

COUNTY OF NAPA
DEPARTMENT OF PLANNING, BUILDING AND ENVIRONMENTAL SERVICES
1195 THIRD STREET, SUITE 210
NAPA, CA 94559
(707) 253-4417

Initial Study Checklist
(Reference Napa County's Procedures for Implementing CEQA, Appendix C)

1. **Project Title:** 230 Long Ranch Road LLC Vineyard Development Agricultural Erosion Control Plan (ECPA) #P24-00114-ECPA
2. **Property Owner(s):** 230 Long Ranch Road LLC c/o Edward Bystrowski
3. **Contact Person, Phone Number and Email:** Pam Arifian, Planner III, (707) 259-5934, Pamela.Arifian@countyofnapa.org
4. **Project Location and Assessor's Parcel Number:**
230 Long Ranch Road, St. Helena, CA 94574; APN 032-560-027 (**Figures 1 and 2**)
Section 7, Township 7 North, Range 4 West, Mt. Diablo Principal Meridian
Latitude 38° 28' 0.08" N / Longitude 122° 20' 43.2"
5. **Project Sponsor:** 230 Long Ranch Road LLC
c/o Edward J. Bystrowski
230 Long Ranch Road
St. Helena, CA 94574
Agent: Applied Civil Engineering Inc.
Michael R. Muelrath (RPE #67435)
2160 Jefferson Street, Suite 230
Napa, CA 94559
6. **General Plan Designation:** Agriculture, Watershed & Open Space (AWOS)
7. **Zoning:** Agricultural Watershed (AW)
8. **Background:** The project is located on an approximately 48.42-acre parcel that contains a residence, domestic septic system and well, water storage tanks, a carport, pool, associated landscaping, fencing, sheds/outbuildings, and a network of paved, gravel, and dirt ranch roads, all within approximately 3.8 acres. Approximately 7.95 acres of land adjacent to the residence and landscaped areas has been and is regularly disturbed and managed for wildfire fuel reduction. The wildfire fuel reduction work was performed in tandem with the Hennessey Rector Firewise work performed along Long Ranch Road in an effort to protect the existing onsite structures and obtain property insurance. A representative from California Department of Forestry and Fire Protection (CalFire) that manages the Defensible Space Program did review the work performed and concurred it was in line with general fire prevention practices and recommendations for the locations on high risk ridgetop settings in Cal Fire's Very High Fire Hazard Severity Zone.

In 2023, approximately 1.47 acres of the site were graded and ripped in three isolated areas for eventual vineyard conversion. These areas are located on slopes of 5% or less; therefore, an ECPA was not required pursuant to NCC Section 18.108.070(B) for the vegetation removal associated with eventual conversion of these areas to vineyard.
9. **Description of Project:** The project involves the clearing of vegetation, earthmoving and land contouring, and installation and maintenance of erosion control measures associated with the development of approximately 18.8 gross acres of vineyard (i.e., development area, project area, or clearing limits) with approximately 15.8 net planted acres within four (4) vineyard blocks located on an approximately 48.42-acre parcel (**Figure 3**). Average slopes within the project area range from five (5) percent (%) to 19%, with an overall average slope of 10%, and approximately 0.4-acre of isolated areas within the project area exceeding 30% slopes. The project would convert to vineyard approximately 10.53 acres of chaparral habitat, which includes 6.4 acres of chamise and 4.13 acres of Scrub Interior Live Oak – Scrub Oak. The project proposes to preserve 4.1 acres+/- of comparable Scrub Interior Live Oak – Scrub Oak Habitat located on less than 30% slopes and outside of stream setbacks.

Rock generated as a result of site preparation would be processed (crushed to a useable size) and used for constructing a new 20-foot-wide vineyard road along the perimeter of the new vineyard blocks. Temporary debris, vegetation, rock and soil amendment stockpiles and storage areas would be located inside of proposed clearing limits. No long-term stockpiles of rock or soil are anticipated. Additionally, there is no planned import and/or export of soil material, however, soil amendments will be imported and incorporated into the project area as needed to support vine and cover crop growth.

The vineyard would be irrigated with water sourced from two groundwater wells, including one existing well (constructed in August 1998, under Permit No. #96-10-299 “Onsite Well”) located in the southeastern corner of the property and one new well (“New Well”) to be drilled in the central portion of the property. All irrigation pipelines would be located in the proposed development area, within the proposed clearing limits.

New wildlife exclusion fencing is proposed along the perimeter of the new vineyard road and Long Ranch Road and would tie into existing fencing on the southern property border, enclosing all vineyard blocks and residential areas. Excepting two sections of wildlife fencing (that spans a total of approximately 450+/- feet, no other vineyard development and grading activities would occur outside of the proposed clearing limits.

Erosion Control Measures: Temporary erosion control measures include installation of fiber rolls/straw wattle sediment barriers, silt fencing, erosion control blankets, the application of straw mulch at a rate of 3,000 pounds per acre over disturbed areas, and a temporary cover crop to be established in the vineyard block areas for the first three years after planting, applied at a minimum rate of 75 pounds per acre. Permanent erosion control measures include: outsloped vineyard avenues, cross slope diversions, waterbars with rock rip-rap energy dissipators, level spreaders along contours, and a storm drain pipe. After the vineyard establishment period, a permanent cover crop for all no-till vineyard blocks and vineyard avenues will be applied at a minimum rate of 75 pounds per acre and maintained at a minimum vegetation cover density of 80 percent (%) in Block 1 and 75% in Blocks 2, 3 and 4. Straw mulching and / or pre-irrigation of the cover crop will also be implemented as needed to achieve the coverage requirement. No herbicides will be used in the vineyard avenues. Alternatively, vineyard avenues may be lined with crushed rock to protect from erosion and provide all weather surface. Details of the proposed erosion control measures are provided in the 230 Long Ranch Road LLC Vineyard Development Erosion Control Plan dated April 19, 2024, prepared by Mike Muelrath (RPE #67435) of Applied Civil Engineering Inc. (**Exhibit A**).

Earthmoving: Earthmoving and grading activities associated with land contouring (2,000 cubic yards balanced onsite) and the installation of erosion control measures and subsequent vineyard operation include, but are not limited to vegetation removal, soil ripping, rock breaking and removal as needed to a depth of approximately 24 to 48 inches, discing and harrowing, and development of erosion control measures, including vineyard avenues and access roads.

Other Activities and Features: Other activities and features of the proposed project and subsequent vineyard development and operation include:

- a. Installation of vineyard trellis and drip irrigation systems, and planting rootstock in a 3.5-foot by 6.5-foot spacing pattern for an approximate vine density of ±1,915 vines per acre, for a total of 30,257 vines.
- b. Ongoing inspection and maintenance of temporary and permanent erosion and runoff control measures.
- c. Ongoing operation and maintenance of the vineyard, which includes vine management (pruning, fertilization, and pest and disease control), weed control, cover crop mowing, irrigation and trellis system maintenance, and fruit harvesting. The management regime of the no-till cover crop would consist of mowing, shoveling, sulphur application, and pesticide/herbicide application. The management regime of the no-till cover crop would consist of mowing and late winter or early springtime strip spraying in a narrow 18-inch maximum width spray, if necessary to control weeds at the bases of the vines. No pre-emergent spraying would be utilized as part of cover crop management.

Table 1 lists a general annual schedule for the phased multi-year construction of the proposed project as identified in #P24-00114-ECPA including for work proposed in the Lake Hennessey Sensitive Domestic Water Supply Drainage and Vinehill Creek Drainage, and **Table 2** outlines typical general ongoing vineyard operations. The final implementation schedule is pending action on #P24-00114-ECPA.

Table 1 – Implementation Schedule

Lake Hennessey Sensitive Domestic Water Supply Drainage	Vinehill Creek Drainage	Work to be Completed
April 1 – September 1	April 1 - October 15	Remove existing vegetation, complete ripping, grading, discing, rock removal and processing, recontouring and incorporation of soil amendments, install permanent erosion control measures.
September 15	October 15	All winterization complete within the Lake Hennessey Sensitive Domestic Water Supply Drainage, including seeding, straw mulching, and straw wattle installation.
September 15 – April 1	October 15 – April 1	Maintain erosion and sediment control devices, inspect after all rain events producing significant runoff, re-seed temporary cover crop as needed to maintain appropriate cover.

¹ During the winter months in municipal watersheds/sensitive domestic water supply drainages (September 1 to April 1 of the succeeding year), no earthmoving work is allowed by the NCC Sections 18.108.027(C) and 18.108.070(L). All winterization measures must be in place by September 15 of any given year in municipal watersheds pursuant to NCC Section 18.108.027(C). All earthwork and winterization measures must be completed by October 15 of any given year for project activities within drainages not identified as municipal watersheds.

Table 2 – Typical Annual Operations Schedule

January to February	a. Prune vines.
March to August	a. Sulfur application to protect against mildew. b. Mow cover crop. c. Weed control.
September to October	a. Harvest. b. Winterize vineyard and vineyard avenues.
November to April	a. Monitor and maintain erosion control measures and repair as necessary during rain events.

Vineyard construction is anticipated to generate about 20 round trips per day for anticipated work crews of five to ten employees, including truck trips for equipment and supply delivery. Anticipated construction equipment would be limited to tracklaying and rubber-tired vehicles and could include bulldozers, tractors, excavators, backhoes, dump trucks, water trucks, and ATVs and passenger vehicle and/or light trucks.

Proposed vineyard operations are anticipated to generate up to 130 truck trips annually for anticipated work crews of up to 10 field personnel. Typical operations include, but are not limited to, irrigation and trellis system inspection and repair, pruning, canopy management, sulphur and pest control, harvest, cover crop inspection and management, erosion control measure monitoring and maintenance, and vine/vineyard maintenance. During peak operations, activities such as vineyard pruning, weed and pest control, and harvest are anticipated to generate up to seven round trips per day, including grape haul trucks, for anticipated work crews of up to 10 employees. Anticipated equipment for vineyard operations would be limited to tracklaying and rubber-tired vehicles and could include tractors, backhoes, 1-2 ton grape haul trucks, and ATVs and passenger vehicles and/or light trucks.

Implementation of the proposed project would be in accordance with the 230 Long Ranch Road LLC Vineyard Development Erosion Control Plan dated April 19, 2024, prepared by Mike Muelrath (RPE #67435) of Applied Civil Engineering Inc. (**Exhibit A**). The proposed project is further described in the application materials including the Supplemental Project Information sheets. All documents are incorporated herein by reference and available for review in the Napa County Department of Planning, Building and Environmental Services (PBES), and at <https://www.countyofnapa.org/2876/CurrentProjects-Explorer>.

- 10. Describe the environmental setting and surrounding land uses.** The approximate 48.42-acre project parcel is located in the Pritchard Hill area east of the Napa Valley, approximately 5.5 miles southeast of the City of St Helena and 4 miles northeast of the Town of Yountville. Access to the project parcel is via a private gravel driveway off of Long Ranch Road, approximately 2.8 miles from its intersection with California State Route 128 / Sage Canyon Road (**Figures 1-3**).

Existing improvements on the project parcel include a residence, well, water storage tanks, a domestic septic system, a carport, pool, associated landscaping, fencing, sheds/outbuildings, and a network of paved, gravel, and dirt ranch roads, all within approximately 3.8 acres. The land adjacent to the residence and landscaped areas has been and is regularly disturbed and managed for wildfire fuel reduction. There is existing wildlife exclusion fencing that borders the southern, western, and northwestern boundaries of the project parcel. Undeveloped

areas of the property consist of chamise chaparral (16.96 acres), Scrub Interior Live Oak – Scrub Oak (18.23 acres), disturbed/wildfire fuel reduction managed areas (formerly chamise habitat, 7.95 acres), and cleared areas (graded and ripped, 1.47 acres).

The project parcel is located within two drainages, including approximately 39 acres within the Lake Hennessey Sensitive Domestic Water Supply Drainage, and approximately 10 acres within the Vinehill Creek Drainage. There are three streams that occur in the project parcel, including: 1) an unnamed blue-line stream borders the eastern property boundary and drains north into Lake Hennessey; 2) an ephemeral stream originating in the northwest corner of the parcel flows into the eastern unnamed blue-line stream, which in turn flows into Lake Hennessey; and 3) an ephemeral, County-definitional stream that originates in the southeastern corner of the parcel and drains west into the vineyard located on the neighboring parcel. All streams are avoided within minimum required setbacks based on slope from top of bank for the unnamed blue line stream and the County-definitional stream in the southwestern corner of the parcel, and 35-feet from the ephemeral stream in the northwestern portion of the parcel.

General topography of the area consists of the flats of Napa Valley to the west and south and rolling mountains to the east and north. Topography on the project property generally consists of gentle to steep slopes ranging from less than 5% to more than 30% across the property, with elevations ranging from approximately 1,125 feet above mean sea level (msl) to 1,350 feet above msl.

Surrounding and adjacent land uses consist generally of undeveloped chaparral interspersed with vineyards, wineries, rural residences and open space. There are eleven (11) wineries within approximately one (1) mile of the project property, which range in an annual production limitation from 5,000 to 250,000 gallons per year. The nearest known school is Yountville Elementary School, approximately 4 miles to the south/southwest of the project site (Napa County GIS Schools Layer). The nearest residences are approximately 1,750 feet to the east, 2,070 feet to the south west and 2,260 feet to the southeast.

The vegetation types on the project site include Chamise Alliance, Scrub Interior Live Oak – Scrub Oak, “disturbed/managed”, and developed. The disturbed/managed areas (7.95 acres) include the wildfire fuel reduction areas surrounding the residence. There are also three cleared areas with less than five percent slopes, totaling approximately 1.47 acres.

Two unnamed inactive fault lines cross the southern project development area, within the areas proposed for Vineyard Block 2 and Block 4 (Napa County GIS Fault 62500 Layer). The nearest active faults are the West Napa and Hunting Creek-Berryessa Faults, approximately 4 miles southwest of the project site and 6.5 miles east of the site, respectively (Napa County GIS Faults Layers). Soils in the project site have been classified according to the Soil Survey of Napa County (USDA 1978) as Rock Outcrop-Hambright complex, 50 to 75 percent slopes (Soils Series #176) and Sobrante loam, 30 to 50 percent slopes (Soil Series #179).

11. **Other agencies whose approval may be required** (e.g., permits, financing approval, or participation agreement that may potentially be required from the identified permitting authority/agency).

Responsible (R) and Trustee (T) Agencies

California Department of Fish and Wildlife (CDFW) (T)
Regional Water Quality Control Board (Regional Water Board) (R)

Other Agencies Contacted

Middletown Rancheria
Mishewal Wappo Tribe of Alexander Valley
Yocha Dehe Wintun Nation
City of Napa Water Division

12. **California Native American Tribal Consultation:** Have tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code Section 21080.3.1? If so, has consultation begun?

Notice of the proposed project was sent certified mail to Middletown Rancheria, Mishewal Wappo Tribe of Alexander Valley, and Yocha Dehe Wintun Nation on May 28, 2024. The County received a response letter from the Yocha Dehe Wintun Nation on July 16, 2024 indicating that the project area was not within their aboriginal territories. On October 28, 2024, the County replied to the Yocha Dehe Wintun Nation and closed the consultation invitation because the Tribe did not request consultation. On October 28, 2024, the County sent consultation closure notices to the Middletown Rancheria and to the Mishewal Wappo Tribe of Alexander Valley because no request for consultation was received, and more than 30 days had elapsed since the County's consultation invitation was provided. This is discussed in detail in **Section XVIII (Tribal Cultural Resources)**.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

- | | | |
|--|--|--|
| ☐ Aesthetics | ☐ Agriculture and Forestry Resources | ☐ Air Quality |
| ☒ Biological Resources | ☐ Cultural Resources | ☐ Energy |
| ☐ Geology/Soils | ☒ Greenhouse Gas Emissions | ☐ Hazards & Hazardous Materials |
| ☐ Hydrology/Water Quality | ☐ Land Use/Planning | ☐ Mineral Resources |
| ☐ Noise | ☐ Population/Housing | ☐ Public Services |
| ☐ Recreation | ☐ Transportation | ☐ Tribal Cultural Resources |
| ☐ Utilities/Service Systems | ☐ Wildfire | ☒ Mandatory Findings of Significance |

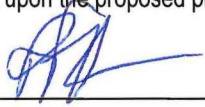
ENVIRONMENTAL IMPACTS AND BASIS OF CONCLUSIONS

The conclusions and recommendations contained herein are professional opinions derived in accordance with current standards of professional practice. They are based on a review of the Napa County Environmental Resource Maps, the other sources of information listed in the file, and the comments received, conversations with knowledgeable individuals, the preparer's personal knowledge of the area, and visit(s) to the project site and proposed development area.

Other sources of information used in the preparation of this Initial Study include site-specific studies conducted and filed by the applicant in conjunction with ECPA #P24-00114-ECPA as listed below, and the environmental background information contained in the permanent file on this project. These documents and information sources are incorporated herein by reference and available for review at the Napa County Department of Planning, Building and Environmental Services located at 1195 Third Street, Suite 210, Napa, CA 94559, or <https://pbes.cloud/index.php/s/nCNY2nJ6MmbwmdG>.

- Applied Civil Engineering Inc., April 19, 2024, Vineyard Development Erosion Control Plan and Narrative, 230 Long Ranch Road LLC (**Exhibit A**).
- Montrose Environmental, March 2024, Biological Resources Assessment, Long Ranch Road Vineyard Napa County (**Exhibit B-1**)
- California Biological Consulting, September 17, 2024, Addendum to Biological Resource Assessment, Long Ranch Road Vineyard Development Project (**Exhibit B-2**)
- Applied Civil Engineering Inc., September 23, 2024, Scrub Interior Live Oak – Scrub Oak Vegetation Exhibit, 230 Long Ranch Road LLC (**Exhibit B-3**).
- Archaeological Resource Service, April 22, 2024, Archaeological Resource Management Report for the Proposed Development on Long Ranch Road, St. Helena, Napa County, CA (Confidential)
- RGH Consultants, March 3, 2023 (revised March 29, 2024), Landslide Hazard Evaluation, 230 Long Ranch Road LLC Vineyard Development, 230 Long Ranch Road, St. Helena, California (**Exhibit C**)
- Steiner, David A, March 23, 2024, Soil Loss Analysis, 230 Long Ranch Road LLC Proposed New Vineyard Development, 230 Long Ranch Road, Napa, CA 94559 APN 032-560-027 (**Exhibit D**)
- Richard C Slade & Associates LLC, March 25, 2024, Results of Napa County Tier 1, Tier 2, and Tier 3 Water Availability Analyses, Memorandum (**Exhibit E**)
- Steiner, David A, March 23, 2024, Hydrologic Analysis, 230 Long Ranch Road LLC Proposed New Vineyard Development, 230 Long Ranch Road, Napa, CA 94559 APN 032-560-027 (**Exhibit F**)
- Site inspection conducted by Napa County Conservation and Engineering Division staff (Pamela Arifian, Raulton Haye and Ryan Kaplan) July 10, 2024
- Napa County Geographic Information Systems (GIS) sensitivity maps/layers.

- ☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- ☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared. Attached as **Exhibit F** is the signed Project Revision Statement.
- ☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- ☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.



Signature

Pamela Arifian

Printed Name



Date

Napa County Planning, Building and Environmental Services

ENVIRONMENTAL CHECKLIST FORM

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
I. AESTHETICS. Except as provided in Public Resources Code Section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

Discussion

a-b. The project is located on a minor ridgeline in the Pritchard Hill area east of the Napa Valley, approximately 1.2 miles east of Silverado Trail and approximately 1.3 miles south of Sage Canyon Road, the closest County viewshed roads (Napa County GIS, Viewshed Road Layers) and eligible State Scenic Highways (Caltrans; <https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways>). The project site is not located within a scenic corridor (Napa County GIS, Scenic Corridors Layer). Surrounding and adjacent land uses consist generally of undeveloped chaparral interspersed with vineyards, wineries, and rural residences. Two properties immediately adjacent to the site on the western and southern property lines are developed with wineries and vineyards. The project would convert approximately 10.53 acres of chaparral habitat and 8.27 acres of disturbed/managed areas to vineyard and associated uses. The new vineyard would be planted within 4 separate blocks surrounding the existing residence. The remaining 24+/- acres of chaparral habitat onsite will remain intact. Construction associated with the vineyard includes grading to create new dirt vineyard roads and avenues and installing vineyard trellising system, irrigation equipment, and erosion control features. No new structures are proposed. Any visual impacts related to construction equipment and activities at the development area would be short-term and temporary in nature.

Napa County Zoning Code defines a "minor ridgeline" as a ridgeline which is not prominently visible to a large area of the county. Minor ridgelines are typically lower in height, when compared to the surrounding terrain and may be visible only to a limited area, or have a backdrop of a nearby higher topographical feature. The new vineyard would be planted below and along the top of the minor ridgeline, however, the topography is such that the project site is not visible from the nearest viewshed roads. Intervening hillsides block the sightline between both viewshed roads and the project site. Further, the scale of the proposed project and its location amidst similar surrounding vineyards, undeveloped chaparral and residences, including immediately adjacent to the proposed project, would result in the proposed vineyard blending in with surrounding uses if it were visible. Although chaparral vegetation would be removed with the proposed project (discussed **Section IV, Biological Resources**), the project site is not visible from a state scenic highway. Additionally, the proposed vineyard development has been designed in a way that would complement the natural contours of the project site and would avoid the riparian habitat surrounding the ephemeral stream and blue line streams on the project parcel.

There are no historic buildings, significant rock outcroppings or geologic features on the project site that would be impacted by the proposed project. For the reasons described above, the proposed project would have a less-than-significant impact on a scenic vista and scenic resources.

c. The proposed project would result in the removal of existing vegetation within the development area and includes the development of new vineyard. The proposed project is consistent with the Napa County AWOS land use designations and with adjacent land uses, which include undeveloped chaparral interspersed with vineyards, agricultural processing facilities, and rural residences. Additionally, as discussed in **Section IV [Biological Resources]**, tree removal occurring as part of project construction would not degrade the existing visual character or quality of public views of the site or its surroundings. For these reasons, the impact would be less than significant.

- d. Proposed agricultural operations on the project site would require some lighted nighttime activities consistent with the nighttime activity already occurring in the surrounding area, which includes vineyard and agricultural uses. Lighting would be in the form of headlights or downward direction lights on equipment being used during nighttime harvest. The proposed project would include harvest activities (typically occurring in September and October), that could include nighttime activity (typically from 12 a.m. to 6 a.m.) up to five days per year. The proposed project would include sulfur applications that could occur between 12 a.m. to 6 a.m. up to five days per year, as well as pesticide/herbicide application that could occur during those same hours up to four days per year. Although some nighttime activity would occur for limited periods, the proposed project would not introduce a new source of substantial light or glare, and the type of nighttime lighting would be consistent with surrounding land uses. Therefore, the proposed project would result in a less than significant impact.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
II. AGRICULTURE AND FORESTRY RESOURCES. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resource Code Section 12220(g)), timberland (as defined in Public Resource Code Section 4526), or timberland zoned Timberland Production (as defined in Government Code Section 51104(g))?	☐	☐	☒	☐
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☒	☐
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

Discussion

- a. The Napa County Important Farmland 2020 map prepared by the California Department of Conservation, Division of Land Resource Protection identifies the development area as Other Land (i.e., not Prime Farmland, Unique Farmland or Farmland of Statewide Importance) (Napa County GIS FMMP Important Farmland layer). Therefore, the proposed project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, resulting in no impact.
- b. The project site has an Agriculture, Watershed & Open Space (AWOS) designation and is zoned Agricultural Watershed (AW) (Napa County GIS General Plan and Zoning layers). Therefore, the establishment of new vineyard totaling approximately 18.8 gross acres (15.8 net acres) is consistent with project site's land use and zoning designations. The project site does not have a Williamson Act contract associated with it. Therefore, implementation of the proposed project would not change the primary agricultural activity within the development area and the proposed project would not conflict with its land use designation or a Williamson Act contract, resulting in no impacts.
- c-e. Forest Land" is defined in California Public Resource Code Section 12220(g) as "land that can support 10% native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits (Public Resources Code Section

12220(g)). The project site does not contain forest land or coniferous forest (Montrose Environmental, March 2024, **Exhibit B-1**; and Napa County GIS vegetation layer). The project site is zoned as AW and is not zoned as forest land as defined in Public Resource Code Section 12220(g), timberland as defined in Public Resource Code Section 4526, or a Timberland Production Zone (TPZ) as defined in Government Code Section 51104(g). The proposed project includes the construction of a new vineyard access road from the existing paved driveway to the project area and along the perimeter of the new vineyard blocks, but construction would not result in the conversion of existing farmland or forestland in the area to non-agricultural or non-forestland uses. As such, the proposed project would have no impact on agricultural or forest resources of Napa County.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
III. AIR QUALITY. Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☒	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

Discussion¹

See **Section VIII (Greenhouse Gas Emissions)** for the greenhouse gas (GHG) emissions disclosure and impact assessment.

