could include solid fences or opaque screening materials.

Fence posts may be steel tubing, timber or concrete, and may be driven into the ground or set in concrete. End, corner or gate posts will be set in concrete footing or otherwise anchored to prevent leaning under the tension of a stretched fence. Posts set between terminal posts will be set at intervals not to exceed 10 feet and a top horizontal rail will be used between all posts. The fence will be attached to the posts and top horizontal rail. No barbed wire, razor wire or similar design will be used.

**Establishing physical barriers to secure perimeter access and all points of entry (such as locking primary entrances with commercial-grade, non-residential door locks, or providing fencing around the grounds, driveway, and any secondary entrances including windows, roofs, or ventilation systems);**

In addition to fences surrounding the project area, the entrance to the project property will be gated and have a commercial lock to prevent access to the site by unauthorized automobiles. Gates will be closed and locked outside of operating hours. The access gate would be improved to meet Caltrans standards and improved to have a 20-foot-wide access which will provide adequate width for ingress and egress of two vehicles including emergency vehicles.

**Installing a security alarm system to notify and record incident(s) where physical barriers have been breached;**

Security cameras will be installed by all entrance gates and will have the capability to notify and record incidents in which the barriers have been breached. Motion-sensing alarms will be installed at all gates and entrances to buildings on the project parcel, to alert personnel when someone has entered the

premises. The entire security system shall be managed by a centralized security station.

**Video surveillance**

The project will have a digital video surveillance system with a minimum camera resolution of 720 pixels to record activities at all sensitive areas. The video surveillance system will be able to record color images effectively under any lighting conditions, 24 hours a day at a minimum of 15 frames per second. The video surveillance system shall be capable of supporting remote access by the permittee and shall be capable of integrating cameras with door alarms.

Each camera will be permanently mounted and in a fixed location that allows the camera to clearly record activity occurring within 20 feet of all points of entry and exit on the licensed premises, and allows for the clear and certain identification of any person and activities in all areas required to be recorded as follows:

- Areas where cannabis goods are cultivated, weighed, packed, stored, quarantined, loaded and unloaded for transportation, prepared, or moved within the licensed premises;
- Areas where cannabis is destroyed;
- Limited access areas;
- Security rooms;
- Areas storing a surveillance-system storage device with at least one camera recording the access points to the secured surveillance recording area; and
- Entrances and exits to the licensed premises, which shall be recorded from both indoor and outdoor vantage points.

All exterior cameras will be waterproof (I-66 minimum) and all interior cameras shall be moisture proof. Thermal technology will be used for perimeter fencing and all cameras will include motion sensors that activates the camera when motion is detected.

The physical media or storage device on which surveillance recordings are stored will be secured in a manner to protect the recording from tampering or theft. Surveillance recordings will be kept for a minimum of 90 calendar days and will be readily available for inspection by authorized regulation personnel. Recorded images will clearly and accurately display the time and date. Time is to be measured in accordance with the standards issued by the United States National Institute of Standards and Technology. The video surveillance system will be equipped with a failure notification system of any interruption or failure of the video surveillance system or video surveillance storage device.

**Establishing an identification and sign-in/sign-out procedure for authorized personnel, suppliers, and/or visitors;**

A sign-in/sign-out book will be maintained for any personnel, suppliers or visitors to the project property. This book will require the name, company, purpose, time-in and time-out of the attendance event. All records will be kept a minimum of 90 days, and 7 years for any corresponding reported incidents caught on tape. Entrances to all limited-access areas shall have a solid key FOB access door. The door shall remain closed when not in use during regular business hours.

**Maintaining the premises such that visibility and security monitoring of the premises is possible;**

The project property will be maintained to ensure visibility and security monitoring of the project area



and cultivation sites. A 100-foot defensible space (vegetation management) shall be established and maintained around the propose cultivation operation for fire protection and to provide for visibility and security monitoring.

**Establishing procedures for the investigation of suspicious activities:**

Any unauthorized entry or suspicious activity will be investigated by the property management team. Full root cause analysis investigation will be conducted by the designated management team. Corrections will be implemented as soon as possible. Corrective actions will be implemented once root cause is found and monitoring of both corrections and corrective actions will be enforced for preventative action control.

If it is found that an internal policy is not being followed, management will take the proper methods to ensure all employees begin to follow the protocols. If a punishable crime is found, management will promptly contact the local law enforcement and provide any evidence necessary and/or requested.

*b) Prevent theft or loss of cannabis and cannabis products. This includes but is not limited to:*

**Establishing an inventory system to track cannabis material and the personnel responsible for processing it throughout the cultivation process;**

Inventory will be tracked at all times using an Enterprise Resource Planning (ERP) system chosen by the management team that integrates with the California Track and Trace program. All employees will be trained on the ERP system and each department manager will be responsible for the oversight of inventory throughout the life cycle in their respective department. This accounting system will be made available to relevant local and state agencies who wish to review the documentation.

**Limiting access of personnel within the premises to those areas necessary to complete job duties, and to those timeframes specifically scheduled for completion of job duties;**

The project will require five full-time employee, and between 10-20 employees for 22 weeks of the year full time during this period. During peak harvesting season (August through October), it is anticipated that a maximum of approximately 30 employees will be present on site. Only verified employees will have access to the project area. Any vendor that comes on site will be accompanied by an employee for the duration of their duties/deliveries/tasks within the cultivation premises. Access to the site will be restricted to standard working hours discussed above.

**Supervising tasks or processes with high potential for diversion (including the loading and unloading of cannabis transportation vehicles);**

All tasks or processes that have high potential for diversion (including the loading and unloading of cannabis transportation vehicles) will be under supervision by management at all times.

**Providing designated areas in which personnel may store and access personal items.**

Personnel will have a designated storage area within the existing structures on site to store and access personal items.

*c) Identification of emergency contact(s) that is/are available 24 hours/seven (7) days a week including holidays. This section shall include the name, phone number and facsimile number or email address of an individual working on the commercial cultivation premises, to whom*

*notice of problems associated with the operation of the commercial cultivation establishment can be provided.*

John Manolian and Francis Herbert will serve as Community Liaisons/Emergency Contacts and primary point of contact for responding to odor complaints 24-hours a day, seven days:

- John Manolian – (707) 362-1326; [jmanolian@puracali.com](mailto:jmanolian@puracali.com)
- Francis Herbert – (707) 391-7256; [francis@puracali.com](mailto:francis@puracali.com)

Emergency contact information will be posted throughout the site in clearly labeled and visible areas for all employees. The emergency contacts will be available 24 hours/seven days a week, including holidays. This list will be kept current at all times. All neighborhood residents will be encouraged to call the designated person to resolve operating problems, if any, before any calls or complaints are made to the County.

**This section shall include a description of procedures on receiving complaints, responding to the complaints, maintaining records of all complaints and resolution of complaints, and providing a tally and summary of issues the annual Performance Review Report.**

All complaints must be investigated, documented and reported. A tally and summary of the complaint log will be submitted in the annual Performance Review Report. Complaints are documented by the regulatory/compliance personnel received through various channels throughout the organization, including through the emergency contacts.

Upon receipt of complaint, the complaint will be reviewed, recorded in the complaint log to be kept on the property, and assigned a unique identifier number. The complaint will be fully investigated for root cause and a risk assessments will be performed depending on the nature of the complaint. Investigation results, conclusion, and root cause will be documented. The investigation will be communicated to the complainant. Staff shall make every good faith effort to encourage neighborhood residents to call the emergency contact to resolve operating problems, if any, before any calls or complaints are made to the County.

*d) A description of the required video surveillance.*

See below.

*e) A description of the required fences.*

See response 10.0 (a) for a description of the proposed video surveillance system and fencing.

## 11. STORMWATER MANAGEMENT

**Intent: To protect the water quality of the surface water and the stormwater management systems managed by Lake County and to evaluate the impact on downstream property owners.**

**This section shall include at a minimum:**

*a) Provide written and graphic representation of how storm water runoff will be managed to protect downstream receiving water bodies from water quality degradation.*

The proposed project would include a drip irrigation system throughout the cultivation area. The project would use the existing installed drip irrigation system that is used throughout the vineyard site but would be augmented as needed to ensure efficient delivery of water and reduce consumption. A weather or sensor based, self-adjusting irrigation controller that has been certified by the Irrigation Association and has multi-cycle timers, a moisture sensor shutoff, and a controller that can detect problems will be installed. The proposed project would use infrequent deep watering only when the soil is dry and would be done in the late evening or at dawn to reduce evaporation from sun and wind. Watering would be minimized during high-wind and high-heat and at monitored irrigation at rates to limit runoff.

The project would require minor site disturbance for placement of prefabricated storage containers and preparation of parking areas. This site disturbance could lead to potential erosion; however, the project would implement tracking control, wind-erosion control, non-stormwater management control, and waste management and pollution control best management practices (BMPs) to reduce potential impacts:

- **Avoid Vegetation Removal** – The area that is currently proposed for cannabis cultivation was previously used as a vineyard and has been regularly disked for prior agricultural operations. The project would not require the removal of existing trees or vegetation within the project site or within the overall project area.
- **Water Conservation Practices** – Project operations would implement water conservation measures including use of efficient drip irrigation and systems that monitor soils moisture. The system would undergo regular leak checks to reduce or eliminate overwatering and non-stormwater discharges.
- **Material Delivery and Storage** – To prevent accidental discharge of pollutants from material delivery and storage, all materials will be stored in manufacturers original packaging within a designated storage shed on site.
- **Material Use** – All employees on site will be trained to properly prepare, apply, and dispose of all pesticides and fertilizers used for the proposed cannabis cultivation operations.
- **Stabilized Entrance** – An existing interior gravel/dirt roadway provides access within the site and would be used to access the cultivation areas. This roadway would be maintained, and new gravel/road base would be applied as needed.

*b) Provide written and graphic representation of how the applicant will comply with the California State Water Board, the Central Valley Regional Water Quality Control Board, and the North Coast Region Water Quality Control Board orders, regulations, and procedures as appropriate.*

The applicant will comply with the SWRCB the CVRWQCB orders, regulations, and procedures as appropriate. The applicant registered with the SWRCB on April 21, 2020 and was classified as a 'Tier 2'



low risk activity. The Notice of Applicability is provided as Appendix C. The Cannabis General Order Application Number is 427010.

- c) Provide written and graphic representation showing the outdoor cultivation, including any topsoil, pesticide or fertilizers used for the cultivation cannabis shall not be located within 100 feet of any spring, top of bank of any creek or seasonal stream, edge of lake, delineated wetland or vernal pool.*

As discussed in Section 8.0, the USFWS National Wetland Inventory reported no water features within the project site or the surrounding project property and a field survey determined that the project site and surrounding project property do not contain any channels or wetlands; see [Figure 8-3](#) and [Figure 8-4](#) above. No cultivation operations are located within 100 feet of any spring, top of bank of any creek or seasonal stream, edge of lake, delineated wetland or vernal pool.

- d) Provide written discussion describing how the illicit discharges of irrigation or storm water from the premises, as defined in Title 40 of the Code of Federal Regulations, Section 122.26, which could result in degradation of water quality of any water body will be prevented.*

By implementing the Best Practicable Treatment and Control (BPTC) measures defined in the SWRCB General Order, there will be no illicit discharges of irrigation or storm water from the premises.

- e) Identify any Lake County maintained drainage or conveyance system that the stormwater is discharged into and documentation that the stormwater discharge is in compliance with the design parameters of those structures.*

As discussed above, the proposed drip irrigation system would result in limited irrigation runoff and implementation of stormwater BMPs would further reduce runoff from the site. The proposed project does not discharge stormwater into any Lake County maintained drainage or conveyance system.

- f) Identify of any public roads and bridges that are downstream of the discharge point and documentation that the stormwater discharge is in compliance with the design parameters of any such bridges.*

The proposed project does not have a stormwater discharge point and all runoff is via overland flow; no downstream roads or bridges will be affected by the cultivation operations.

- g) Provide documentation that the discharge of stormwater from the site will not increase the volume of water that historically has flow onto adjacent properties.*

No offsite stormwater discharge will occur as a result of the cultivation operations. Stormwater management BMPs will be implemented to ensure that stormwater runoff is managed on-site and will not increase the volume of water that historically has flowed onto adjacent properties.

- h) Provide documentation that the discharge of stormwater will not increase flood elevations downstream of the discharge point.*

There is no stormwater discharge point within the project operations; all stormwater discharge is via overland flow and will be contained within the project property to the extent feasible.

- i) Provide documentation of compliance with the requirements of Chapter 29, Storm Water Management Ordinance of the Lake County Ordinance Code.*

The stormwater management measures proposed by the project will meet the requirements of the Lake County Storm Water Management Ordinance (Chapter 29 of the Lake County Ordinance Code).

*j) Describe the proposed grading of the property.*

The project would require minor grading and earthwork to remove the existing vines within the cultivation area. The vines would be cleared, and the ground surface would be prepared for cultivation by mixing soils and creating planting beds. The area would be prepared for inground planting through the addition of nutrients to facilitate cannabis growth. The proposed site of the metal storage containers and other trailers is flat with minimal slopes and would not require substantial grading. These areas would require minor site preparation to create level pads and ground surface to support the installation of proposed structures. Accordingly, the proposed project would not require substantial depths of cut or fill, would not create slopes in excess of a two to one (2:1) ratio, would not occur within any existing drainages or watercourse, and would not require tree removal or occur within a floodplain. Also, due to the limited number and prefabricated nature of proposed structures, the needed ground preparation would be minimal.

*k) Describe the best management practices (BMPs) that will be used during construction and those that will be used post-construction. Post-construction BMPs shall be maintained through the life of the permit;*

Construction-related BMPs are provided under Section 11.0 (a) above.

Further, the proposed cannabis cultivation operation will implement and maintain an irrigation system for the lifetime of its operation permit. The system will be monitored daily to ensure minimum run-off. The operation will incorporate the following BMPs for stormwater management:

1. Adhere to Lake County Planning Department waterway and creek setback requirements;
2. Stabilize unpaved site entrance and temporary driveways to prevent tracking soil from site;
3. Cover all stockpiles and landscape materials; keep behind silt fence, and away from water bodies;
4. Use pea-gravel bags around drain-inlets on-site and downstream of cannabis cultivation areas;
5. Place portable toilets on stabilized soil and away from storm drain inlets and water bodies; and
6. Cover all exposed soil with straw or straw with tackifier.

*l) Describe what parameters will be monitored and the methodology of the monitoring program.*

The proposed project will comply with the following SWRCB Monitoring and Reporting Requirements for cannabis cultivation operations:

- Winterization Measures Implementation
- Tier Status Confirmation
- Third Party Identification (if applicable)
- Nitrogen Application (Monthly and Total Annual)

An Annual Report shall be submitted to the CVRWQCB by March 1st of each year. The Annual Report shall include the following:

1. Facility Status, Site Maintenance Status, and Storm Water Runoff Monitoring.

2. The name and contact information of the person responsible for operation, maintenance, and monitoring.
3. A summary of the numbers and severity of waste discharge violations found during the reporting period, and actions taken or planned to correct the violations and prevent future violations.

The project will follow all monitoring requirements to maintain compliance with SWRCB Statewide General Order for cannabis waste discharge; these monitoring reports will be provided to Lake County officials upon request.



## 12. WASTE MANAGEMENT

### 12.1. Solid Waste Management

- a) *Provide an estimate of the amount of solid waste that will be generated on an annual basis and daily during peak operational seasons, broken down into the following categories:*

Table 12.1-1: Solid Waste Generation		
Solid Waste Type	Peak Season Daily	Annual
Paper	200	300
Glass	400	550
Metal	150	200
Electronics	N/A	N/A
Plastic	700	1000
Organics	composted	composted
Inerts	N/A	N/A
Household hazardous waste	N/A	N/A
Special Waste	N/A	N/A
Mixed residue	N/A	N/A
<b>Total</b>		

- b) *Describe how the permittee will minimize solid waste generation including working with vendors to minimize packaging.*

The project will minimize solid waste generation, by using a licensed off-site facility to package materials. All solid waste produced on site will be collected daily and be separated for landfill, recycling, or compost. Solid waste will be temporarily stored on site prior to weekly disposal at Lake County Waste Solutions Transfer Station and Recycling Center by C&S Waste Solutions. The project will prioritize the purchasing of materials in reusable, eco-friendly, compostable, and/or recyclable packaging when possible; reuse and recycle materials as much as possible to divert waste from landfills and designate multiple recyclable materials collection receptacles on the project property.

- c) *Describe the waste collection frequency and method.*

Pura Vineyards will contract for collection of solid waste on a weekly basis a permitted solid waste/recycling facility. Pura Vineyards' preferred permitted solid waste/recycling provider is C&S Waste Solutions. The project's contract for recycling and solid waste removal services will be arranged in accordance with state or local laws or requirements, including a local ordinance or agreement, applicable to the collection, handling, or recycling of solid waste, to the extent that these services are offered and

reasonably available from a local service provider.

