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:** Schramsberg Vineyards Agricultural Erosion Control Plan (ECPA) #P23-00360-ECPA

2. **Property Owner(s):** Schramsberg Vineyards Company, c/o Hugh Davies

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:**
   1400 Schramsberg Road, Calistoga, CA 94515
   Assessor's Parcel Numbers (APNs) 020-300-014 and -015, 020-390-007, -008, -011 & -020 (**Figures 1** and **2**)
   Sections 8, 9, 16 and 17, Township 8 North, Range 6 West, Mt. Diablo Base
   Latitude 38° 33' 8.6394" N / Longitude 122° 32' 37.32" W

5. **Project Sponsor:** Schramsberg Vineyards Company
   c/o Hugh Davies
   1400 Schramsberg Road
   Calistoga, CA 94515

   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 Schramsberg property consists of six parcels totaling 225.08 acres, which contain approximately 44.9 acres of vineyard planted prior to 1993 (replanted under Erosion Control Plans #95654-ECPA, #97085-ECPA, #98117-ECPA, #P08-00374-ECPA, #P17-00173-ECPA), an 180,000-gallon winery (originally developed in the 1870s; Registered Historical Landmark No. 561; Use Permit Major Modification #02643), three (3) residences, orchard and garden, agricultural structures, four (4) wells, water tanks, and related outbuildings and utility infrastructure, and dirt and gravel roads.

   The property was heavily burned in the 2020 Glass Fire and is subject to the Disaster Recovery Ordinance NCC Section 8.80.130 regarding Conservation Regulations for fire-damaged properties. The burned trees were removed with an Emergency Timber Harvest Permit (CalFire/Department of Forestry and Fire Protection, Notice of Emergency Timber Operations No: 1-21EM-00307-NAP, August 27, 2021). A Timber Harvest Plan and Timber Conversion Permit are required for the proposed vineyard development. The Applicant will file the required applications concurrently with the final processing of this erosion control plan, utilizing this IS/MND for its CEQA compliance in issuing the Timber Conversion Permit. The Timber permit process has its own environmental procedural protections built into the process; and will only proceed once this CEQA process is completed.

   Parcel number 020-390-020 was created by a lot line adjustment in December 2023; some of the technical documents associated with this project reference the former parcel number (APN 020-390-017).

9. **Description of Project:** The proposed project involves the clearing of vegetation, earthmoving and land contouring, and installation and maintenance of erosion control measures associated with the development of approximately 14.1 gross acres of vineyard (i.e., proposed development area or project area) with approximately 11.0 net planted acres (including 1.2 acres of existing vineyard installed without benefit of a permit) in seven (7) proposed vineyard blocks, located on four (4) separate parcels under same ownership and totaling 162.56 acres (i.e., project site). Average slopes within the development area range from four (4) percent (%) to 27%, with an overall average slope of 15%, and a total of approximately 1.1 acres (non-contiguous) having slopes slightly over 30%. The project would result in the conversion to vineyard of approximately 12.9 acres of pre-fire tree canopy, including 11.4 acres of Douglas fir forest and 1.5-acre of coast live oak woodland (163 trees greater than 6-inch diameter at breast height (DBH)). The project proposes to preserve 39.4 acres of vegetation canopy cover, including 6.9 acres of oak woodland and 32.5 acres of coniferous forest located on slopes less than 30% and outside of stream setbacks.

The proposed vineyard development consists of seven vineyard blocks (1, 1A, 2, 3, 4, 5 & 6); refer to Table 1, Block Size and Cover Crop Specifications. Blocks 1A and a portion of Block 4 are existing vineyards that were planted without the benefit of an erosion control plan and are therefore being treated as new vineyard in this proposal. The blocks will have a row spacing of between 7 and 10 feet and vine spacing along the row of 4 feet for an average vine density of 1,089 to 1,556 vines per acre.

All temporary debris, vegetation, soil and soil amendment stockpiles and storage areas, if needed, will be located within the proposed vineyard project area. No long-term stockpiles of rock or soil are anticipated. No new roads are required to access the proposed vineyard development area. Access is via the existing driveways and access roads. Access to a majority of the project area including Blocks 1, 1a, 4, 5 and 6 is via a paved private road (Schramsberg Road) off of State Route 29 and existing gravel and dirt vineyard access roads that serve the existing winery, vineyard and residential uses. Access to Blocks 2 and 3 is via Peterson Driveway and an existing paved private driveway and existing onsite vineyard access roads serving the existing adjacent residence and onsite vineyards.

All irrigation water for the existing and proposed vineyard would be supplied by existing developed groundwater resources. No other new wells or other water sources are planned as part of this project. Irrigation pipelines would be located in existing roads, vineyards and vineyard avenues, and within the proposed development area. The project proposes new wildlife exclusion fencing that would enclose proposed new and existing vineyard blocks.