The Bay Area Air Quality Management District (BAAQMD), now known as the Bay Area Air District, has published CEQA guidance titled *BAAQMD CEQA Air Quality Guidelines* (referred to as CEQA Guidelines) to assist lead agencies in evaluating air quality and climate impacts from proposed land use projects and plans.² The CEQA Guidelines are advisory for local and regional governments in the San Francisco Bay Area Air Basin (SFBAAB). They contain nonbinding recommendations for how a lead agency can measure, evaluate, and mitigate air quality and GHG impacts generated from land use construction and operational activities.

The BAAQMD CEQA Guidelines do not replace the State CEQA Statute and Guidelines; rather, they are designed to provide BAAQMD-recommended procedures for evaluating potential air quality and climate impacts during the environmental review process that are consistent with CEQA requirements. The BAAQMD published its most recent update to the CEQA Guidelines on April 20, 2023, which is referred to as the 2022 CEQA Guidelines. The 2022 Guidelines supersede BAAQMD's previous CEQA guidance titled *BAAQMD CEQA Air Quality Guidelines* (2017). The potential impacts associated with construction and operation of the proposed project as a result of air pollutant emissions were evaluated consistent with BAAQMD's 2022 CEQA Guidelines.

a-b. The project site is generally located in the Lake Hennessey and Vinehill Creek watersheds along the eastern side of Napa Valley, within the Napa County climatological sub region of the San Francisco Bay Area Air Basin, which is under the jurisdiction of BAAQMD. The topographical and meteorological features of the Napa Valley sub region create the potential for air pollution. In the short term, potential air quality impacts are most likely to result from construction activities. Construction-related emissions, which are temporary in nature, mainly consist of particulate matter (PM) generated from fugitive dust during grading or other earthmoving activities and other criteria pollutants generated through the exhaust from construction equipment, vehicular haul and worker trips, and the burning of any project area vegetation³. In the long term, potential air quality impacts would likely result from ongoing activities associated with the operation and maintenance of the proposed vineyard. Operational-related emissions, which are seasonal in nature, are primarily generated from

¹ See **Section VIII (Greenhouse Gas Emissions)** for the greenhouse gas (GHG) emissions disclosure and impact assessment.

² BAAQMD, 2023. *2022 California Environmental Quality Act Air Quality Guidelines*. April 2023. Available at <https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines>.

³ See **Section VIII (Greenhouse Gas Emissions)** for the greenhouse gas (GHG) emissions disclosure and impact assessment.

vehicular trips associated with workers going to and from the site and equipment necessary for ongoing vineyard maintenance. Refer to **Section XVII (Transportation)** for the anticipated number of construction- and operation-related trips.

Ambient air quality standards have been established by state and federal environmental agencies for specific pollutants most pervasive in urban environments. These pollutants are referred to as criteria air pollutants because the standards established for them were developed to meet specific health and welfare criteria set forth in the enabling legislation. Criteria air pollutants include ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, respirable particulate matter less than 10 microns in diameter (PM₁₀), fine particulate matter less than 2.5 microns (PM_{2.5}), and lead. Air basins (or portions thereof) are categorized as “attainment,” “nonattainment” or “unclassified” for each criteria air pollutant based on whether ambient air quality standards have been achieved. The SFBAAB is currently designated as a nonattainment area designated for the federal 8-hour ozone standard, state 1-hour and 8-hour ozone standards, state annual and 24-hour PM₁₀ standards, federal 24-hour PM_{2.5} standard and the state annual PM_{2.5} standard. Therefore, the criteria air pollutants of concern in the SFBAAB are reactive organic gases (ROG) and oxides of nitrogen (NO_x) which are referred to as ozone precursors, as well as PM₁₀ and PM_{2.5}.

Air quality attainment plans are required to be prepared for nonattainment areas both under federal and state law. The most recently adopted air quality plan to address nonattainment issues in the SFBAAB is the 2017 Bay Area Clean Air Plan (Clean Air Plan).⁴ The Clean Air Plan provides a regional strategy to protect public health and the climate by progressing toward attaining all state and federal air quality standards, eliminating health risk disparities from exposure to air pollution among Bay Area communities, transitioning the region to a post-carbon economy needed to achieve greenhouse gas (GHG) reduction targets for 2030 and 2050, and providing a regional climate protection strategy that will put the Bay Area on a pathway to achieve those GHG reduction targets. The Clean Air Plan includes a wide range of control measures designed to decrease emissions of the air pollutants that are most harmful to SFBAAB residents, such as particulate matter, ozone, and toxic air contaminants (TACs); reduce emissions of methane and other “super-GHGs”⁵ that are potent climate pollutants in the near-term; and decrease emissions of carbon dioxide by reducing fossil fuel combustion.⁶

The BAAQMD’s current guidance requires consideration of the following questions in determining whether a project is consistent with an air quality plan. If all three questions are answered in the affirmative with substantial evidence provided in support of the answer, the project would be considered to be consistent with the Clean Air Plan.

- 1) For each applicable air quality plan, does the project support the primary goals?
- 2) For each applicable air quality plan, does the project include all applicable control measures?
- 3) For each applicable air quality plan, does the project not disrupt or hinder implementation of any control measures?

The BAAQMD-recommended guidance for determining if a project supports the goals of the current Clean Air Plan is to compare project-estimated emissions with BAAQMD thresholds of significance. If a project’s emissions would not exceed the thresholds of significance after the application of all feasible mitigation measures, the project would be consistent with the goals of the Clean Air Plan. As indicated in the following discussion with regard to air quality impact Question b, the proposed project would result in less than significant impacts from construction and operation as the project would not generate criteria air pollutant emissions related to either construction or operation that would exceed the BAAQMD mass emissions thresholds of significance. Thus, the proposed project would not conflict with the goals of the Clean Air Plan.

The Clean Air Plan contains 85 control measures aimed at reducing air pollution in the SFBAAB, and projects that incorporate all feasible air quality plan control measures are considered consistent with the Clean Air Plan. Of these, the only control measure applicable to the proposed project is Transportation Control Measure TR22 that addresses emissions from construction equipment. Control measure TR22 uses various strategies to reduce emissions from construction and farming equipment (e.g., incentives for equipment upgrades and/ or use of renewable electricity and fuels). Since 2009, the BAAQMD has provided more than \$38 million to replace and/or upgrade hundreds of pieces of older, often uncontrolled equipment used in construction, cargo-handling and agricultural operations with newer units that have engines certified to the cleanest available standards. The proposed project would benefit from this ongoing program and would not conflict with its implementation. Therefore, the proposed project would not be inconsistent with nor hinder implementation of any of the Clean Air Plan control measures, and the project would not conflict with or obstruct implementation of the Clean Air Plan..

⁴ BAAQMD, 2017. Spare the Air, Cool the Climate, Final 2017 Clean Air Plan. Adopted April 19, 2017. Available at https://www.baaqmd.gov/~media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a_proposed-final-cap-vol-1-pdf.pdf?la=en.

⁵ “Super-GHGs” are climate pollutants that have a powerful ability to contribute to global warming, such as methane, black carbon, and fluorinated gases.

⁶ BAAQMD, 2017. Spare the Air, Cool the Climate, Final 2017 Clean Air Plan. Adopted April 19, 2017. Available at https://www.baaqmd.gov/~media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a_proposed-final-cap-vol-1-pdf.pdf?la=en.

In summary, the proposed project would not conflict with or obstruct implementation of the Clean Air Plan. The impact would be less than significant.

The 2022 BAAQMD Guidelines provide thresholds of significance for air quality impacts from both construction and operation. According to BAAQMD, a project would have a significant impact on air quality if emissions from construction or operation would exceed the thresholds of significance shown in **Table 3**.

Table 3 – BAAQMD Thresholds of Significance for Construction and Operation

Pollutant	Construction	Operation	
	Average Daily (pounds per day)	Average Daily (pounds per day)	Annual (tons per year)
ROG	54	54	10
NO _x	54	54	10
PM ₁₀ ^a	82	82	15
PM _{2.5} ^a	54	54	10
Fugitive Dust	Construction Dust Ordinance or other best management practices (BMPs)	Not applicable	

^a Includes PM emissions from exhaust only.

Sources: BAAQMD CEQA Guidelines April 2023.

For construction-related emissions of fugitive dust, the BAAQMD recommends that lead agencies take a qualitative approach to determine impact significance; the CEQA Air Quality Guidelines state that a project would be considered to have a less than significant impact with regard to fugitive dust emissions of PM₁₀ and PM_{2.5} if BAAQMD Basic Construction Mitigation Measures are implemented during construction.

In order to assess potential air pollutant emissions from the proposed project, a review of the analysis of emissions associated with vineyard development/construction and operations performed for the CEQA analysis of three recent vineyard projects in Napa County was completed: Stagecoach North Vineyards⁷ for an approximately 91-acre vineyard development, KJS and Sorrento Vineyard⁸ for an approximately 98-acre vineyard development, and Le Colline Vineyards⁹ for an approximately 28-acre vineyard development¹⁰.

All three vineyard projects involved similar activities associated with land clearing, construction, and installation of vineyards as the proposed project. Construction emissions estimated for each of these projects were divided by the development area for each to derive an estimate of the pounds per acre per day for each criteria air pollutant. Construction emissions included emissions from the use of off-road equipment and construction vehicles.

Table 4 shows the approximate anticipated construction emissions associated with the development of vineyards of the sizes described above. Variations or similarities in construction emissions modeling results between the three projects can be attributed to the modeling platform and version used, and differences in modeling assumptions and inputs such as construction trips, construction equipment and duration of use/operation. Variations in operational emissions between the three projects can be attributed to the modeling platform and version used, and differences in modeling assumptions and inputs such as operational year and number of vehicle trips generated, level of off-road equipment use in operation, and the use of electric equipment and vehicles.

The proposed project would involve clearing of existing vegetation, earthmoving and land contouring, and installation and maintenance of erosion control measures associated with the development of approximately 18.8 gross acres of vineyard. Vineyard construction is anticipated to generate about 20 trips per day for anticipated work crews of five to ten employees, including truck trips for equipment and supply delivery. Anticipated construction equipment would be limited to tracklaying and rubber-tired vehicles and could include bulldozers, tractors, excavators, backhoes, dump trucks, water trucks, ATVs and passenger vehicle and/or light trucks.

Daily construction emissions associated with the proposed project's 18.8 gross acre vineyard development (approximately 15.8 net-planted acres) were estimated using the average pounds per day estimated of the three vineyard projects described above and is shown in **Table 4**. As shown in **Table 4** short-term construction emissions associated with the proposed project would be well below the BAAQMD's daily construction thresholds. Therefore, the project would not negatively affect air quality and is anticipated to result in a less than significant impact during construction.

⁷ #P18-00446-ECPA, November 2022, SCH #2019100250

⁸ #P17-0432-ECPA, March 2023, SCH #2018092042

⁹ #P14-00410-ECPA, December 2022, SCH #2016042030

¹⁰ These EIRs are incorporated herein by reference and available for review in the Napa County Department of Planning, Building and Environmental Services permanent files.

Proposed vineyard operations are anticipated to generate at most 130 truck trips annually for anticipated work crews of up to ten field personnel. Typical operations include, but are not limited to, irrigation and trellis system inspection and repair, pruning, canopy management, harvest, cover crop inspection and management, erosion control measure monitoring and maintenance, and vine/vineyard maintenance. During peak activities, operations are anticipated to generate up to seven round trips per day, including grape hauling trucks, for anticipated work crews of up to ten employees. Vineyard operations would be similar to the other three vineyard projects discussed above and the project proposes to develop a vineyard in a smaller area than the projects shown in **Table 5**. Therefore, operational emissions associated with the proposed project would be less than those shown in **Table 5** and well below both the daily and annual thresholds.

Table 4 – Emissions from Vineyard Development and Operation

Emissions and Thresholds	Construction Emissions			
	ROG	NO _x	PM ₁₀	PM _{2.5}
Stagecoach North vineyard ¹ (pounds per acre per day)	0.08	0.75 to 0.78	0.03	0.03
KJS and Sorrento vineyard ² (pounds per acre per day)	0.5	0.42	0.02	0.02
Le Colline vineyard ³ (pounds per acre per day)	0.24	2.33	0.10	0.09
Average (pounds per acre per day)	0.12	1.18	0.05	0.05
Project Construction Emissions based on Average (pounds per day)	2.26	22.18	0.94	0.94
Construction threshold	54	54	82	54
Significant?	No	No	No	No
Emissions and Thresholds	Operational Emissions ^{4, 5}			
Stagecoach North 91-acre vineyard operation ¹ (pounds per acre per day)	0.01	0.08 to 0.14	0.01	<0.01
KJS and Sorrento 98-acre vineyard operation ² (pounds per acre per day)	<0.01	<0.01	<0.01	<0.01
Le Colline 28.5-acre vineyard operation ³ (pounds per acre per day)	<0.01	<0.01	<0.01	<0.01
Average (pounds per acre per day)	<0.01	0.03	<0.01	<0.01
Project Operational Emissions based on Average (pounds per day)	0.18	0.56	0.18	0.18
Operational threshold (pounds per day)	54	54	82	54
Significant?	No	No	No	No
Emissions and Thresholds	Operational Emissions ⁴ (tons per year)			
Stagecoach North 91-acre vineyard operation ¹ (tons per year)	<0.01	0.01 to 0.03	<0.01	<0.01
KJS and Sorrento 98-acre vineyard operation ² (tons per year)	<0.01	<0.01	<0.01	<0.01
Le Colline 28.5-acre vineyard operation ³ (tons per year)	<0.01	0.01	<0.01	<0.01
Average (tons per year)	<0.01	<0.01	<0.01	<0.01
Project Operational Emissions based on Average (tons per year)	0.18	0.18	0.18	0.18
Operational threshold (tons per year)	10	10	15	10
Significant?	No	No	No	No

1 As identified in Stagecoach North EIR

2 As identified in KJS and Sorrento EIR

3 As identified in Le Colline Vineyard EIR

4 Includes dust and exhaust emissions

5 Calculation based on 365 days of operation. Project emissions are anticipated to be less than identified as vineyard operations are seasonal in nature.

Sources: Stagecoach North Vineyard EIR 2022; KJS and Sorrento Vineyard EIR 2023; Le Colline Vineyard Initial EIR 2023; BAAQMD CEQA Guidelines April 2023.

Additionally, project approval, if granted, would be subject to the standard Air Quality Conditions of Approval below, which includes standard air quality and construction best management practices (BMPs) consistent with BAAQMD measures identified in Table 5-2 of

the BAAQMD CEQA Guidelines that would further reduce potential air quality impacts associated with construction and ongoing operation of the proposed project.

Air Quality – Conditions of Approval: The owner/permittee shall implement the following air quality BMPs during construction activities and vineyard maintenance and operations:

- Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. The BAAQMD's phone number shall also be visible.
- Water all exposed surfaces (e.g., parking areas, staging areas, soil piles, grading areas, and unpaved access roads) two times per day.
- Cover all haul trucks transporting soil, sand, or other loose material offsite.
- Remove all visible mud or dirt tracked onto adjacent public roads by using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved roads shall be limited to 15 mph.
- All trucks and equipment, including their tires, shall be washed off prior to leaving the site.
- Idling times shall be minimized either by shutting off equipment when not in use or reducing the maximum idling time to five minutes (as required by state regulations). Clear signage should be provided for construction workers at all access points.
- Unpaved roads providing access to sites located 100 feet or farther from a paved road shall be treated with a 6- to 12-inch layer of compacted layer of wood chips, mulch, or gravel.
- Water and/or dust palliatives shall be applied in sufficient quantities during grading and other ground disturbing activities onsite to minimize the amount of dust produced. Outdoor construction activities shall not occur when average wind speeds exceed 20 mph.

Installation of the proposed project is expected to generate emissions that are below the thresholds presented in **Table 4**, would contain other features that minimize fugitive dust (such as vineyard cover crop), and would introduce fewer new vehicle trips than the projects shown in **Table 4** during both installation and operation (see **Section XVII [Transportation]** for anticipated project trips). Implementation of the proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard; less than significant impacts are anticipated.

- c-d. Land uses such as schools, playgrounds, childcare centers, hospitals and convalescent homes are considered sensitive to poor air quality, because infants and children, the elderly, and people with health afflictions, especially respiratory ailments, are more susceptible to respiratory infections and other air quality related health problems than the general public. Residential areas are also considered to be sensitive to air pollution because residents, which include children and the elderly, tend to be at home for extended periods of time.

The approximate 48.42-acre project parcel is located in the Pritchard Hill area east of the Napa Valley, approximately 5.5 miles southeast of the City of St Helena and 4 miles northeast of the Town of Yountville. Access to the project parcel is via a private gravel driveway off of Long Ranch Road, approximately 2.8 miles from its intersection with California State Route 128 / Sage Canyon Road.

Surrounding and adjacent land uses consist generally of undeveloped chaparral interspersed with vineyards, wineries, rural residences and open space. There are eleven (11) wineries within approximately one (1) mile of the project property, which range in an annual production limitation from 5,000 to 250,000 gallons per year. The nearest known school is Yountville Elementary School, approximately 4 miles to the south/southwest of the project site (Napa County GIS Schools Layer). The nearest residences are approximately 1,750 feet to the east, 2,070 feet to the southwest and 2,260 feet to the southeast.

During installation of the ECP, vineyard planting, and subsequent vineyard operations, TACs and odors would be created through the use of construction, grading, and farm equipment (e.g., tractors, trucks, bulldozers, and an excavator). These sources would be temporary and/or seasonal in nature and would occur approximately 4 miles from the closest school and approximately 60 feet from the nearest residence, providing dilution of pollutants and odors. For the reasons identified above, the proposed project would not expose sensitive receptors or a substantial number of people to pollutants or objectionable odors. Therefore, these impacts would be less than significant.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES. Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☒	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☐	☒	☐
c) 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?	☐	☒	☐	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☒	☐	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☒	☐	☐
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

Discussion

The following sources were used in this analysis and are incorporated herein by reference and available in the project file for review:

- Montrose Environmental, March 2024, Biological Resources Assessment, Long Ranch Road Vineyard Napa County (**Exhibit B-1**)
- California Biological Consulting, September 17, 2024, Addendum to Biological Resource Assessment, Long Ranch Road Vineyard Development Project (**Exhibit B-2**)
- Applied Civil Engineering Inc., September 23, 2024, 230 Long Ranch Road LLC Scrub Interior Live Oak – Scrub Oak Vegetation Exhibit (**Exhibit B-3**)

Additionally, the following Napa County Geographic Information System (GIS) Sensitivity Maps/layers were utilized in this biological resources assessment: Sensitive biotic vegetation groups, U.S. Fish and Wildlife (USFWS) Critical Habitat, California Natural Diversity Database (CNDDB), Owl Habitat, Wetlands and Vernal Pools, Vegetation, Soil types, U.S. Geological Survey Quadrangle (DRG), and Aerial Photos.

Montrose Environmental conducted an assessment of biological resources present or potentially present in the project site and the effects of the proposed vineyard development on those species. Montrose Environmental conducted protocol level special-status plant surveys on the subject parcel resulting in a 48.42-acre 'Study Area' (project parcel) on April 12 and June 13, 2023. On August 23, 2024, California Biological Consulting conducted additional surveys for special status species within the Disturbed/Managed habitat areas and an assessment of the quality of Scrub Interior Live Oak – Scrub Oak habitat proposed for removal. The field surveys were conducted by qualified biologists familiar with the resources of Napa County and surrounding counties, with the goal of identifying habitat types, sensitive habitats, wetlands and waters

of the U.S. and state, special-status animal and plant species, including lichens and bryophytes, identifying potentially suitable bat habitat, characterization and identification of forested habitats and trees, and potential wildlife corridors.

Biological information for the Study Area was obtained from the following sources: CNDDB (CDFW, 2024a), California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants (CNPS, 2024a), and the USFWS List of Federal Endangered and Threatened Species that may be affected by projects in the Saint Helena, Chiles Valley, Lake Berryessa, Rutherford, Yountville, Capell Valley, Sonoma, Napa and Mount George USGS 7.5 minute quadrangles (USFWS, 2024b).

Botanical assessments followed protocols described in the *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities* (CDFW, 2018), *Botanical Survey Guidelines of the California Native Plant Society* (CNPS, 2001), *Guidelines for Mapping Rare Vegetation* (CNPS 2011), and *The Jepson Manual* (Baldwin, 2012). Wildlife was identified by calls, scat, remains, or direct sight. Aerial imagery from Google Earth, as well as the BIOS Terrestrial Connectivity mapper, were reviewed to assess habitats surrounding the study area for potential wildlife movement, wildlife corridors, or movement barriers. Field methodology for identifying corridors for movement including searching for game trails or habitats that would favor the movement of wildlife or potential gene flow. Existing and proposed barriers were examined to determine current movement potential within the study area and whether the proposed project would impact movement.

The project parcel consists of the following vegetation alliances (or habitat types): chamise, Scrub Interior Live Oak – Scrub Oak, and disturbed/managed areas cleared of vegetation or significantly thinned for wildfire fuel reduction (formerly chamise), as well as cleared areas located on land with slopes less than 5% that have been graded and ripped. The parcel also contains a portion of an un-named blue-line (intermittent) stream along the eastern property line and two ephemeral drainages originating in the northwestern and southwest portions of the parcel. Developed areas of the parcel include a residence, accessory structures, landscaping, roads and driveway. The habitats/land covers and their acreages are shown in **Table 5**.

Table 5 – Habitats/Land Cover within the Project Parcel

Vegetation Alliance or Habitat Type	Approximate Acreages on Project Parcel	Approximate Acreages within Development Area	Percent of Total Acreage Retained on Project Parcel
Chamise	16.96	6.4	62.27%
Scrub Interior Live Oak – Scrub Oak	18.23	4.13	77.32%
Disturbed/Managed	7.95	6.51	18.13%
Developed	3.8	0.21	94.49%
Cleared Areas with < 5% slopes	1.47	1.47	0.00%

- a. **Special-Status Plants:** Based on survey results and the review of regionally occurring special-status species and associated habitat requirements, Montrose Environmental determined the Study Area (project parcel) may contain suitable habitat for 12 special-status plant species. Of these, five (5) special status plant species were observed on the project parcel, including holly-leaved ceanothus (*Ceanothus purpureus*), Sharsmith’s western flax (*Hesperolinon sharsmithiae*), Napa lomatium (*Lomatium repostum*), Mt. Diablo cottonweed (*Micropus amphibolus*), and green monardella (*Monardella viridis*). Of these five special-status plants, project biologists observed and documented three (3) special-status plants within the proposed project development area: holly-leaved ceanothus, Sharsmith’s western flax, and green monardella. (Montrose Environmental, March 2024 - **Exhibit B-1** and California Biological Consulting, September 2024 – **Exhibit B-2**).

Holly-leaved ceanothus is a perennial shrub in the buckthorn family (Rhamnaceae). It is endemic to northern California, where it is known only from the inner north coast ranges north of the Bay Area, mainly in Sonoma and Napa counties. It generally grows in volcanic substrates in chaparral habitat. It blooms from February to April. An estimated 1.41 acres of holly-leaved ceanothus occurs on the project parcel, predominantly in chamise habitat, with lesser populations in the disturbed/managed (previously chamise) habitat types, and in the Scrub Interior Live Oak – Scrub Oak habitat type specifically in the southeastern corner of the parcel. Approximately 0.34 acres of the 1.41 acres of this species was observed within the proposed project area, occurring in varying densities from 1% cover to 15% cover density. The highest densities of holly-leaved ceanothus are located predominantly to the north and east of proposed Block 3, with approximately one-third (1/3) of the populations within

the project area identified as having high density (i.e., 15% cover density) located in the southeastern portion of Block 3 (Figure 7 in Montrose Environmental, March 2025 – **Exhibit B-1**).

Sharsmith's western flax is an annual herb in the flax (Linaceae) family that blooms from May through July. It typically occurs on serpentine open chaparral habitat ranging in elevations from 884 to 1,000 feet above msl. An estimated 202,602 total plants were observed on the project parcel within the chamise habitat and disturbed/managed habitat (previously chamise), with 17,491 individuals occurring in the project development area (**Exhibits B-1 and B-2**).

Green monardella is a perennial rhizomatous herb in the mint (Lamiaceae) family that blooms from June through September. It typically occurs in broad-leaved upland forest, chaparral, and cismontane woodland habitat at elevations ranging from 300 to 3,100 feet above msl. Approximately 78 individuals were observed within the chamise habitat and disturbed/managed habitat (previously chamise) on the project parcel, with nine (9) individuals occurring in the project development area (**Exhibits B-1 and B-2**).

Holly-leaved ceanothus and Sharsmith's western flax are CNPS California Rare Plant Rank (CRPR) List 1B species, which are considered "Rare, Threatened, or Endangered in California and Elsewhere" and are fairly threatened in California (i.e., moderate degree/immediacy of threat). CRPR List 1B species meet the definition of Section 1901, Chapter 10 of the Native Plant Protection Act, or Sections 2062 and 2067 of the California Endangered Species Act of the California Fish and Game Code (CFGF) and are eligible for state listing. Green monardella is a CNPS California Rare Plant Rank (CRPR) List 4 species, which are considered "Plants of Limited Distribution – A Watch List". While these species are not state or federally listed species at this time, the species and their associated habitats are limited locally within Napa County and warrant protection through applicable General Plan Goals and Policies.