*d) Describe how solid waste will be temporarily stored prior to transport to a compost, recycling, or final disposal location.*

Solid waste produced on site will be handled and stored in a manner that prevents vectors, health and safety threats and nuisances, as well as litter and water contamination. The project will separate recyclable materials from solid waste and subscribe to a basic level of recycling service that includes collection, self-hauling, or other arrangements for the pickup of the recyclable materials. Pura Vineyards will obtain appropriate waste containers from the waste service provider and all waste and recyclable material storage receptacles will receive frequent maintenance to ensure they are kept in a clean and sanitary condition.

Solid waste will be stored in suitable watertight containers with tight fitting lids and all waste containers stored outside will be covered. Materials intended for recycling will be stored in a clean and sanitary manner separate from solid waste, and all cannabis waste will be managed, stored, and handled separately from all other waste streams generated by the project. The project will store solid waste and recyclable material in the secured waste storage area on the licensed premises.

*e) Describe the composting, recycling, or final disposal location for each of the above categories of solid waste.*

Solid waste collected by C&S Waste Solutions will be appropriately disposed of at the following permitted facilities located in Lake County<sup>1</sup>:

- East Lake Landfill – 16015 Davis Street, Clearlake, CA 95422,
- South Lake Recycling Center – 16015 Davis Street, Clearlake, CA 95422, and
- Quackenbush Mountain Compost Facility – 16520 Davis Street, Clearlake, CA 95422.

## 12.2. Hazardous Waste Management

### Hazard Analysis

Pursuant to the California Health and Safety Code, the use of hazardous materials shall be prohibited except for limited quantities of hazardous materials that are below State threshold levels of 55 gallons of liquid, 500 pounds of solid, or 200 cubic feet of compressed gas. No hazardous wastes will be generated from the proposed cultivation operation.

The proposed project would not use acutely hazardous waste (including industrial waste). All potentially hazardous materials, including commonly used materials as part of agricultural operations including fuels, greases, lubricants, pesticides, and fertilizer will be stored, handled, and disposed of according to all Hazardous Waste Control and Generator regulations. These types of waste will not be disposed of on-site without review or permits from EHD, the SWRCB, and/or the Air Quality Board. Locally, the proposed project would be required to, and be subject to verification by the Lake County Division of Environmental Health (LCDEH), which acts as the Certified Unified Program Agency (CUPA) for all of Lake County. If any leftover or waste products from the materials listed above remain, they will be recycled or disposed of at

<sup>1</sup> CalRecycle. (2019). *SWIS Facility/Site Search*. Retrieved from <https://www2.calrecycle.ca.gov/SolidWaste/Site/Search>.

a registered and approved site legally authorized to accept such material.

*a) The applicant shall conduct a hazard analysis to identify or evaluate known or reasonably foreseeable hazards for each type of cannabis product produced at their facility in order to determine whether there exist any hazards requiring a preventive control. The hazard analysis shall include the identification of potential hazards, including:*

**i. Biological hazards, including microbiological hazards;**

Potential biological hazards for the cannabis flower products produced at commercial cannabis operations include those molds and bacteria tested for in Phase 3 State of CA cannabis testing assays: *Aspergillus flavus*, *Aspergillus fumigatus*, *Aspergillus niger*, *Aspergillus terreus*, shiga toxin-producing *E. coli*; and *Salmonella* spp.

**ii. Chemical hazards, including radiological hazards, pesticide(s) contamination, solvent or other residue, natural toxins, decomposition, unapproved additives, or food allergens; and/or**

Potential chemical hazards on the project property include gasoline, diesel fuel, oils/lubricants, and disinfecting/cleaning supplies for routine maintenance of equipment and storage/freezer containers. All equipment will be maintained, stored and operated in a manner that minimizes any spill or leak of these materials. Any spilled materials and/or contaminated soil will be immediately collected and disposed of consistent with applicable local, State and Federal regulations.

**iii. Physical hazards, such as stone, glass, metal fragments, hair or insects.**

Physical hazards could result from and include exposure to unsanitary conditions; exposure to agricultural and processing chemicals; and contamination from foreign materials (insect frass, dust, glass, metal). All working and cultivation areas, machinery, and use of equipment will be done in a way to minimize the potential for workers to be exposed to these conditions. In the case of exposure and injury, the workers will be treated as feasible on-site or transported to a medical facility if needed.

*b) The evaluation of the hazards identified in order to assess the severity of any illness or injury that may occur as a result of a given hazard, and the probability that the hazard will occur in the absence of preventive controls.*

If a potential hazard is identified at any point by on-site personnel, an evaluation will be conducted to determine the severity of illness/injury of a given hazard and the probability that the hazard will occur in absence of preventative controls. Biological contaminants may cause an immediate illness requiring medical attention; chemical hazards often have long-term health consequences via repeated exposure events; physical hazards range from unsanitary (insect frass, hair) to injurious (glass or metal fragments) and vary in potential threat to human health depending on concentration or substance. Contamination from the each of the above listed hazards can be prevented by practicing proper safety protocols during operations.

Pursuant to the California Health and Safety Code, the use of hazardous materials shall be prohibited except for limited quantities of hazardous materials that are below State threshold levels of 55 gallons of liquid, 500 pounds of solid, or 200 cubic feet of compressed gas. The production of any Hazardous Waste as part of the cultivation process is prohibited.

*c) The hazard evaluation shall consider the effect of the following on the safety of the finished cannabis product for the intended consumer:*



**i. The sanitation conditions of the manufacturing premises;**

No manufacturing is proposed on the project property.

**ii. The product formulation process;**

While some cannabis plants will be trimmed on-site to enable storage of the product, any subsequent manufacturing or processing will occur off-site.

**iii. The design, function and condition of the manufacturing facility and its equipment;**

The proposed application does not include manufacturing of cannabis product. After drying on site, cannabis products will be transported by a licensed distributor to a licensed manufacturing facility.

**iv. The ingredients and components used in a given cannabis product;**

The proposed project will not include manufacturing of cannabis product.

**v. The operation's transportation and transfer practices;**

Shipments of cannabis goods will only be received, and cannabis products will only be prepared for shipment within a designated limited-access shipping and receiving area. Managers will supervise all shipment preparation and receiving activities and maintain security in the designated shipping and receiving space. The project's shipping and receiving area will be secured with the following:

- Access control points, which include the positive identification of all employees and service providers at all points of entry.
- Video surveillance, including entry and exit points, with enough clarity to allow facial recognition.
- The quantity of each shipment will be tracked with a departure date.

**vi. The facility's manufacturing and processing procedures;**

The proposed project would include the following processing activities: drying and refrigeration of cannabis in the drying and storage structures. Unsanitary conditions in this facility may present a safety hazard for consumers. This hazard will be avoided through regular sanitation and maintenance of the area.

**vii. The facility's packaging and labeling activities;**

The proposed application does not include manufacturing or packaging of cannabis product for consumer distribution. Packaging and labelling activities will be done off-site.

**viii. The storage of components and/or the finished cannabis product;**

Components and/or finished cannabis product will be stored off-site.

**ix. The intended or reasonably foreseeable use of the finished cannabis product;**

The proposed project would include drying and cold storage of cannabis product. All cannabis product would be sold to licensed facilities for final manufacturing and consumer sales.

**x. Any other relevant factors.**

N/A

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Management Plan*a) The Management Plans shall:***i. Identify all Resource Conservation and Recovery Act (RCRA), Non-RCRA hazardous waste and Universal wastes and the volume of each;**

The project would include routine use of common household chemicals for routine cleaning and maintenance on site. These substances would be stored within the residence on site and would not result in potential hazards. All containers would be under 50 gallons.

The proposed cannabis cultivation operation would include the use pesticides identified above in Table 9-1: Chemical List.

**ii. Identify all containers and container management;****iii. Describe storage locations and chemical segregation procedures;**

All pesticides would be stored in their manufacturer's original containers/packaging in an on-site storage container to prevent possible exposure to the environment. All containers would be under 50 gallons. Absorbent materials designed for spill containment and spill cleanup equipment will be maintained within the materials storage area and adjacent to the preparation area, for use in the event of an accidental spill. Staff will be trained in the proper use of spill containment materials and notification procedures.

The manager will ensure that all chemical products, cleaning alcohols, and any other flammable substances in the Facility will be stored in cabinets with the following attributes:

- Constructed of a double wall 18-gauge welded steel.
- 1 ½" air space to meet NFPA and OSHA standards.
- Leak-proof doors.
- 3-point locking handle.

All packaging and container waste would be stored in solid-waste bins located on site for weekly pick-up by C&S Waste Services.

**iv. Describe hazardous waste manifest and record keeping protocol;**

As discussed above, the project is not expected to produce hazardous wastes on site. Non-hazardous waste, including pesticides, would be stored on-site and supplies would be tracked by personnel in a supply-log after deliveries and pesticide applications.

**v. Outline inspection procedures;****vi. Identify emergency spill response procedures;**

Absorbent materials designed for spill containment will be used immediately in response to any spill on site. Further, staff will immediately notify appropriate County personnel to determine if actions are needed to protect public safety.

**vii. Describe staff responsibilities;**

Project staff would be required to maintain accurate logs of pesticide supplies, follow manufacturers protocol on pesticide use and disposal, and report all accidental spills to management staff.

**viii. Describe the staff training program;**

The project's hazards policies and procedures will ensure the proposed project is compliant with applicable Occupational Safety and Health Administration (OSHA) requirements and all applicable state and local laws, regulations, ordinances, and other requirements. All levels of supervision will be held accountable for the safety of those employees under their direction. Hazards policies and procedures will, at a minimum, address the following:

- Informing employees of hazardous chemicals used on site.
- Use of labels and other forms of warning.
- Use of Material Safety Data Sheets (MSDSs).
- Procedure with respect to hazardous non-routine tasks.
- Maintaining a list of known hazardous chemicals used by employees and independent contractors.
- Communication of hazards.
- Training of employees and independent contractors.

**ix. Describe the methodology on how the amount of hazardous materials and waste that is generated on the site, the amount that is recycled, and the amount and where hazardous materials and waste is disposed of, is measured; and**

Pursuant to the California Health and Safety Code, the use of hazardous materials shall be prohibited except for limited quantities of hazardous materials that are below State threshold levels of 55 gallons of liquid, 500 pounds of solid, or 200 cubic feet of compressed gas. The production of any Hazardous Waste as part of the cultivation process is prohibited.

**x. Include A map of any private drinking water well, spring, top of bank of any creek or seasonal stream, edge of lake, delineated wetland or vernal pool on the lot of record or within 100 feet of the lot of record and a 100 foot setback from any identified private drinking water well, spring, top of bank of any creek or seasonal stream, edge of lake, delineated wetland or vernal pool. The map shall also include any public water supply well on the lot of record or within 200 feet of the lot of record and a 200-foot setback from any public water supply well.**

As discussed in Section 8.0, the USFWS National Wetland Inventory reported no water features within the project site or the surrounding project property and a field survey determined that the project site and surrounding project property do not contain any channels or wetlands; see [Figure 8-3](#) and [Figure 8-4](#) above. No cultivation operations are located within 100 feet of any spring, top of bank of any creek or seasonal stream, edge of lake, delineated wetland or vernal pool.



### 12.3. Cannabis Vegetative Material Waste Management

**The cannabis vegetative material waste management section shall:**

*a) Provide an estimate of the type and amount of cannabis vegetative waste that will be generated on an annual basis;*

The applicant will minimize cannabis vegetative waste generation. All cannabis vegetative waste will be composted and reused to amend the soils. Any waste not composted shall be destroyed as to not resemble cannabis material and be disposed of as green waste.

Cannabis vegetative waste will be collected and placed in a compost pile. Once composted, vegetative waste shall be re-applied to the soil to act as an organic amendment to existing soils. Vegetative waste will not be disposed of offsite outside of unforeseen circumstances. If cannabis is disposed off-site it will first be destroyed as to not resemble cannabis material and then disposed of as green waste at a licensed facility.

*b) Describe how the permittee will minimize cannabis vegetative waste generation;*

Vegetative waste will be recycled and composted on site or transported to a licensed green waste disposal facility.

*c) Describe how solid waste will be disposed; and*

As discussed in Section 12.1, solid waste will be collected by C&S Waste Services at least every seven (7) days/weekly during the cultivation season.

*d) Describe the methodology on how the amount of cannabis vegetative waste that is generated on the site, the amount that is recycled, and the amount and where cannabis vegetative waste is disposed of is measured.*

An estimated 200,000 pounds of cannabis vegetative waste would be produced during the first yearly harvest and 288,000 pounds during the second harvest, for a total of 488,000 pounds of cannabis vegetative waste. All vegetative waste will be composted on site. As waste is collected, it will be chopped using a chipper machine and subsequently mixed with organic material at a 50/50 mix. All compost will be regularly turned and spread throughout the property once or twice annually. If cannabis is disposed off-site it will first be destroyed as to not resemble cannabis material and disposed of as green waste at a licensed facility.

### 12.4. Growing Medium Management

**The growing medium management section shall:**

*a) Provide an estimate of the type and amount of new growing medium that will be used, and amount of growing medium will be disposed of on an annual basis;*

The proposed outdoor cultivation activities would plant directly in native soils, therefore, very minimal organic growing medium disposal would be required.

*b) Describe how the permittee will minimize growing medium waste generation;*

When feasible, growing medium waste will be fertilized and reused for future growing seasons to

minimize the amount of waste that is both produced and disposed of. Growing medium will only be purchased as needed and at necessary amounts to lower the amount of waste created by over consumption.

*c) Describe any non-organic content in the growing medium used (such as vermiculite, silica gel, or other non-organic additives;*

See below.

*d) Describe how growing medium waste will be disposed; and*

Non-organic growing medium will not be used on site.

*e) Describe the methodology on how the amount of growing medium waste that is generated on the site, the amount that is recycled, and the amount and where growing medium waste is disposed of, is measured.*

The proposed outdoor cultivation activities would plant directly in native soils, therefore, very minimal organic growing medium disposal would be required. Any growing medium that will not be reused will be stored as spoils piles. Because the project site is outside of the 100-year flood plain and not within a 100 foot distance of any surface water, nutrient flows to downstream receiving waters would be highly unlikely. During the winter season beginning October 15<sup>th</sup>, the spoils piles will be covered with visqueen tarp or other impermeable material and lined with straw wattles to prevent the infiltration of rainwater prevent the off-site transport to water bodies. Permanent waste disposal methods consist of compacting the growing medium into a natural contour with the existing land and seeding the area with native vegetation to form a natural buffer to water flows.

## 13. WATER RESOURCES

**Intent: To minimize adverse impacts on surface and groundwater resources.**

*a) A description of the surface and groundwater resources that are located on the lot of record where the permitted activity is located.*

### Groundwater Resources

There are two existing water wells within the project property, but irrigation water would be provided by only one of the permitted wells on APN 007-029-05 that would be used for cultivation. This well was completed in April of 1999 under County well permit number WP2570. The well has a depth of 598 feet with a static water level of 500 feet. The well has a total depth of 635 feet and at the time it was drilled depth to first water was at 530 feet and static water level was 500 feet. The water pump is located at approximately 588 feet and has a pumping rate of 225 gallons per minute with full recharge within 10 to 20 minutes. Accordingly, the existing well has sufficient capacity to serve project water demand. This well is located approximately 500 feet south of the southern cultivation area boundary. The Well Completion Report is provided within Appendix D Hydrology Study to this Property Management Plan.

### Surface Water Resources

As discussed in Section 8.0, the USFWS National Wetland Inventory reported no water features within the project site or the surrounding project property and a field survey determined that the project site and surrounding project property do not contain any channels or wetlands; see [Figure 8-3](#) and [Figure 8-4](#) above. No cultivation operations are located within 100 feet of any spring, top of bank of any creek or seasonal stream, edge of lake, delineated wetland or vernal pool.

*b) A description of the watershed in which the permitted activity is located.*

The project site is located in the Red Hills Watershed. The volcanic soils of the Red Hills area have excellent drainage and poor water retention capacity. These soils are characteristically by gravelly or rocky soils and are very well-drained. In these volcanic soil types, water is absorbed quickly and efficiently. These soils limit water run-off in rain-fall, and increase the efficiency of drip irrigation.

*c) A description of how the permittee will minimize adverse impacts on the surface and groundwater resources.*

The proposed project will not disturb any surface water resources or aquatic habitat on site. The project will maintain existing vegetative cover on the project property and that would minimize off-site waste discharge. Access roads and parking areas are graveled to prevent the generation of fugitive dust. Vegetative ground cover will be preserved and/or re-established as soon as possible throughout the project site to filter and infiltrate stormwater runoff from the access roads, parking areas, and the proposed operations.

Water would be piped to the cultivation areas via an above ground water line. Water from the well would be used to water the cultivation areas using a total of thirty 5,000-gallon high density polyethylene (HDPE) tanks, ten in each of the three cultivation areas. A total of 150,000 gallons of water storage. Each bank of ten tanks would be located adjacent to the westerly side of each Cultivation area.



Personnel will minimize adverse impacts on the surface/ground water resources by not applying pesticides or fertilizer within 100-feet of a surface water body or in unfavorable wind conditions and implementing the best practices summarized in Section 6.0 Fertilizer Usage.