Erosion Control Measures: Temporary erosion control measures include installation of sediment barriers, erosion control blankets, water bars, and a temporary cover crop for the first three years at densities listed in **Table 1.** Permanent erosion control measures include sediment barriers rolling dips, storm drainpipes, cross-slope diversions, energy dissipaters, straw mulch applied at 3,000 pounds per acre, and a no-till permanent cover crop to achieve minimum densities as specified in **Table 1**.

Table 1: Block Size and Cover Crop Density Specifications

Block ID	Development Area (Gross / Net Acres)	Required Cover Density (%)
1	4.5 / 3.6	85%
1A	0.7 / 0.5	70%
2	0.3 / 0.2	75%
3	1.0 / 0.6	80%
4	1.0 / 0.8	80%
5	2.3 / 1.8	80%
6	4.3 / 3.5	80%

Vineyard avenues would be protected with a permanent no-till cover crop with densities maintained at 80% or more. Alternatively, vineyard avenues may be lined with crushed rock to limit their susceptibility to erosion and provide all weather access.

Details of the proposed erosion control measures are provided in the Schramsberg Vineyards Co Vineyard Development Erosion Control Plan (dated May 2024) prepared by Mike Muelrath (RPE #67435) of Applied Civil Engineering Inc., Napa, California (**Exhibit A**).

Earthmoving: Earthmoving and grading activities associated with the land contouring (1,000 cubic yards balanced onsite) and the installation of erosion control measures and subsequent vineyard operations include, but are not limited to, vegetation removal, soil ripping, rock removal and processing, discing, recontouring, incorporation of soil amendments, construction of vineyard access roads to connect development areas, and the development of erosion and runoff control measures.

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 7-foot by 10-foot row spacing pattern and vine spacing of 4 feet for an approximate vine density of up to approximately 1,556 vines per acre.
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 and late winter or early springtime strip spraying in an 18- to 24-inch-wide strip by contact or systemic herbicides: no pre-emergent spraying would be utilized as part of cover crop management.

Table 2 lists a general schedule for the construction of the proposed project as identified in #P23-00360-ECPA and **Table 3** outlines typical general ongoing vineyard operations. The vineyard would be developed in one phase, with construction occurring for up to six months during the year. The final implementation schedule is pending action on #P23-00360-ECPA.

Table 2 – Implementation Schedule

April 1 – October 1	Remove existing vegetation, complete ripping, grading and discing, planting
October 15[1]	All winterization complete, including seeding, straw mulching, and straw wattle installation.
October 16 – March 31	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 (October 15 to April 1 of the succeeding year), no earthmoving work is allowed by the Napa County Code (NCC) Section 18.108.070(L).

Table 3 – 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 15 to 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, and ATVs and passenger vehicle and/or light trucks.

Proposed vineyard operations are anticipated to generate at most 850 truck trips annually for anticipated work crews of up to 14 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 operations, activities such as vineyard pruning, weed and pest control, and harvest are anticipated to generate up to ten round trips per day, including grape haul trucks, for anticipated work crews of up to 14 employees. Anticipated equipment for vineyard operations would be limited to tracklaying and rubber-tired vehicles and could include tractors, backhoes, grape haul trucks, and ATVs and passenger vehicles and/or light trucks.

Implementation of the proposed project would be in accordance with the Schramsberg Vineyards Co Vineyard Development and Erosion Control Plan prepared by Applied Civil Engineering Inc. (March 2024 – **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/Current-Projects-Explorer.

10. Describe the environmental setting and surrounding land uses.

The approximately 225.08-acre property (consisting of six parcels) is located in the Mayacamas Mountain range along the west side of the Napa Valley, at the end of a private paved driveway (Schramsberg Road) approximately 2.5 miles southeast of the City of Calistoga, in an unincorporated portion of Napa County, California (Napa County APNs 020-300-015, 020-390-007, 020-390-008 and 020-390-020) (**Figures 1-3**). Access to a majority of the project area including Blocks 1, 1A, 4, 5 & 6 is via Schramsberg Road and existing gravel and dirt vineyard access roads that serve the existing winery, vineyard and residential uses. Access to the Block 2 and Block 3 project area is via Peterson Driveway and Tucker Road, and an existing paved private driveway and existing onsite vineyard access roads serving the existing adjacent residence and onsite vineyards. Existing improvements on the project property include approximately 44.9 acres of vineyard planted prior to 1993 (replanted under Erosion Control Plans #95654-ECPA, #97085-ECPA, #98117-ECPA, #P08-00374-ECPA, #P17-00173-ECPA), an 180,000-gallon winery (originally developed in the 1870s; Registered Historical Landmark No. 561; Use Permit Major Modification #02643), three (3) residences, orchard and garden, agricultural structures, four (4) wells, water tanks, and related outbuildings and utility infrastructure, and dirt and gravel roads.