Protecting the continued presence of special-status species, including special-status plants, special-status wildlife, and their habitats is encouraged by Napa County General Plan Goal CON-39. Additionally, pursuant to Napa County General Plan Policy CON-13, the County shall require that all discretionary agricultural projects consider and address impacts to wildlife habitat and avoid impacts to habitat supporting special-status species to the extent feasible, and where impacts to special-status species and their habitat cannot be avoided, projects shall include effective mitigation measures and management plans to provide protection for habitat supporting special status species through buffering or other means, and enhance existing habitat values particularly for special-status species through restoration and replanting as part of the project or its mitigation. General Plan Policy CON-13(d) and (e) provide protections for habitat through buffering or other means, and by requiring replacement of habitat of like quantity and quality on- or off-site to mitigate impacts on special status species. General Plan Policy CON-17 requires that the County preserve and protect sensitive biotic communities, and requires that, where avoidance, restoration or replacement of sensitive biotic habitats is not feasible, preservation of like habitat at a 2:1 ratio occurs to avoid significant cumulative loss of valuable habitats.

Because these three special-status plant species are present across the chamise vegetation alliance (and the disturbed/managed area, which was previously chamise) or their margins within the project site, the chamise habitat is considered to provide suitable habitat (i.e., containing the biological and ecological characteristics necessary to support these species) and is treated as sensitive habitat for the purpose of this analysis.

The project as proposed would remove approximately 0.34 acres (24% of total) of holly-leaved ceanothus, 17,491 individuals (9% of total) of Sharsmith's western flax, and 9 individuals (12% of total) of green monardella from the project parcel. The project parcel contains approximately 16.96 acres of chamise, with 6.4 acres occurring in the development area; the project as proposed would remove approximately 37.7% of this special-status plant species habitat. This, in conjunction with the removal of up to approximately 24% of the individual special-status plants within the Study Area, would be considered a potentially significant impact (See **Table 6**).

Table 6 – Retention of Vegetation Alliances and Special-Status Plants on Project Parcel

BIOLOGICAL FEATURE	STUDY AREA	DEVELOPMENT AREA	
		Acres or Individuals	% Removed
Holly-leaved ceanothus	1.41 acres	0.34 acre	24%
Sharsmith's western flax	202,602 individuals	17,491 individuals	9%
Green monardella	78 individuals	9 individuals	12%

Vegetation Alliances	Acres	Acres	% Removed
Chamise	16.96	6.4	37.7%
Scrub Interior Live Oak – Scrub Oak	18.23	4.13	22.6%
Disturbed/Managed	7.95	6.51	44.1%
Cleared Areas with < 5% slope	1.47	1.47	100%

Sources: Montrose Environmental, March 2024 (**Exhibit B-1**) and California Biological Consulting, September 2024 (**Exhibit B-2**)

Where avoidance of special-status habitat and plant species is infeasible due to the prevalence and density of special-status plants on a parcel, County practice requires that a minimum of 80% of special-status populations and their habitat be avoided and preserved to ensure consistency with Policy CON-13 and Policy CON-17. Adherence to this County practice would require that the project be limited to total vegetation removal of approximately 3.4 acres of chamise and 0.28-acre of holly-leaved ceanothus.

The removal of these special status plant species and their habitat onsite would be inconsistent with the following Napa County General Plan Conservation Element Goals and Policies and Zoning Ordinance: General Plan Goal Con-3 as it does not provide protections for the continued presence of special-status plant species or its habitat; Policy CON-17 because the removal and disturbance of special-status plant containing-habitat is not prevented; and the purpose and intent of the Conservation Regulations (NCC Chapter 18.108) in that it does not preserve natural habitat or existing vegetation, and adversely affects sensitive, rare, threatened or endangered plants.

Pursuant to Napa County General Plan Conservation Element Policy CON-17, projects shall be required to preserve and protect sensitive biotic communities and habitats of limited distribution through the following:

- Prevent removal or disturbance of sensitive natural plant communities that contain special-status plant species or provide critical habitat to special-status animal species.
- In other areas, avoid disturbances to or removal of sensitive natural plant communities and mitigate potentially significant impacts where avoidance is infeasible.
- Require no net loss of sensitive biotic communities and habitats of limited distribution through avoidance, restoration, or replacement where feasible. Where avoidance, restoration, or replacement is not feasible, preserve like habitat at a 2:1 ratio or greater within Napa County to avoid significant cumulative loss of valuable habitats.

As such, the removal of chamise habitat and holly-leaved ceanothus would result in potentially significant direct and cumulative impacts.

Regarding the approximate 1.47 acres of “cleared areas with <5% slope” and the approximate 7.95 acres of “disturbed/managed” area that is currently managed for wildfire fuel reduction: these areas as shown in Figures 5 and 7 of the Biological Resources Report (**Exhibit B-1**) are proximal to chamise habitat that contains varying densities of holly-leaved ceanothus. Further, the project biologist determined that chamise vegetation, including some holly-leaved ceanothus shrubs, were resprouting in some of the “disturbed/managed” area (**Exhibit B-2**). Given the prevalence of chamise alliance containing special status plants in proximity to these “cleared areas with <5% slopes” and “Disturbed/Managed” areas, it can be assumed that these areas contained special status plants (including holly-leaved ceanothus, at minimum) that were removed or disturbed and would be impacted by the proposed conversion of these areas to vineyard. This would be considered a potentially significant direct and cumulative impact.

To offset both project specific and cumulative impacts due to loss and conversion of special-status plant species and their habitat on the project parcel, **Mitigation Measure BIO-1** shall be implemented to require a combination of on-site avoidance and on-site preservation to reduce potential impacts to a less than significant level. **Mitigation Measure BIO-1** requires the complete avoidance of approximately three (3) acres of chamise alliance containing higher densities of holly-leaved ceanothus, including from the eastern portion of Block 3 and lower densities of holly-leaved ceanothus as well as some populations of Sharsmith’s western flax and green monardella located in Block 4, resulting in a minimum of 80% avoidance of these populations and habitat. The avoidance of three (3) acres of chamise alliance containing up to 15% densities holly-leaved ceanothus habitats from Block 3 and 4, in addition to the Scrub Interior Live Oak – Scrub Oak habitat containing up to 5% densities of holly-leaved ceanothus populations from Block 4 would result in the mitigated project avoiding more than 80% of this special status plant populations and their habitat on the parcel.

Additionally, while it would be impossible to estimate the populations of special status plants (predominantly holly-leaved ceanothus) that may have been removed within the areas identified as “Cleared Areas with <5% Slopes” and “Disturbed/Managed” and that would be converted to vineyard, **Mitigation Measure BIO-1** also requires avoidance of the Scrub Interior Live Oak – Scrub Oak habitat (approximately 0.4-acre) located in Block 4 that contains holly-leaved ceanothus, and of an approximately 0.1-acre of area identified as

“Disturbed/Managed” surrounded by chamise habitat located in the southeastern area of Block 4. The avoidance of the Scrub Interior Live Oak – Scrub Oak habitat and “Disturbed/Managed” areas in addition to the chamise alliance located within Block 4 would result in avoidance of low-to-moderate densities of holly-leaved ceanothus, and of Sharsmith’s western flax and green monardella populations within an area that is contiguous with the special status plant preservation areas located on neighboring parcels to the east, southeast and south of the project parcel.

Further, to minimize potentially significant cumulative impacts to habitats that support special status plant species, as evident in both the project property and in neighboring parcels to the east, southeast and south, and that is also within a larger Sensitive Domestic Watershed, **Mitigation Measure BIO-1** will also require that the entirety of the avoided special-status-plant-containing habitats as mitigated be permanently preserved in a deed restriction or similar mechanism approved by the County. Implementation of **Mitigation Measure BIO-1** would result in an approximate 14.1-acre Preservation Area that would be permanently preserved (including approximately 13.56 acres of chamise alliance, 0.4-acre Scrub Interior Live Oak – Scrub Oak), and consistency with General Plan Goal CON-3, Policies CON-13 and CON-17, and the Conservation Regulations (NCC Chapter 18.108) by avoiding and preserving special status plant species and their habitat at a greater than 2:1 ratio, and in Goal CON-2 because it would assist in maintaining the existing level of biodiversity in the County, as well as mitigate the project’s incremental contribution to cumulative impacts associated with the loss of special-status plant species and habitat due to past, present and future agricultural conversion projects.

Block 4 is located adjacent to an approximate 68.1-acre chamise chaparral habitat conservation area located east and southeast of the project parcel at APNs 032-560-037, -038, and 032-030-071 (Red Dirt Grapes LLC #P22-00143-ECPA, approved May 2, 2024). To the south is a 16.4-acre chamise chaparral habitat conservation area on APN 032-030-066 (Metamorphosis Wines - Ovid Vineyards, #P18-00275-ECPA, approved November 25, 2019). The contiguous area of avoided habitat and special status plant populations resulting from **Mitigation Measure BIO-1** would result in permanently preserving a large swatch of chamise habitat on the parcel that contributes to a permanently preserved chamise corridor in the context of neighboring properties, resulting in less fragmentation of these habitats in the area and continued cross-pollination and gene flow between the parcels.

Furthermore, implementation of **Mitigation Measure BIO-1** would not affect the feasibility of the project or the continued viability of agricultural use of the project site, in that it would allow the owner/permittee to develop and operate approximately 15.8-acres of vineyard on the 48.42-acre project property. Following implementation of **Mitigation Measure BIO-1** the project would result in less than significant direct, indirect and cumulative impacts on special status plants and their habitat.

Mitigation Measure BIO-1: The Owner/Permittee shall implement the following measures to minimize potential direct and cumulative impacts to special-status plant species (i.e., holly-leaved ceanothus, Sharsmith’s western flax, and green monardella) and their habitat, including Chamise Alliance and Scrub Interior Live Oak – Scrub Oak habitat types and associated cover canopy as depicted in Figure 5, Habitat Types, and Figure 7, Special Status Plants, in the Biological Resources Report (Montrose Environmental, November 2023 - Exhibit B-1):

- a. Revise Erosion Control Plan #P24-00114-ECPA prior to approval to remove from project development area (i.e., retain) a minimum of approximately 3.0 acres of chamise alliance habitat containing special-status plant populations to achieve minimum 80% retention of sensitive habitat, including:
 - i. Chamise alliance habitat containing higher densities of holly-leaved ceanothus, including in proposed Block 3 (i.e., 10% to 15% densities within the eastern portion of the proposed block).
 - ii. Chamise alliance containing 2% to 10% densities of holly-leaved ceanothus and Scrub Interior Live Oak – Scrub Oak habitat containing up to 5% densities of holly-leaved ceanothus from proposed Block 4.
 - iii. Habitat that is contiguous with adjacent like habitat outside of the proposed project area to the maximum extent feasible.
- b. Revise Erosion Control Plan #P24-00114-ECPA prior to approval to remove from project development area (i.e., retain) the Scrub Interior Live Oak – Scrub Oak habitat containing up to 5% densities of holly-leaved ceanothus in Block 4 and the approximately 0.12-acre area identified in “Disturbed/Managed” habitat in the eastern part of Block 4.
- c. Revise #P24-00114-ECPA wildlife exclusion fencing plan prior to approval to limit any new wildlife exclusion fencing associated with this project to the periphery of project development areas, including as modified by this mitigation measure.
- d. The owner/permittee shall implement the following measure to permanently preserve special-status plant species and associated habitat within the project site consistent with General Plan policies. Revise Erosion Control Plan #P24-00114-ECPA prior to approval to identify a Preservation Area, totaling a minimum of 14.1 acres that includes a minimum of 80% of the chamise alliance on the parcel that includes the avoided populations per **Mitigation Measure BIO-1(a)**, as well as the

Scrub Interior Live Oak-Scrub Oak habitat containing special status plant populations within Block 4 per **Mitigation Measure BIO-1(b)**.

- e. The Preservation Area shall be identified and designated for preservation in a deed restriction or conservation easement, or other means of permanent protection acceptable to Napa County, as approved by the Director of PBES. Areas placed in protection shall be restricted from development and other uses that would potentially degrade the quality of the habitat (including but not limited to conversion to other land uses such as agriculture or urban development, and excessive off-road vehicle use that increases erosion), and should be otherwise restricted by the existing goals and policies of Napa County. The preservation areas shall be confirmed by a qualified botanist/biologist and shall be submitted to Napa County for review and approval prior to their incorporation into the ECPA.
- f. The owner/permittee shall record the deed restriction or easement within 90 days of the County's approval of #P24-00114-ECPA, or prior to project initiation, whichever comes first. In no case shall the erosion control plan be initiated until said deed restriction or easement is recorded.
- g. Prior to any earthmoving activities temporary construction fencing or other means of project demarcation acceptable to the County shall be placed at the limits of the project footprint. The precise locations of said fences shall be inspected and approved by the Conservation Division prior to the commencement of any earthmoving activities. No disturbance, including grading, placement of fill material, storage of equipment, etc., shall occur within the designated protection areas for the duration of erosion control plan, and vineyard installation and operation.
- h. In accordance with Napa County Code Section 18.108.100 (Erosion hazard areas – Vegetation preservation and replacement) any special-status plants/populations inadvertently removed as part of development authorized under #P24-00114-ECPA shall be replaced on-site at a ratio of 3:1 at locations with similar habitat. For such removal a replacement plan shall be prepared by a qualified botanist or ecologist for review and approval by the Director prior to vineyard planting. At a minimum, the replacement plan shall include i) a site plan showing the locations where replacement plants will be planted, ii) a plant pallet composed the special-status plants specie(s) being removed including sizes and/or application rates, iii) planting notes and details including any recommended plant protection measures, iv) invasive species removal and management specifications, v) an implementation and monitoring schedule, and vi) performance standards with a minimum success rate of 80% to ensure the success of re-vegetation efforts. Any replaced special-status plants shall be monitored for a period of at least three years to success criteria are met.

Special-Status Animals: Based on the review of the resource databases listed in **Exhibit B-1**, ten (10) special-status animal species have the potential to occur in the vicinity of the Study Area. Of these, three (3) special-status animal species have the potential to occur on the project parcel: foothill yellow-legged frog (*Rana boylei* pop. 1), western pond turtle (*Emys (Actinemys) marmorata*), and white-tailed kite (*Elanus leucurus*).

Foothill yellow-legged frog (FYLF) historically occurred in coastal and mountain streams from southern Oregon to Los Angeles County but has declined in many parts of this range. This species is strongly associated with perennial streams, and prefers shallow, flowing water in moderate-sized streams with a cobble substrate. FYLF individuals do not typically move overland and are rarely observed far from a source of permanent water (typically less than 10 feet). The nearest FYLF CNDDB occurrences are within 3-miles of the project. According to the biologist, FYLF may utilize the blue-line stream located along the eastern property line and the stock pond located on the adjacent parcel to the south, approximately 70-feet south of proposed Block 4. There were no observations of this species during the biological surveys; however, a focused survey was not performed.

Western pond turtle (WPT) is found in Washington to northern Baja California and is listed by the State as a Species of Concern. Suitable habitat consists of rivers, streams, lakes, ponds, reservoirs, stock ponds, and permanent wetland habitats with basking sites. Refuge sites include partially submerged logs or rocks or mats of floating vegetation. Basking sites can be partially submerged rocks or logs, as well as shallow sloping banks with little or no cover. Nesting occurs in sandy banks or in soils up to 100 meters away from aquatic habitat. The nearest CNDDB occurrences for WPT are within 2-miles of the project. Montrose Environmental found that WPT may utilize the blue-line stream located along the eastern property line and the stock pond located 70+/- feet south of the project parcel.

White-tailed kite is a medium-sized raptor that is found throughout the United States and resides and breeds in California. White-tailed kite is found year-round in Napa County. This species forages in undisturbed, open grasslands, meadows, farmlands, and emergent wetlands and uses trees with dense canopies for cover. It makes a nest of loosely-piled sticks and twigs lined with grass, straw, or rootlets. Nests are placed near the top of a tree in a dense canopy of oak, willow, or other tree strands, and are usually

located near an open foraging area. The nearest CNDDDB occurrences for white-tailed kite are within 3-miles of the project. The project site provides suitable year-round habitat for white-tailed kites, including stands of scrub oaks for nesting and relatively open areas in close proximity for foraging. This species was not observed during biological surveys; however, a focused bird survey was not performed.

Regarding FYLF and WPT: The on-site USGS blue-line stream is dry during the summer months and therefore the potential for these species to occur would be seasonally limited. Because the on-site stream draws down following the end of the wet season, on-site breeding by this species is unlikely. The proposed project was designed in accordance with minimum 65-foot setbacks from the blue-line stream as required in NCC Section 18.108.025. Further, the project is setback from the stock pond on the adjacent parcel by approximately 70 feet, which exceeds the minimum 50-foot setback as required by NCC Section 18.108.026. As such, potential impacts on FYLF and WPT are anticipated to be less than significant.

Implementation of the standard condition of approval for stream protection ensures protection of the riparian vegetation and habitat, including basking substrates, which may be outside of the immediate riparian corridor, thereby reducing the risk of harm to FYLF and WPT. The stream protection standard condition of approval would require the installation of temporary protective construction fencing along the edges of stream bank setbacks (65' from top of bank) prior to commencement of earthmoving activities. Although the project has been specifically designed to avoid the riparian corridor and the required creek setbacks, the proposed Conditions of Approval ensures protection of the riparian vegetation and habitat, including basking substrates, which may be outside of the immediate riparian corridor, thereby reducing the risk of harm to these species.

Stream Protection – Standard Conditions: The applicant/owner shall implement the following measures to prevent the inadvertent encroachment into specified stream setbacks during construction and subsequent vineyard operations:

1. The location of stream setbacks shall be clearly demarcated in the field with temporary construction fencing, which shall be placed at the outermost edge of required setbacks shown on the project plans. Prior to any earthmoving activities, temporary fencing shall be installed: the precise locations of said fences shall be inspected and approved by the Planning Division prior to any earthmoving and/or development activities. No disturbance, including grading, placement of fill material, storage of equipment, etc. shall occur within the designated areas for the duration of erosion control plan installation and vineyard installation. The protection fencing shall remain in place for the duration of project implementation.
2. All construction and related traffic will remain outside of the protective fencing to the maximum extent practicable to ensure that the stream, buffer zones, and associated woodland habitat remains undisturbed.

Further, following implementation of **Mitigation Measure BIO-1** would result in the avoidance and preservation of the habitat in proposed Block 4 that is closest in proximity to the ephemeral blue-line stream and the pond to the south; as a result project activities would be further removed from these features that may support these species.

Regarding white-tailed kite, as well as other raptors, special-status bird species and other birds protected by the Migratory Bird Treaty Act and California Fish and Game Code: the project site and areas within 500 feet of proposed development activities may provide potential nesting habitat for migratory birds. Removal of trees and development activities within the project areas could result in direct and indirect impacts on nesting birds and raptors. Temporary and intermittent increases in noise levels during construction may cause nest abandonment and death of young or loss of reproductive potential at active nests located near project activities. This is considered to be a potentially significant impact.

Implementation of **Mitigation Measure BIO-2**, as described below, would reduce potentially significant impacts on white-tailed kite, other raptors and protected bird species, and nesting migratory birds to a less than significant level.

Mitigation Measure BIO-2: The owner/permittee shall revise Erosion Control Plan #P24-00114-ECPA prior to approval to include the following measures to minimize impacts associated with the potential loss and disturbance of special-status and nesting birds and raptors (including white-tailed kite) consistent with and pursuant to California Fish and Game Code Sections 3503 and 3503.5:

1. For earth-disturbing activities occurring between February 1 and August 31 (which coincides with the grading season of April 1 through September 15 – NCC Section 18.108.027(C), and bird breeding and nesting seasons), a qualified biologist (defined as knowledgeable and experienced in the biology and natural history of local avian resources with the potential to occur at the project site) shall conduct a preconstruction surveys for nesting birds within all suitable habitat on the development area, and where there is potential for impacts adjacent to the development area (typically within 500 feet of project activities). The preconstruction survey shall be conducted no earlier than 7 days prior to when vegetation removal and ground disturbing

activities are to commence. Should ground disturbance commence later than 7 days from the survey date, surveys shall be repeated. A copy of the survey shall be provided to the Napa County Conservation Division and the California Department of Fish and Wildlife (CDFW) prior to commencement of work.

2. After commencement of work if there is a period of no work activity of 7 days or longer during the bird breeding season, surveys shall be repeated to ensure birds have not established nests during inactivity.
3. In the event that nesting birds are found, the owner/permittee shall identify appropriate avoidance methods and exclusion buffers in consultation with the County Conservation Division and the U.S. Fish and Wildlife Service (USFWS) and/or CDFW prior to initiation of project activities. Exclusion buffers may vary in size, depending on habitat characteristics, project activities/disturbance levels, and species as determined by a qualified biologist in consultation with County Conservation Division and/or the USFWS or CDFW.
4. Exclusion buffers shall be fenced with temporary construction fencing (or the like), the installation of which shall be verified by Napa County prior to the commencement of any earthmoving and/or development activities. Exclusion buffers shall remain in effect until the young have fledged or nest(s) are otherwise determined inactive by a qualified biologist.
5. Alternative methods aimed at flushing out nesting birds prior to preconstruction surveys, whether physical (i.e., removing or disturbing nests by physically disturbing trees with construction equipment), audible (i.e., utilizing sirens or bird cannons), or chemical (i.e., spraying nesting birds or their habitats) shall be prohibited.

- b-c. Approximately 10 acres of the southwestern portion of the project parcel is located within the Vinehill Creek Drainage, while the remaining 39 acres of the parcel are located within the Lake Hennessey Sensitive Domestic Water Supply Drainage. Three ephemeral drainages occur within the parcel, including an unnamed USGS blue-line stream in the southwest area of the parcel, a County-definitional stream in the southwest corner of the parcel, and an ephemeral stream in the northwest area of the parcel. These drainages convey flows in response to rain events and do not contain flows or standing water outside of the rainy season.

The unnamed USGS blue-line stream that drains north to Lake Hennessey is located along the southeastern property boundary. This intermittent stream displays a clear ordinary high-water mark (OHWM), top of bank, and therefore is likely be considered Waters of the U.S. and State of California subject to USACE and RWQCB jurisdiction, respectively. The stream channel is predominantly bare rock, boulders, and cobble and is bound by thick Scrub Interior Live Oak – Scrub Oak habitat and did not contain hydrophytic vegetation (Montrose Environmental, March 2024 – **Exhibit B-1**). This stream is avoided by the proposed project with minimum 65-foot setbacks, consistent with NCC Section 18.108.025.

The ephemeral stream located in the southwest corner of the parcel drains to the west into the established vineyard on the neighboring parcel. The drainage is entirely within a ravine or an erosional feature that appears to be a remnant section of a historical drainage that no longer exists outside of the parcel. This drainage is surrounded by chamise alliance habitat and eventually passes through a small section of scrub interior live oak – scrub oak habitat before dissipating in the vineyard to the west (**Exhibit B-1**). This short stream contains features that meet the definition of “stream” (as defined in NCC Section 18.108.030); the project avoids this stream with minimum 55-foot setbacks based on slopes from top of bank, as required by NCC Section 18.108.025.

A third stream originates as a shallow swale in the northwest corner of the parcel flows north and flows through a steep ravine near the parcel boundary that drains into the aforementioned unnamed blue-line stream, which in turn flows into Lake Hennessey. This ephemeral stream does not meet the definition of a “stream” and is avoided by the proposed project with minimum 35-foot setbacks, consistent with NCC Section 18.108.025.

The project would not result in significant impacts to riparian habitat or on-site streams or tributaries as the project has been designed to avoid all streams any associated riparian habitat with setbacks according to the slope from top of bank for the blue-line intermittent stream and by 35 feet for the ephemeral streams per Napa County Code Section 18.108.025(B) (General provisions – Intermittent/perennial streams). Further, implementation of **Mitigation Measure BIO-1** would result in the avoidance and preservation of the habitat in proposed Block 4 that is closest in proximity to the ephemeral blue-line stream located in the southeastern corner of the parcel and the pond to the south of the parcel; as a result project activities would be further removed from these features.

The project is also being designed to maintain existing soil loss (sedimentation) and hydrologic/runoff characteristics (i.e., result in no net increase in soils loss or runoff as compared to existing conditions). Additionally, no trees are proposed for removal and no work will occur within the 35-foot and 65-foot stream setbacks, therefore the top of bank will be maintained consistent with NCC Section 18.108.025. To ensure the project results in reduced impacts to streams, standard project conditions of approval for stream protection (described above) have been incorporated into the project. Less than significant impacts are anticipated for streams and riparian habitat.

The project parcel does not contain vernal pools, wetlands, or seasonal wetlands (Montrose Environmental, March 2024 - **Exhibit B-1**). Therefore, no impacts to vernal pools or wetlands are expected.