The proposed cultivation operation applied for coverage under the SWRCB General Order for Cannabis Cultivation Activities on April 21, 2020 and was classified as a 'Tier 2 Low Risk' activity. The applicant will comply with all requirements of the Cannabis General Order to protect water resources. Per the Water Conservation and Use requirements outlined in the SWRCB's Cannabis General Order, the project will implement the following Best Management Practices (BMPs) / Best Practical Treatment and Control (BPTC) measures to conserve water resources:

- Regularly inspect the entire water delivery system for leaks and immediately repair any leaky faucets, pipes, connectors, or other leaks
- Install float valves on all water storage tanks to keep them from overflowing onto the ground
- Use water conserving irrigation systems/methods, such as drip/trickle and microspray irrigation and hand watering, and never overwater the plants
- Document and maintain daily records of all water used by the proposed cannabis cultivation operation

*d) A description of what parameters will be measured and the methodology of how they will be measured.*

Table 13-1: Water Measurement	
Parameters to Measure	Method
Static level of groundwater well	Static level monitoring device will be installed in well casing that provides continuous data logging of groundwater well water elevation.
Groundwater usage and flow	Irrigation controller will be installed in the water supply line to the project area.
Stormwater events/runoff	Rain gauge and visual inspection/written documentation of Project site after significant weather event (>1/2" rainfall over 24 hours)

*e) A map of any spring, top of bank of any creek or seasonal stream, edge of lake, delineated wetland or vernal pool on the lot of record of land or within 200 feet of the lot of record.*

Refer to Figure 8-4.

*f) A topographic map of the parcel prepared by a licensed surveyor where the permitted activity is located with contours no greater than five (5) feet.*

Refer to Section 2.0.

## 14. WATER USE

**Intent: To conserve the County's water resources by minimizing the use of water.**

**This section shall:**

*a) Identify the source of water, including location, capacity, and documentation that it is a legal source.*

Irrigation water would be provided by only one of the permitted wells on APN 007-029-05 that would be used for cultivation. Well locations are shown on plans provided in [Section 2.0](#). Existing well capacity has been tested to preliminarily confirm total supply per minute. The well is 635 feet deep, above 300 gallons per minute. Currently the well is the sole water source for all activities on the project site including cannabis cultivation irrigation and associated activities as well as all domestic use. Well capacity to provide suitable water supply will be reviewed and confirmed following completion of an irrigation plan. A hydrology report was prepared for the proposed project. The well will have adequate capacity, will use less than 0.5% of the existing capacity of the aquifer, and will not result in drawdown such that the cumulative impact area would be affected. The Well Completion Report is provided within Appendix D Hydrology Study to this Property Management Plan.

*b) Describe the proposed irrigation system and methodology.*

The cultivation operation will include a drip irrigation system to ensure targeted and efficient use of water on site. A total of 30 HDPE tanks holding 5,000 gallons each, for a total storage capacity of 150,000 gallons, will also be used on site to store water. Efficient irrigation provides a template for how and when to water. A weather or sensor-based, self-adjusting irrigation controller that has been certified by the Irrigation Association and has multi-cycle timers, a moisture sensor shutoff, and a controller that can detect overwatering or leaking conditions will be installed.

*c) Describe the amount of water projected to be used on a monthly basis for irrigation and separately for all other uses of water and the amount of water to be withdrawn from each source of water on a monthly basis.*

The cultivation season would occur between June and November. The proposed project would contain approximately 5,000 plants per acre. At the start of the season, water demand would be approximately one gallon per plant every three days. Across the approximate 14.84-acre cultivation area, water demand would total approximately 75,000 gallons. As plants mature and temperatures increase over summer, water demand could increase up to 10 gallons per plant every other day. [Table 14-1: Estimated Water Demand](#) provides an estimate of monthly water used for irrigation. Actual usage will be reported to the SWRCB annually.

**Table 14-1: Estimated Water Demand (gallons)**

Month	Jun	Jul	Aug	Sept	Oct	Nov	Annual
Per acre	50,000	100,000	750,000	750,000	50,000	10,000	<b>335,000</b>

Total	750,000	1,500,000	11,250,000	11,250,000	750,000	150,000	<b>25,650,000</b>
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*d) Provide calculations as to the efficiency of the irrigation system using the methodology of the Model Water Efficient Landscape Ordinance (California Code of Regulations, Title 23, Division 2, Chapter 27).*

The final irrigation plan for the proposed project is under development and final calculations of efficiency are not available. However, the proposed irrigation system will incorporate a range of features including a pre-programmable and web-based irrigation system and Variable Frequency Drive for the well to ensure efficient water use. Final calculations will be provided to the County upon completion.

*e) Describe the methodology that will be used to measure the amount of water used and the required monitoring.*

All block control valves will be directed by a main irrigation controller for on/off/duration control. The irrigation controller is pre-programmable & web-based. A weather or sensor based, self-adjusting irrigation controller that has been certified by the Irrigation Association and has multi-cycle timers, a moisture sensor shutoff, and a controller that can detect leaks and/or overwatering will be installed.

## 15. WILDFIRE SAFETY

The project property and project site are located within an area designated as a Wildland Fire Hazard Area by Lake County. The project property is located within the Kelseyville Fire Protection District and is in a State Responsibility Area (SRA) as mapped by the California Department of Forestry & Fire Protection (Calfire). The Calfire map indicates that the proposed cultivation area is in Very High Fire Hazard Severity Zone (VHFHSZ). Portion of the southerly area of the project property within APN 007-029-05 is within a Moderate Fire Hazard Severity Zone (MFHSZ) and the westerly portion of APN 007-018-02 also is in a (MFHSZ). The slopes within the cultivation area are slight and vary between 0-20 percent. The overall project area, however, has a varied topography with some steeper areas with 20-30 percent slopes, all of which are outside the cultivation areas. Vegetative cover within the proposed cultivation areas and some adjacent locations consists of existing vines. The existing vineyard is surrounded by an area dominated by chaparral habitat.

The proposed project includes installation of prefabricated sheds, barns, water tanks, and metal containers for office use, and equipment and product storage. Consistent with County Policy HS-7.2, the prefabricated structures would be clustered within an area that is already largely devoid of existing vegetation and is adjacent to areas used as vineyard. The structures would be situated at the required distance from the high fire hazard severity zones. This area also is adjacent to the interior access roads that could be used by emergency vehicles and would provide access and required turn-around areas. The proposed project includes 30 water tanks that would be used for cultivation but could be used in case of emergency. The proposed project also would provide water tank(s) made of steel or fiberglass that would be dedicated to fire suppression or emergency use. These tanks would be located in proximity to the proposed structures and installed pursuant to all requirements and standards of National Fire Protection Act 1142.

The proposed project does not include any new residential units and would not increase the population in the area. To mitigate risk, the proposed project would cluster the prefabricated structures in an area with lower existing wildfire risk, and would perform maintenance and abatement activities to minimize fuel buildup, maintain defensible space and access (roadway widths and turn arounds), ensure the water supply is secure, and that adequate volumes are stored in dedicated tank(s).

The proposed project has been designed and includes measures to conform with fire safety requirements, buildings codes and regulations, etc., that ensure consistency with wildfire prevention strategies and includes defensible space that would be maintained through vegetation management. The proposed project also was designed to be consistent with emergency management and potential for evacuations.

### *a) Compliance with Emergency Plans or Emergency Evacuation Plan*

The Lake County Emergency Operations Plan was adopted in 2018 and a more recent Draft Plan was circulated in July of 2020. The project would not impair or interfere with any provisions of either of the emergency response or evacuation plans. The EOP establishes multi-agency and multi-jurisdictional coordination during emergency operations, assigns functions and tasks consistent with California's Standardized Emergency Management System and the National Incident Management System, and serves



as the policy for emergency management in the Operational Area. No aspects of the proposed project would interfere with implementation of, coordination between agencies, or hamper any emergency response on site or in surrounding areas.

Access to the site is taken from a short private drive that intersects with SH-29 near the southern project property. This access would be improved as part of the project and within previously disturbed areas to comply with Caltrans standards. The gate would be set back from the roadway at least 30 feet and have a width of at least 20 feet, and have a Knox box. The project would meet CBC standards for emergency access as verified by the County Fire Marshall or other approving authority. This would include improving as needed, and then maintenance of access roads with all-weather standards (no mud or standing water), loops and/or turn-a-rounds/or hammerhead T's, and provision of turnouts or bulb outs every 400 feet. The existing internal roadway is not located in area with greater than 16 percent grade. In addition, the proposed project would implement all design requirements set for in Sections 4290 and 4291 CalFire Standards related to hazardous fire areas. The proposed project would not alter or modify any existing county roads and does not include any uses that would impede the use of SH-29 should it be needed to evacuate nearby areas.

*b) Ensure the proposed project does not make exiting fire hazard worse.*

The slopes within the cultivation area are typically between 0-10 percent. Within the overall project property slopes are more varied and greater than 30 percent in some areas. No cultivation or any project activities would occur in these areas. In addition, immediately surrounding the cultivation areas slopes do not exceed 30 percent. With vegetation being largely chaparral a fire hazard does exist. The proposed project would not result in substantial changes to any onsite locations that would increase the dangers of wildfire.

As discussed above, the project proposed to place all prefabricated structures in a concentrated area that is largely void of vegetation and would be mostly surrounded by proposed cultivation. The proposed project would use appropriate setbacks and fuel breaks of at least 100 feet around all structures. Fire buffers also will be used along the interior roadway by thinning, disking, mowing, or other means to reduce potential fire hazards.

All areas of the project that require electricity would be powered by on grid utilities from PG&E. Any lines that are extended are planned to occur within areas proposed for disturbance, are away from high fire hazard areas, and would be installed with all require safety and construction methodologies to minimize activities that result in temporary sparks, open flames, and minimize use of machinery to the extent feasible. Where and if generators are needed to support operations, the generators will be placed on a minimum of a ten-foot radius of non-combustible materials surface, and will have a 3A-40B fire extinguisher within the ten feet.

*c) Implement and comply with the Lake County Wildfire Protection Plan*

The proposed project would implement the Lake County Wildfire Protection Plan. Fire management on the project site would be done while maintaining a balance between needed fire prevention measures,

conservation, and wildlife protection. Fire management on the project site also will consider integration of community needs and expectations for fire safety. The project applicant also will work with adjacent property owners and coordinate, as needed to ensure fire protection strategies across property boundaries to achieve a cohesive strategy and to ensure that neither area would interfere with evacuation planning and preparation.

The proposed project would implement fuel-reduction methods in accordance with the County Wildland Fuel Hazard Reduction planning documentation. The proposed project would incorporate ecological fuel reduction to reduce surface fuels, ladder fuels, and crown density, as applicable, while implementing treatments that work to enhance plant community health and biodiversity. Site specific fuel reductions would take into consideration vegetation, soil types, slope, aspect, ecosystem health needs, and landowner objectives.

Trimmed or thinned material would be disposed of by chipping, composting. No controlled burning is proposed. The project also would not include broadcast burning which allows a controlled fire to burn in the understory throughout a designated area within well-defined boundaries, or patch or patch burning.

**Cultural Resources Evaluation - Confidential**

## Biological Resources Assessment Report



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**BIOLOGICAL RESOURCES ASSESSMENT FOR THE  
PURA VINEYARDS, LLC CANNABIS CULTIVATION OPERATION  
AT 6700 WILKINSON ROAD, KELSEYVILLE, CALIFORNIA**

May 20, 2020

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# 1. INTRODUCTION

## 1.1. PROJECT LOCATION AND DESCRIPTION

Natural Investigations Company conducted a biological resources assessment for a cannabis cultivation operation at Pura Vineyards, 6700 Wilkinson Road, Kelseyville, California. The property is 315 acres and consists of five parcels: APNs 007-018-02, 007-018-04, 007-018-11, 007-029-04, and 007-029-05. A cultivation compound of approximately 27 acres will be established, and up to 15.7 acres of Cannabis canopy is proposed to be cultivated on APNs 007-029-04 and -05. To establish this cultivation operation, existing vineyards will be removed; no trees need to be removed. The Cannabis will be grown in full sun, and planted in tilled, amended native soil. No hoopouses or greenhouses will be constructed at this time. No permanent structures will be constructed; trailers and shipping containers will be used for office, chemical and equipment storage, and product cold storage. Portable toilets will be rented and maintained. Existing agricultural well in southern portion of Study Area will be used for the water supply. A drip irrigation system will be employed, and a fertilizer injector will be used to supply nutrients to planting stations. Access is provided by existing, unpaved agricultural roads.

For this assessment, the Project Area was defined as the cultivation area plus the ancillary facilities, and this 27-acre area was the subject of the impact analysis. The entire 315-acre property was defined as the Study Area. The Study Area is defined to identify biological resources adjacent to the Project Area, and is the area subject to potential indirect effects from Project implementation.

## 1.2. PURPOSE AND SCOPE OF ASSESSMENT

This Biological Resources Assessment was prepared to assist in compliance with the California Environmental Quality Act and the state and federal Endangered Species Acts. This assessment also functions to fulfill requirements for obtaining enrollment (a Notice of Applicability) in the State Water Resources Control Board's Order WQ 2019-0007-DWQ General Waste Discharge Requirements for Discharges of Waste Associated with Cannabis Cultivation Activities (General Order).

This assessment provides information about the biological resources within the Study Area, the regulatory environment affecting such resources, any potential Project-related impacts upon these resources, and finally, to identify mitigation measures and other recommendations to reduce the significance of these impacts. The specific scope of services performed for this assessment consisted of the following tasks:

- Compile all readily-available historical biological resource information about the Study Area;
- Spatially query state and federal databases for any occurrences of special-status species or habitats within the Study Area and vicinity;
- Perform a reconnaissance-level field survey of the Study Area, including photographic documentation;
- Inventory all flora and fauna observed during the field survey;
- Characterize and map the habitat types present within the Study Area, including any potentially-jurisdictional water resources;
- Evaluate the likelihood for the occurrence of any special-status species;
- Assess the potential for the Project to adversely impact any sensitive biological resources;
- Recommend mitigation measures designed to avoid or minimize Project-related impacts; and
- Prepare and submit a report summarizing all of the above tasks.

The scope of services does not include other services that are not described in this Section, such as formal aquatic resource delineations or protocol-level surveys for special-status species.

### 1.3. REGULATORY SETTING

The following section summarizes some applicable regulations of biological resources on real property in California.

#### 1.3.1. Special-status Species Regulations

The United States Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service implement the Federal Endangered Species Act of 1973 (FESA) (16 USC §1531 *et seq.*). Threatened and endangered species on the federal list (50 CFR §17.11, 17.12) are protected from “take” (direct or indirect harm), unless a FESA Section 10 Permit is granted or a FESA Section 7 Biological Opinion with incidental take provisions is rendered. Pursuant to the requirements of FESA, an agency reviewing a proposed project within its jurisdiction must determine whether any federally listed species may be present in the project area and determine whether the proposed project will have a potentially significant impact upon such species. Under FESA, habitat loss is considered to be an impact to the species. In addition, the agency is required to determine whether the project is likely to jeopardize the continued existence of any species proposed to be listed under FESA or result in the destruction or adverse modification of critical habitat proposed to be designated for such species (16 USC §1536[3], [4]). Therefore, project-related impacts to these species or their habitats would be considered significant and would require mitigation. Species that are candidates for listing are not protected under FESA; however, USFWS advises that a candidate species could be elevated to listed status at any time, and therefore, applicants should regard these species with special consideration.

The California Endangered Species Act of 1970 (CESA) (California Fish and Game Code §2050 *et seq.*, and CCR Title 14, §670.2, 670.51) prohibits “take” (defined as hunt, pursue, catch, capture, or kill) of species listed under CESA. A CESA permit must be obtained if a project will result in take of listed species, either during construction or over the life of the project. Section 2081 establishes an incidental take permit program for state-listed species. Under CESA, California Department of Fish and Wildlife (CDFW) has the responsibility for maintaining a list of threatened and endangered species designated under state law (CFG Code 2070). CDFW also maintains lists of species of special concern, which serve as “watch lists.” Pursuant to requirements of CESA, an agency reviewing proposed projects within its jurisdiction must determine whether any state-listed species may be present in the Study Area and determine whether the proposed project will have a potentially significant impact upon such species. Project-related impacts to species on the CESA list would be considered significant and would require mitigation.

California Fish and Game Code Sections 4700, 5050, and 5515 designates certain mammal, amphibian, and reptile species “fully protected”, making it unlawful to take, possess, or destroy these species except under issuance of a specific permit. The California Native Plant Protection Act of 1977 (CFG Code §1900 *et seq.*) requires CDFW to establish criteria for determining if a species or variety of native plant is endangered or rare. Section 19131 of the code requires that landowners notify CDFW at least 10 days prior to initiating activities that will destroy a listed plant to allow the salvage of plant material.