The project site is located within the Schramsberg Creek Drainage and the Nash Creek Drainage, and a small portion within the Ritchie Creek Drainage of the Napa River Watershed. There are two (2) U.S. Geological Survey (USGS) blue-line streams located on the subject properties, including Nash Creek on the northern portion and Schramsberg Creek in the central portion of the property. Ritchie Creek, another blue-line stream, is located just south of the property. The nearest blue-line stream to the project area is Nash Creek, which is located approximately 475-feet west of the project area at its closest point. There are five (5) ephemeral drainages located near the project areas, including: two (2) ephemeral drainages located near Blocks 1 and 1A, a third ephemeral drainage located southwest of Block 3, a fourth ephemeral drainage located between Blocks 3 and 4 and a fifth ephemeral drainage located between Blocks 5 and 6. A 35-foot setback has been established for all ephemeral drainages in close proximity to the project areas pursuant to Napa County Conservation Regulations Section 18.108.025, with 75-foot setbacks from the ephemeral drainage between proposed Blocks 5 and 6.

All irrigation water will be supplied by existing developed groundwater resources, including four (4) on-site project wells: Well 1 (Claes Well – serves APN 020-390-020), Well 2 (McEachran Well – serves APN 020-030-015), Well 3 (Mt. Diamond Well – serves APN 020-390-007) and Well 4 (Tractor Shed Well – serves APN 020-390-008). No other new wells or other water sources are planned at this time. Well 1 is located within 500 feet of neighboring wells; a Tier 2 Water Availability Analysis was prepared (refer to **Section X, Hydrology and Water Quality**, and **Exhibit D**). Nash Creek and Ritchie Creek are County-designated Significant Streams. One project well (Well 3) is located within 1,500 feet of a Significant Stream (Nash Creek); all of the remaining project wells are outside of the 1,500-foot buffer from a Significant Stream. A Tier 3 Water Availability Analysis was prepared for that well (refer to **Section X, Hydrology and Water Quality**, and **Exhibit D**).

General topography in the vicinity of the project site consists of gentle to steep slopes ranging from less than 5% to over 30%. The project area occurs on land with slopes between 4% and 27% and at elevations ranging from 605 to 1,025 feet above mean sea level.

Surrounding properties are generally used for agricultural and rural residential purposes north and northwest of the project property, residential, Highway 29 and the Napa Valley to the north and east, and open space (Bothe State Park) immediately south and southeast of the project property. 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 1,500,000 gallons per year. The nearest known schools are Calistoga Elementary School, Calistoga Junior-Senior High School, Palisades High School, located approximately 2.5 miles to the northwest of the project parcel (Napa County GIS: Schools Layer). The nearest residences are in the vicinity of Blocks 2 and 3 along Tucker Road and Summit Drive, with the nearest neighboring residence located approximately 60 feet to the southeast of Block 2. The City of Calistoga is located approximately 2.5 miles to the north.

Drainage from the project area generally flows northerly and easterly and southerly via sheet flow and thence concentrates in the onsite drainage courses that are tributary to three (3) blue-line streams (Schramsberg Creek, Nash Creek and Ritchie Creek), which are tributary to the Napa River. The project site is not located within a municipal drinking water supply watershed, nor in any designated groundwater-deficient area.

The vegetation types on the project site include Douglas fir forest, coast live oak woodland and existing vineyard.

Soils within the property are mapped as Forward gravelly loam (#138, 2 to 9 percent slopes), Forward gravelly loam (#139, 9 to 30 percent slopes), Forward gravelly loam (#140, 30 to 75 percent slopes) and Kidd loam (#156, 30 to 75 percent slopes). Nearly all of the project areas are mapped as Forward gravelly loam with the exception of Block 5 and a small portion of Block 4, which are mapped as Kidd loam, classified according to the Soil Survey of Napa County (USDA 1978).

The closest active fault is located approximately 2.5 miles to the southwest of the project site (Napa County GIS Faults Layer).

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	**Other Agencies Contacted**
Regional Water Quality Control Board (Regional Water Board) (T)	Middletown Rancheria
California Department of Forestry and Fire Protection (CalFire) (R)	Mishewal Wappo Tribe of Alexander Valley
California Department of Fish and Wildlife (CDFW) (T)	Yocha Dehe Wintun Nation