- d. Wildlife corridors are natural areas interspersed with developed areas that are important for animal movement, increasing genetic variation in plant and animal populations, the reduction of population fluctuations, and the retention of predators of agricultural pests and for movement of wildlife and plant populations. Wildlife corridors have been demonstrated to not only increase the range of vertebrates including avifauna between patches of habitat but also facilitate two key plant-animal interactions: pollination and seed dispersal. Corridors also preserve watershed connectivity. Corridor users can be grouped into two types: passage species and corridor dwellers. The data from various studies indicate that corridors should be at least 100 feet wide to provide adequate movement for passage species and corridor dwellers in the landscape.

The project area is located within a mapped “Essential Connectivity Area,” specifically a large, north-south oriented tract of land east of Napa Valley (CDFW and Caltrans, 2010). The project area is located near the western edge of this mapped area, which is approximately 9 miles wide in that vicinity. At the scale of landscape linkages, this tract provides connectivity between baylands of San Pablo Bay and areas from northern Napa County northward. Given the relatively small size of the project area (relative to the width of the corridor tract) and the lack of apparent development impacts within the more central portion of this tract, agricultural expansion within the project area is in and of itself unlikely to result in any significant impacts to wildlife movement or migration at the landscape linkage scale. There is no USFWS-designated critical habitat within the vicinity of the project site.

At a more local scale, the project parcel is surrounded by vineyards, wineries and rural residences on Pritchard Hill, with a corridor between those uses of undeveloped land immediately north, east and southeast of the parcel. The undeveloped land in the parcels to the east, southeast and south of the project parcel is permanently protected from development under deed restrictions associated with Agricultural Erosion Control Plans #P22-00143-ECPA and #P18-00275-ECPA to protect special-status plants and their habitats. Project biologists found that wildlife use the intermittent blue-line stream corridor on the project parcel for movement, as evidenced by of wildlife observed within and around this habitat (**Exhibits B-1 and B-2**). The project as proposed would retain the integrity of the core habitat most suitable for wildlife movement such as the intermittent blue-line stream and the scrub interior live oak – scrub oak habitats.

The proposed project involves the installation of approximately 18.8 gross acres (15.8 net acres) of new vineyard on a single parcel. Existing barriers to wildlife movement onto the project parcel include Long Ranch Road and exclusionary fencing from adjacent vineyards that border the southern, western, and northwestern boundaries of the project parcel.

As proposed, project development would occur only in the southwestern half of the parcel, which would result in retention of special status plants and Scrub Interior Live Oak – Scrub Oak habitat in the northeastern half of the parcel. As mitigated by **Mitigation Measure BIO-1**, the project development area would be reduced by approximately 3.5 acres of special-status plants and their habitat and would result in the avoidance and permanent protection of the avoided and remaining chamise habitat (approximately 13.96 acres). Further, following implementation of **Mitigation Measure GHG-1**, a minimum of approximately 3.7 acres of Scrub Interior Live Oak – Scrub Oak habitat in the eastern/northeastern/northern areas of the project parcel and on land with slopes less than 30% and outside of stream setbacks would be permanently preserved. These areas are adjacent to similar habitat outside of the development area and located on steeper slopes and within the setbacks of the blue-line stream corridor on the eastern part of the parcel that the biologist determined is used by wildlife. As previously mentioned, the resulting reduction of Block 4 in the southeastern corner in concert with that permanent preservation of habitat would result in connectivity with similar habitat permanently protected on adjacent parcels. The Preservation Areas that would be permanently preserved following implementation of **Mitigation Measures BIO-1 and GHG-1**, in combination with the habitat located on land that is restricted from development due to slopes and stream setbacks, would permanently preserve wildlife habitat and access through large swath of the parcel. The mitigated project would be consistent with General Plan Policy CON-18, which encourages the reduction of impacts to habitat conservation and connectivity, resulting in less than significant impacts related to wildlife access and habitat.

New wildlife exclusion fencing is proposed around significant portions of the property. The new fencing would connect with existing fencing on the project site to enclose the residence and proposed vineyard Blocks 1, 3, and 4 together, and to enclose proposed vineyard Block 2 individually. Long Ranch Road separates proposed Vineyard Block 2 from the remainder of the project site. There are two sections of the proposed fencing plan that extend beyond the proposed block boundary, including an approximate 115-foot section north of Block 1 that would enclose approximately 0.1-acre of scrub oak habitat adjacent to the block boundary, and an approximate 370-foot section to the northeast of the Block 3 boundary that encloses an approximate 1-acre area of chamise habitat that contains 15%+ density of holly-leaved ceanothus, as well as high density of Sharnsmith’s western flax.

Though the proposed project would incrementally reduce a small amount of habitat in the project area, resulting in changes in avifauna and rodent utilization in the area, the proposed project would not lead to significant impacts to habitat fragmentation in the region,

significant species exclusion, or a significant change in species composition in the region. Construction activities could result in temporary barriers to wildlife movement, but these are not expected to be significant because they are temporary and because of the limited scale of the project.

General Plan Policy CON-18(E) obligates the County to require that new vineyard development be designed to minimize the reduction of wildlife movement to the maximum extent feasible. Enclosure of the approximately 1-acre area of chamise habitat with special status plants, and to a lesser extent, the approximately 0.1-acre of scrub oak habitat, may result in significant impacts related to inadvertent direct (i.e., encroachment into or disturbance the habitat outside of the vineyard avenues but within the proposed fenced area) due to the vineyard operations within the block. This would be considered a potentially significant direct and indirect impact on that habitat and special status plants.

As described above, **Mitigation Measure BIO-1** would require a reconfiguration of Block 3 such that the Block size would be reduced, including a majority of the chamise alliance containing holly-leaved ceanothus on the eastern side of the Block, and would require that the wildlife exclusion fencing be redesigned to enclose the reconfigured block boundaries. Following implementation of **Mitigation Measure BIO-1**, the unnecessarily enclosed chamise habitat shown in the proposed site plan would be preserved from enclosure. However, as proposed, the fencing plan would unnecessarily enclose an area north of proposed Block 1 (approximately 0.1-acre) within the Scrub Interior Live Oak – Scrub Oak habitat adjacent to the ephemeral stream setback; this would be considered a potentially significant impact related to wildlife access and movement.

Implementation of **Mitigation Measure BIO-3** would require revisions to the project fencing plan to enclose the vineyard blocks / development area exclusively, and would ensure that the wildlife exclusion fencing is installed in a manner that is consistent with CDFW recommendations to minimize impacts to wildlife movement, habitat use and availability. Following implementation of **Mitigation Measure BIO-1** and **BIO-3**, potentially significant impacts related to wildlife access and movement would be reduced to less than significant levels.

Mitigation Measure BIO-3: The owner/permittee shall revise Erosion Control Plan #P24-00114-ECPA prior to approval to eliminate barriers to localized movement through and access to habitat on the project parcel, consistent with General Plan Policy CON-18, as follows:

- a. Wildlife exclusion fencing associated with development of all vineyard blocks shall be limited to enclosing the vineyard blocks only.
- b. Any new fencing shall use a design that has 6-inch square gaps at the base (instead of the typical 3-inch by 6-inch rectangular openings) to allow small mammals to move through the fence.
- c. Exit gates shall be installed at the corners of deer fencing to allow trapped wildlife to escape.
- d. Any modifications to the location of wildlife exclusion fencing as specified in Erosion Control Plan #P24-00114-ECPA required by this measure shall be strictly prohibited and would require County review and approval to ensure the modified wildlife exclusion fencing location/plan would not result in potential impacts to wildlife movement.

Wildlife nursery sites were not identified in the project parcel; thus the proposed project would have no impact on wildlife nursery sites.

- e. Approximately 87% of the project site is located in the Lake Hennessey Reservoir Sensitive Domestic Water Supply Drainage, with the remaining area located in the Vinehill Creek Drainage of the Napa River watershed. Pursuant to NCC Section 18.108.027(B) (Sensitive domestic water supply drainages – Vegetation Clearing) a minimum of 70% of the tree canopy cover and a minimum of 40% of the grass/brush cover existing on the parcel in 1993 is required to be retained as part of the project located in the Lake Hennessey Sensitive Domestic Water Supply Drainage.

Based on information provided in the Biological Resources Report (Table 4 in **Exhibit B-1**), the project site contained 42.03 acres of brush/shrub cover in 1993 in Lake Hennessey Drainage. The parcel does not contain any tree canopy, as the Scrub Interior Live Oak – Scrub Oak habitat on site contains tree species that are predominantly early successional shrub form; the biologist did not identify any woodland vegetation types on the parcel. With the project as proposed, approximately 17.2 acres of brush/shrub cover subject to Section 18.108.027(B) would be removed in the Lake Hennessey Drainage, which would result in the retention of approximately 59% of the brush/shrub cover in 1993 in the Lake Hennessey Drainage. Following implementation of **Mitigation Measure BIO-1**, the total amount of brush/shrub cover removed compared to 1993 would be reduced from 17.2 acres to approximately 14.2 acres, resulting in the retention of approximately 66% of the brush/shrub cover in 1993. Therefore, the proposed project would be in compliance with Section 18.108.027(B).

NCC Section 18.108.020(C) (General Provisions: Vegetation Retention Requirements) requires that parcels within the AW zoning district retain 70% of the vegetation canopy cover¹¹ based on the on-site canopy present on June 16, 2016. Because there is no mapped oak woodland, riparian oak woodland, or coniferous forest vegetation types (or biotic communities) within the project site or project area (**Exhibit B-1**), the project is not subject to NCC Section 18.108.020 (C) or (D), which requires vegetation canopy cover to be permanently preserved at a minimum 3:1 ratio.

As discussed in questions a through c above, the proposed project is designed to incorporate the identified mitigation measures and impacts to sensitive natural communities and special-status species would be less than significant. Therefore, the proposed project with conditions incorporated is consistent with applicable Napa County General Plan Policies and NCC Chapter 18.108.

With implementation of **Mitigation Measures BIO-1 through BIO-3**, and the identified stream protection conditions of approval, the proposed project would have less than significant impacts on special-status plants and wildlife, and wildlife movement and result in conformance with policies protecting biological resources in the Napa County General Plan and Conservation Regulations. Further, as discussed in Section VII (Geology and Soils) and Section X (Hydrology and Water Quality), under existing conditions, the annual soil loss is anticipated to total 55.89 tons per year across the proposed development area based on soil types, slope lengths, and gradients. Under proposed project conditions, annual soil loss is anticipated to total 18.39 tons per year, or a reduction of approximately 67% as compared to existing conditions. Therefore, the findings can be made that highest biological and water quality protections have been incorporated into the project, as proposed, with incorporation of **Mitigation Measures BIO-1 through BIO-3** and standard conditions of approval, consistent with applicable Napa County General Plan Policies and NCC Chapter 18.108, resulting in less than significant impacts.

- f. There are no Habitat Conservation Plans, Natural Community Conservation Plans, or other similar plans applicable to the project site. Therefore, no impact would occur.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
V. CULTURAL RESOURCES. Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☐	☐	☒	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☒	☐
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐

Discussion

See **Section XVIII (Tribal Cultural Resources)** for disclosures and the impact assessment pursuant to Public Resources Code 21080.3.1 (Assembly Bill 52 - Gatto).

The following report was used in this analysis and is incorporated herein by reference, in addition to Napa County GIS archeological sensitive areas and archeological sites layers: Archaeological Resource Service, April 22, 2024, Archaeological Resource Management Report for the Proposed Development on Long Ranch Road, St. Helena, Napa County, CA.

Archaeological Resource Service conducted a cultural resources evaluation within the project area, which included a check of information on file at Archaeological Resource Service and at the Northwest Information Center of the California Historic Resources Information System to check relevant historic references to determine the potential for historic era archaeological deposits or structures. Sources of information included but were not limited to the current listings of properties on the National Register of Historic Places, California Historical Landmarks, California Register of Historical Resources, and California Points of Historical Interest as listed in the OHP's *Historic Property Directory*

¹¹ Napa County Code Section 18.108.030 defines "vegetation canopy cover" as "the biotic communities classified as oak woodland, riparian oak woodland, or coniferous forest based on the current Manual of California Vegetation (MCV) and as described in the Napa County Baseline Data Report (2005 or as amended)."

(2012). A request was sent to the State of California’s Native American Heritage Commission (NAHC) to obtain information from the Sacred Lands Files to determine presence or absence of previously recorded historic or prehistoric cultural resources, and letters were sent to nine tribes for consultation. Origer & Associates also conducted a surface reconnaissance survey of all accessible parts of the proposed development area to locate any visible signs of potentially significant historic or prehistoric cultural deposits.

- a-b. The cultural resources studies (Archaeological Resource Service, April 2024) did not identify any significant or potentially significant cultural resources in the proposed development area. The research conducted revealed that the entire project parcel was included in a larger survey of the stream tributaries connected to Lake Hennessey, conducted in 1980 by William Soule in affiliation with the State Water Resources Control Board. The survey did not discover any archaeological sites or artifacts within the project parcel. There are eleven archaeological resource reports within half-mile of the project parcel. Previously recorded archaeological resources are located within half-mile of the project parcel, but outside of the proposed development area, and the surface examination resulted in a negative finding. As such, less than significant impacts are expected to occur during vineyard development. There is also the possibility that buried archaeological deposits could be present and accidental discovery could occur. The proposed project would be subject to the standard conditions of approval identified below to protect cultural resources that may be discovered accidentally.
- c. The cultural resources study did not locate any human remains in the proposed development area and does not anticipate the discovery of human remains due to implementation of the proposed project. Therefore, impacts on human remains are anticipated to be less than significant. Furthermore, the following conditions of approval would be incorporated should the proposed project be approved, which would ensure that potential impacts on human remains would be less than significant.

Cultural Resources – Conditions of Approval: Discovery of cultural, historical or archaeological resources, or human remains during construction, grading, or other earth moving activities:

- In accordance with CEQA Subsection 15064.5(f), should any previously unknown historic or prehistoric resources, including but not limited to charcoal, obsidian or chert flakes, grinding bowls, shell fragments, bone, pockets of dark, friable solids, glass, metal, ceramics, wood or similar debris, be discovered during grading, trenching or other onsite excavation(s), earth work within 100-feet of these materials shall be stopped until a professional archaeologist certified by the Registry of Professional Archaeologists has had an opportunity to evaluate the significance of the find and suggest appropriate mitigation(s), as determined necessary.
- If human remains are encountered the Napa County Coroner shall be informed to determine if an investigation of the cause of death is required and/or if the remains are of Native American origin. Pursuant to Public Resources Code Section 5097.98, if such remains are of Native American origin the nearest tribal relatives as determined by the State Native American Heritage Commission shall be contacted to obtain recommendations for treating or removal of such remains, including grave goods, with appropriate dignity.
- All persons working onsite shall be bound by contract and instructed in the field to adhere to these provisions and restrictions.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VI. ENERGY. Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

Discussion

Consistent with Public Resources Code Section 21100(b)(3), this impact analysis evaluates the potential for the proposed project to result in a substantial increase in energy demand and wasteful use of energy during project construction, operation and maintenance. The impact analysis is informed by Appendix G of the CEQA Guidelines. The potential impacts are analyzed based on an evaluation of whether construction and operation energy use estimates for the proposed project would be considered excessive, wasteful, or inefficient.

- a. During construction of the proposed project, the use of construction equipment, truck trips for hauling materials, and construction workers' commutes to and from the project site would consume fuel. Project construction is anticipated to occur over six months in one phase. Construction activities and corresponding fuel energy consumption would be temporary and localized. In addition, there are no unusual project characteristics that would cause the use of construction equipment or haul vehicles that would be less energy efficient when compared with other similar agricultural construction sites within Napa County.

Once construction is complete, equipment and energy use would be slightly higher than existing levels and the proposed project would not include any unusual maintenance activities that would cause a significant difference in energy efficiency compared to the surrounding developed land uses. Thus, the proposed project would not result in wasteful, inefficient, or unnecessary energy use. This impact would be less than significant.

- b. The transportation sector is a major end-user of energy in California, accounting for approximately 28% of total statewide energy consumption in 2019 (U.S. Energy Information Administration 2020). In addition, energy is consumed in connection with construction and maintenance of transportation infrastructure, such as streets, highways, freeways, rail lines, and airport runways. California's 30 million vehicles consumed more than 13 billion gallons of gasoline and more than 3 billion gallons of diesel each year (CEC 2024). In Napa County, farm equipment (not including irrigation pumps) accounted for approximately 60% of agricultural emissions in 2014, with the percentage anticipated to increase through 2050 (Napa County Revised Draft Climate Action Plan, July 2018).

With respect to transportation energy, existing energy standards are promulgated through the regulation of fuel refineries and products such as the Low Carbon Fuel Standard (LCFS), which mandated a 10% reduction in the non-biogenic carbon content of vehicle fuels by 2020. Additionally, there are other regulatory programs with emissions and fuel efficiency standards established by United States Environmental Protection Agency and the California ARB such as Pavley II/LEV III from California's Advanced Clean Cars Program and the Heavy-Duty (Tractor-Trailer) GHG Regulation. Further, construction sites would need to comply with State requirements designed to minimize idling and associated emissions, which also minimizes use of fuel. Specifically, idling of commercial vehicles and off-road equipment would be limited to five minutes in accordance with the Commercial Motor Vehicle Idling Regulation and the Off-Road Regulation.¹³ The proposed project would comply with these State requirements and the Air Quality conditions of approval presented in **Section III (Air Quality)**. Napa County has not implemented an energy action plan. Therefore, the proposed project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency or impede progress towards achieving goals and targets, and impacts would be less than significant.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
VII. GEOLOGY AND SOILS. Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐
ii. Strong seismic ground shaking?	☐	☐	☒	☐
iii. Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv. Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐

¹³ California Code of Regulations, 2005. Title 13, Chapter 10, 2485, updated through 2014.

- | | | | | |
|--|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? | ☐ | ☐ | ☒ | ☐ |
| d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property? | ☐ | ☐ | ☐ | ☒ |
| e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water? | ☐ | ☐ | ☐ | ☒ |
| f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | ☐ | ☐ | ☒ | ☐ |

Discussion

- a. The project site could experience potentially strong ground shaking and other seismic related hazards based on the number of active faults in the San Francisco Bay region. The proposed project consists of earthmoving activities associated with the installation of erosion control measures for agricultural development but does not include the construction of new residences or other facilities (i.e., enclosed areas where people can congregate) that would be subject to seismic forces. Additionally, the proposed project would not result in a substantial increase in the number of people to the site. Therefore, the proposed project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving fault rupture, ground shaking, liquefaction, and landslides and impacts would be less than significant. Additional information supporting this conclusion is identified below.
- i) No faults have been mapped on the project site, and the project site is not located on an active fault or within an "Earthquake Fault Hazard Rupture Zone" designated by the Alquist-Priolo Earthquake Zoning Act. The closest active faults to the project site are the West Napa and Hunting Creek-Berryessa Fault approximately 3.7 miles southwest, and 6.8 miles east of the site, respectively (Napa County GIS Fault 62500 Layer). Given the agricultural nature of the proposed project, these would not directly or indirectly cause potential substantial adverse effects involving fault rupture and impacts would be less than significant.
- ii) Although the project site is located in an area that may be subject to moderate to strong seismic ground shaking potential during an earthquake (California Geological Survey, 2016), the proposed project does not include construction of any new residences or enclosed areas where people would congregate. Therefore, this impact would be less than significant.
- iii) The project site is not in an area subject to high liquefaction potential. The Napa County General Plan identifies the project site as having low liquefaction potential (Napa County General Plan-Safety Element, 2023). The project geologist did not identify any large-scale slope instabilities within the vineyard blocks and did not observe any slope failures or landslides, and determined that the risk of erosional failure, global slope instability to be low (RGH, March 2023 – **Exhibit C**). Further, as noted above, the proposed project would not result in a substantial increase in the number of people or add structures onsite. Therefore, this impact would be less than significant.
- iv) There are no landslides located in the vicinity of the project site; furthermore, the proposed development area is not located in an area with a mapped landslide deposit (Napa County GIS). Given the agricultural nature of the proposed project and the proposed erosion control measures, the proposed project would not directly or indirectly cause potential substantial adverse effects involving landslide potential; a less than significant impact would occur (also see Question c below for additional discussion regarding slope stability and landslides).
- b. Soils in the proposed development area have been classified according to the Soil Survey of Napa County (USDA 1978) as Rock outcrop-Hambright complex (No. 176, 50 to 75 percent slopes) and Sobrante loam (No. 178, 5 to 30 percent slopes and No. 179, 30 to 50 percent slopes). Installation and implementation of the proposed project would involve vegetation removal and earthmoving activities within the proposed development area. Pursuant to NCC Section 18.108.070(L) (Erosion Hazard Areas), earth-disturbing activities (other than installation of winterization measures) cannot be performed between September 1 (in the Lake Hennessey Sensitive Domestic Water Supply Drainage) or October 16 (in the Vinehill Creek Drainage) and March 31. These activities would take place during the dry season when rainstorms are less likely, resulting in negligible erosion and sedimentation during project installation.

Soil loss calculations were prepared using the USLE to evaluate potential effects of erosion as a result of the proposed project. The USLE model evaluates the environmental conditions and physical forces that lead to the detachment and potential movement of soil particles through surface erosion. The USLE model does not describe travel distances of soil particles once dislodged. Potential soil loss and sedimentation associated with the proposed agricultural development and operations would primarily be controlled through cover crops with a minimum vegetative cover density of 85% in proposed vineyard Block 1 and 75% in proposed vineyard Blocks 2, 3 and 4, as specified in the ECP (**Exhibit A**). The cover crop provides the ability to trap eroded soils onsite, thereby reducing soil loss and sedimentation potential. Permanent measures also include cross-slope diversions, storm drain pipe, water bars, rock rip-rap energy dissipators at the outlet of all water bars.

Based on USLE modeling calculations prepared by David Steiner (CPESC No. 770) (**Exhibit C**), the proposed conversion of approximately 18.8 acres of vegetation to vineyard is not anticipated to increase soil loss, or surface erosion, within the project site as compared to existing conditions (**Table 7**). Under existing conditions, the annual soil loss is anticipated to total 55.89 tons per year across the proposed development area based on soil types, slope lengths, and gradients. Under proposed project conditions, annual soil loss is anticipated to total 18.39 tons per year, or a reduction of approximately 67% as compared to existing conditions.

Table 7 – USLE Soil Loss Analysis

Vineyard Transect ID	Pre-project Soil Loss (tons/year)	Post-project Soil Loss (tons/year)	Difference	Percent Change (approximate)
Block 1 North	42.33	10.42	-31.91	-75%
Block 1 Middle	3.77	1.42	-2.35	-62%
Block 1 South	3.52	1.76	-1.76	-50%
Block 2	0.29	0.23	-0.06	-21%
Block 3 North	0.99	0.88	-0.10	-10%
Block 3 South	1.95	1.72	-0.23	-12%
Block 4 West	1.48	1.17	-0.31	-21%
Block 4 East	1.56	0.79	-0.77	-49%
Total	55.89	18.39	-37.5	-67%

Source: David Steiner, March 2024, Soil Loss Equation – **Exhibit D**

Other proposed erosion control features that are anticipated to further reduce potential soil loss as a result of the proposed project, including soil loss experienced during vineyard and cover crop development and establishment, consist of installation of straw mulching, erosion control blankets, sediment barriers and other practices as needed.

Should the proposed project be approved, the following conditions of approval would be incorporated to ensure that erosion control measures are installed according to plan specifications.

Erosion and Runoff Control (i.e., Hydromodification) Installation and Operation – Conditions of Approval: The following conditions shall be incorporated by reference into Erosion Control Plan #P24-00114-ECPA pursuant to NCC Chapter 18.108 (Conservation Regulations):

- **Permanent Erosion and Runoff Control Measures:** Pursuant to NCC Section 18.108.070(L) installation of runoff and sediment attenuation devices and hydromodification facilities including, but not limited to, cross-slope diversions, storm drain pipes, water bars, energy dissipators, and permanent no-till cover crop (or adequate mulch cover applied annually), shall be installed no later than September 15 within the Lake Hennessey Sensitive Domestic Water Supply Drainage or October 15 within the Vinehill Creek Drainage during the same year that initial vineyard development occurs. This requirement shall be clearly stated on the final Erosion Control Plan. Additionally, pursuant to NCC Section 18.108.135 "Oversight and Operation" the qualified professional that has prepared this erosion control plan (#P24-00114-ECPA) shall oversee its implementation throughout the duration of the proposed project, and that installation of erosion control measures, sediment retention devices, and hydromodification facilities specified for the vineyard have been installed and are functioning correctly. Prior to the first winter rains after construction begins, and each year thereafter until the proposed project has received a final inspection from the county or its agent and been found complete, the qualified professional shall inspect the site and certify in writing to the planning director, through an inspection report or formal letter of completion verifying that all of the erosion control measures, sediment retention devices, and hydromodification facilities required at that stage of development have been installed in conformance with the plan and related specifications, and are functioning correctly.
- **Cover Crop Management/Practice:** The permanent vineyard cover crop shall not be tilled (i.e., shall be managed as a no-till cover crop) for the life of the vineyard and the owner/permittee shall maintain a plant residue density of a

permanent cover crop to achieve minimum densities of 85% for proposed vineyard Block 1, and 75% for Blocks 2, 3, and 4. Cover crop may be disced between rows and sprayed under vines or otherwise cultivated after April 1; after three years a permanent, no-till cover shall be established. Should the permanent no-till cover crop need to be replanted/renewed during the life of the vineyard, cover crop renewal efforts shall follow the County "Protocol for Replanting/Renewal of Approved Non-Tilled Vineyard Cover Crops" July 19, 2004, or as amended.