Many bird species, especially those that are breeding, migratory, or of limited distribution, are protected under federal and state regulations. Under the Migratory Bird Treaty Act of 1918 (16 USC §703-711), migratory bird species and their nests and eggs that are on the federal list (50 CFR §10.13) are protected from injury or death, and project-related disturbances must be reduced or eliminated during the nesting cycle. California Fish and Game Code (§3503, 3503.5, and 3800) prohibits the possession, incidental take, or needless destruction of any bird nests or eggs. Fish and Game Code §3511 designates certain bird species “fully protected”, making it unlawful to take, possess, or destroy these species except under issuance of a specific permit. The Bald and Golden Eagle Protection Act (16 USC §668) specifically protects bald and golden eagles from harm or trade in parts of these species.



California Environmental Quality Act (CEQA) (Public Resources Code §15380) defines “rare” in a broader sense than the definitions of threatened, endangered, or fully protected. Under the CEQA definition, CDFW can request additional consideration of species not otherwise protected. CEQA requires that the impacts of a project upon environmental resources must be analyzed and assessed using criteria determined by the lead agency. Sensitive species that would qualify for listing but are not currently listed may be afforded protection under CEQA. The CEQA Guidelines (§15065) require that a substantial reduction in numbers of a rare or endangered species be considered a significant effect. CEQA Guidelines (§15380) provide for assessment of unlisted species as rare or endangered under CEQA if the species can be shown to meet the criteria for listing. Plant species on the California Native Plant Society (CNPS) Lists 1A, 1B, or 2 are typically considered rare under CEQA. California “Species of Special Concern” is a category conferred by CDFW on those species that are indicators of regional habitat changes or are considered potential future protected species. While they do not have statutory protection, Species of Special Concern are typically considered rare under CEQA and thereby warrant specific protection measures.

### 1.3.2. Water Resource Protection

Real property that contains water resources are subject to various federal and state regulations and activities occurring in these water resources may require permits, licenses, variances, or similar authorization from federal, state and local agencies, as described next.

The Federal Water Pollution Control Act Amendments of 1972 (as amended), commonly known as the Clean Water Act (CWA), established the basic structure for regulating discharges of pollutants into “waters of the United States”. Waters of the US includes essentially all surface waters, all interstate waters and their tributaries, all impoundments of these waters, and all wetlands adjacent to these waters. CWA Section 404 requires approval prior to dredging or discharging fill material into any waters of the US, especially wetlands. The permitting program is designed to minimize impacts to waters of the US, and when impacts cannot be avoided, requires compensatory mitigation. The US Army Corps of Engineers (USACE) is responsible for administering Section 404 regulations. Substantial impacts to jurisdictional wetlands may require an Individual Permit. Small-scale projects may require only a Nationwide Permit, which typically has an expedited process compared to the Individual Permit process. Mitigation of wetland impacts is required as a condition of the CWA Section 404 Permit and may include on-site preservation, restoration, or enhancement and/or off-site restoration or enhancement. The characteristics of the restored or enhanced wetlands must be equal to or better than those of the affected wetlands to achieve no net loss of wetlands.

Under CWA Section 401, every applicant for a federal permit or license for any activity which may result in a discharge to a water body must obtain State Water Quality Certification that the proposed activity will comply with State water quality standards. The California State Water Resources Control Board is responsible for administering CWA Section 401 regulations.

Section 10 of the Rivers and Harbors Act of 1899 requires approval from USACE prior to the commencement of any work in or over navigable Waters of the US, or which affects the course, location, condition or capacity of such waters. Navigable waters of the United States are defined as waters that have been used in the past, are now used, or are susceptible to use, as a means to transport interstate or foreign commerce up to the head of navigation. Rivers and Harbors Act Section 10 permits are required for construction activities in these waters.

California Fish and Game Code (§1601 - 1607) protects fishery resources by regulating “*any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake.*” CDFW requires notification prior to commencement, and issuance of a Lake or Streambed Alteration Agreement, if a proposed project will result in the alteration or degradation of “waters of the State”. The limit of CDFW jurisdiction is subject to the judgment of the

Department; currently, this jurisdiction is interpreted to be the “stream zone”, defined as “*that portion of the stream channel that restricts lateral movement of water*” and delineated at “*the top of the bank or the outer edge of any riparian vegetation, whichever is more landward*”. CDFW reviews the proposed actions and, if necessary, submits to the applicant a proposal for measures to protect affected fish and wildlife resources. The final proposal that is mutually agreed upon by the CDFW and the applicant is the Streambed Alteration Agreement. Projects that require a Streambed Alteration Agreement may also require a CWA 404 Section Permit and/or CWA Section 401 Water Quality Certification.

For construction projects that disturb one or more acres of soil, the landowner or developer must obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit, 2009-0009-DWQ).

The State Water Resources Control Board’s Order WQ 2019-0007-DWQ General Waste Discharge Requirements for Discharges of Waste Associated with Cannabis Cultivation Activities protects receiving water bodies from water-quality impacts associated with cannabis cultivation using a combination of Best Management Practices, buffer zones, sediment and erosion controls, site management plans, inspections and reporting, and regulatory oversight.

### 1.3.3. Tree Protection

At the State level, in areas inside timberland, any tree removal is subject to the conditions and requirements set forth in the Z’berg-Nejedly Forest Practice Act and the California Forest Practice Rules. If development of a project will result in the removal of commercial tree species, one of the following permits is needed: Less than 3 Acre Conversion Exemption; Christmas Tree; Dead, Dying or Diseased, Fuelwood, or Split Products Exemption; a Public Agency, Public and Private Utility Right of Way Exemption; a Notice of Exemption from Timberland Conversion Permit for Subdivision; or an Application for Timberland Conversion Permit.

Lake County does not have a specific ordinance protecting native trees. However, under the Cannabis Ordinance 3084, Section 4, Subsection iii) Prohibited Activities (a) Tree Removal, Lake County restricts tree removal as follows:

*“The removal of any commercial tree species as defined by the California Code of Regulations section 895.1, Commercial Species for the Coast Forest District and Northern Forest District, and the removal of any true oak species (Quercus species) or Tan Oak (Notholithocarpus species) for the purpose of developing a cannabis cultivation site should be avoided and minimized. This shall not include the pruning of any such tree species for the health of the tree or the removal of such trees if necessary for safety or disease concerns.”*

During the permitting process, Lake County requires mitigation for the removal of protected trees; typical mitigation is tree replacement at a ratio of 2:1 or 3:1.

## 2. ENVIRONMENTAL SETTING

The Study Area is located within the Inner North Coast Range geographic subregion, which is contained within the Northwestern California geographic subdivision of the larger California Floristic Province (Baldwin et al. 2012). This region has a Mediterranean-type climate, characterized by distinct seasons of hot, dry summers and wet, moderately-cold winters. The Study Area and vicinity is in climate Zone 14 “Northern California’s Inland Areas with Some Ocean Influence”, with maritime air moderating temperatures that would otherwise be hotter in summer and colder in the winter (Sunset, 2020). The topography of the Study Area is undulating, and consists of a series of ridges and foothills of Mount Konocti. The elevation ranges from approximately 1,600 feet to 2,400 feet above mean sea level.

## 3. METHODOLOGY

### 3.1. PRELIMINARY DATA GATHERING AND RESEARCH

Prior to conducting the field survey, the following information sources were reviewed:

- Any readily-available previous biological resource studies pertaining to the Study Area or vicinity
- United States Geologic Service (USGS) 7.5 degree-minute topographic quadrangles of the Study Area and vicinity
- Aerial photography of the Study Area
- California Natural Diversity Database (CNDDDB), electronically updated monthly by subscription
- USFWS species list (IPaC Trust Resources Report).

### 3.2. FIELD SURVEY

Consulting biologist Tim Nosal, MS. conducted a reconnaissance-level field survey on May 14, 2020. A variable-intensity pedestrian survey was performed, and modified to account for differences in terrain, vegetation density, and visibility. All visible fauna and flora observed were recorded in a field notebook, and identified to the lowest possible taxon. Survey efforts emphasized the search for any special-status species that had documented occurrences in the CNDDDB within the vicinity of the Study Area and those species on the USFWS species list (Appendix 1).

When a specimen could not be identified in the field, a photograph or voucher specimen (depending upon permit requirements) was taken and identified in the laboratory using a dissecting scope where necessary. Dr. Graening holds the following scientific collection permits: CDFW Scientific Collecting Permit No. SC-006802; and CDFW Plant Voucher Specimen Permit 09004. Tim Nosal holds CDFW Plant Voucher Specimen Permit 2081(a)-16-102-V. Taxonomic determinations were facilitated by referencing museum specimens or by various texts, including the following: Powell and Hogue (1979); Pavlik (1991); (1993); Brenzel (2012); Stuart and Sawyer (2001); Lanner (2002); Sibley (2003); Baldwin et al. (2012); Calflora (2020); CDFW (2020b,c); NatureServe 2020; and University of California at Berkeley (2020a,b).

The locations of any special-status species sighted were marked on aerial photographs and/or georeferenced with a geographic positioning system (GPS) receiver. Habitat types occurring in the Study Area were mapped on aerial photographs, and information on habitat conditions and the suitability of the habitats to support special-status species was also recorded. The Study Area was also informally assessed for the presence of potentially-jurisdictional water features, including riparian zones, isolated wetlands and vernal pools, and other biologically-sensitive aquatic habitats

### 3.3. MAPPING AND OTHER ANALYSES

Locations of species' occurrences and habitat boundaries within the Study Area were digitized to produce the final habitat maps. The boundaries of potentially jurisdictional water resources within the Study Area were identified and measured in the field, and similarly digitized to calculate acreage and to produce informal delineation maps. Geographic analyses were performed using geographical information system software (ArcGIS 10, ESRI, Inc.). Vegetation communities (assemblages of plant species growing in an area of similar biological and environmental factors), were classified by Vegetation Series (distinctive associations of plants, described by dominant species and particular environmental setting) using the CNPS Vegetation Classification system (Sawyer and Keeler-Wolf, 1995). Informal wetland delineation methods consisted of an abbreviated, visual assessment of the three requisite wetland parameters (hydrophytic vegetation, hydric soils, hydrologic regime) defined in the US Army Corps of Engineers Wetlands Delineation Manual (Environmental Laboratory, 1987). Wildlife habitats were classified according to the CDFW's California Wildlife Habitat Relationships System (CDFW, 2020c). Species' habitat requirements and life histories were identified using the following sources: Baldwin et al. (2012); CNPS (2020), Calflora (2020); CDFW (2020a,b,c); and University of California at Berkeley (2020a,b).



## 4. RESULTS

### 4.1. INVENTORY OF FLORA AND FAUNA FROM FIELD SURVEY

All plants detected during the field survey of the Study Area are listed in Appendix 2. The following animals were detected within the Study Area during the field survey:

western fence lizard (*Sceloporus occidentalis*); Botta's pocket gopher (*Thomomys bottae*); Columbian black-tailed deer (*Odocoileus hemionus columbianus*); coyote (*Canis latrans*); dusky-footed wood rat (*Neotoma fuscipes*); gray fox (*Urocyon cinereoargenteus*); Anna's hummingbird (*Calypte anna*); California quail (*Callipepla californica*); California scrub jay (*Aphelocoma californica*); California thrasher (*Toxostoma redivivum*); California towhee (*Melospiza crissalis*); common raven (*Corvus corax*); mourning dove (*Zenaidura macroura*); turkey vulture (*Cathartes aura*) and common songbirds.

### 4.2. VEGETATION COMMUNITIES AND WILDLIFE HABITAT TYPES

#### 4.2.1. Terrestrial Vegetation Communities

The Study Area contains the following terrestrial vegetation communities: Agricultural (Vineyard, Orchard), Chaparral, Gray Pine Woodland, and Oak Woodland/Forest. These vegetation communities are discussed here and are delineated in the Exhibits. Soils are derived from volcanic ash and residuum weathered from rhyolite, andesite and obsidian.

**Agricultural (Vineyard and Orchard):** These areas consist of converted natural habitat that was in agricultural production as vineyard or orchard. Vegetation within this habitat type consists primarily of agricultural crops lacking a consistent community structure. This habitat type provides limited resources for wildlife and is utilized primarily by species tolerant of human activities. The disturbed and altered condition of these lands greatly reduces their habitat value and ability to sustain rare plants or diverse wildlife assemblages. This habitat is classified as Holland vegetation type – “Urban”.

**Chaparral (Chamise/Scrub Oak):** Much of northern and eastern portions of the Study Area are dominated by shrub-covered slopes and ridges. Stands of chaparral within the Study Area are dominated by a rich diversity of species. Typical shrubs encountered within the chaparral include manzanita (*Arctostaphylos* spp.), chamise (*Adenostoma fasciculatum*), California scrub oak (*Quercus berberidifolia*), leather oak (*Quercus durata*), California lilac (*Ceanothus* spp.), western redbud (*Cercis occidentalis*), yerba santa (*Eriodictyon californicum*), toyon (*Heteromeles arbutifolia*), poison-oak (*Toxicodendron diversilobum*), Fremont's silk tassel (*Garrya fremontii*) and bush monkey flower (*Diplacus aurantiacus*). Occasional gray pine (*Pinus sabiniana*) and interior live oak (*Quercus wislizeni*) are found within the chaparral habitat. Because of the dense canopy of shrubs, very few herbs and grasses were observed in the understory. This vegetation can be classified as the Holland Type “Northern Mixed Chaparral” or “37.101.19 *Adenostoma fasciculatum*-*Arctostaphylos manzanita*” (CDFW 2019).

**Gray Pine Woodland/Forest.** A narrow ribbon of pine dominated vegetation is found within the western portion of the Study Area. This habitat is characterized by an open-to-dense canopy of gray pine with a diverse understory of shrubs including chamise, manzanita, toyon, leather oak, poison-oak, California lilac (*Ceanothus* spp.) and California bay (*Umbellularia californica*). The herbaceous layer within this habitat consists of a variety of native and non-native herbs and

grasses. This vegetation can be classified as the Holland Type “Non-Serpentine Gray Pine Woodland” or “87.130.07 *Pinus sabiniana* – *Adenostoma fasciculatum*” (CDFW 2019).

**Oak Woodland/Forest:** Oak woodland habitat is found along the western portions of the Study Area. Interior live oak is the primary species in the canopy, with occasional gray pine and exceptionally large common manzanita (*Arctostaphylos manzanita* ssp. *manzanita*). The shrub layer within the oak woodland is composed largely of common manzanita, California scrub oak, leather oak, toyon and poison oak. The trees and shrubs form a dense canopy, which limits the amount of light available to species in the herb layer. This vegetation can be classified as the Holland Type “Interior Live Oak Woodland” or “71.080.00 *Interior Live Oak Woodland*” (CDFW 2019).

#### 4.2.2. Wildlife Habitat Types

Wildlife habitat types were classified using CDFW’s Wildlife Habitat Relationship System. The Study Area contains the following wildlife habitat types: Montane Hardwood-Conifer; Montane Chaparral; Mixed Chaparral; Blue Oak Woodland; Annual Grassland; Orchard – Vineyard; and Barren.

#### 4.2.3. Critical Habitat and Special-status Habitat

No critical habitat for any federally-listed species occurs within the Project Area or the surrounding Study Area. The CNDDDB reported no special-status habitats within the Project Area or surrounding Study Area. The CNDDDB reported the following special-status habitats in a 10-mile radius outside of the Study Area: Clear Lake Drainage Resident Trout Stream; Clear Lake Drainage Cyprinid/Catostomid Stream; Clear Lake Drainage Seasonal Lakefish Spawning Stream; Northern Basalt Flow Vernal Pool; Northern Volcanic Ash Vernal Pool; Coastal and Valley Freshwater Marsh and Great Valley Mixed Riparian Forest. No special-status habitats were detected within the Project Area or surrounding Study Area during the field survey.

#### 4.2.4. Habitat Plans and Wildlife Corridors

Wildlife movement corridors link remaining areas of functional wildlife habitat that are separated primarily by human disturbance, but natural barriers such as rugged terrain and abrupt changes in vegetation cover are also possible. Wilderness and open lands have been fragmented by urbanization, which can disrupt migratory species and separate interbreeding populations. Corridors allow migratory movements and act as links between these separated populations.

Although there are no designated wildlife corridors, the open space within the Study Area provides unrestricted animal movement. The Study Area is not located within any adopted Habitat Conservation Plan or Natural Community Conservation Plan.

### 4.3. LISTED SPECIES AND OTHER SPECIAL-STATUS SPECIES

For the purposes of this assessment, “special status” is defined to be species that are of management concern to state or federal natural resource agencies, and include those species that are:

- Listed as endangered, threatened, proposed, or candidate for listing under the Federal Endangered Species Act;
- Listed as endangered, threatened, rare, or proposed for listing, under the California Endangered Species Act of 1970;
- Designated as endangered or rare, pursuant to California Fish and Game Code (§1901);
- Designated as fully protected, pursuant to California Fish and Game Code (§3511, §4700, or §5050);
- Designated as a species of special concern by CDFW;

- Plants considered to be rare, threatened or endangered in California by the California Native Plant Society (CNPS); this consists of species on Lists 1A, 1B, and 2 of the CNPS Ranking System; or
- Plants listed as rare under the California Native Plant Protection Act.

#### 4.3.1. Reported Occurrences of Listed Species and Other Special-status Species

A list of special-status plant and animal species that have occurred within the Study Area and vicinity was compiled based upon the following:

- Any previous and readily-available biological resource studies pertaining to the Study Area;
- Informal consultation with USFWS by generating an electronic Species List (Information for Planning and Conservation website at <https://ecos.fws.gov/ipac/>); and
- A spatial query of the CNDDDB.

The CNDDDB was queried and any reported occurrences of special-status species were plotted in relation to the Study Area boundary using GIS software (see exhibits). The CNDDDB reported the following special-status species occurrences within the Study Area: western pond turtle (*Emys marmorata*); few-flowered navarretia (*Navarretia leucocephala* ssp. *pauciflora*); woolly meadowfoam (*Limnanthes floccosa* ssp. *floccosa*); and glandular western flax (*Hesperolinon adenophyllum*). However, these occurrences are an artifact of the mapping process for occurrence records with vague location data. These rare species require aquatic, vernal pool, and serpentine habitat, respectively, and no such habitat is not found within the Study Area. Within a 10-mile buffer of the Study Area boundary, the CNDDDB reported several special-status species occurrences, summarized in the following table.

A USFWS species list was generated online using the USFWS' IPaC Trust Resource Report System (see Appendix 1). This list is generated using a regional and/or watershed approach and does not necessarily indicate that the Study Area provides suitable habitat. The following listed species should be considered in the impact assessment:

- Northern Spotted Owl (*Strix occidentalis caurina*) Threatened
- California Red-legged Frog (*Rana draytonii*) Threatened
- Delta Smelt (*Hypomesus transpacificus*) Threatened
- Conservancy Fairy Shrimp (*Branchinecta conservancy*) Endangered
- Burke's Goldfields (*Lasthenia burkei*) Endangered
- Few-flowered Navarretia (*Navarretia leucocephala* ssp. *pauciflora*) Endangered
- Many-flowered Navarretia (*Navarretia leucocephala* ssp. *plieantha*) Endangered
- Slender Orcutt Grass (*Orcuttia tenuis*) Threatened

Migratory birds should also be considered in the impact assessment.

## Special-status Species Reported by CNDDB in the Vicinity of the Study Area

Common Name Scientific Name	Status*	General Habitat**	Microhabitat**
<b>Red-bellied newt</b> <i>Taricha rivularis</i>	CSSC	Found in coastal woodlands and redwood forests along the coast of Northern California	A stream or river dweller. Larvae retreat into vegetation and under stones during the day.
<b>California giant salamander</b> <i>Dicamptodon ensatus</i>	CSSC	Mendocino and Lake Counties south to Santa Cruz and Santa Clara Counties.	Wet coastal forests in or near clear, cold permanent and semi-permanent streams and seepages.
<b>Foothill yellow-legged frog</b> <i>Rana boylei</i>	CCT/CSSC	Partly-shaded, shallow streams & riffles with a rocky substrate in a variety of habitats.	Need at least some cobble-sized substrate for egg-laying. Need at least 15 weeks to attain metamorphosis.
<b>Osprey</b> <i>Pandion haliaetus</i>	CWL	Ocean shore, bays, fresh-water lakes, and larger streams.	Large nests built in tree-tops within 15 miles of a good fish-producing body of water.
<b>Western yellow-billed cuckoo</b> <i>Coccyzus americanus occidentalis</i>	FT/CE	Riparian forest nester, along the broad, lower flood-bottoms of larger river systems.	Nests in riparian jungles of willow, often mixed with cottonwoods, w/ lower story of blackberry, nettles, or wild grape.
<b>Purple martin</b> <i>Progne subis</i>	CSSC	Inhabits woodlands, low elevation coniferous forest of Douglas-fir, ponderosa pine, & Monterey pine.	Nests in old woodpecker cavities mostly, also in human-made structures. Nest often located in tall, isolated tree/snag.
<b>Bell's sage sparrow</b> <i>Artemisospiza belli belli</i>	CWL	Nests in chaparral dominated by fairly dense stands of chamise. Found in coastal sage scrub in south of range.	Nest located on the ground beneath a shrub or in a shrub 6-18 inches above ground. Territories about 50 yds apart.
<b>Tricolored blackbird</b> <i>Agelaius tricolor</i>	CT/CSSC	Highly colonial species, most numerous in Central Valley & vicinity. Largely endemic to California.	Requires open water, protected nesting substrate, & foraging area with insect prey within a few km of the colony.
<b>Steelhead - central California coast DPS</b> <i>Oncorhynchus mykiss irideus pop. 8</i>	FT	From Russian River, south to Soquel Cr & to, but not including, Pajaro River. Also San Francisco & San Pablo Bay basins.	
<b>Clear Lake hitch</b> <i>Lavinia exilicauda chi</i>	CT	Found only in Clear Lake, Lake Co, and associated ponds. Spawns in streams flowing into Clear Lake.	Adults found in the limnetic zone. Juveniles found in the nearshore shallow-water habitat hiding in the vegetation.
<b>Sacramento perch</b> <i>Archoplites interruptus</i>	CSSC	Historically found in the sloughs, slow-moving rivers, and lakes of the Central Valley.	Prefers warm water. Aquatic vegetation is essential for young. Tolerates wide range of physio-chemical water conditions.
<b>Long-eared myotis</b> <i>Myotis evotis</i>	CSSC	Found in all brush, woodland & forest habitats from sea level to about 9000 ft. Prefers coniferous woodlands & forests.	Nursery colonies in buildings, crevices, spaces under bark, & snags. Caves used primarily as night roosts.
<b>Fringed myotis</b> <i>Myotis thysanodes</i>	CSSC	In a wide variety of habitats, optimal habitats are pinyon-juniper, valley foothill hardwood & hardwood-conifer.	Uses caves, mines, buildings or crevices for maternity colonies and roosts.
<b>Hoary bat</b> <i>Lasiurus cinereus</i>	CSSC	Prefers open habitats or habitat mosaics, with access to trees for cover & open areas or habitat edges for feeding.	Roosts in dense foliage of medium to large trees. Feeds primarily on moths. Requires water.
<b>Western red bat</b> <i>Lasiurus blossevillii</i>	CSSC	Roosts primarily in trees, 2-40 ft above ground, from sea level up through mixed conifer forests.	Prefers habitat edges & mosaics with trees that are protected from above & open below with open areas for foraging.
<b>Townsend's big-eared bat</b> <i>Corynorhinus townsendii</i>	CSSC	Throughout California in a wide variety of habitats. Most common in mesic sites.	Roosts in the open, hanging from walls & ceilings. Roosting sites limiting. Extremely sensitive to human disturbance.
<b>Pallid bat</b> <i>Antrozous pallidus</i>	CSSC	Deserts, grasslands, shrublands, woodlands & forests. Most common in	Roosts must protect bats from high temperatures. Very sensitive to disturbance



		open, dry habitats with rocky areas for roosting.	of roosting sites.
<b>North American porcupine</b> <i>Erethizon dorsatum</i>	CSSC		
<b>American badger</b> <i>Taxidea taxus</i>	CSSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils.	Needs sufficient food, friable soils & open, uncultivated ground. Preys on burrowing rodents. Digs burrows.
<b>Western pond turtle</b> <i>Emys marmorata</i>	CSSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams & irrigation ditches, usually with aquatic vegetation, be	Need basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying
<b>An isopod</b> <i>Calasellus californicus</i>	CSSC	Known from Lake, Napa, Marin, Santa Cruz and Santa Clara counties.	
<b>Brownish dubiraphian riffle beetle</b> <i>Dubiraphia brunnescens</i>	CSSC	Aquatic; known only from the NE shore of Clear Lake, Lake County.	Inhabits exposed, wave-washed willow roots.
<b>Ricksecker's water scavenger beetle</b> <i>Hydrochara rickseckeri</i>	CSSC	Aquatic.	
<b>Western bumble bee</b> <i>Bombus occidentalis</i>	CSSC	Once common & widespread, species has declined precipitously from central ca to southern B.C., perhaps from disease.	
<b>Obscure bumble bee</b> <i>Bombus caliginosus</i>	CSSC		
<b>Blennosperma vernal pool andrenid bee</b> <i>Andrena blennospermatis</i>	CSSC	This bee is oligolectic on vernal pool Blennosperma.	Bees nest in the uplands around vernal pools.
<b>Borax Lake cuckoo wasp</b> <i>Hedychridium milleri</i>	CSSC	Endemic to central California. Only collection is from the type locality.	External parasite of wasp and bee larva.
<b>Clear Lake pyrg</b> <i>Pyrgulopsis ventricosa</i>	CSSC	Open grassy coastal prairies and Coast Range meadows. Nesting occurs underground as well as above ground in abandoned bird nests.	Food plants include <i>Ceanothus</i> , <i>Cirsium</i> , <i>Clarkia</i> , <i>Keckiella</i> , <i>Lathyrus</i> , <i>Lotus</i> , <i>Lupinus</i> , <i>Rhododendron</i> , <i>Rubus</i> , <i>Trifolium</i> , and <i>Vaccinium</i> .
<b>Toren's grimmia</b> <i>Grimmia torenii</i>	1B.3	Cismontane woodland, lower montane coniferous forest, chaparral.	Openings, rocky, boulder and rock walls, carbonate, volcanic. 325-1160 m.
<b>Loch Lomond button-celery</b> <i>Eryngium constancei</i>	FE/CE/1B.1	Vernal pools.	Volcanic ash flow vernal pools. 460-855 m.
<b>Small-flowered calycadenia</b> <i>Calycadenia micrantha</i>	1B.2	Chaparral, valley and foothill grassland, meadows and seeps.	Rocky talus or scree; sparsely vegetated areas. Occasionally on roadsides; sometimes on serpentine. 5-1500 m.
<b>Greene's narrow-leaved daisy</b> <i>Erigeron greenei</i>	1B.2	Chaparral.	Serpentine and volcanic substrates, generally in shrubby vegetation. 80-1005 m.
<b>Burke's goldfields</b> <i>Lasthenia burkei</i>	FE/CE/1B.1	Vernal pools, meadows and seeps.	Most often in vernal pools and swales. 15-600 m.
<b>Colusa layia</b> <i>Layia septentrionalis</i>	1B.2	Chaparral, cismontane woodland, valley and foothill grassland.	Scattered colonies in fields and grassy slopes in sandy or serpentine soil. 145-1095m.
<b>Hall's harmonia</b> <i>Harmonia hallii</i>	1B.2	Chaparral.	Serpentine hills and ridges. Open, rocky areas within chaparral. 500-900 m.
<b>Bent-flowered fiddleneck</b> <i>Amsinckia lunaris</i>	1B.2	Cismontane woodland, valley and foothill grassland.	50-500m.
<b>Serpentine cryptantha</b> <i>Cryptantha dissita</i>	1B.2	Chaparral.	Serpentine outcrops. 330-730m.
<b>Mayacamas popcornflower</b>	1A	Meadows? Valley and foothill grassland, cismontane woodland, chaparral?	Moist sites. 285-450m.

<i>Plagiobothrys lithocaryus</i>			
<b>Watershield</b> <i>Brasenia schreberi</i>	2B.3	Freshwater marshes and swamps.	Aquatic from water bodies both natural and artificial in California.
<b>Legenere</b> <i>Legenere limosa</i>	1B.1	Vernal pools.	In beds of vernal pools. 1-880 m.
<b>Three-fingered morning-glory</b> <i>Calystegia collina</i> ssp. <i>tridactylosa</i>	1B.2	Chaparral, cismontane woodland.	Rocky, gravelly openings in serpentine. 0-600 m.
<b>Oval-leaved viburnum</b> <i>Viburnum ellipticum</i>	2B.3	Chaparral, cismontane woodland, lower montane coniferous forest.	215-1400 m.
<b>Lake County stonecrop</b> <i>Sedella leiocarpa</i>	FE/CE/1B.1	Valley and foothill grassland, vernal pools, cismontane woodland.	Level areas that are seasonally wet and dry out in late spring; substrate usually of volcanic origin. 365-790 m.
<b>Raiche's manzanita</b> <i>Arctostaphylos stanfordiana</i> ssp. <i>raichei</i>	1B.1	Chaparral, lower montane coniferous forest.	Rocky, serpentine sites. Slopes and ridges. 450-1000 m.
<b>Konocti manzanita</b> <i>Arctostaphylos manzanita</i> ssp. <i>elegans</i>	1B.3	Chaparral, cismontane woodland, lower montane coniferous forest.	Volcanic soils. 395-1615 m.
<b>Jepson's milk-vetch</b> <i>Astragalus rattanii</i> var. <i>jepsonianus</i>	1B.2	Cismontane woodland, valley and foothill grassland, chaparral.	Commonly on serpentine in grassland or openings in chaparral. 180-1000 m.
<b>Cobb Mountain lupine</b> <i>Lupinus sericatus</i>	1B.2	Chaparral, cismontane woodland, lower montane coniferous forest, broadleaved upland forest.	In stands of knobcone pine-oak woodland, on open wooded slopes in gravelly soils; sometimes on serpentine. 275-1525 m.
<b>Napa bluecurls</b> <i>Trichostema ruygii</i>	1B.2	Cismontane woodland, chaparral, valley and foothill grassland, vernal pools, lower montane coniferous forest.	Often in open, sunny areas. Also has been found in vernal pools. 30-590m.
<b>Woolly meadowfoam</b> <i>Limnanthes floccosa</i> ssp. <i>floccosa</i>	4.2	Chaparral, cismontane woodland, valley and foothill grassland, vernal pools.	Vernally wet areas, ditches, and ponds. 60-1335 m.
<b>Glandular western flax</b> <i>Hesperolinon adenophyllum</i>	1B.2	Chaparral, cismontane woodland, valley and foothill grassland.	Serpentine soils; generally found in serpentine chaparral. 150-1315 m.
<b>Marsh checkerbloom</b> <i>Sidalcea oregana</i> ssp. <i>hydrophila</i>	1B.2	Meadows and seeps, riparian forest.	Wet soil of streambanks, meadows. 1100-2300 m.
<b>Brandegge's eriastrium</b> <i>Eriastrum brandegeae</i>	1B.1	Chaparral, cismontane woodland.	On barren volcanic soils; often in open areas. 425-840 m.
<b>Baker's navarretia</b> <i>Navarretia leucocephala</i> ssp. <i>bakeri</i>	1B.1	Cismontane woodland, meadows and seeps, vernal pools, valley and foothill grassland, lower montane coniferous forest.	Vernal pools and swales; adobe or alkaline soils. 5-1740 m.
<b>Few-flowered navarretia</b> <i>Navarretia leucocephala</i> ssp. <i>pauciflora</i>	FE/CT/1B.1	Vernal pools.	Volcanic ash flow, and volcanic substrate vernal pools. 400-855 m.
<b>Many-flowered navarretia</b> <i>Navarretia leucocephala</i> ssp. <i>plieantha</i>	FE/CE/1B.2	Vernal pools.	Volcanic ash flow vernal pools. 30-950 m.
<b>Rincon Ridge ceanothus</b> <i>Ceanothus confusus</i>	1B.1	Closed-cone coniferous forest, chaparral, cismontane woodland.	Known from volcanic or serpentine soils, dry shrubby slopes. 75-1065 m.
<b>Calistoga ceanothus</b> <i>Ceanothus divergens</i>	1B.2	Chaparral.	Rocky, serpentine or volcanic sites. 170-950 m.
<b>Bolander's horkelia</b> <i>Horkelia bolanderi</i>	1B.2	Lower montane coniferous forest, chaparral, meadows, valley and foothill grassland.	Grassy margins of vernal pools and meadows. 450-1100 m.

<b>Boggs Lake hedge-hyssop</b> <i>Gratiola heterosepala</i>	CE/1B.2	Marshes and swamps (freshwater), vernal pools.	Clay soils; usually in vernal pools, sometimes on lake margins. 10-2375 m.
<b>Sonoma beardtongue</b> <i>Penstemon newberryi</i> var. <i>sonomensis</i>	1B.3	Chaparral.	Crevices in rock outcrops and talus slopes. 700-1370 m.
<b>Dimorphic snapdragon</b> <i>Antirrhinum subcordatum</i>	4.3	Chaparral, lower montane coniferous forest.	Generally, on serpentine or shale in foothill woodland or chaparral on s- and w-facing slopes. 185-800 m.
<b>Geysers panicum</b> <i>Panicum acuminatum</i> var. <i>thermale</i>	CE/1B.2	Closed-cone coniferous forest, riparian forest, valley and foothill grassland.	Usually around moist, warm soil in the vicinity of hot springs. 305-2470 m.
<b>California satintail</b> <i>Imperata brevifolia</i>	2B.1	Coastal scrub, chaparral, riparian scrub, Mojavean scrub, meadows and seeps (alkali), riparian scrub.	Mesic sites, alkali seeps, riparian areas. 0-1215 m.
<b>Slender Orcutt grass</b> <i>Orcuttia tenuis</i>	FT/CE/1B.1	Vernal pools.	Often in gravelly pools. 35-1760 m.
<b>Eel-grass pondweed</b> <i>Potamogeton zosteriformis</i>	2B.2	Marshes and swamps.	Ponds, lakes, streams. 0-1860 m.