It is not expected that land preparation activities associated with the proposed vineyard, such as removal of rocks from the soil profile, would substantially affect the USLE modeling results. The USLE model evaluates the environmental conditions and physical forces that lead to the detachment and movement of soil particles. The primary goal of cultivating the soils within the development area during implementation is to prepare the site for planting, including fracturing and mixing layers of compressed soil and rock to facilitate root growth and improve permeability, rather than to remove all the rock within the development area soils. Soil cultivation may result in a greater number of smaller rocks at the soil surface. Smaller rocks that emerge through development would be left within the vineyard, and only larger rocks that surface would be removed. Because the larger rocks that may be removed from the site are generally underneath the soil surface, the removal of larger rocks that emerge during development would not significantly alter the composition of soil. Therefore, the soil type classification utilized in the USLE calculations would remain unchanged (Oster, 2008).

For these reasons, the proposed project, with incorporation of specified erosion control measures and conditions of approval, would not increase soil erosion and the loss of topsoil as compared to existing conditions, and maximize the potential for containment of detached soil particles to the project site, resulting in a less-than-significant impact with regard to soil erosion, soil loss, and sedimentation. Also see **Section IX (Hazards and Hazardous Materials)** and **Section X (Hydrology and Water Quality)** for additional disclosures related to water quality. Additionally, as shown in the soil loss modeling following development, overall soil loss is anticipated to be less than pre-development conditions. This is consistent with General Plan Conservation Element Policy CON-48, which requires post-development sediment erosion conditions (i.e., soil loss) be less than or equal to pre-development conditions.

- c. As discussed above, there are no landslide deposits located on or near the project site. The proposed development area is in an area prone to low chances of ground failure or liquefaction and the proposed project would address any potential soil instability. The proposed vineyard development is not expected to cause any significant decrease in slope stability nor any increase in erosion associated with landslide processes. Therefore, the proposed project would not result in any significant impacts of on- or off-site landslides, lateral spreading, subsidence, liquefaction or collapse.
- d. Soils in the proposed development area exhibit a very low to high shrink-swell potential (USDA, 1978). However, no structures are proposed as part of the project and expansive soils pose little risk to vineyards and related agricultural improvements. Therefore, there would be no impacts associated with expansive soils.
- e. The proposed project involves the development of a vineyard. No septic tanks or alternative wastewater disposal systems are needed or proposed for the proposed project. Therefore, no impact would occur with regard to soils supporting septic tanks or alternative wastewater disposal systems.
- f. The proposed project would not destroy any unique geologic features on the project site. Due to the nature of the soils in the project site and the nature of the proposed project (which would involve a relatively shallow vineyard), the probability of encountering paleontological resources within the project site is minimal. Furthermore, project approval, if granted, would be subject to the standard conditions described below that would avoid and reduce potential paleontological resource impacts. Therefore, impacts to geologic features and paleontological resources are anticipated to be less than significant.

Paleontological Resources – Conditions of Approval: Discovery of paleontological resources during construction, grading, or other earth moving activities:

- In the event that a discovery of a breas, true, and/or trace fossils are discovered during ground disturbing activities, all work within 100 feet of the find shall be temporarily halted or diverted until the discovery is examined by a qualified paleontologist. The paleontologist shall notify the appropriate agencies to determine procedures that should be followed before ground disturbing activities are allowed to resume at the location of the find.
- All persons working onsite shall be bound by contract and instructed in the field to adhere to these provisions and restrictions.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
VIII. GREENHOUSE GAS EMISSIONS. Would the project:				
a) Generate a net increase in greenhouse gas, either directly or indirectly, that may have a significant impact on the environment?	☐	☒	☐	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☒	☐	☐

Discussion

See **Section III (Air Quality)** for other air quality emissions disclosures and impact assessments.

GHGs are the atmospheric gases whose absorption of solar radiation is responsible for the greenhouse effect, including CO₂, methane, nitrous oxide, and fluorocarbons, which contribute to climate change. CO₂ is the principal GHG emitted by human activities, and its concentration in the atmosphere is most affected by human activity. It also serves as the reference gas to which to compare other GHGs. Agricultural sources of carbon emissions include forest clearing, land-use changes, biomass burning, farm equipment and management activity emissions. GHG emissions are reported as carbon dioxide equivalent (CO_{2e}) which is a metric used to compare the emissions from various GHGs on the basis of their global warming potential (GWP), by converting amounts of other gases with different GWPs to an equivalent amount of carbon dioxide with a GWP of one. CO₂ is used as the reference gas to calculate atmospheric carbon effects of GHGs. Carbon stocks and sequestration are converted to CO_{2e} by multiplying the carbon total by 44/12 (or 3.67), which is the ratio of the atomic mass of a carbon dioxide molecule to the atomic mass of a carbon atom (<http://ncasi2.org/COLE/faq.html>).¹²

On April 20, 2022, the BAAQMD adopted updated thresholds of significance for climate impacts (CEQA Thresholds for Evaluating the Significance of Climate Impacts, BAAQMD April 2022). The updated thresholds to evaluate GHG and climate impacts from land use projects are qualitative and geared toward building and transportation projects. Per the BAAQMD, all other projects should be analyzed against either an adopted local Greenhouse Gas Reduction Strategy (i.e., Climate Action Plan [CAP]) or other threshold determined on a case-by-case basis by the Lead Agency. If a project is consistent with the State's long-term climate goals of being carbon neutral by 2045, then a project would have a less than significant impact as endorsed by the California Supreme Court in *Center for Biological Diversity v. Department of Fish & Wildlife* (2015) 62 Cal. 4th 204. There is no proposed construction-related climate impact threshold at this time. GHG emissions from construction represent a very small portion of a project's lifetime GHG emissions. The proposed thresholds for land use projects are designed to address operational GHG emissions which represent the vast majority of project GHG emissions.

The 2022 CEQA Guidelines are advisory for local and regional governments in the San Francisco Bay Area Air Basin. They contain nonbinding recommendations for how a lead agency can evaluate, measure, and mitigate air quality and greenhouse gas impacts generated from land use construction and operational activities.

Napa County has been working to develop a CAP for several years. In 2012, a Draft CAP (March 2012) was recommended using the emissions checklist in the Draft CAP, on a trial basis, to determine potential GHG emissions associated with project development and operation. At the December 11, 2012, Napa County Board of Supervisors (BOS) hearing, the BOS considered adoption of the proposed CAP. In addition to reducing Napa County's GHG emissions, the proposed plan was intended to address compliance with CEQA for projects reviewed by the County and to lay the foundation for development of a local offset program. While the BOS acknowledged the plan's objectives, the BOS requested that the CAP be revised to better address transportation-related GHG emissions to acknowledge and credit past accomplishments and voluntary efforts, and to allow more time for establishment of a cost-effective local offset program. The BOS also requested that best management practices be applied and considered when reviewing projects until a revised CAP is adopted to ensure that projects address the County's policy goal related to reducing GHG emissions. In addition, the BOS recommended utilizing the emissions checklist and associated carbon stock and sequestration factors in the Draft CAP to assess and disclose potential GHG emissions associated with project development and operation pursuant to CEQA.

In July 2015, the County re-commenced preparation of the CAP to: i) account for present day conditions and modeling assumptions (such as but not limited to methods, emission factors, and data sources), ii) address the concerns with the previous CAP effort as outlined above, iii)

¹² "Carbon stock" refers to the total amount of carbon stored in the existing plant material including trunks, stems, branches, leaves, fruits, roots, dead plant material, downed trees, understory, and soil organic material. Carbon stock is expressed in units of metric tons of carbon per acre. When land is cleared, some percentage of the carbon stored is released back to the atmosphere as CO₂. Land clearing or the loss of carbon stock is thus a type of GHG emission (County of Napa, March 2012, Napa County Draft Climate Action Plan).

meet applicable State requirements, and iv) result in a functional and legally defensible CAP. On April 13, 2016, the County, as part of the first phase of development and preparation of the CAP, released Final Technical Memorandum #1: 2014 Greenhouse Gas Emissions Inventory and Forecast, April 13, 2016. This initial phase included: i) updating the unincorporated County's community-wide GHG emissions inventory to 2014, and ii) preparing new GHG emissions forecasts for the 2020, 2030, and 2050 horizons. On July 24, 2018, the County prepared a Notice of Preparation of a Draft Focused EIR for the Climate Action Plan. The review period was from July 24, 2018, through August 22, 2018. The Draft Focused EIR for the CAP was published May 9, 2019. Additional information on the County CAP can be obtained at the Napa County Department of Planning, Building and Environmental Services or online at <https://www.countyofnapa.org/589/Planning-Building-Environmental-Services>. However, the County's draft CAP was placed on hold when the Climate Action Committee (CAC) began meeting on regional GHG reduction strategies in 2019. The County is currently preparing an updated CAP to provide a clear framework to determine what land use actions will be necessary to meet the State's adopted GHG reduction goals, including a quantitative and measurable strategy for achieving net zero emissions by 2045.

In the absence of quantitative GHG thresholds from BAAQMD or a qualified CAP for the County, construction GHG emissions from the project are evaluated against the 1,100 metric tons (MT) per year and operational GHG emissions are evaluated against the 10,000 MT per year threshold from the neighboring Sacramento Metropolitan Air Quality Management District (SMAQMD). While air quality emission thresholds are difficult to apply to across air districts due to the regional nature of air quality impacts, GHG emission impacts are global in nature. Therefore, the use of neighboring air district thresholds is an adequate evaluation given the absence of GHG thresholds from BAAQMD or a qualified CAP for the County. However, the County, as the Lead Agency, has opted to use a no net increase threshold for the evaluation of carbon dioxide (CO₂) emissions through carbon sequestration and carbon stock from vegetation at the project site.

"Carbon stock" refers to the total amount of carbon stored in the existing plant material including trunks, stems, branches, leaves, fruits, roots, dead plant material, downed trees, understory, and soil organic material. Carbon stock is expressed in units of metric tons of carbon per acre. When land is cleared, some percentage of the carbon stored is released back to the atmosphere as CO₂.

"Carbon storage" refers to the carbon stocks held in the soil and vegetation. When land is altered or vegetation is removed, the carbon stored in plants and soil can be released back into the atmosphere as a one-time event. Similarly, adding vegetation to a site would increase carbon stock. Unlike sequestration, which is an active, recurring process, changes to carbon stock typically result in a one-time change of CO₂, and not an ongoing loss or gain over time.

"Carbon sequestration" refers to the ongoing process by which plants, such as vines, trees, and grasses absorb CO₂ from the atmosphere through photosynthesis, converting it into carbon that is stored in their biomass (roots, stems, leaves) and soil. This process helps remove CO₂ from the atmosphere over time. Any changes in land use or vegetation that reduce carbon sequestration—such as removing natural vegetation or converting land for other uses—lead to ongoing reductions in this CO₂-capturing benefit, potentially increasing the amount of CO₂ that remains in the atmosphere annually. A decrease in carbon sequestration is considered an increase in CO₂ emissions.

a-b. Overall increases in GHG emissions in Napa County were assessed in the EIR prepared for the Napa County General Plan Update certified in June 2008. GHG emissions were found to be significant and unavoidable in that document, despite the adoption of mitigation measures incorporating specific policies and action items into the General Plan.

The County requires project applicants to consider methods to reduce GHG emissions consistent with Napa County General Conservation Element Plan Policy CON-65e. Pursuant to State CEQA Guidelines Section 15183, this assessment focuses on impacts that are "peculiar to the project," rather than the cumulative impacts previously assessed, because this Initial Study assesses a project that is consistent with an adopted General Plan for which an EIR was prepared.

Because BAAQMD does not include significance thresholds for operational emissions of non-building projects, the operational emissions analysis below is for disclosure purposes only. Operational emissions are compared to the SMAQMD annual GHG threshold to provide context for the magnitude, or lack thereof, of operational emissions global impacts.

Emissions from change in vegetation associated with the proposed project include: i) the carbon stocks that are lost or released when site vegetation is removed or burned, including any woody debris and downed wood; ii) underground carbon stocks, or soil carbon, released when soil is ripped in preparation for vineyard development and planting (referred to as Carbon Stock Emissions); iii) ongoing carbon sequestration that is gained or lost by altering vegetation or conserving specific vegetation types (referred to as Carbon Sequestration Emissions).

Construction Emissions:

Construction emissions associated with vineyard development projects include emissions from fuel used in construction equipment and vehicle trips used to develop and prepare the development area and plant vineyard. As discussed in **Section III (Air Quality)**, three

recent County Certified CEQA documents assessed and analyzed potential air quality and GHG emissions associated with vineyard development. Within those documents, potential GHG emissions associated with construction equipment were calculated and disclosed. An estimation of potential construction equipment emissions per acre of vineyard development was derived using the highest emissions results of the three projects. The KJS and Sorrento EIR anticipated approximately 1,880 metric tons (MT) CO_{2e} of construction equipment emissions for a 97.7-acre vineyard development, resulting in approximately 19.2 MT CO_{2e} of construction equipment emissions per acre of vineyard development.¹³ Using this emission factor it is anticipated that construction equipment emissions associated with the proposed 18.8 gross acres of vineyard would be approximately 361 MT CO_{2e} (18.8 acres multiplied by 19.2 MT CO_{2e}). Construction emissions are seasonal in nature and would only occur during the dry season (April-October) of any given year. While BAAQMD has no quantitative GHG threshold for comparison, the project's construction equipment emissions are well below the SMAQMD GHG emission threshold of 1,100 MT and therefore are less than significant.

Operational Emissions:

Emissions associated with the operation of the vineyard capture ongoing emissions from the use of equipment and vehicles to maintain and farm the vineyard, including vehicles (such as haul trucks, pick-up trucks) and worker vehicle trips. The three vineyard development project analyses referenced above also assessed ongoing vineyard operation emissions associated with vehicles and equipment. Estimated potential operational emissions per acre of vineyard development were derived using the highest emissions results of the three projects; the Stagecoach North Vineyard EIR estimated approximately 322 MT CO_{2e} of operational emissions per year for a 116-acre vineyard, resulting in approximately 2.77 MT CO_{2e} of operational emissions per acre of vineyard per year. Using this emission rate, it is anticipated that operational equipment emissions associated with the proposed 18.8-acre agricultural development would be approximately 52 MT CO_{2e} per year (18.8 multiplied by 2.77 MT CO_{2e}). Operational emissions are also seasonal in nature, mostly occurring during the harvest season. While the BAAQMD's qualitative operational thresholds do not apply to projects such as the proposed project which do not generate emissions from building energy and transportation, the project's operational emissions can be considered less than significant when compared to SMAQMD's operational threshold of 1,100 MT per year.

Emissions from Change in Vegetation:

Converting existing land uses into vineyard can impact both carbon stock and sequestration from vegetation and soil. The project as proposed would convert 4.1 acres of Scrub Interior Live Oak – Scrub Oak habitat, which contains tree species that occur in early successional shrub form. The ECP prepared for the proposed project identified an approximate 4.1-acre proposed preservation area of comparable habitat on the property located on slopes less than 30% and outside of stream setbacks, as shown in **Exhibit B-3**. The full 4.1-acre preservation area consists of Scrub Interior Live Oak – Scrub Oak habitat that is comparable like habitat to the habitat that would be converted to vineyard, if the project is approved (**Exhibit B-2**). By preserving 4.1 acres of vegetation on slopes less than 30% and outside of stream setbacks (i.e., “developable land”), the project would result in a minimum removal to preservation ratio of 1:1, which more than compensates for the emissions resulting from the removal associated with the project, consistent with the State's long-term climate goals of being carbon neutral by 2045, and with the County's no net increase threshold for carbon sequestration and carbon stock for evaluation of GHG emissions impacts.

Following implementation of **Mitigation Measure BIO-1**, the total amount of Scrub Interior Live Oak – Scrub Oak habitat to be removed as a result of project implementation would be reduced from 4.1 acres to 3.7 acres, which would reduce the required preservation area to meet the 1:1 preservation area to a minimum 3.7 acres.

However, there is no mechanism to ensure that the proposed Preservation Areas remain undeveloped, which may result in potentially significant indirect and/or cumulative impacts related to consistency with the State's goal of no net increase in loss of carbon sequestration by 2045. Implementation of **Mitigation Measure GHG-1** would ensure that a minimum of 3.7 acres of Scrub Interior Live Oak – Scrub Oak habitat located on developable land is permanently restricted from development through deed restriction, thereby meeting the intent of the no net increase in loss of carbon sequestration goal.

Therefore, the impact would be less than significant with mitigation incorporated.

¹³ As discussed in **Section III (Air Quality)** variations or similarities in emissions modeling results between the three projects can be attributed to modeling platform and version utilized, variations in modeling assumptions and inputs (such as project acreage and vegetation types removed), and anticipated construction and equipment and duration of use.

Mitigation Measure GHG-1: The owner/permittee shall revise Erosion Control Plan #P24-00114-ECPA prior to approval to include the following provisions to reduce potential impacts related to consistency with the State's long-term climate goals of being carbon neutral by 2045:

- a. Prior to project approval, the owner/permittee shall provide for County review and a revised Preservation Area exhibit that reflects a total preservation area of 3.7 acres of Scrub Interior Live Oak – Scrub Oak habitat located on developable land (i.e., like habitat on land with slopes less than 30% and outside of stream setbacks). The area to be preserved shall be of like kind and quality to the Scrub Interior Live Oak – Scrub Oak habitat being impacted as a result of the proposed project, as follows: areas to be preserved shall take into account the type of vegetation being removed, and species diversity and species that are limited within the project property and Napa County; the acreage included in the preservation area shall be selected in a manner that minimizes fragmentation of this habitat within the project property; and the preservation area should not include portions of the property already subject to development restrictions (i.e., within creek setbacks or on slopes over 30%). The area to be preserved shall be determined by a qualified biologist with knowledge of the habitat and species and shall obtain final approval from Napa County.
- b. Within 90 days of project approval or prior to project development activities (whichever comes first), the Preservation Area shall be designated and recorded as such in a deed restriction or conservation easement or other means of permanent protection. Land placed in protection shall be restricted from development and other uses that would degrade the quality of the habitat (including but not limited to conversion to other land uses such as agriculture or urban development and excessive off-road vehicle use that increases erosion) and should be otherwise restricted by the existing goals and policies of Napa County.
- c. Prior to any earthmoving activities temporary fencing shall be placed at the edge of the dripline of trees to be retained that are located adjacent to the development area (typically within approximately 50-feet of the proposed development area). The precise locations of said fences shall be inspected and approved by the Planning Division prior to the commencement of any earthmoving activities. No disturbance, including grading, placement of fill material, storage of equipment, etc. shall occur within the designated protection areas for the duration of erosion control plan and vineyard installation.
- d. The owner/permittee shall refrain from severely trimming vegetation (typically no more than 1/3rd of the canopy) to be retained adjacent to the proposed development area.
- e. In accordance with County Code Section 18.108.100 (Erosion hazard areas – Vegetation preservation and replacement) trees that are inadvertently removed that are not within the boundary of the project and/or not identified for removal as part of #P24-00114-ECPA shall be replaced on-site with fifteen-gallon trees at a ratio of 2:1 at locations approved by the planning director. A replacement plan shall be prepared for county review and approval that includes at a minimum, the locations where replacement trees will be planted, success criteria of at least 80%, and monitoring activities for the replacement trees. The replacement plan shall be implemented before vineyard planting activities. Any replaced trees shall be monitored for at least three years to ensure an 80% survival rate. Replacement trees shall be installed and documented that they are in good health prior to completion and finalization of the erosion control plan.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
IX. HAZARDS AND HAZARDOUS MATERIALS. Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒

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| e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area? | ☐ | ☐ | ☐ | ☒ |
| f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | ☐ | ☐ | ☒ | ☐ |
| g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires? | ☐ | ☐ | ☒ | ☐ |

Discussion

a-b. Installation of the proposed project and subsequent vineyard operation and maintenance would require a variety of equipment and vehicles that use fuel and other petroleum-based products such as oil and transmission fluids, which are considered hazardous materials. Ongoing vineyard operations would also involve the transport and use of chemicals such as herbicides, mildewcides, and fertilizers to the site that are considered hazardous materials. Herbicide applicators must be licensed by the state, and the Napa County Agricultural Commissioner enforces application of pesticides and regulates applicators.

A detailed listing of fertilizers and other chemicals, application methods, application amounts, number of annual applications, and annual amounts of chemicals that are anticipated to be utilized for ongoing vineyard maintenance and operation of the existing and proposed vineyard is provided within Supplemental Project Information forms on file at the Planning Department.

Chemical storage, mixing, cleaning and washing of chemical application equipment would be brought to the site as needed by the vineyard manager. No chemical storage or mixing, or equipment washing would occur onsite. Fertilizers (i.e., nitrogen, magnesium, boron, and zinc) would be applied via drip and spray up to two times per year. Mildewcides (i.e., wettable sulfur, Sonata, Regalia) would be sprayed up to four to five times per year; herbicides would be sprayed up to two times per year.

The National Resource Conservation Service recommends a minimum 50-foot-wide vegetated buffer from aquatic resources (such as streams, ephemeral drainages, and wetlands) because under most conditions it is generally an adequate buffer width to provide enough vegetation to effectively entrap and filter chemicals, nutrients, and sediment thereby, facilitating degradation within buffer soils and vegetation (USDA, 2000).

There are two ephemeral streams occurring on the parcel; as previously mentioned, the proposed development area avoids those streams within minimum required setbacks pursuant to NCC Section 18.108.025. Therefore, no waterways have the potential to be significantly impacted by the proposed project.

The risk of potentially hazardous materials reaching or affecting adjacent water courses or other aquatic resources is significantly reduced because: i) there are no streams or wetlands located within 50 feet of the proposed development area; ii) only federal and/or California approved chemicals would be applied to the vineyard in strict compliance with applicable state and federal law. Project approval, if granted, would also be subject to the following standard conditions of approval that would further avoid and/or reduce potential impacts associated with routine transport and use of hazardous materials during project implementation and ongoing vineyard operations and maintenance. Impacts related to routine use, transportation, and application of hazardous materials described above are anticipated to be less than significant. The following conditions of approval would be implemented to reduce potential accidental release of hazardous materials, if the project is approved:

Hazardous Materials – Conditions of Approval: The owner/operator shall implement the following BMPs during construction activities and vineyard maintenance and operations:

- Workers shall follow manufacturer's recommendations on use, storage and disposal of chemical products.
- Workers shall avoid overtopping fuel gas tanks and use automatic shutoff nozzles where available.
- During routine maintenance of equipment, properly contain and remove grease and oils.
- Discarded containers of fuel and other chemicals shall be properly disposed of.
- Spill containment features shall be installed at the project site wherever chemicals are stored overnight.
- All refueling, maintenance of vehicles and other equipment, handling of hazardous materials, and staging areas shall occur at least 100 feet from watercourses, existing groundwater well(s), and any other water resource to avoid the potential for risk of surface and groundwater contamination.
- To prevent the accidental discharge of fuel or other fluids associated with vehicles and other equipment, all workers shall be informed of the importance of preventing spills and of the appropriate measures to take should a spill occur.

For these reasons, and with incorporation of the conditions of approval described above, impacts associated with the use, storage, and transport of hazardous materials and accidental release of hazardous materials would be less than significant.

- c. The closest schools are located over four (4) miles to the west/northwest of the project site within the City of St. Helena (Napa County GIS, Schools Layer). There are no schools within 0.25-mile of the project site. Therefore, no impact would occur.
- d. The project site is not on any of the lists of hazardous waste sites enumerated under Government Code Section 65962.5 (Napa County GIS hazardous facility layer; GeoTracker, 2024). Therefore, no impact would occur.
- e. The project site is neither located within an area covered by an airport land use plan, nor is it within 2 miles of a public, public-use, or private airport (Napa County Airport Land-use Compatibility Plan, 1991). The closest public airport to the project site is Angwin-Parret Airfield located approximately 5.4 miles northeast. Therefore, no impact would occur.
- f. During construction, there would be negligible numbers of workers (up to 10 employees) visiting the project site on a temporary basis to implement the project and install vineyards. Up to 14 employees would also visit the site on a seasonal basis for subsequent vineyard operations; it is anticipated that these employees would be from the same workforce for the existing vineyard on the parcel. No road closures would be required to implement the project, and there would not be a permanent substantial increase in the number of people working or residing at or near the project site. Therefore, the proposed project would not impair implementation of or physically interfere with any adopted emergency response plan or emergency evacuation plan, and the impact would be less than significant.
- g. No structures are proposed as part of the project. The project site is located in a State Fire Protection Responsibility Area identified as having high fire severity (Napa County GIS, Fire Hazard Severity Zone; CalFire 2023). However, the risk of fire in vineyards due to the proposed project is low due to the limited amount of fuel, combustibles, and ignition sources that would be present. Vineyards are irrigated and cover crops are typically mowed in May and August, thereby reducing the fuel loads within the vineyard. The removal of vegetation and the management of vineyard may result in an overall reduction of fuel loads within the project site as compared with existing conditions. Therefore, the proposed project would not increase the exposure of people or structures to wildland fires and the impact would be less than significant.

X.	HYDROLOGY AND WATER QUALITY. Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
a)	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	☐	☐	☒	☐
b)	Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces which would:				

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|---|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| i) result in substantial erosion or siltation on- or off-site? | ☐ | ☐ | ☒ | ☐ |
| ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site? | ☐ | ☐ | ☒ | ☐ |
| iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff? | ☐ | ☐ | ☒ | ☐ |
| iv) impede or redirect flood flows? | ☐ | ☐ | ☒ | ☐ |
| d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation? | ☐ | ☐ | ☐ | ☒ |
| e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? | ☐ | ☐ | ☐ | ☒ |

Discussion

The County requires all discretionary permit applications (such as use permits and ECPAs) to complete necessary water analyses to document that sufficient water supplies are available for the proposed project and to implement water saving measures to prepare for periods of limited water supply and to conserve limited groundwater resources.

On June 7, 2022, the Napa County Board of Supervisors provided interim procedures to implement provisions of the Napa County Groundwater Sustainability Plan (GSP) for issuance of new, altered or replacement well permits and discretionary projects that would increase groundwater use. The direction limits a parcel's groundwater allocation to 0.3- acre feet per acre per year, or no net increase in groundwater use if that threshold is exceeded already for parcels located in the GSA Subbasin. For parcels not located in the GSA Subbasin (i.e., generally located in the hillsides), a parcel-specific Water Availability Analysis would suffice to assess potential impacts on groundwater supplies. The project well is located outside of the GSA Subbasin.

To assess potential impacts resulting from project well(s) interference with neighboring wells within 500 feet and/or springs within 1,500 feet, the County's WAA guidance³ requires applicants to perform a Tier 2 analysis where the proposed project would result in an increase in groundwater extraction from project well(s) compared to existing levels.

To assess the potential impacts of groundwater pumping on hydrologically connected navigable waterways and those non-navigable tributaries connected to navigable waters, the County's WAA guidance requires applicants to perform a Tier 3 or equivalent analysis for new or replacement wells, or discretionary projects that would rely on groundwater from existing or proposed wells that are located within 1,500 feet of designated "Significant Streams."⁴

Public Trust: The public trust doctrine requires the state and its legal subdivisions to "consider," give "due regard," and "take the public trust into account" when considering actions that may adversely affect a navigable waterway. (*Environmental Law Foundation v. State Water Resources Control Bd.*; *San Francisco Baykeeper, Inc. v. State Lands Com.*) There is no "procedural matrix" governing how an agency should consider public trust uses. (*Citizens for East Shore Parks v. State Lands Com.*) Rather, the level of analysis "begins and ends with whether the challenged activity harms a navigable waterway and thereby violates the public trust." (*Environmental Law Foundation*, 26 Cal.App.5th at p. 403.). As demonstrated in the *Environmental Law Foundation vs State Water Resources Control Board Third District Appellate Court Case*, that arose in the context of a lawsuit over Siskiyou County's obligation in administering groundwater well permits and management program with respect to Scott River, a navigable waterway (considered a public trust resource), the court affirmed that the public trust doctrine is relevant to extractions of groundwater that adversely impact a navigable waterway and that Counties are obligated to consider the doctrine, irrespective of the enactment of the Sustainable Groundwater Management Act (SGMA).

On January 10, 2024, Napa County released the Interim Napa County Well Permit Standards and WAA Requirements - January 2024, providing guidance to complying with the Public Trust.

The project site is located predominantly (approximately 39 acres) within the Lake Hennessey Sensitive Domestic Water Supply Drainage, and a smaller portion (approximately 10 acres) within the Vinehill Creek Drainage of the Napa River Watershed. A majority of runoff ultimately runoff flows north and concentrates in the unnamed blue-line stream drainage course that flows into Lake Hennessey, thence the Napa River and San Pablo Bay. Within the 10 acres on the parcel within the Vinehill Creek drainage, runoff flows to the southwest and into the ephemeral stream that ultimately dissipates into the vineyard located on the parcel to the west, and ultimately the Napa River into the San Pablo Bay.

The Napa River is currently listed as an impaired waterbody for nutrients, pathogens, and sediment under Section 303(d) of the CWA. Historically, the construction of large dams and other impoundment structures between 1924 and 1959 on major tributaries in the eastern Napa River watershed and northern headwater areas of the Napa River has affected sediment transport processes into the mainstem of the Napa River by reducing the delivery of coarse load sediments to the river (Stillwater Science and W. Dietrich, 2002). However, the finer sediments that are not trapped by dams negatively affect salmonid habitat by reducing gravel permeability potentially affecting special-status fish species (Stillwater Science and W. Dietrich, 2002).

In response, the San Francisco Bay Regional Water Board has implemented the following programs. In 2009 the San Francisco Bay Regional Water Board adopted total maximum daily load (TMDL) for the Napa River (Order #R2-2009-0064), which calls for reductions in the amount of fine sediment deposits into the watershed to improve water quality and maintain beneficial uses of the river, including spawning and rearing habitat for salmonid species. Several watershed stewardship groups have developed management plans and are planning or have implemented large-scale projects to enhance water quality and stream-riparian habitat with the watershed (San Francisco Bay Regional Water Board, 2009).

- a. Waste discharge is not anticipated as part of the proposed project or ongoing vineyard operations; therefore, the proposed project would not violate waste discharge requirements.

The proposed project has been designed with site-specific temporary and permanent erosion control measures and features to prevent sediment, runoff, and pollutants from leaving the project site. Agricultural Erosion Control Plan #P24-00114-ECPA includes BMPs that are consistent with NCC Section 18.108.080(c), as well as with Regional Water Board guidance from the Stormwater Best Management Practice Handbooks for Construction and for New Development and Redevelopment, and the Erosion and Sediment Control Field Manual. Therefore, the proposed project is not anticipated to violate any water quality standards or otherwise substantially degrade surface or groundwater quality, and impacts would be less than significant.

- b. **Tier 1 Water Availability Analysis:** A Tier 1 WAA was prepared to determine if the proposed increase in groundwater demand as a result of the proposed project would result in a significant impact to groundwater supplies (Richard C. Slade & Associates LLC, March 2024 - **Exhibit F**). The Tier 1 WAA estimates the onsite groundwater recharge and both existing and proposed groundwater use to disclose and assess potential impacts on groundwater in accordance with the WAA Guidance Document adopted by the County on May 12, 2015.

There is one existing well ("Onsite Well") on the parcel that provides water for the existing uses, and one proposed well ("New Well"). Both the Onsite and New Wells would provide water for the existing and proposed uses on the parcel. Neither well is or would be located within the Napa Valley Groundwater Sustainability Agency boundary.

Onsite water demands for existing uses totals 0.85 af/y, which includes one (1) residence with moderate landscaping (0.75 af/y) and a pool (0.1 af/y). The proposed project would result in an additional 15.8 net acres of vineyard in four (4) vineyard blocks, which would increase the groundwater demand on the property by 11.85 af/y (0.5 af/ac/y for vineyard irrigation plus 0.25 af/ac/y for heat protection and drought year irrigation), for a total proposed parcel demand of 12.7 af/y.

Following implementation of **Mitigation Measure BIO-1**, the gross planted acreage of the project would be reduced from 18.8 gross acres to approximately 15.3 gross acres. Based on the gross to net acreage ratio of the project as proposed (18.8 gross acres:15.8 net acres), it can be assumed that the project as mitigated would result in a total net planted acreage of approximately 12.9 net acres. As such, the project as mitigated would result in an increase of groundwater demand on the property of 9.7 af/y (0.5 af/ac/y for vineyard irrigation plus 0.25 af/ac/y for heat protection and drought year irrigation), for a total proposed parcel demand of 10.55 af/y.

Long-term average groundwater recharge can be estimated as the percentage of rainfall that falls on the project aquifer recharge area that percolates into the underlying aquifer. The percentage of rain that has the potential to infiltrate varies depending on factors such as

rates of evaporation and transpiration, soil type and geology that exists at the site, and average annual rainfall. Based on 10-year average rainfall data (between 2012 to 2021), the average annual rainfall for the project parcel is 28.39 inches, for a total annual rainfall volume of 114.6 af/y for the parcel. The WAA identified a conservative 17% deep percolation rate for the parcel; when multiplied with the average annual rainfall volume results in a parcel-specific average groundwater recharge rate of 19.5 af/y, which accounts for reductions in deep percolation rates on slopes over 30%. As the total proposed onsite groundwater extractions (12.7 af/y as proposed; 10.55 af/y as mitigated) is less than the estimated average annual groundwater recharge at the property, the project meets the Tier 1 WAA criteria. Given the surplus of groundwater resources in terms of estimated average annual groundwater recharge, the 9.7 af/y increase in groundwater use associated with the mitigated project is highly unlikely to result in reductions in groundwater levels or depletion of groundwater resources over time. Less than significant impacts would result.

Tier 2 Water Availability Analysis: According to the County's WAA Guidelines (Napa County, 2015), if a project well is located within 500 feet of neighboring well(s), or within 1,500 feet of a spring used for water supply, a Tier 2 WAA (Well and Spring Interference) is required. According to the WAA prepared for this proposed project, there is one neighboring well within 500-feet of one of the project wells (Onsite Well). The Tier 2 Analysis concluded that pumping of the existing Onsite Well has minimal effects on the nearest known offsite well located 447 feet to the southeast and is unlikely to result in significant drawdown at neighboring wells. There are no known natural springs used by others for water supply purposes within 1,500 feet of the project wells. Less than significant impacts are expected.

Tier 3 Water Availability Analysis: A Tier 3 review is the County's adopted method for complying with its duties under the Public Trust Doctrine and is required when a project well is located within 1,500 feet of a County-designated "Significant Stream." The entire project parcel is located within 1,500 feet of an unnamed Significant Stream, including the existing Onsite Well (1,170 feet from the Significant Stream) and proposed New Well (1,205 feet from the Significant Stream). The Tier 3 analysis demonstrated that the existing Onsite Well is not hydraulically connected, and that the proposed New Well would not be hydraulically connected to surface water in the unnamed Significant Stream. Based on available data about groundwater levels, as well as the intermittent nature of the unnamed Stream, controlled by direct precipitation and surface runoff rather than locally deep groundwater. Further, the WAA determined that, in the unlikely scenario that a hydraulic connection did exist between either of the project wells and the unnamed Significant Stream, nearly all of the groundwater extractions proposed from these wells would occur during the irrigation season, when the intermittent unnamed Stream tends to be dry. Less than significant impacts would result.

Considering: i) anticipated annual water use of the proposed project of approximately 12.7 af/y (10.55 af/y as mitigated by **Mitigation Measure BIO-1**) is below the anticipated annual groundwater recharge rate of approximately 19.5 af/y; ii) the Tier 2 Analysis concluded that groundwater use on the project parcel following project implementation is unlikely to result in significant drawdown at neighboring wells; iii) the Tier 3 WAA concluded that the project wells are not hydraulically connected to the Significant Stream located less than 1,500 feet away; iv) there is no evidence to date indicating that there are groundwater problems or declining well production in the this area of the County; and v) incorporation of the standard groundwater management conditions of approval below to reduce potential impacts associated with groundwater use, the proposed project (if approved) would result in less than significant impacts to groundwater supplies, groundwater recharge, and local groundwater aquifer levels.

Groundwater Management, Wells – Condition of Approval:

The owner/permittee shall be required (at the permittee's expense) to record well monitoring data (specifically, static water level no less than quarterly, and the volume of water no less than monthly) for the project wells. Such data shall be provided to the County. If data indicates the need for additional monitoring, and if the owner/permittee is unable to secure monitoring access to neighboring wells, onsite monitoring wells may need to be established to gauge potential impacts on the groundwater resource utilized for the project. Water usage shall be minimized by use of best available control technology and best water management conservation practices.

In order to support the County's groundwater monitoring program, well monitoring data as discussed above shall be provided to the County. The project well shall be made available for inclusion in the groundwater monitoring network if the Director of PBES determines that the well could be useful in supporting the program.

In the event that changed circumstances or significant new information provide substantial evidence that the groundwater system referenced in the ECPA would significantly affect the groundwater basin, the PBES Director shall be authorized to recommend additional reasonable conditions on the owner/permittee, or revocation of this permit, as necessary to meet the requirements of the Napa County Code and to protect public health, safety, and welfare.

- c. Earthmoving activities have the potential to alter the natural pattern of surface runoff, which could lead to areas of concentrated runoff and/or increased erosion. The conversion of existing vegetation to vineyard would alter the composition of the existing land cover and infiltration rates, which could affect erosion and runoff. The proposed project does not propose any alteration to a stream, river, or drainage course, or include the creation of impervious surfaces that would concentrate runoff. The project site is not located in an area of a planned stormwater drainage system, nor is it not directly served by a stormwater drainage system.

Erosion control measures and plan features that are not anticipated to affect drainage patterns but would assist in minimizing the potential for increased erosion and water runoff include fiber rolls/straw wattle sediment barriers, silt fencing, erosion control blankets, the application of straw mulch at a rate of 3,000 pounds per acre over disturbed areas, and establishment of a no-till cover crop with vegetative cover density minimum densities of 80% in proposed vineyard Block 1 and 75% in Blocks 2, 3 and 4, and the application of straw mulch cover on all disturbed areas as needed to achieve the required coverage. These features would slow and filter surface runoff water, thereby minimizing sediment, nutrients, and chemicals from leaving the project site and entering nearby aquatic resources. Refer to **Exhibit E** for details related to the following discussion.

Proposed erosion control and project features that have the potential to alter natural drainage patterns include outsloped vineyard avenues, cross slope diversions, waterbars with rock rip-rap energy dissipators, level spreaders along contours, and a storm drain pipe. These proposed erosion control measures are not anticipated to significantly alter the existing topography or drainage patterns of the project site, or direct surface flows into other watersheds (as further described below). As discussed in **Section VII (Geology and Soils)**, erosion control features would maintain soil losses below the tolerable levels for the soil types found on the project site and ensure (in conjunction with the cover crop) that no net increase in erosion sediment conditions occurs as a result of the proposed project, and that the proposed project is anticipated to decrease soil loss as compared to existing conditions.

A Hydrology Report for the proposed project was prepared by David A. Steiner, CPESC, CPWSWQ and Applied Civil Engineering (March 2024 – **Exhibit F**). The Hydrology Report used the USDA Technical Release (TR-55) modeling to compare the pre- and post-development peak stormwater runoff rates from the proposed development area for the 2-year, 10-year, 50-year, and 100-year, 24-hour design storms. The development area (i.e., four (4) vineyard blocks) is within four (4) watershed basins which total approximately 50.4 acres. The analysis concluded that the proposed project would not increase peak flows (**Exhibit F**).

Table 8 – Hydrologic Modeling Calculations (TR-55) Results: Runoff Rates

Watershed	Peak Discharge Flow (cfs) by 24-hour Storm Event Frequency Return Interval (cubic feet/second)			
	2-year	10-year	50-year	100-year
Watershed A				
Pre-project conditions	3.32	6.42	9.76	11.18
Post-project conditions	3.32	6.42	9.76	11.18
Change (cfs)	0	0	0	0
Change (%)	0%	0%	0%	0%
Watershed B				
Pre-project conditions	2.83	5.07	7.41	8.40
Post-project conditions	2.39	4.55	6.86	7.84
Change (cfs)	-0.44	-0.52	-0.55	-0.56
Change (%)	-15.6%	-10.3%	-7.4%	-6.7%
Watershed C				
Pre-project conditions	4.51	8.21	12.09	13.72
Post-project conditions	4.51	8.21	12.09	13.72
Change (cfs)	0	0	0	0
Change (%)	0%	0%	0%	0%
Watershed D				
Pre-project conditions	5.78	10.21	14.80	16.73
Post-project conditions	5.78	10.21	14.80	16.73
Change (cfs)	0	0	0	0
Change (%)	0%	0%	0%	0%

Source: Applied Civil Engineering, March 2024 (**Exhibit F**)

As proposed, the project would result in no increase in peak flow or runoff compared to pre-project conditions, consistent with General Plan Policy CON-50c. Furthermore, as discussed in **Section VII (Geology and Soils)**, a reduction in soil loss and sedimentation is anticipated under post-project conditions. In addition, pursuant to NCC Section 18.108.135 (Oversight and Operation), projects requiring an erosion control plan would be inspected by the County after the first major storm event of each winter until the proposed project has been completed and stable for three years to ensure that the implemented erosion control plan is functioning properly.¹⁴ Therefore, the proposed project would not contribute a substantial amount of additional runoff to an existing stormwater drainage system or provide substantial additional sources of polluted or sediment laden runoff, resulting in a less than significant impact.

- d. The project site is not located within a Federal Emergency Management Agency (FEMA) 100-year flood zone, in a dam or levee failure inundation area, or in an area subject to seiche or tsunami (Napa County GIS FEMA flood zone and dam levee inundation areas layers; Napa County General Plan-Safety Element, 2023). Therefore, no impact would occur.
- e. The proposed project would not have an adverse impact on water quality because the ECPA has been designed to keep polluted runoff and sediment from leaving the project site. As discussed in **Section IX (Hazards and Hazardous Materials)**, the project proposes the use of potentially hazardous materials during implementation activities (i.e., oil, gasoline, and transmission fluids associated with construction equipment) and the application of chemicals (i.e., fertilizers) for ongoing vineyard maintenance. Only federal and/or California approved chemicals would be applied to the vineyard in strict compliance with applicable state and federal law. As discussed in **Sections IV (Biological Resources)** and **IX (Hazards and Hazardous Materials)**, buffers provided in the ECP to area watercourses would facilitate increased water infiltration so that chemicals and potentially hazardous materials associated with project implementation and operation can be trapped and degraded in buffer vegetation and soils to protect water quality. The limited application of agricultural chemicals generally occurring during the non-rainy season would also minimize the amounts of chemicals that could impact on or offsite water resources. Because the proposed project as designed is not expected to increase overall runoff rates or decrease times of concentration in relation to existing conditions (as discussed in Question c above), the proposed cover crop and buffers would be able to effectively trap and filter sediments, thereby minimizing their entry into nearby water resources.

As discussed above and in **Section VII (Geology and Soils)**, the proposed project has been designed with site-specific temporary and permanent erosion and runoff control measures and features to prevent sediment, runoff, and pollutants from leaving the project site. As such, the proposed project is anticipated to reduce soil loss and sedimentation by approximately 37.5 tons per year, have no negative effect on runoff rates, and maintain project site drainage characteristics as compared to existing conditions. The ECPA includes BMPs that are consistent with NCC Section 18.108.080(c), as well as with Regional Water Board guidance from the Storm Water Best Management Practice Handbooks for Construction and for New Development and Redevelopment, and the Erosion and Sediment Control Field Manual.

Furthermore, project approval, if granted, would be subject to the following condition of approval, which would further reduce and avoid potential impacts to water quality as a result of the proposed project and ongoing operations.

Water Quality – Condition of Approval: The owner/permittee shall refrain from disposing of debris, storage of materials, or constructing/operating the vineyard, including vineyard avenues, outside the boundaries of the approved plan, or within required setbacks pursuant to Napa County Code Section 18.108.025 (General Provisions – Intermittent/perennial streams). Furthermore, consistent with the standard conditions identified in the **Hazards and Hazardous Materials Section (Section IX)**, all operational activities that include the use or handling of hazardous materials, such as but not limited to agricultural chemical storage and washing, portable restrooms, vehicular and equipment refueling/maintenance and storage areas, soil amendment storage and the like, shall occur at least 100 feet from groundwater wells, watercourses, streams and any other water resource to avoid the potential risk of surface and groundwater contamination, whether or not such activities have occurred within these areas prior to this ECPA approval.

Therefore, the proposed project as designed, in conjunction with identified conditions of approval, would not adversely conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. No impact would occur.

	Potentially Significant Impact	Less Than Significant Impact With	Less Than Significant Impact	No Impact
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¹⁴ Compliance with Section 18.108.135 is achieved by including their provisions as conditions of approval for a project, if granted, as indicated in **Section VII (Geology and Soils)**.

		Mitigation Incorporated			
X.	LAND USE AND PLANNING. Would the project:				
a)	Physically divide an established community?	☐	☐	☐	☒
b)	Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐

Discussion

- a. The project site is in a rural area of Napa County in the Pritchard Hill area east of the Napa Valley. The nearest established community is the Town of Yountville, approximately 4 miles southwest of the project site. Existing improvements on the project site include a residence, domestic septic system and well, water storage tanks, a carport, pool, associated landscaping, fencing, sheds/outbuildings, and a network of paved, gravel, and dirt ranch roads, all within approximately 3.8 acres. Surrounding areas contain agricultural and rural residential areas. Therefore, the proposed vineyard and subsequent vineyard operations are consistent with surrounding land uses and would not physically divide an established community and no impact would occur.
- b. The project site is zoned as Agricultural Watershed and is designated under the Napa County General Plan as Agriculture, Watershed and Open Space. Surrounding parcels are also zoned Agricultural Watershed in the Napa County General Plan Land Use Element. Vineyards and associated improvements are permitted uses under these designations.

The proposed project has been analyzed for consistency with applicable sections of the NCC and with the Napa County General Plan. With inclusion of the mitigation measures and conditions of approval, the proposed project has been found consistent with applicable code requirements and General Plan Goals and Policies, including but not limited to the following:

- The proposed project is consistent with NCC Section 18.108.010, which requires that soil loss and runoff as a result of a project be minimized to protect water quality. As discussed in **Sections VII (Geology and Soils) and X (Hydrology and Water Quality)**, the proposed project is anticipated to decrease soil loss and potential sedimentation by approximately 37.5 tons per year (reduction of approximately 67% as compared to existing conditions) and maintain runoff conditions as compared to existing conditions.
- The proposed project is consistent with Policies CON-48 and CON-50c, which require pre-development sediment erosion conditions and runoff characteristics following development not be greater than predevelopment conditions. As discussed in **Section VII (Geology and Soils) and Section X (Hydrology and Water Quality)** the project as proposed would reduce soil loss, sedimentation, and reduce runoff characteristics as compared to existing conditions.
- The proposed project with implementation of **Mitigation Measures BIO-1 through BIO-3** is consistent with Policies CON-13, CON-16 and CON-17 which require discretionary projects consider and avoid impacts to fisheries, wildlife habitat, and special-status species through evaluation of biological resources, as well as the preservation and protection of native grasslands, sensitive biotic communities, and habitats of limited distribution and no net loss of sensitive biotic communities. A Biological Resources Survey Report was prepared for the proposed project (**Exhibits B-1 and B-2**). The project as proposed would minimize potential direct, indirect, and cumulative impacts to special-status species and associated habitat occurring in the project site with implementation of **Mitigation Measures BIO-1 through BIO-3**. Furthermore, implementation of these measures would not affect the feasibility of the proposed project in that impacts to special-status species and their habitat can be minimized.
- With implementation of **Mitigation Measures BIO-1 through BIO-3 and GHG-1**, the proposed project is consistent with Goals CON-2 and CON-3, which require the continued enhancement of existing levels of biodiversity and protection of special-status species and habitat, and the County Conservation Regulations through preservation of natural habitats and existing vegetation. With these measures and conditions, the proposed project would maintain levels of biodiversity and would avoid impacts to special-status plant and animal species.
- The proposed project is consistent with Policy CON-18, which encourages the reduction of impacts to habitat conservation and connectivity. With implementation of **Mitigation Measures BIO-1 and BIO-3**, the project size would be reduced to retain a minimum of 80% of the chamise alliance habitat, and approximately 3.7 acres of scrub interior live oak – scrub oak habitat on the parcel in a manner that is contiguous with the special status plant preservation areas that are permanently preserved with deed restrictions on neighboring parcels to the south, southeast and east of the project parcel.
- The project site does not contain wetlands within its boundaries and the proposed project is consistent with Policy CON-30, which encourages the avoidance of wetlands.
- The proposed project is consistent with Policies CON-48 and CON-50c, which require pre-development sediment erosion conditions and runoff characteristics following development to be no greater than pre-project conditions. As discussed in **Section**

VII (Geology and Soils) and **Section X (Hydrology and Water Quality)**, with incorporation of the Permanent Erosion and Runoff Control Measures condition of approval, the proposed project would reduce soil loss and sedimentation and would not increase runoff.

- The proposed project is consistent with Policy CON-65b. Following implementation of **Mitigation Measure GHG-1**, the proposed project's construction and operational GHG emissions are anticipated to be less than significant, as disclosed in **Section VIII (Greenhouse Gas Emissions)**.
- The proposed project is consistent with Policy AG/LU-1, which states that agricultural and related activities are the primary land uses in Napa County, as the proposed project is vineyard development and would increase agriculture uses in the County.
- The proposed project is consistent with the General Plan land use designation of AWOS and is therefore consistent with Policy AG/LU-20.