\*Definitions of Status Codes: FE = Federally listed as endangered; FT = Federally listed as threatened; FPE = Federally proposed for listing as endangered; FPT = Federally proposed for listing as threatened; FC = Candidate for Federal listing; MB = Migratory Bird Act; CE = California State listed as endangered; CT = California State listed as threatened; CSSC = California species of special concern; CR = California rare species; CFP = California fully protected species; CNPS (California Native Plant Society) List 1A = Plants presumed extinct in California by CNPS; CNPS List 1B = CNPS designated rare or endangered plants in California and elsewhere; and CNPS List 2 = CNPS designated rare or endangered plants in California, but more common elsewhere. Global Ranking: G1 = Critically Imperiled; G2 = Imperiled; G3 = Vulnerable. State Ranking: S1 = Critically Imperiled; S2 = Imperiled; S3 = Vulnerable.

\*\*Copied verbatim from CNDDB, unless otherwise noted.

#### **4.3.2. Listed Species or Special-status Species Observed During Field Survey**

During the field survey, no special-status species were detected within the Project Area or the surrounding Study Area.

#### **4.3.3. Potential for Listed Species or Special-status Species to Occur in the Study Area**

The footprint for the proposed project is entirely within existing vineyard habitat, which has virtually no potential to support special-status species due to habitat conversion and constant disturbance from agricultural activities. Areas of the Study Area that contain undisturbed habitats, such as the chaparral and woodland habitats, have a moderate potential to sustain special-status plant species because several locally-occurring special status plant species are known to occur on volcanic soils, and volcanic soils are present in the Study Area. However, implementation of the proposed project will not disturb these habitats, and vegetated buffers exist between these areas. Streams, riparian corridors, and riverine wetlands can sustain aquatic special-status species but there are no water resources within the Study Area.

### **4.4. POTENTIALLY-JURISDICTIONAL WATER RESOURCES**

The USFWS National Wetland Inventory reported no water features within the Project Area or the surrounding Study Area (see Exhibits).

An informal assessment for the presence of potentially-jurisdictional water resources within the Study Area was also conducted during the field survey. For purposes of this biological site assessment, non-wetland waters were classified using the California Forest Practice Rules. The California Forest Practice Rules define a Class I watercourse as 1) a watercourse providing habitat for fish always or seasonally, and/or 2) providing a domestic water source; a Class II watercourse is 1) a watercourse capable of supporting non-fish aquatic species, or 2) a watercourse within 1000 feet of a watercourse that seasonally or always has fish present; a Class III watercourse is a watercourse with no aquatic life present and that shows evidence of being capable of transporting sediment to Class I and Class II waters during high water flow conditions.

The field survey determined that the Project Area and surrounding Study Area do not contain any channels or wetlands. There are no vernal pools or other isolated wetlands in the Study Area. The topography is too steep, and the soils too well drained, to contain surface water resources.



## 5. IMPACT ANALYSES AND MITIGATION MEASURES

This section establishes the impact criteria, then analyzes potential Project-related impacts upon the known biological resources within the Study Area, and then suggests mitigation measures to reduce these impacts to a less-than-significant level.

### 5.1. IMPACT SIGNIFICANCE CRITERIA

The significance of impacts to biological resources depends upon the proximity and quality of vegetation communities and wildlife habitats, the presence or absence of special-status species, and the effectiveness of measures implemented to protect these resources from Project-related impacts. As defined by CEQA, the Project would be considered to have a significant adverse impact on biological resources if it would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a special-status species in local or regional plans, policies, or regulations, or by USFWS or CDFW
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by USFWS or CDFW
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means
- 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
- Conflict with any county or municipal policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved governmental habitat conservation plan.

### 5.2. IMPACT ANALYSIS

The following discussion evaluates the potential for Project-related activities to adversely affect biological resources. The Project boundaries were digitized and then overlaid on the habitat map using GIS to quantify potential impacts. Historical aerial photos were also analyzed for changes in land use.

#### 5.2.1. Potential Direct / Indirect Adverse Effects Upon Special-status Species

- *Will the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*

The footprint for the proposed project is entirely within existing vineyard habitat, which has virtually no potential to support special-status species due to habitat conversion and constant disturbance from agricultural activities. Areas of the Study Area that contain undisturbed habitats, such as the chaparral and woodland habitats, have a moderate potential to sustain special-status plant species because several locally-occurring special status plant species are known to occur on volcanic soils, and volcanic soils are present in the Study Area. However, implementation of the proposed project will not disturb these habitats, and vegetated buffers exist between these areas. Streams, riparian corridors, and riverine wetlands can sustain aquatic special-status species but there are no water resources within the

Study Area, and the Project Area is at least a thousand feet from the nearest channel or wetland. No impacts to special-status species were identified from project implementation.

Special-status bird species were reported in databases (CNDDDB and USFWS) in the vicinity of the Study Area. The Project Area contains no trees or other suitable nesting habitat for bird species. No nests were observed during the field survey. Therefore, Project construction is considered to have a less than significant adverse impact to nesting birds.

### **Recommended Mitigation Measures**

No mitigation is necessary.

If future construction activities require grading or other soil-disturbing activities in undisturbed chaparral, gray pine woodland, or oak woodland habitat, a rare plant survey is recommended before groundbreaking. If trees are removed, a pre-construction nesting bird survey is recommended.

### **5.2.2. Potential Direct / Indirect Adverse Effects Upon Special-status Habitats or Natural Communities or Corridors**

- *Will the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*

The Study Area is not within any designated listed species' critical habitat. The Project Area and surrounding Study Area contains no special-status habitats. Vegetated buffers exist between the Study Area and the nearest offsite sensitive habitats. There is no evidence that project implementation will impact any special-status habitats.

### **Recommended Mitigation Measures**

No mitigation is necessary.

### **5.2.3. Potential Direct / Indirect Adverse Effects on Jurisdictional Water Resources**

- *Will the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*

There are no water resources within the Study Area or surrounding Project Area. Potential indirect impacts to water resources could occur during construction by increased erosion and sedimentation in receiving water bodies due to soil disturbance. This is unlikely because the nearest receiving water bodies are over 1,000 feet away and vegetated buffers exist in between.

If the total area of ground disturbance from installation of the cultivation operation is 1 acre or more, the Cultivator must enroll for coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit, 2009-0009-DWQ). Implementation of a stormwater pollution prevention plan, and erosion control plan, along with regular inspections, will ensure that construction activities do not pollute receiving waterbodies.

Potential adverse impacts to water resources could occur during operation of cultivation activities resources by discharge of sediment or other pollutants (fertilizers, pesticides, human waste, etc.) into receiving waterbodies. However, the project proponent must file a Notice of Intent and enroll in Cannabis Cultivation Order WQ 2019-0007-DWQ. Compliance with this Order will ensure that cultivation operations will not significantly impact water resources by using a combination of Best Management Practices (BMPs), buffer zones, sediment and erosion controls, site management plans, inspections and reporting, and regulatory oversight.

Cultivators who enroll in the State Water Board's Waste Discharge Requirements for Cannabis Cultivation Order WQ 2019-0007-DWQ must comply with the Minimum Riparian Setbacks, as summarized in the following table. The Project would be considered to have a significant adverse impact on jurisdictional water resources if it would be non-compliant with these requirements. The minimum riparian setbacks apply to all land disturbance, cannabis cultivation activities, and facilities (e.g., material or vehicle storage, diesel powered pump locations, water storage areas, and chemical toilet placement). The proposed project is compliant with the setback requirements of Cannabis Cultivation Order WQ 2019-0007-DWQ.

**Minimum Riparian Setbacks**

Common Name	Watercourse Class	Distance
Perennial watercourses, waterbodies (e.g. lakes, ponds), or springs	I	150 ft.
Intermittent watercourses or wetlands	II	100 ft.
Ephemeral watercourses	III	50 ft.
Man-made irrigation canals, water supply reservoirs, or hydroelectric canals that support native aquatic species	IV	Established riparian zone vegetation

## Recommended Mitigation Measures

No impacts were identified, and therefore no mitigation measures are proposed.

### 5.2.4. Potential Impacts to Wildlife Movement, Corridors, etc.

- *Will the project 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?*

Although no mapped wildlife corridors (such as the California Essential Habitat Connectivity Area layer in CNDDDB) exist within or near the Study Area, the open space in the Study Area facilitate animal movement and migrations. The existing vineyards pose a partial barrier to wildlife movement. While the Study Area may be used by wildlife for movement or migration, the Project would not have a significant impact on this movement because it would not block movement and the majority of the open space in the Study Area would still be available.

Implementation of the proposed project would necessitate erection of security fences around the cultivation compounds. These fences do not allow animal movement and may act as a local barrier to wildlife movement. However, the fenced cultivation areas are surrounded by open space, allowing wildlife to move around these fenced areas. Thus, implementation of the proposed project is a less than significant impact upon wildlife movement. Implementation of the project will not 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.

### **Recommended Mitigation Measures**

No mitigation is necessary.

#### **5.2.5. Potential Conflicts with Ordinances, Habitat Conservation Plans, etc.**

- *Will the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*
- *Will the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?*

Construction of the project will not require the removal of trees protected by Lake County or CALFIRE. This is a potentially significant impact before mitigation. The project does not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or another approved governmental habitat conservation plan. The Study Area is not within the coverage area of any adopted Habitat Conservation Plan or Natural Community Conservation Plan.

### **Recommended Mitigation Measures**

No mitigation is necessary.