For these reasons, the proposed project, with the mitigation measure and conditions of approval incorporated, would not conflict with applicable County regulations, policies, or goals, and is anticipated to have a less than significant impact with respect to applicable County regulations, policies, or goals.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XI. MINERAL RESOURCES. Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

Discussion

- a-b. The project site is not in an area with a known mineral resource of value to the region or state or within a known mineral resource recovery area (Napa County Baseline Date Report, Figure 2-2, 2-3 and Map 2-1, 2005; Napa County General Plan Map, December 2008; Special Report 205, Update of Mineral Land Classification, Aggregate Materials in the North San Francisco Bay Production-Consumption Region, Sonoma, Napa, Marin and Southwestern Solano Counties, California Geological Survey, 2013). The nearest known mineral resources area in Napa County is the Napa Quarry, located approximately 13 miles southeast of the project site. Proposed development of vineyard on the project site would not physically preclude future mining activities from occurring. Therefore, no impact would occur.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XII. NOISE. Would the project:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) For project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of	☐	☐	☐	☒

a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

Discussion

a-b. The project property is located in a rural setting where surrounding parcels are generally planted with vineyards and contain wineries or are undeveloped. The nearest residences to the project site are located approximately 1,750 feet to the east, 2,070 feet to the south west and 2,260 feet to the southeast. Adjacent properties and other properties in the immediate area contain vineyards.

Activities associated with installation of the proposed project, including earthmoving, and subsequent vineyard operations, could generate noise levels above existing conditions. Several types of equipment would be necessary for implementation and operation of the proposed project, including bulldozers, tractors, excavators, backhoes, dump trucks, water trucks, and ATVs and passenger vehicles and/or light trucks. **Table 9** characterizes typical equipment noise levels at a reference distance of 50 feet. As identified in **Table 9**, equipment used for vineyard development could produce a maximum of 89 (A-weighted decibels) dBA at a distance of 50 feet.

Table 9 – Construction Equipment Noise Emission Levels

Equipment	Typical Noise Level (dBA) 50 feet from Source	Equipment	Typical Noise Level (dBA) 50 feet from Source
Backhoe	80	Roller/Sheep's foot	74
Bulldozer	85	Scarifier	83
Chainsaw	86	Scraper	89
Compactor	82	Shovel	82
Excavator/Shovel	82	Spike driver	77
Grader	85	Truck	88
Loader	85	Wood chipper	89

Sources: Cowan 1994, Federal Transit Administration 1995, Nelson 1987, United States Department of Agriculture Forest Service 1980, and Napa County Baseline Date Report Chapter 6 (Noise Resources), November 2005 (Version 1)

Table 10 characterizes the typical reduction in construction equipment noise levels as the distance increases from the source, based on a source noise level of 90 dBA.

Table 10 – Estimated Distance to dBA Contours from Construction Activities¹

Distance from Construction Source	Calculated Noise Level
50 feet	90 dBA
180 feet	75 dBA
300 feet	70 dBA
450 feet	65 dBA
700 feet	60 dBA
1,100 feet	55 dBA
1,700 feet	50 dBA

¹ Based on a source noise level of 90 dBA

Source: Napa County Baseline Date Report, Noise Section Table 6-13, Version 1, November 2005

Based on distances to existing residences, noise associated with project construction would be 50 dBA or less.

Noise related to farming activities and equipment typically ranges from 75 dBA to 95 dBA, with an average of approximately 84 dBA (Toth 1979 and Napa County Baseline Date Report, chapter 6, 2005). These noise levels should be reasonably representative of noise levels from wheeled and tracked farm equipment. Noise sources associated with ongoing vineyard operation and maintenance include a variety of vehicles and equipment, such as track and rubber wheel farming tractors and equipment, which would occur on a temporary and seasonal basis. **Table 11** characterizes the typical reduction of farming activity noise levels as the distance increases from the source using a noise source level of 84 dBA.

Table 11 – Estimated Distance to dBA Contours from Farming Activities¹

Distance from Farming Source	Calculated Noise Level
50 feet	84 dBA
115 feet	75 dBA
175 feet	70 dBA
275 feet	65 dBA

400 feet	60 dBA
650 feet	55 dBA
1,000 feet	50 dBA

¹ Based on a source noise level of 84 dBA.

Source: Napa County Baseline Noise Report, Noise Section Table 6-14, Version 1, November 2005.

Based on distances to existing residences, it is anticipated that noise due to operation and maintenance agricultural activities would be 50 dBA at the closest existing offsite residence.

Napa County considers construction noise levels up to 75 dBA during daytime hours (7 a.m. to 7 p.m.) and 60 dBA during nighttime hours (7 p.m. to 7 a.m.) as compatible with residential uses (NCC Section 8.16.080), and ongoing (or established use) noise levels of approximately 55 dBA as compatible with residential uses (NCC Section 8.16.070). The proposed project would generate noise levels that are consistent with the levels considered compatible with residential uses.

The temporary and ongoing noise sources and levels are considered typical and reasonable for agricultural development and operational activities, consistent with the County's "Right to Farm" ordinance (NCC Chapter 2.94 and General Plan Agricultural Preservation and Land Use Policy AG/LU-15), and are therefore exempt from compliance with the noise ordinance. NCC Section 8.16.090.E (Exemptions to Noise Regulations) exempts agricultural operations from noise regulations. Additionally, the proposed project would not result in a permanent increase in ambient noise levels over what currently exists in the project vicinity, resulting in a less than significant impact on ambient noise levels of the area.

During site preparation and vineyard installation, the use of heavy equipment could result in a temporary increase in ambient noise levels in the vicinity of the project site as described above. Compliance with measures identified in the County's noise ordinance for construction-related noise, such as a limitation of hours of construction activity and muffling of equipment, would result in temporary less-than-significant noise and vibration impacts, and would result in no permanent increase in ambient noise levels in the vicinity of the proposed project in excess of County standards.

- e. The project site is neither located within an area covered by an airport land use plan, nor is it within 2 miles of a public, public-use, or private airport (Napa County Airport Land-use Compatibility Plan, 1991). Therefore, no impact would occur in that regard.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIII. POPULATION AND HOUSING. Would the project:				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Discussion

- a. The proposed project involves earthmoving activities and the installation and maintenance of erosion control measures in connection with the development and cultivation of vineyards. It does not involve the construction of new homes, businesses, or infrastructure (e.g., water, sewer or utility lines) that would directly or indirectly induce substantial unplanned population growth. Construction and installation activities associated with the proposed project would generate a minimal number of workers to the project site on a temporary basis, and ongoing vineyard operation and maintenance would generate a minimal number of workers to the project site on an ongoing basis. It is anticipated that these workers would come from the existing labor pool in the region. Therefore, the proposed project would not induce unplanned population growth in the project vicinity or greater region, either directly or indirectly. No impact would occur.
- b. The proposed project would not displace any existing housing or people, and it does not involve the construction of new homes. The closest residence is located approximately 1,070 feet to the east. No impact would occur.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIV. PUBLIC SERVICES. Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
i. Fire protection?	☐	☐	☐	☒
ii. Police protection?	☐	☐	☐	☒
iii. Schools?	☐	☐	☐	☒
iv. Parks?	☐	☐	☐	☒
v. Other public facilities?	☐	☐	☐	☒

Discussion

- a. The proposed project does not include the construction of residential or commercial structures, as discussed in **Section XIV (Population and Housing)**, resulting in no substantial population growth in the area. It is anticipated that these temporary workers would come from the existing labor pool in the local region and would not result in an increase in population over existing conditions. As a result, there would be no need to construct any new government facilities. Therefore, there would be no change in the demand for the listed services and amenities. No impact would occur.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XV. RECREATION. Would the project:				
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

Discussion

- a-b. The proposed project does not include any recreational facilities. As discussed in **Sections XIV (Population and Housing)** and **XV (Public Services)**, the proposed project would not result in substantial population growth, resulting in no increase in the use of recreational facilities and requiring no construction or expansion of recreational facilities. Therefore, no impact would occur.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVI. TRANSPORTATION. Would the project:				

- | | | | | |
|---|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities? | ☐ | ☐ | ☒ | ☐ |
| b) Would the project conflict or be inconsistent with CEQA guidelines § 15064.3 subdivision (b)? | ☐ | ☐ | ☒ | ☐ |
| c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | ☐ | ☐ | ☒ | ☐ |
| d) Result in inadequate emergency access? | ☐ | ☐ | ☐ | ☒ |
| e) Conflict with General Plan Policy CIR-14, which requires new uses to meet their anticipated parking demand, but to avoid providing excess parking which could stimulate unnecessary vehicle trips or activity exceeding the site's capacity? | ☐ | ☐ | ☐ | ☒ |

Discussion

a-b. As part of the statewide implementation of Senate Bill (SB) 743, the Governor's Office of Planning and Research (OPR) settled upon automobile vehicle miles of travel (VMT) as the preferred metric for assessing passenger vehicle-related impacts under CEQA and issued revised CEQA Guidelines in December 2018, along with a Technical Advisory on Evaluating Transportation Impacts in CEQA to assist practitioners in implementing the CEQA Guidelines revisions.

The County's General Plan Circulation Element contains a policy statement (Policy CIR-7) indicating that the County expects development projects to achieve a 15% reduction in project-generated VMT to avoid triggering a significant environmental impact. Specifically, the policy directs project applicants to identify feasible measures that would reduce their project's VMT and to estimate the amount of VMT reduction that could be expected from each measure. The policy states "projects for which the specified VMT reduction measures would not reduce unmitigated VMT by 15 or more percent shall be considered to have a significant environmental impact." That policy is followed by an action item (CIR-7.1) directing the County to update its CEQA procedures to develop screening criteria for projects that "would not be considered to have a significant impact to VMT" and that could therefore be exempted from VMT reduction requirements.

The new CEQA Guidelines and the OPR Technical Advisory note that CEQA provides a categorical exemption (Section 15303) for additions to existing structures of up to 10,000 square feet, so long as the project is in an area that is not environmentally sensitive and where public infrastructure is available. OPR determined that "typical project types for which trip generation increases relatively linearly with building footprint (i.e., general office building, single tenant office building, office park, and business park) generate or attract 110-124 trips per 10,000 square feet." They concluded that, absent substantial evidence otherwise, the addition of 110 or fewer daily trips could be presumed to have a less-than-significant VMT impact.

The County maintains a set of Transportation Impact Study Guidelines (Napa County TIS Guidelines, 2022) that define situations and project characteristics that trigger the need to prepare a TIS. The purpose of a TIS is to identify whether the project is likely to cause adverse physical or operational changes on a County roadway, bridge, bikeway or other transportation facility, to determine whether the project should be required to implement or contribute to improvement measures to address those changes, and to ensure that the project is developed consistent with the County's transportation plans and policies. Per the County's current TIS Guidelines, a project is required to prepare a TIS if it generates 110 or more net new daily vehicle trips.

The TIS Guidelines also include VMT analysis requirements for projects based on trip generation, which includes a screening approach that provides a structure to determine what level of VMT analysis may be required for a given project. For a new project that would generate less than 110 net new daily vehicle and truck trips, not only is the project not required to prepare a TIS, but it is also presumed to have a less-than-significant impact for VMT. However, applicants are encouraged to describe the measures they are taking and/or plan to take that would reduce the project's trip generation and/or VMT. Projects that generate more than 110 net new passenger vehicle trips must conduct a VMT analysis and identify feasible strategies to reduce the project's vehicular travel; if the feasible strategies would not reduce the project's VMT by at least 15%, the conclusion would be that the project would cause a significant environmental impact.

The project would occur on one parcel totaling 48.42 acres that contains a residence, domestic septic system and well, water storage tanks, a carport, pool, associated landscaping, fencing, sheds/outbuildings, and a network of paved, gravel, and dirt ranch roads, all within approximately 3.8 acres. Approximately 7.95 acres of land adjacent to the residence and landscaped areas has been and is regularly disturbed and managed for wildfire fuel reduction. The project site is accessed via a private gravel driveway off of Long Ranch Road, approximately 2.8 miles from its intersection with California State Route 128 / Sage Canyon Road. Trucks and other equipment would use County roads or State highways for short periods during construction and subsequent vineyard operation.

Vineyard construction is anticipated to generate about 20 round trips per day for anticipated work crews of five to ten employees, including truck trips for equipment and supply delivery. Anticipated construction equipment would be limited to tracklaying and rubber-tired vehicles and could include bulldozers, tractors, excavators, backhoes, dump trucks, water trucks, and ATVs and passenger vehicle and/or light trucks.

Proposed vineyard operations are anticipated to generate up to 130 truck trips annually for anticipated work crews of up to 10 field personnel. Typical operations include, but are not limited to, irrigation and trellis system inspection and repair, pruning, canopy management, sulphur and pest control, harvest, cover crop inspection and management, erosion control measure monitoring and maintenance, and vine/vineyard maintenance. During peak operations, activities such as vineyard pruning, weed and pest control, and harvest are anticipated to generate up to seven round trips per day, including grape haul trucks, for anticipated work crews of up to 10 employees. Anticipated equipment for vineyard operations would be limited to tracklaying and rubber-tired vehicles and could include tractors, backhoes, 1-2 ton grape haul trucks, and ATVs and passenger vehicles and/or light trucks.

Construction traffic would be intermittent during non-peak hours, generally arriving between 6 a.m. and 7 a.m. and departing between 2 p.m. and 3 p.m. Traffic associated with routine vineyard operation and maintenance would also be intermittent during the non-peak hours, generally arriving between 2 a.m. and 4 a.m. and departing between 7 a.m. and 9 a.m.

Because the proposed project would be expected to generate up to approximately 20 daily round trips during construction and up to seven daily round trips for ongoing operations and maintenance, below the 110-trip threshold in the Office of Planning and Research guidelines and the County's TIS Guidelines and VMT screening criteria, the project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b). Impacts would be less than significant. Further, operational trips are not anticipated to increase because of the project due to the existing vineyard on the property.

- c. The proposed project would use the existing private gravel driveway for project development. The proposed project does not include roadway improvements and/or modifications to the existing road or include any other design feature that would result in hazardous conditions due to a geometric design feature or incompatible uses. The installation of the vineyard is consistent with the allowed use of the project site and other Agricultural Watershed zoned properties as well as agricultural uses in the area. Therefore, the potential for the creation of or substantial increase in hazards due to a geometric design feature or incompatible uses would be a less than significant impact.
- d. The existing roads would continue to provide adequate emergency access to the project site, resulting in no impact. Refer to **Section IX (Hazards and Hazardous Materials)**, for additional discussion related to emergency access.
- e. The proposed project would generate its largest demand for parking (approximately seven vehicles) during pruning and harvest, which would occur over ten to 14 days. Current county ordinances do not require formal parking for agricultural projects. Parking within the proposed staging area and/or along proposed vineyard avenues would satisfy parking demands of project installation and subsequent vineyard operations. Therefore, no parking impacts are anticipated.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVIII. TRIBAL CULTURAL RESOURCES. Would the project:				

Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- | | | | | |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
| a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or | ☐ | ☐ | ☒ | ☐ |
| b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. | ☐ | ☐ | ☒ | ☐ |

Discussion

a-b) Notice of the proposed project was sent certified mail to Middletown Rancheria, Mishewal Wappo Tribe of Alexander Valley, and Yocha Dehe Wintun Nation on May 28, 2024. The County received a response letter from the Yocha Dehe Wintun Nation on July 16, 2024 indicating that the project area was not within their aboriginal territories. On October 28, 2024, the County replied to the Yocha Dehe Wintun Nation and closed the consultation invitation because the Tribe did not request consultation. On October 28, 2024, the County sent consultation closure notices to the Middletown Rancheria and to the Mishewal Wappo Tribe of Alexander Valley because no request for consultation was received, and more than 30 days had elapsed since the County's consultation invitation was provided.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIX. UTILITIES AND SERVICE SYSTEMS. Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
c) Result in a determination by the waste water treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☐	☒
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☐	☒

Discussion

a. The proposed project would generate a minimal number of workers to the project site on a temporary basis during construction, and ongoing vineyard operation and maintenance would generate a minimal number of workers to the project site on an ongoing basis. It is anticipated that these workers would come from the existing labor pool in the region and would not generate an increase in the population relative to the existing conditions. Therefore, the proposed project would not create a need to construct new or modified utilities and service systems. Further, implementation of the proposed project would not result in the construction or expansion of a water or wastewater treatment facility; the proposed project would not generate wastewater, and groundwater would provide irrigation water to the vineyard (see the Groundwater Management, Wells conditions of approval in **Section X [Hydrology and Water Quality]**). Irrigation pipelines would be located in existing roads, vineyards and vineyard avenues, and/or within the proposed development area.

The proposed project also would include the installation of a limited number of onsite storm water drainage features such as water bars, storm drain pipes, cross-slope diversions energy dissipaters, straw mulch and a permanent vineyard cover crop, which have been designed to meet project-related storm water drainage needs. The effect of the proposed storm water drainage features is described in **Sections IV (Biological Resources), VII (Geology and Soils), and X (Hydrology and Water Quality)**. As discussed in the referenced sections, the environmental impacts of construction of these features, with incorporation of standard conditions identified in **Sections III (Air Quality), V (Cultural Resources), IX (Hazards and Hazardous Materials), and XVIII (Tribal Cultural Resources)** would result in a less-than-significant impact.

- b. Typically, the annual irrigation season ranges from late May to September. The WAA prepared by Richard Slade & Associates (**Exhibit F**) concluded that after full development, total long-term groundwater demand for the project parcel with the new 15.8 net acres of vineyard would be 11.85 af/y from one existing and one proposed new groundwater wells. As mitigated by **Mitigation Measure BIO-1**, the project would be reduced from 15.8 net acres to approximately 12.9 net acres, which would reduce the groundwater demand associated with the vineyard development project from 11.85 af/y to approximately 9.7 af/y, resulting in a total estimated annual groundwater demand of 10.55 af/y for the project parcel. Based on the 10-year average annual rainfall of 28.39 inches for the project parcel and a conservative 17% deep percolation rate, the annual recharge rate for the project site's recharge area was calculated to be 114.6 af/y. The future annual groundwater demand on the parcel following implementation of the mitigated project (10.55 af/y) represents approximately 11% of the average annual groundwater allotment for the project parcel. Therefore, the proposed project would be consistent with this regulation and would have a less-than-significant impact on water supplies. Water availability and water use are discussed in greater detail in **Section X (Hydrology and Water Quality)**.
- c. The proposed project would generate no wastewater that would require treatment, resulting in no impact on wastewater treatment providers.
- d-e. Rock removed during vineyard development would be used within the proposed development area and for the proposed erosion control features. Solid waste generated during construction activities (e.g., trash, discarded building materials, debris, etc.) would be negligible and would be cleared daily, or as necessary. Implementation of the proposed project would include pruning and harvesting activities which would generate waste material (cane). This material would generally be disposed of onsite by spreading it back into the vineyard, burning it in accordance with BAAQMD regulations, or a combination of the two. Therefore, the proposed project would not generate a volume of waste that would need to be disposed of at a landfill that would exceed the permitted capacity of applicable landfills serving the project area. Furthermore, all waste would be disposed of in accordance with federal, state, and local statutes and regulations. Therefore, no impact would occur.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XX. WILDFIRE. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☒	☐
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☒	☐
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☒	☐

Discussion

The project site is located in a State Responsibility Area (SRA) that is designated as Very High Fire Hazard Severity Zone (CalFire, Fire Hazard Severity Zone 2022; Napa County GIS Fire Hazard Severity Layer). The topography of the project site is characterized by moderate to steep slopes, with slopes in the proposed development area ranging from 5% to 19%.

- a. Project construction and operation would not require any road closures and would not substantially increase traffic in the area compared to current conditions. Existing roads would continue to provide adequate emergency access to the project site. Therefore, the proposed project would not impact an adopted emergency response plan or emergency evacuation plan; no impact would occur. Refer to **Section IX (Hazards and Hazardous Materials)** for additional discussion related to emergency access.
- b-c. Project construction would require the use of vehicles and heavy equipment for grading and other activities, and these vehicles and equipment could spark and ignite flammable vegetation. During construction, the risk of igniting a fire would be low because vegetation would be cleared prior to developing the vineyard, and the risk would be temporary during project construction. The proposed project does not include any infrastructure that would exacerbate fire risk. Although the project site is in an area that historically has experienced wildfires, the proposed project would not exacerbate wildfire risk, and this impact would be less than significant.
- d. Although the proposed project would alter land cover, temporary and permanent erosion control measures would be implemented for the proposed project which would reduce the impact of stormwater runoff or drainage changes being discharged on or offsite and there would not be an increase in peak flow in the development area (see **Section X [Hydrology and Water Quality]**). Therefore, there are no structures or people that would be exposed to downslope or downstream flooding or landslides and the impact would be less than significant.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XXI. MANDATORY FINDINGS OF SIGNIFICANCE. Would the project:				
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	☐	☒	☐	☐
c) Does the project have environmental effects which will cause substantial effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

Discussion

Project impacts have been analyzed to determine potential project-specific and cumulatively considerable significant impacts. All areas of impact analysis were found to have a less than significant negative effect on the environment or human beings due to project design with incorporation of identified mitigation measures and conditions of approval.

- a. As discussed in this Initial Study, implementation of #P24-00114-ECPA, with the incorporation of identified mitigation measures and conditions of approval (should the proposed project be approved), would not have the potential to significantly degrade the quality of the environment. The project, as mitigated by **Mitigation Measure BIO-1**, would remove approximately 20% of the chamise alliance on the parcel that contains varying densities of holly-leaved ceanothus, Sharsmith's western flax and green monardella populations, but would

permanently preserve the remaining 80% of the chamise habitat that contains the greatest densities of holly-leaved ceanothus (over 80% of identified populations), as well as over 95% of the green monardella and over 90% of the Sharsmith's western flax.

Habitat for special status species including the foothill yellow-legged frog, western pond turtle and white-tailed kite bee have been identified in the project area. The habitat for the FYLF and WPT is within the vicinity of the unnamed blue line stream on the eastern side of the parcel, and within the stock pond located on the neighboring parcel and approximately 70 feet from the proposed project boundary. As proposed, the project development area is setback from the blue-line stream within minimum 65-foot setbacks consistent with NCC Section 18.108.025, and over 50-feet from the pond consistent with NCC Section 18.108.026. Following implementation of **Mitigation Measure BIO-1**, proposed Block 4 would be reduced in size such that the project limits would be further away from the blue-line stream and stock pond than proposed. Further, implementation of the stream protection condition of approval and of **Mitigation Measure BIO-2** (which requires pre-construction surveys for and avoidance of nesting birds and raptors) would ensure that potential impacts related to these special status species would be less than significant.

New wildlife exclusion fencing is proposed around the new vineyard blocks and residence, with two areas outside of the development area that would be enclosed within the fencing as proposed (refer to Section IV(d), Biological Resources). As mitigated by **Mitigation Measure BIO-1**, the project area would be reduced by approximately 3.5 acres, and would result in revisions to the fencing plan. Further, implementation of **Mitigation Measure BIO-3** would require revisions to the project fencing plan to enclose the development area exclusively, and would ensure that the wildlife exclusion fencing is installed in a manner that is consistent with CDFW recommendations to minimize impacts to wildlife movement, habitat use and availability. Following implementation of **Mitigation Measure BIO-1 and BIO-3**, potentially significant impacts related to wildlife access and movement would be reduced to less than significant levels.

To reduce impacts on water quality within streams, the proposed project has been designed to avoid nearby ephemeral drainages with minimum 35-foot setbacks, and the blue-line stream with minimum 65-foot setbacks in accordance with NCC 18.108.025. Implementation of standard condition of approval regarding stream protection would ensure that impacts remain less than significant.

With the incorporation of standard conditions of approval to protect cultural resources that may be discovered accidentally, less than significant impacts to cultural and tribal cultural resources are expected (Section V [Cultural Resources] and XVIII [Tribal Cultural Resources]).

By ensuring permanent preservation of a minimum of approximately 3.7 acres of Scrub Interior Live Oak – Scrub Oak habitat, implementation of **Mitigation Measure GHG-1**, would result in the project being consistent with the State's goal of no net increase in carbon sequestration loss by 2045, and less than significant on the quality of the environment as related to greenhouse gas emissions.

Therefore, with the incorporation of **Mitigation Measures BIO-1 through BIO-3 and GHG-1** and conditions of approval, the proposed project would have a less than significant potential to degrade the quality of the environment.

- b. A majority of project site is located within the Lake Hennessey Sensitive Domestic Water Supply Drainage, with a small area of the project within the Vinehill Creek Drainage of the Napa River Watershed.

The Lake Hennessey Sensitive Domestic Water Supply Drainage area contains approximately 5,165 acres. In 1993, vineyard acreage within this drainage was approximately 309 acres, or 5.9% of the drainage. Since 1993, approximately 220 acres of additional vineyard (or 4.3% of the drainage) have been developed to vineyard, resulting in approximately 10.2% of the drainage (or approximately 529 acres) containing vineyard.

The Vinehill Creek drainage area contains approximately 2,078 acres. In 1993, vineyard acreage within this drainage was approximately 767 acres, or 37% of the drainage. Since 1993, approximately 202 acres of additional vineyard (or 9.7% of the drainage) have been developed to vineyard, resulting in approximately 46.6% of the drainage (or approximately 969 acres) containing vineyard.