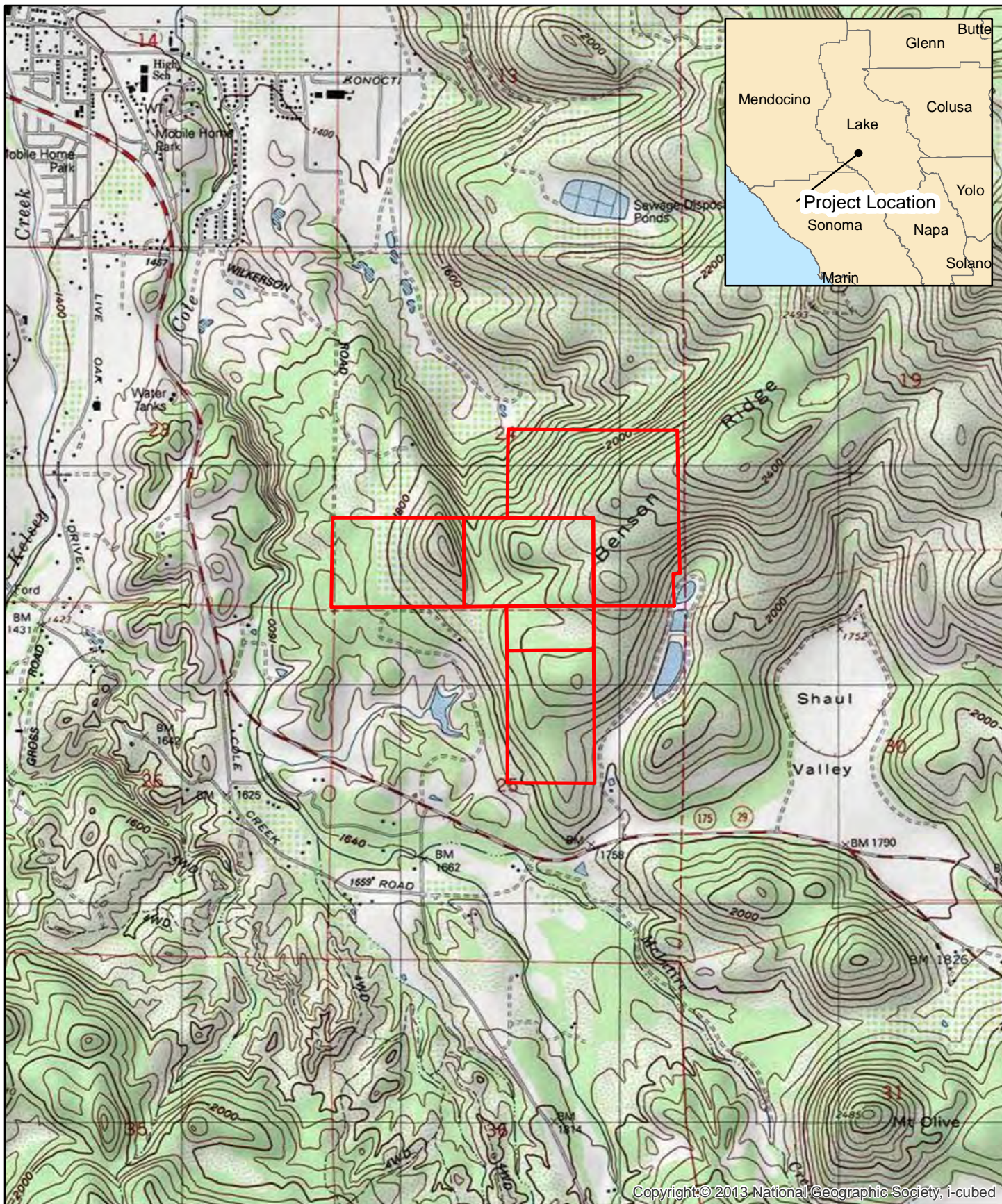
## 6. REFERENCES

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# EXHIBITS





Parcel Location

0

0.5

1

Kilometers

0

0.5

1

Miles



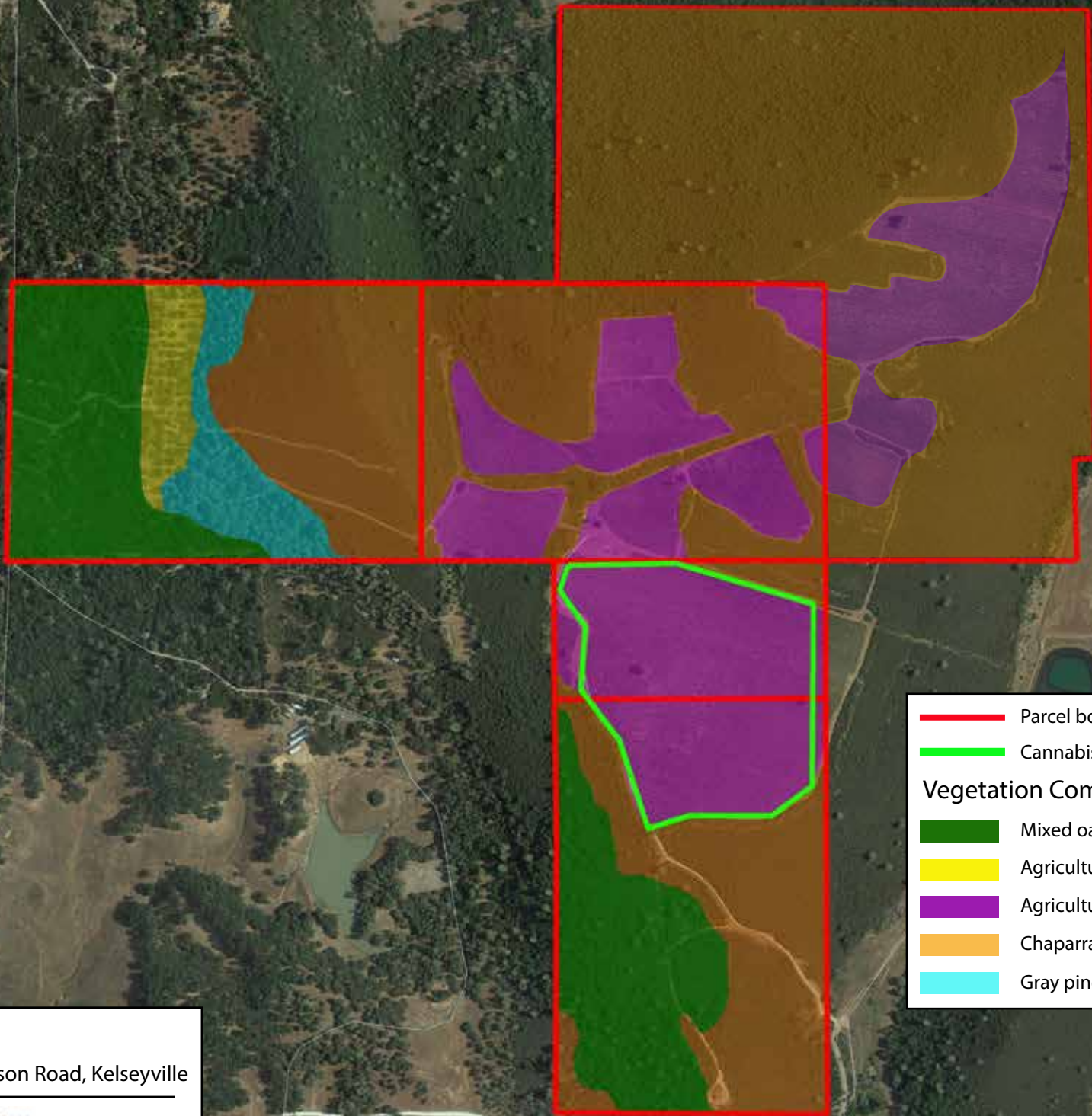
1:24,000

Pura Vineyards  
Parcel Location Map



NATURAL  
INVESTIGATIONS  
COMPANY





## Habitats

Pura Vineyards, 6700 Wilkinson Road, Kelseyville



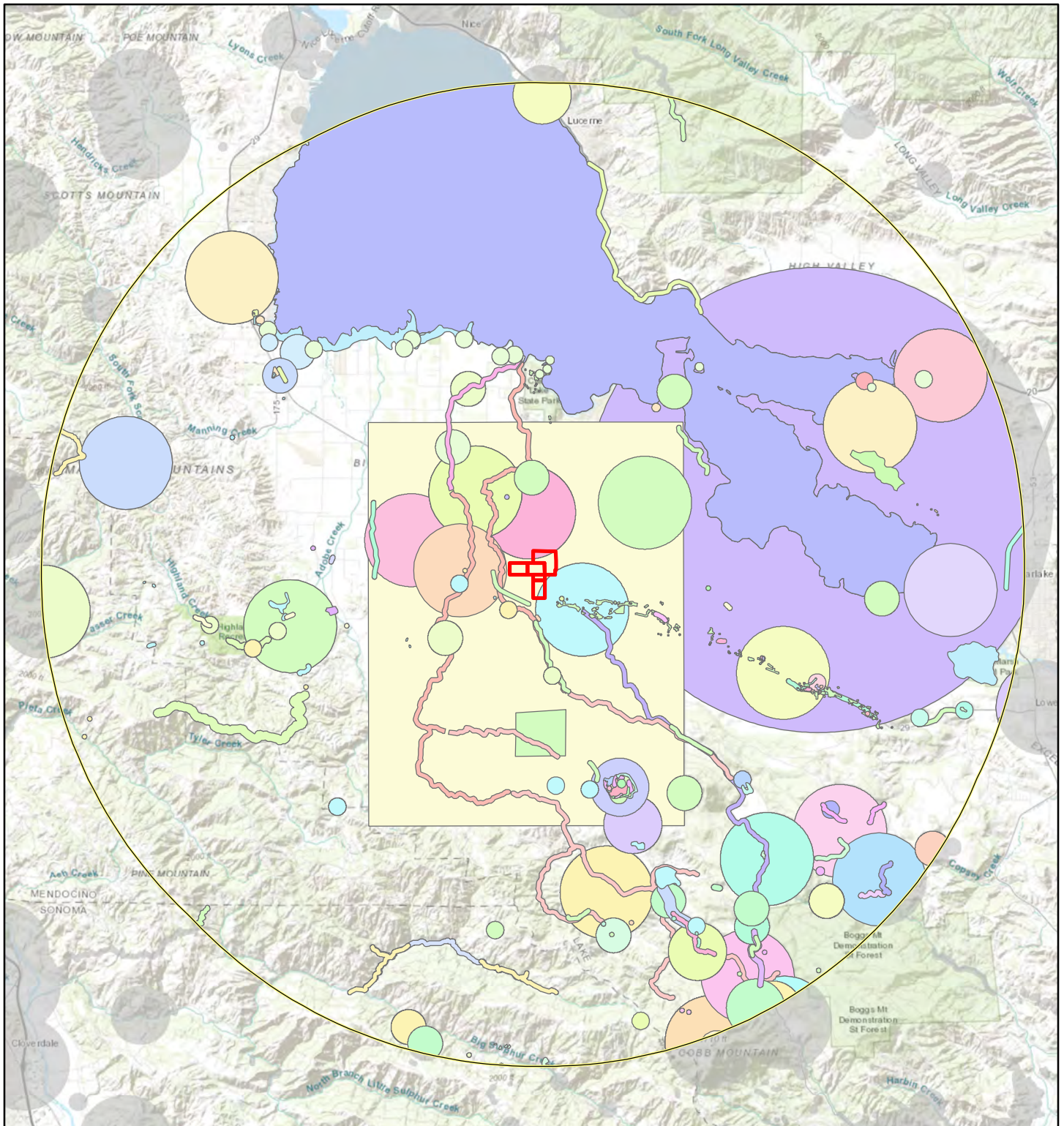
NATURAL INVESTIGATIONS  
COMPANY

- Parcel boundaries
- Cannabis Production Area
- Vegetation Community Types**
  - Mixed oak woodland/forest
  - Agricultural (orchard)
  - Agricultural (vineyard)
  - Chaparral
  - Gray pine forest



2000 ft





Parcel Location  10 Mile Buffer

1:190,000      1 inch = 3 miles  
 0                      3                      6  
 Miles



**Notes:**

1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. Natural Investigations Company can not guarantee the accuracy and content of electronic files. The master file is stored by Natural Investigations Company and will serve as the official record of this communication.
3. It is unlawful to copy or reproduce all or any part thereof, whether for personal use or resale, without permission. Data Sources: California Department of Fish and Wildlife. 2020. RareFind 5.x, California Natural Diversity Data Base. Biogeographic Data Branch, Sacramento, California. (updated monthly by subscription service)

## Special-Status Species Occurrences Map

### Pura Vineyards

Kelseyville 1993 Quadrangle: Township 13N, Range 9W, Section 24,25

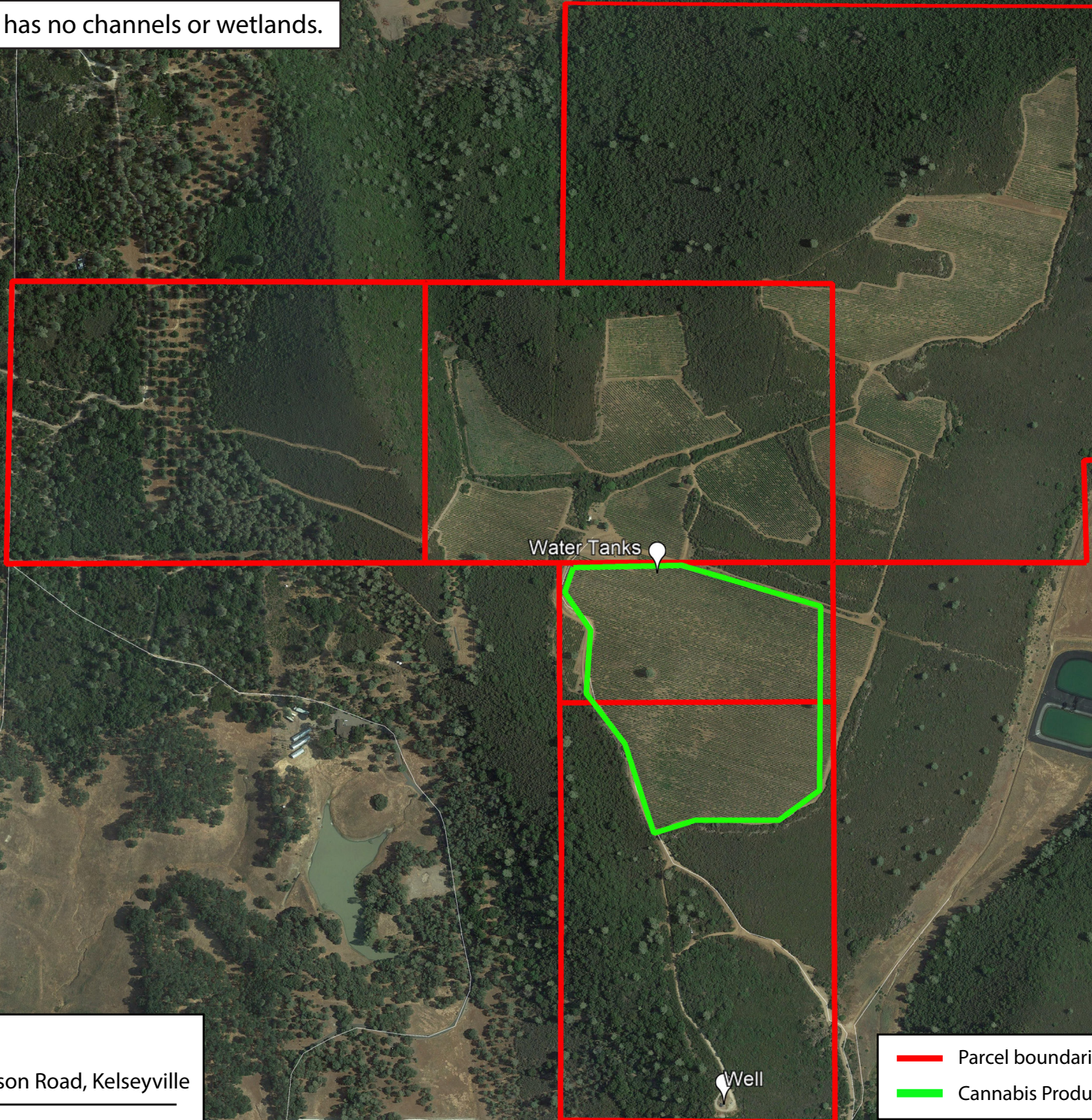


**NATURAL INVESTIGATIONS CO.**

[WWW.NATURALINVESTIGATIONS.COM](http://WWW.NATURALINVESTIGATIONS.COM)



Note: This property has no channels or wetlands.



## Water Resources

Pura Vineyards, 6700 Wilkinson Road, Kelseyville



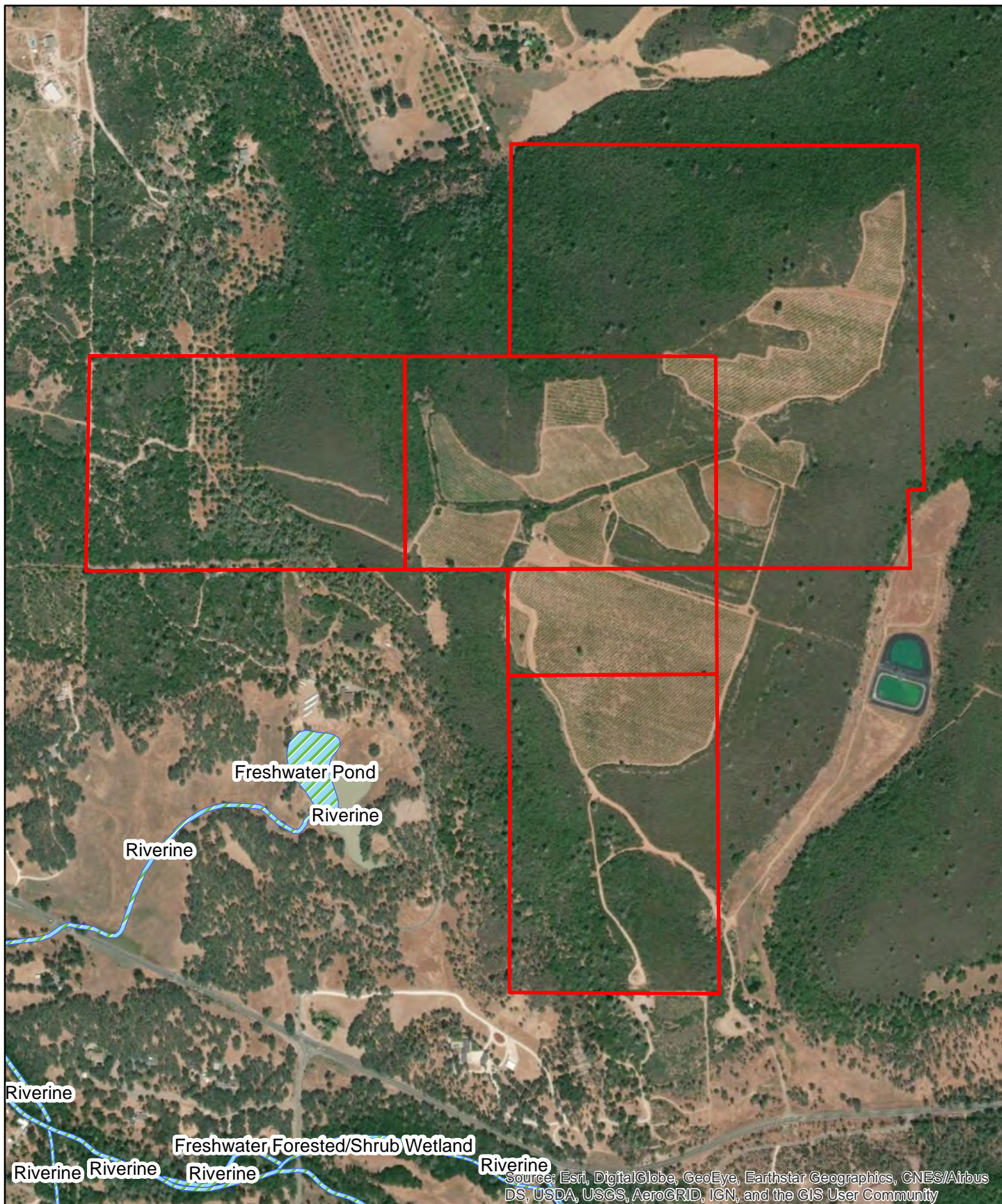
NATURAL INVESTIGATIONS  
COMPANY

- Parcel boundaries
- Cannabis Production Area



2000 ft



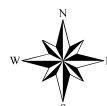


Parcel Location

Wetlands and Channels

0 250 500  
Meters

0 1,000 2,000  
Feet



1:10,000

Pura Vineyards  
National Wetlands Inventory  
Features Map



NATURAL  
INVESTIGATIONS  
COMPANY

## **APPENDIX 1: USFWS SPECIES LIST**





## United States Department of the Interior

### FISH AND WILDLIFE SERVICE

Sacramento Fish And Wildlife Office

Federal Building

2800 Cottage Way, Room W-2605

Sacramento, CA 95825-1846

Phone: (916) 414-6600 Fax: (916) 414-6713



In Reply Refer To:

May 06, 2020

Consultation Code: 08ESMF00-2020-SLI-1826

Event Code: 08ESMF00-2020-E-05665

Project Name: Pura Vineyards

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

#### To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, under the jurisdiction of the U.S. Fish and Wildlife Service (Service) that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the Service under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

Please follow the link below to see if your proposed project has the potential to affect other species or their habitats under the jurisdiction of the National Marine Fisheries Service:

[http://www.nwr.noaa.gov/protected\\_species/species\\_list/species\\_lists.html](http://www.nwr.noaa.gov/protected_species/species_list/species_lists.html)

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan ([http://www.fws.gov/windenergy/eagle\\_guidance.html](http://www.fws.gov/windenergy/eagle_guidance.html)). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

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Attachment(s):

- Official Species List

# Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

**Sacramento Fish And Wildlife Office**

Federal Building

2800 Cottage Way, Room W-2605

Sacramento, CA 95825-1846

(916) 414-6600

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## Project Summary

Consultation Code: 08ESMF00-2020-SLI-1826

Event Code: 08ESMF00-2020-E-05665

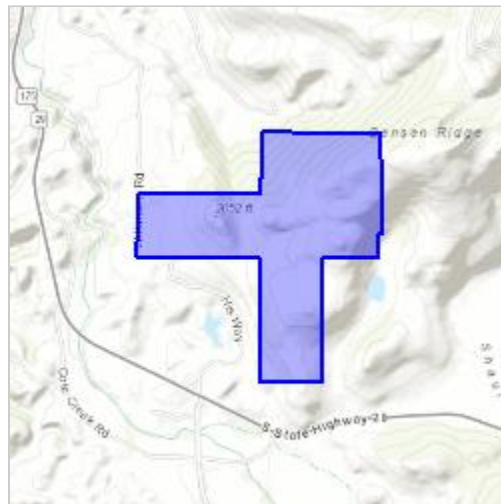
Project Name: Pura Vineyards

Project Type: \*\* OTHER \*\*

Project Description: Bio Assessment

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/38.95272356254458N122.8131270031404W>



Counties: Lake, CA

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## Endangered Species Act Species

There is a total of 8 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

- 
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

## Birds

NAME	STATUS
Northern Spotted Owl <i>Strix occidentalis caurina</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/1123">https://ecos.fws.gov/ecp/species/1123</a>	Threatened

## Amphibians

NAME	STATUS
California Red-legged Frog <i>Rana draytonii</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/2891">https://ecos.fws.gov/ecp/species/2891</a> Species survey guidelines: <a href="https://ecos.fws.gov/ipac/guideline/survey/population/205/office/11420.pdf">https://ecos.fws.gov/ipac/guideline/survey/population/205/office/11420.pdf</a>	Threatened

## Fishes

NAME	STATUS
Delta Smelt <i>Hypomesus transpacificus</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/321">https://ecos.fws.gov/ecp/species/321</a>	Threatened

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## Crustaceans

NAME	STATUS
Conservancy Fairy Shrimp <i>Branchinecta conservatio</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/8246">https://ecos.fws.gov/ecp/species/8246</a>	Endangered

## Flowering Plants

NAME	STATUS
Burke's Goldfields <i>Lasthenia burkei</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/4338">https://ecos.fws.gov/ecp/species/4338</a>	Endangered
Few-flowered Navarretia <i>Navarretia leucocephala ssp. pauciflora</i> (=N. <i>pauciflora</i> ) No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/8242">https://ecos.fws.gov/ecp/species/8242</a>	Endangered
Many-flowered Navarretia <i>Navarretia leucocephala ssp. plieantha</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/2491">https://ecos.fws.gov/ecp/species/2491</a>	Endangered
Slender Orcutt Grass <i>Orcuttia tenuis</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/1063">https://ecos.fws.gov/ecp/species/1063</a>	Threatened

## Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

## **APPENDIX 2: CHECKLIST OF PLANTS DETECTED IN THE STUDY AREA**



## Appendix 2:

Plants Observed at 6700 Wilkinson Road (Pura Vineyards) on May 14, 2020

Common Name	Scientific Name
Blow wifes	<i>Achyrrachaena mollis</i>
Deer brush	<i>Acmispon glaber</i>
California dandelion	<i>Agoseris grandiflora</i>
Spearleaf mountain dandelion	<i>Agoseris retrorsa</i>
Tree of heaven	<i>Ailanthus altissimum</i>
Common fiddleneck	<i>Amsinckia menziesii</i>
Western everlasting	<i>Anaphalis margaritacea</i>
Silvery everlasting	<i>Antennaria argentea</i>
Bur chervil	<i>Anthriscus caucalis</i>
Hoary manzanita	<i>Arctostaphylos canescens</i>
Common manzanita	<i>Arctostaphylos manzanita ssp. manzanita</i>
Stanford's manzanita	<i>Arctostaphylos stanfordiana ssp. stanfordiana</i>
Slender wild oat	<i>Avena barbata</i>
Wild oat	<i>Avena fatua</i>
Coyote brush	<i>Baccharis pilularis</i>
Ripgut brome	<i>Bromus diandrus</i>
Soft chess	<i>Bromus hordeaceus</i>
Madrid brome	<i>Bromus madritensis</i>
Western morning glory	<i>Calystegia occidentalis</i>
Wedge leaf ceanothus	<i>Ceanothus cuneatus</i>
Jim brush	<i>Ceanothus soledadensis ssp. oliganthus</i>
Maltese star thistle	<i>Centaurea melitensis</i>
Yellow star thistle	<i>Centaurea solstitialis</i>
Western redbud	<i>Cercis occidentalis</i>
Birch leaf mountain mahogany	<i>Cercocarpus betuloides</i>
Narrow leaf soap plant	<i>Chlorogalum angustifolium</i>
Bull thistle	<i>Cirsium vulgare</i>
Chaparral clematis	<i>Clematis lasiantha</i>
Peak rush rose	<i>Crocanthemum scoparium</i>
Orchard grass	<i>Dactylis glomerata</i>
Bush monkeyflower	<i>Diplacus aurantiacus</i>
Sticky cinquefoil	<i>Drymocallis glandulosa</i>
Medusa-head grass	<i>Elymus caput-medusae</i>
Blue wildrye	<i>Elymus glaucus</i>
Tall willowherb	<i>Epilobium brachycarpum</i>
Yerba santa	<i>Eriodictyon californicum</i>
Wooly sunflower	<i>Eriophyllum lanatum</i>
Filaree	<i>Erodium botrys</i>
Filaree	<i>Erodium cicutarium</i>
Filaree	<i>Erodium moschatum</i>
California poppy	<i>Eschscholzia californica</i>
Brome fescue	<i>Festuca bromoides</i>
Pacific fescue	<i>Festuca microstachys</i>
Rattail sixweek fescue	<i>Festuca myuros</i>
Italian ryegrass	<i>Festuca perennis</i>
Bedstraw	<i>Galium sp.</i>
Fremont's silktassel	<i>Garrya fremontii</i>
Toyon	<i>Heteromeles arbutifolia</i>
Shortpod mustard	<i>Hirschfeldia incana</i>

Mediterranean barley	<i>Hordeum marinum</i>
Wall barley	<i>Hordeum murinum</i>
Goldwire	<i>Hypericum concinnum</i>
Klamath weed	<i>Hypericum perforatum</i>
Northern California black walnut	<i>Juglans hindsii</i>
English walnut	<i>Juglans regia</i>
Hawkbit	<i>Leontodon saxatilis</i>
Pitcher sage	<i>Lepechinia calycina</i>
Shining peppergrass	<i>Lepidium nitidum</i>
Pink honeysuckle	<i>Lonicera hispidula</i>
Small tarweed	<i>Madia exiguus</i>
Horehound	<i>Marrubium vulgare</i>
Pineapple weed	<i>Matricaria discoidea</i>
Foothill penstemon	<i>Penstemon heterophylla</i>
Goldback fern	<i>Pentagramma triangularis</i>
Gray pine	<i>Pinus sabiniana</i>
Fremont cottonwood	<i>Populus fremontii</i>
Slender wooly marbles	<i>Psilocarphus tenellus</i>
California scrub oak	<i>Quercus berberidifolia</i>
Leather oak	<i>Quercus durata</i>
Hybrid oak (leather x scrub)	<i>Quercus durata x berberidifolia</i>
Interior live oak	<i>Quercus wislizeni</i>
Lemonade berry	<i>Rhus aromatica</i>
California tea	<i>Rupertia physodes</i>
Arroyo willow	<i>Salix lasiolepis</i>
Blue elderberry	<i>Sambucus nigra ssp. caerulea</i>
Pacific sanicle	<i>Sanicula crassicaulis</i>
Parish's nightshade	<i>Solanum parishii</i>
Prickly sow thistle	<i>Sonchus oleracea</i>
Hedgenettle	<i>Stachys ajugoides</i>
Poison-oak	<i>Toxicodendron diversilobum</i>
Death camas	<i>Toxicoscordion sp.</i>
White clover	<i>Trifolium hirtum</i>
California bay	<i>Umbellularia californica</i>
Cultivated grape	<i>Vitis vinifera</i>

## **APPENDIX 3: SITE PHOTOS**











**SWRCB Notice of Applicability**



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## Central Valley Regional Water Quality Control Board

15 June 2020

WDID: 5S17CC427010

### DISCHARGER

Jonathan Lasser  
Pura Vineyards LLC  
100 Shoreline Highway Building B  
Mill Valley, CA 94941

### LANDOWNER

Anthony Bello  
P.O. Box 3728  
Santa Rosa, CA 95402

### NOTICE OF APPLICABILITY, WATER QUALITY ORDER WQ-2019-0001-DWQ, JONATHAN LASSER, APN 007-029-040-000, 007-029-050-000, LAKE COUNTY

Jonathan Lasser for Pura Vineyards LLC (hereafter "Discharger") submitted information through the State Water Resources Control Board's (State Water Board's) online portal on 21 April 2020, for discharges of waste associated with cannabis cultivation related activities. Based on the information provided, the Discharger self-certifies the cannabis cultivation activities are consistent with the requirements of the State Water Board *Cannabis Cultivation Policy- Principles and Guidelines for Cannabis Cultivation* (Policy), and the *General Waste Discharge Requirements and Waiver of Waste Discharge Requirements for Discharges of Waste Associated with Cannabis Cultivation Activities*, Order No. WQ-2019-0001-DWQ (General Order). This letter provides notice that the Policy and General Order are applicable to the site as described below. You are hereby assigned waste discharge identification (WDID) number **5S17CC427010**.

The Discharger is responsible for all applicable requirements in the Policy, General Order, and this Notice of Applicability (NOA), including submittal of all required reports. The Discharger is the sole person with legal authority to, among other things, change information submitted to obtain regulatory coverage under the General Order; request changes to enrollment status, including risk designation; and terminate regulatory coverage. The Central Valley Regional Water Quality Control Board (Central Valley Water Board) will hold the Discharger liable for any noncompliance with the Policy, General Order, and this NOA, including non-payment of annual fees.

Pursuant to the General Order and Policy, Anthony Bello (hereafter "Landowner") is ultimately responsible for any water quality degradation that occurs on or emanates from the property and for unauthorized water diversions. Accordingly, the Landowner, in addition to the Discharger, may be held responsible for correcting non-compliance.



## 1. FACILITY AND DISCHARGE DESCRIPTION

The information submitted by the Discharger states the disturbed area is equal to or greater than 1 acre (43,560 square feet), no portion of the disturbed area is within the setback requirements, no portion of the disturbed area is located on a slope greater than 30 percent, and the cannabis cultivation area is greater than 1 acre.

Based on the information submitted by the Discharger, the cannabis cultivation activities are classified as Tier 2, low risk.

## 2. SITE-SPECIFIC REQUIREMENTS

[The Policy and General Order](http://www.waterboards.ca.gov/cannabis) are available on the Internet at <http://www.waterboards.ca.gov/cannabis>. The Discharger shall ensure that all site operating personnel know, understand, and comply with the requirements contained in the Policy, General Order, this NOA, and the Monitoring and Reporting Program (MRP, Attachment B of the General Order). Note that the General Order contains standard provisions, general requirements, and prohibitions that apply to all cannabis cultivation activities.

The application requires the Discharger to self-certify that all applicable Best Practicable Treatment or Control (BPTC) measures are being implemented, or will be implemented by the onset of the winter period (November 15 - April 1), following the enrollment date.

## 3. TECHNICAL REPORT REQUIREMENTS

The following technical report(s) shall be submitted by the Discharger as described below:

1. A *Site Management Plan* must be submitted within 90 days of applying for enrollment in the General Order; this deadline falls on **20 July 2020**. For more information on the requirements to submit a *Site Management Plan*, see General Order Provision C.1.a, and Attachment A, Section 5. Attachment D of the General Order provides guidance on the contents of a *Site Management Plan*. Dischargers that cannot implement all applicable BPTC measures by the onset of the winter period, following their enrollment date, shall submit to the appropriate Central Valley Water Board a *Site Management Plan* that includes a time schedule and scope of work for use by the Central Valley Water Board in developing a compliance schedule as described in Attachment A of the General Order. You are not required to use a Qualified Professional for developing the Site Management Plan. However, you are required to submit the Site Management Plan to Central Valley Water Board staff for approval prior to any site development.
2. A *Nitrogen Management Plan* must be submitted within 90 days of applying for enrollment in the General Order; this deadline falls on **20 July 2020**, consistent with the requirements of General Order Provision C.1.d., and Attachment A, Section 5. Attachment D of the General Order provides guidance on the contents

of the *Nitrogen Management Plan*.

3. A *Site Closure Report* must be submitted 90 days prior to permanently ending cannabis cultivation activities and seeking to rescind coverage under the Conditional Waiver. The *Site Closure Report* must be consistent with the requirements of General Order Provision C.1.e., and Attachment A, Section 5. Attachment D of the General Order provides guidance on the contents of the *Site Closure Report*.

#### **4. MONITORING AND REPORTING PROGRAM**

The Discharger shall comply with the Monitoring and Reporting Program (MRP). Attachment B of the General Order provides guidance on the contents for the annual reporting requirement. Annual reports shall be submitted to the Central Valley Water Board by March 1 following the year being monitored. The Discharger shall not implement any changes to this MRP unless and until a revised MRP is issued by the Central Valley Water Board's Executive Officer or the State Water Board's Chief Deputy Director, or Deputy Director.

#### **5. ANNUAL FEE**

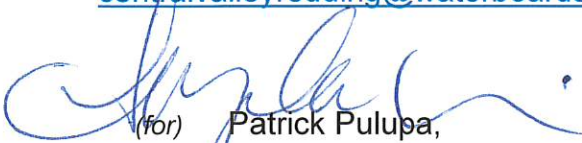
According to the information submitted, the discharge is classified as Tier 2, low risk with the current annual fee assessed at \$1,000. The fee is due and payable on an annual basis until coverage under this General Order is formally rescinded. To rescind coverage, the Discharger must submit a Notice of Termination, including a *Site Closure Report* at least 90 days prior to termination of activities and include a final MRP report.

#### **6. TERMINATION OF COVERAGE UNDER THE GENERAL ORDER & REGIONAL WATER BOARD CONTACT INFORMATION**

Cannabis cultivators that propose to terminate coverage under the Conditional Waiver or General Order must submit a Notice of Termination (NOT). The NOT must include a *Site Closure Report* (see Technical Report Requirements above), and Dischargers enrolled under the General Order must also submit a final monitoring report. The Central Valley Water Board reserves the right to inspect the site before approving a NOT. Attachment C includes the NOT form and Attachment D of the General Order provides guidance on the contents of the *Site Closure Report*.

If the Discharger cannot comply with the General Order, or will be unable to implement an applicable BPTC measure contained in Attachment A by the onset of the winter period each year, the Discharger shall notify Central Valley Water Board staff by telephone at 530-224-4845 so that a site-specific compliance schedule can be developed.

All monitoring reports, submittals, discharge notifications, and questions regarding compliance and enforcement should be directed to [centralvalleyredding@waterboards.ca.gov](mailto:centralvalleyredding@waterboards.ca.gov) or 530-224-4845.



(for) Patrick Pulupa,  
Executive Officer

JF:mb

cc via email: Kevin Porzio, State Water Resources Control Board, Sacramento  
Mark Roberts, Lake County Planning Department, Lakeport

Appendix D

## Well Completion Report



**QUADRUPPLICATE**  
**For Local Requirements**

STATE OF CALIFORNIA  
**WELL COMPLETION REPORT**

Refer to Instruction Pamphlet

Page 1 of 1  
Owner's Well No. WP 2570

No. **713396**

Date Work Began 3-22-99, Ended 4-30-99

Local Permit Agency Health Dept.

Permit No. WE-11064 Permit Date 3-21-99

DD-1-024-05  
DWR USE ONLY - DO NOT FILL IN

STATE WELL NO./STATION NO.	
LATITUDE	LONGITUDE
APN/TRS/OTHER	

**GEOLOGIC LOG**

ORIENTATION (°)		DRILLING METHOD	FLUID	DESCRIPTION
FL	TO	FL		
0	460	White	Volcanic	Rock
460	500	Red	Vol	Rock
500	635	Red	Vol	Rock

Describe material, grain size, color, etc.

**RECEIVED**  
**NOV 12 2004**  
**LAKE COUNTY**  
**ENVIRONMENTAL HEALTH**

TOTAL DEPTH OF BORING 635 (Feet)  
TOTAL DEPTH OF COMPLETED WELL 635 (Feet)

**WELL OWNER**

Name Gary Snider  
Mailing Address 130 Pepper Ave  
City La Grange State CA ZIP 95429

**WELL LOCATION**

Address 7630 Hwy 29  
City Kelseyville  
County Lake  
APN Book 07 Page 029 Parcel 05  
Township 13 Range 9 Section 25  
Latitude 39 NORTH Longitude 122 WEST

**LOCATION SKETCH**

WEST EAST

House

Mud Ponds

**ACTIVITY (°)**

☒ NEW WELL  
☐ MODIFICATION/REPAIR  
    ☐ Deepen  
    ☐ Other (Specify)

☐ DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG")

**PLANNED USES (°)**

**WATER SUPPLY**

☐ Domestic ☐ Public  
☐ Irrigation ☐ Industrial

☒ MONITORING  
☐ TEST WELL  
☐ CATHODIC PROTECTION  
☐ HEAT EXCHANGE  
☐ DIRECT PUSH  
☐ INJECTION  
☐ VAPOR EXTRACTION  
☐ SPARGING  
☐ REMEDIATION  
☐ OTHER (SPECIFY)

Illustrate or Describe Distance of Well from Roads, Buildings, Fences, Rivers, etc. and attach a map. Use additional paper if necessary. **PLEASE BE ACCURATE & COMPLETE.**

**WATER LEVEL & YIELD OF COMPLETED WELL**

DEPTH TO FIRST WATER 530 (FL) BELOW SURFACE  
DEPTH OF STATIC WATER LEVEL 500 (FL) & DATE MEASURED 4-25-99  
ESTIMATED YIELD 300+ (GPM) & TEST TYPE air lift  
TEST LENGTH 4 (Hrs.) TOTAL DRAWDOWN 30 (FL)  
\* May not be representative of a well's long-term yield.

DEPTH FROM SURFACE FL to FL	BORE-HOLE DIA. (Inches)	CASING (S)						DEPTH FROM SURFACE FL to FL	ANNULAR MATERIAL					
		TYPE (°)				MATERIAL / GRADE	INTERNAL DIAMETER (Inches)		GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)	TYPE			
		BLANK	SCREEN	CON- DUCTOR	FILL PIPE									CE- MENT
0	500	12 1/4	X			511.156	8.32	1.56		0	20	X		
500	555	8 3/4	X							20	500			Per Grout
555	635													

**ATTACHMENTS (°)**

- ☐ Geologic Log
- ☐ Well Construction Diagram
- ☐ Geophysical Log(s)
- ☐ Soil/Water Chemical Analyses
- ☐ Other

ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.

**CERTIFICATION STATEMENT**

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief.

NAME Larry Newman Drilling  
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

ADDRESS 13011 Hwy 29 Lakeview City CA State 95457 ZIP

Signed [Signature] DATE SIGNED 4-16-99 C-57 LICENSE NUMBER 445211