It is estimated, based on evaluation of the County's GIS layer identifying Potentially Productive Soils within the Lake Hennessey drainage, that there are approximately 890 acres (17% of the drainage) having the potential to be developed to vineyard. This, in conjunction with existing and approved vineyard development (approximately 529 acres), results in a total potential build out of approximately 1,419 acres or approximately 27.5% of the drainage.

It is estimated, based on evaluation of the County's GIS layer identifying Potentially Productive Soils within the Vinehill Creek drainage, that there are approximately 325 acres (15.6% of the drainage) having the potential to be developed to vineyard. This, in conjunction

with existing and approved vineyard development (approximately 969 acres), results in a total potential build out of approximately 1,294 acres or approximately 62% of the drainage.

The Potentially Productive Soils layer includes lands with characteristics that have been found to be suitable for potential future vineyard development; however, this total does not take into consideration other site-specific limitations such as water courses requiring setbacks, wetlands, other water features, rare or special-status plants and animal species, or cultural resources, nor does the layer take into account other factors influencing vineyard development, such as sun exposure, soil type, water availability, or economic factors.

While it is not possible to precisely quantify the acreage and location of additional vineyard development that may be proposed by property owners in these drainages in the future, it is possible to make a conservative estimate based on previous trends. To estimate the amount reasonably foreseeable vineyard that may be developed over time, the acreage of vineyard development including approved vineyard projects in the cumulative environment (i.e., Lake Hennessey drainage and Vinehill Creek drainage) over the last 32 years (1993-2025) were used to project an estimation of vineyard development for the next three to five years.

Over the past 32 years within the Lake Hennessey drainage, approximately 7 acres of vineyard was developed per year (220 divided by 32). Over the past 32 years within the Vinehill Creek drainage, approximately 6 acres of vineyard was developed per year (202 divided by 32). Combined with Napa County policies and other site selection factors that limit the amount of land that can be converted to vineyard, the development over the next three to five years of approximately 21 to 35 acres within the Lake Hennessey drainage, approximately 18 to 30 acres within the Vinehill Creek drainage are considered reasonable estimates.

NCC Chapter 18.108 includes policies that require setbacks of 35 to 150 feet from watercourses (depending on slopes), and that require preservation of vegetation canopy cover, and General Plan Conservation Policy CON-24(C) that requires the retention of oak woodland at a 2:1 ratio, which limits the amount of potential vineyard acreage that could be converted within the watershed. It has been the County's experience with ECP projects that there are generally site-specific issues, such as oak woodland preservation, wetlands, other water features, special-status plant and animal species, or cultural resources that further reduce areas that can be developed to other land uses. Additionally, the vineyard acreage projections for the next three to five years do not consider environmental factors that influence vineyard site selection, such as sun exposure, soil type, water availability, slopes greater than 30%, or economic factors such as land availability, cost of development or investment returns.

c. Air Quality and GHG – Sections III and VIII:

The proposed project (#P24-00114-ECPA) includes the removal of vegetation and installation of vineyard and erosion control measures concurrent with other projects in the San Francisco Bay Area Air Basin that would generate emissions of criteria pollutants, including suspended PM and equipment exhaust emissions. As discussed in **Section III (Air Quality)** and shown in **Table 5** (Emissions from Vineyard Development and Operation) criteria pollutant emissions associated with development and operations are anticipated to be well below identified thresholds, and therefore are not expected to result in project or cumulatively significant impacts. Additionally, the proposed project would be subject to standard air quality conditions of approval (should the proposed project be approved) that requires implementation of Air Quality BMPs to further reduce potential less-than-significant air quality effects of the proposed project and ongoing operation. While BAAQMD has no quantitative GHG threshold for comparison, the project's construction and operational equipment emissions are well below the SMAQMD GHG emission threshold of 1,100 MT CO_{2e} and can be considered less than significant.

As proposed (**Exhibit B-3**), the ECP prepared for the proposed project identified an approximate 4.1-acre proposed Scrub Interior Live Oak – Scrub Oak preservation area on the property located on slopes less than 30% and outside of stream setbacks. Implementation of **Mitigation Measure BIO-1** would reduce the removal of Scrub Interior Live Oak – Scrub Oak from 4.1 acres to 3.7 acres, and **Mitigation Measure GHG-1** would require permanent preservation of the proposed preservation area. Therefore, the proposed project would permanently preserve greater than 1:1 acres of canopy on slopes less than 30% and outside of stream setbacks. By permanently preserving a minimum of 3.7 acres of vegetation as detailed in **Mitigation Measure GHG-1**, the project would result in a minimum removal to preservation ratio of 1:1 which more than compensates for the emissions resulting from the removal associated with the project, consistent with the State's long-term climate goals of being carbon neutral by 2045, and with the County's no net increase threshold for carbon sequestration and carbon stock for evaluation of GHG emissions impacts.

Potential contributions to air quality impacts associated with the proposed project, including GHG emissions and loss of sequestration, would be considered less than cumulatively significant through project design (i.e., scope and scale) and implementation of mitigation measures and standard conditions of approval.

Biological Resources – Section IV:

Project-specific biological resources reconnaissance surveys (Montrose Environmental March 2024 and California Biological Consulting September 2024– **Exhibits B-1 and B-2**) were performed for the proposed project to evaluate potential habitat loss and disturbance to plant and wildlife species because of the proposed project. The surveys included database records searches to identify the presence or potential presence of special-status species within the project site. The database records searches included the USFWS, CNDDDB and CNPS databases. As discussed in **Section IV (Biological Resources)**, the project development area contains three special-status plants predominantly within the chamise alliance on the parcel, as well as potential habitat and/or foraging for three special status animal species. While the project as mitigated by **Mitigation Measure BIO-1** would result in conversion to vineyard of approximately 20% of the chamise alliance that contains holly-leaved ceanothus, it would also be required to permanently preserve a minimum of 80% of the chamise habitat that contains the greatest densities of holly-leaved ceanothus (over 80% of identified populations), as well as over 95% of the green monardella and over 90% of the Sharsmith's western flax.

Additionally, as discussed in **Section IV, Biological Resources**, it is assumed based on proximity to chamise habitat that contains moderate densities of holly-leaved ceanothus, it can be assumed that the "cleared areas with <5% slopes" and potentially the "disturbed/managed" areas contained special-status plants that were removed or disturbed and would be impacted by the conversion of these areas to vineyard. To offset those cumulative impacts related to potential removal of special-status plants within those disturbed/managed and cleared areas, implementation of **Mitigation Measure BIO-1** would require the retention of approximately 0.4-acre of Scrub Interior Live Oak – Scrub Oak habitat that contains holly-leaved ceanothus, as well as a 0.1-acre "disturbed/managed" area in Block 4 that may have contained special status plants given its proximity to habitat that contains these plants. **Mitigation Measure BIO-1** would also require permanent preservation of these avoided areas, which would result in less than significant cumulative impacts related to special-status plants.

Regarding white-tailed kite, as well as other protected nesting birds and raptors, while the project would convert potential habitat (i.e. Scrub Interior Live Oak – Scrub Oak) for these species, following implementation of **Mitigation Measure BIO-1**, the proposed habitat conversion would be reduced by 0.4-acre, and following implementation of **Mitigation Measure GHG-1**, an equivalent amount of like habitat located on "developable" land (i.e., outside of stream setbacks and on land with slopes less than 30%) would be permanently preserved, including areas adjacent to streams. Following incorporation and implementation of **Mitigation Measures BIO-1, BIO-2 and GHG-1**, the potential direct, indirect and cumulative impacts related to these species would be less than significant.

Streams within the project property are outside of the proposed development area and would be avoided with minimum required setbacks pursuant to NCC Section 18.108.025; as such, streams would not be affected by the proposed project. Further, following implementation of **Mitigation Measure BIO-1**, the project area would be reduced such that the development activities would be further removed from the blue-line stream located on the parcel.

With incorporation of **Mitigation Measure BIO-1 and BIO-3**, which would require revision to the project area and fencing plan to enclose vineyard blocks only. Further, following implementation of **Mitigation Measures BIO-1 and GHG-1**, 80% of the chamise habitat on the parcel and a minimum of 3.7 acres of the Scrub Interior Live Oak – Scrub Oak habitat located on developable land on property would be permanently preserved, which would support ongoing wildlife access and movement through the property. As such, the project as mitigated would not introduce any new movement barriers to wildlife and impacts to wildlife movement are expected to be less than significant.

Cultural and Tribal Cultural Resources – Sections V and XVIII:

The Cultural Resources Studies (Archaeological Resource Service, April 2024) did not identify any significant or potentially significant cultural resources in the proposed development area. Previously recorded archaeological resources are located within a half-mile the project parcel, but outside of the proposed development area; less than significant impacts are expected to occur during vineyard development. With the incorporation of standard conditions of approval for cultural and paleontological resources project-specific and cumulative impacts related to cultural and tribal cultural resources are considered to be less than significant (see **Section V [Cultural Resources]** and **Section XVII [Tribal Cultural Resources]**).

Geology and Soils – Section VII:

Soil loss and associated sedimentation resulting from implementation of the proposed project is anticipated to be reduced by approximately 67% or 37.5 tons per year compared to existing conditions (**Table 7**). The reasons for this reduction are due to the increased vegetative cover conditions within the proposed vineyard development areas and the installation of erosion control features which reduce soil loss potential. Because the proposed project would reduce soil loss as compared to existing conditions and would implement erosion and runoff control conditions of approval, the proposed project is not anticipated to contribute cumulatively to

sediment production within the Kortum Canyon Creek drainage. Therefore, impacts associated with soil loss and associated sedimentation are not considered cumulatively significant.

Because geologic impacts associated with future agricultural projects would receive the same scrutiny under CEQA and the County's General Plan Goals and Policies (in particular General Plan Conservation Element Policy CON-48, which requires development projects to result in no net increase in sediment erosion conditions and soil loss as compared to existing conditions), it is not unreasonable to anticipate that those projects would also have a less than significant project-specific and cumulative impact on erosion and associated sedimentation.

Because geologic impacts associated with future agricultural projects would receive the same scrutiny under CEQA and the County's General Plan Goals and Policies (in particular General Plan Conservation Element Policy CON-48, which requires development projects to result in no net increase in sediment erosion conditions and soil loss as compared to existing conditions), it is not unreasonable to anticipate that those projects would also have a less-than-significant project-specific and cumulative impact on erosion and associated sedimentation.

Hazards and Hazardous Materials – Section IX:

The proposed project would implement the identified hazardous materials conditions of approval. Impacts associated with the use, storage, and transport of hazardous materials and accidental release of hazardous materials would be less than significant and no cumulative impacts would occur.

Hydrology and Water Quality – Section X:

Water use calculations provided in the Tier 1, Tier 2 and Tier 3 WAA prepared by Richard C. Slade & Associates LLC (March 2024 - **Exhibit F**) indicate that the proposed development consisting of approximately 15.8 net acres of planted vineyard would result in approximately 11.85 af/yof groundwater use. The total calculated water recharge for the project parcel is 114.6 af/y. Further, following incorporation of **Mitigation Measure BIO-1**, the total net acreage of the vines would be reduced from 15.8 acres to approximately 12.9 acres, which would result in a commensurate reduction in groundwater demand. Given the surplus of groundwater resources in terms of estimated average annual groundwater recharge, the 9.7 af/y increase in groundwater use as mitigated is unlikely to result in reductions in groundwater levels or depletion of groundwater resources over time. The proposed project would result in less than significant impacts to groundwater supplies, groundwater recharge, and local groundwater aquifer levels.

As discussed in **Section X (Hydrology and Water Quality)** a Hydrology Report was prepared by David A. Steiner, CPESC, CPWSWQ and Applied Civil Engineering (March 2024 – **Exhibit E**). Following implementation of the erosion control specifications of the ECPA (as described above, and in **Exhibit A**), the proposed project would result in no increase in peak flow or runoff compared to pre-project conditions; therefore, no significant impacts due to changes in hydrology are expected.

Not increasing runoff rates is consistent with General Plan Conservation Element Policy CON-50c, which requires that peak runoff following development is not greater than predevelopment conditions. Additionally, as discussed in **Section VII (Geology and Soils)** the proposed project is anticipated to decrease soil loss as compared to existing conditions. Therefore, the proposed project would have a less-than-significant impact with respect to alterations of existing drainage patterns of the site or area that would result in increased runoff, considerable on or off-site erosion, siltation or flooding.

Furthermore, because hydrologic impacts associated with future agricultural projects would receive the same scrutiny under CEQA and County General Plan Policy CON-50(c), which requires development projects to be designed so that peak runoff following development is not greater than predevelopment conditions, it is not unreasonable to anticipate that those projects would also have a less than significant project specific and cumulative impact on hydrologic conditions.

Land Use and Planning – Section XI:

As discussed in **Section XI (Land Use and Planning)**, the proposed project, with implementation of the mitigation measures and conditions of approval identified in this Initial Study, achieves compliance with applicable NCC requirements and General Plan Goals and Policies (also see **Section VIII [Greenhouse Gas Emissions]**). The proposed project would not conflict with the any applicable land use plan, policies, or regulation as mitigated and conditioned.

Proposed Project Impacts Found to be Less Than Significant:

In addition to the impact categories identified above, the following discussion summarizes those impacts considered to be less than significant with development of the proposed project: Aesthetics, Agriculture and Forestry Resources, Energy, Mineral Resources, Noise, Population and Housing, Public Services, Recreation, Transportation, Utilities and Service Systems, and Wildfire. Periodic use of lighting at the site would not create a substantial source of light and lighting would be in the form of heat lights or downward directional lights on equipment being used during nighttime harvest. The potential contribution to aesthetic impacts associated with the proposed project is considered to be less than cumulatively considerable. The proposed project would not result in wasteful, inefficient, or unnecessary energy use, or conflict with or obstruct a state or local plan for renewable energy or energy efficiency or impede progress towards achieving goals and targets. There are no known mineral resource areas within the proposed project site or immediate vicinity. This project would generate noise levels that are considered normal and reasonable for agricultural activities and consistent with the County's "Right to Farm" Ordinance. The potential contribution to noise or vibration impacts is considered less than cumulatively considerable. Traffic related to construction and farm worker trips would not increase by a discernible amount and the relatively low and off-peak vehicle trips associated with the proposed project are considered less than cumulative considerable. The proposed project does not include the construction of structures that would result in population growth or displacement of people and would not adversely impact current or future public services. For these reasons, impacts associated with the proposed project that may be individually limited, but cumulatively considerable, would be less than significant.

Considering the project site's characteristics, surrounding environment, and the scope and scale of the proposed project, the proposed project with incorporation of identified mitigation measure and conditions of approval, as discussed throughout this Initial Study, is not anticipated to result in either project specific or cumulatively considerable negative impacts; therefore, impacts associated with the proposed project that may be individually limited, but cumulatively considerable, would be less than significant.

- c. Implementation of the proposed project would not have any potentially significant negative effects on human beings (see discussions under **Sections III [Air Quality], IX [Hazards and Hazardous Materials], X [Hydrology and Water Quality], XIII [Noise], XIV [Population and Housing], XVII [Transportation], and XX [Wildfire]**). The proposed project, the use of the project site, and reasonably foreseeable projects would be activities at a level of intensity considered normal and reasonable for a property within an Agricultural Watershed zoning district. Therefore, less than significant impacts on human beings are anticipated.

LIST OF FIGURES:

Figure 1	Site Location Map (USGS)
Figure 2	Site Location Map (Aerial)
Figure 3	Project Area (Aerial)
Figure 4	Mitigated Project Figure (Aerial)

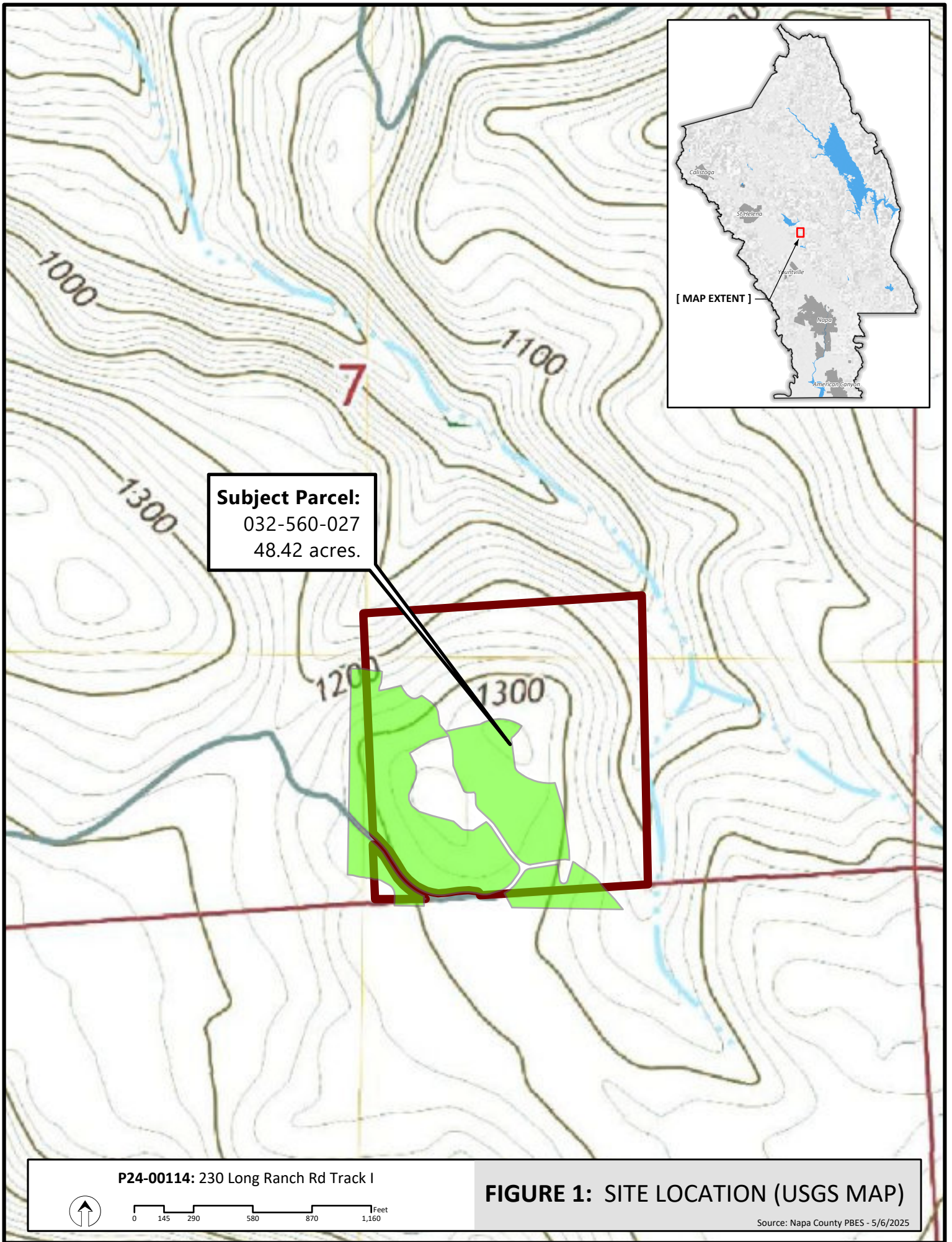
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Table 9	Construction Equipment Noise Emission Levels
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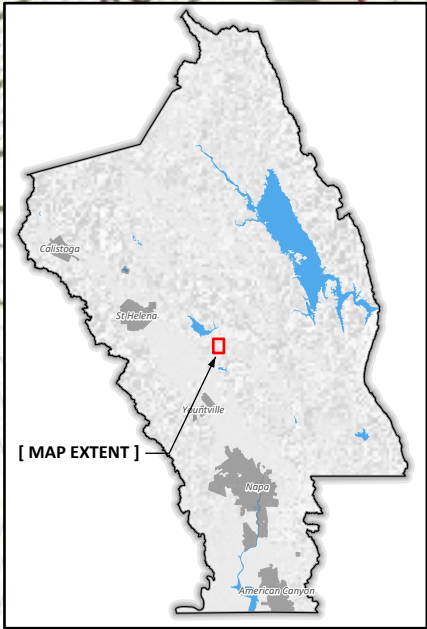
LIST OF EXHIBITS:

Exhibit A	230 Long Ranch Road Vineyard Development Erosion Control Plan and Narrative\
Exhibit B-1	Biological Resources Assessment
Exhibit B-2	Addendum to Biological Resources Assessment

Exhibit B-3	Scrub Interior Live Oak – Scrub Oak Vegetation Exhibit
Exhibit C	Landslide Hazard Evaluation
Exhibit D	Soil Loss Analysis
Exhibit E	Water Availability Analysis
Exhibit F	Hydrologic Analysis
Exhibit G	Application Submittal Materials & Correspondence
Exhibit H	Project Revision Statement



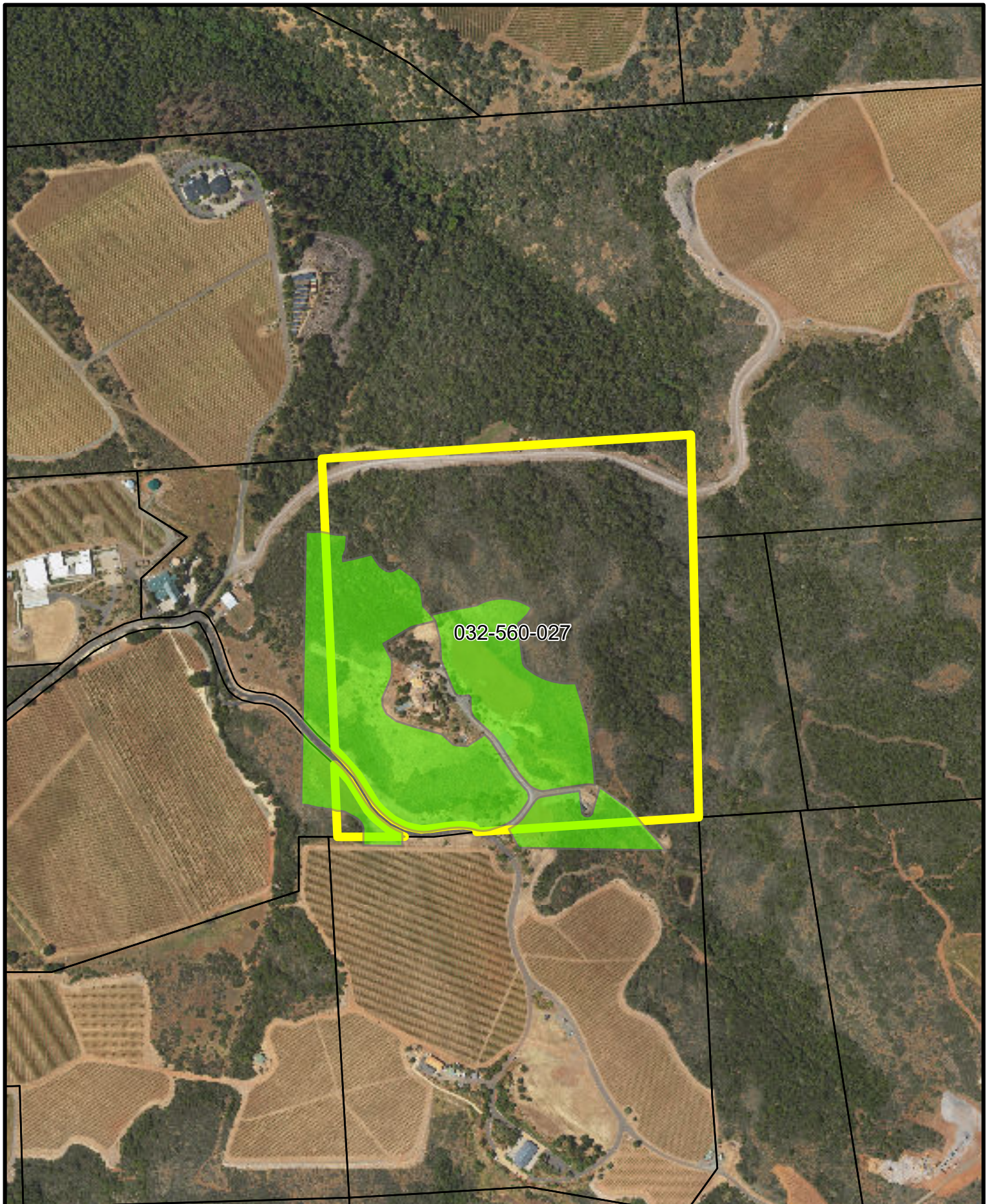
Subject Parcel:
032-560-027
48.42 acres.



P24-00114: 230 Long Ranch Rd Track I

FIGURE 1: SITE LOCATION (USGS MAP)

Source: Napa County PBES - 5/6/2025



P24-00114: 230 Long Ranch Rd Track I



0 112.5 225 450 675 900 Feet

FIGURE 2: SITE LOCATION (2024 AERIAL)

Source: Napa County PBES - 5/6/2025