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 the Mishewal Wappo Tribe of Alexander Valley, Middletown Rancheria, and the Yocha Dehe Wintun Nation on January 11, 2024. The County did not receive responses from any of the Tribes contacted, and sent

consultation closure notices Middletown Rancheria, Mishewal Wappo and Yocha Dehe on March 25, 2025. The County did not receive any responses. This is discussed 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 #P23-00360-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, May 17, 2024, Schramsberg Vineyard Co Vineyard Development Erosion Control Plan and Narrative (**Exhibit A**).
- Forest Ecosystem Management and Salix Natural Resource Management, February 8, 2023, Biological Resource Reconnaissance Survey for Schramsberg Winery, 1400 Schramsberg Road, Calistoga, California APNs 020-390-007, 020-390-008, 020-390-011, 020-200-015 & 020-300-014 (**Exhibit B-1**).
- Forest Ecosystem Management, January 30, 2024, Addendum to Biological Resource Reconnaissance Survey for Schramsberg Winery, 1400 Schramsberg Road, Calistoga, California APNs 020-390-007, 020-390-008, 020-390-011, 020-200-015 & 020-300-014 (**Exhibit B-2**).
- Salix Natural Resource Management, August 27, 2024, Letter Re: Schramsberg #P23-00360-ECPA Review Letter #2, Biological Opinion, and Environmental Resource Management, July 15, 2025, Letter (**Exhibit B-3**).
- Applied Civil Engineering, August 30, 2024, Schramsberg Vineyard Co Vegetation Canopy Cover Exhibit (**Exhibit B-4**).
- Tom Origer & Associates, July 17, 2019, Cultural Resources Study for the Schramsberg Vineyards Development Project, Calistoga, Napa County, California.
- Tom Origer & Associates, August 25, 2021, Confidential Archaeological Letter Emergency Notice Schramsberg Emergency Notice, Napa County, CA.
- Tom Origer & Associates, April 12, 2024, RE: An Addendum Report to Two Cultural Resources Studies, Schramsberg Vineyard, Calistoga, Napa County.
- David A. Steiner, May 6, 2024, Soil Loss Analysis, Proposed Vineyard Expansion, Schramsberg Vineyards, 1400 Schramsberg Road, St. Helena CA 94574, APNs 020-390-007, -008, -011, -014, -001 (**Exhibit C**).
- O'Connor Environmental, Inc., September 1, 2023, Water Availability Analysis for Schramsberg Vineyards, 1400 Schramsberg Road, Calistoga, California APNs 020-390-007, 020-390-008, 020-390-011, 020-200-015 & 020-300-014 (**Exhibit D**).
- Applied Civil Engineering, May 15, 2024, Hydrologic Analysis, Revised, Proposed Vineyard Expansion, Schramsberg Vineyards, 1400 Schramsberg Road, St. Helena CA 94574, APNs 020-390-007, -008, -011, -014, -001 (**Exhibit E**).
- Application submittal materials and Correspondence (**Exhibit F**)
- Project Revision Statement (**Exhibit G**)

- Site inspection conducted by Napa County Planning, Building and Environmental Services staff Pamela Arifian and Alexei Belov on January 17, 2024.
- Napa County Geographic Information System (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

10/30/2025
Date

Pamela Arifian
Printed Name

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-c. The project site is located approximately 0.6-mile south/southwest of the St. Helena Freeway, State Route 29, which is a Napa County-designated scenic corridor road, and a portion of project site (including Blocks 1, 1A, 2, 3 and 4) is within the scenic corridor buffer (Napa County GIS Viewshed roads and Scenic Corridors Layers). While the project is within a scenic corridor, the project site is not visible from State Route 29 due to topography and southwest-facing aspect; further, the surrounding area includes existing vineyard land and open space, and there is existing vineyard on the adjacent properties to the northwest and north. The project site is in the Agricultural Watershed (AW) zoning district which is dominated by vineyards and typifies the visual character of the area (Napa County GIS, Zoning Districts Layer).

The project site is not located on a prominent hillside, or a major ridgeline (Napa County Baseline Data Report, Chapter 12, map 12-3, 2005). Therefore, the approximately 163 trees in the proposed development area that are proposed for removal would generally not be visible from public roadways. The site is not located near a scenic vista, and there are no significant rock outcroppings or geologic features on the project site that would be impacted by the proposed project.

Schramsberg Vineyard was nominated and determined eligible for inclusion on the National Register of Historic Places (NR #98001251) due to its significance in agriculture and industry. In addition, Schramsberg Winery is listed on the California Inventory of Historic Resources (Department of Parks and Recreation 1976) and the Historic Property Directory (HPD) (Property Number 000097) of the Office of Historic Preservations (OHP 2012). The Winery is outside of the scenic corridor for Highway 29, and, due to topography, is not visible from a viewshed road. The project would add to existing vineyard on the property, and would not damage historic scenic structures within the scenic corridor.

The surrounding land uses and project site include vineyard land, forest and rural residential; views of the proposed project would be consistent with this existing use and dominate use within the area (i.e., vineyard and forest land). Therefore, for the reasons described above, the proposed project would have less than significant impacts on a scenic vista, scenic highway, historic buildings, scenic trees, rock outcrops, and the visual character and quality of the site and surroundings.

d. Proposed agricultural operations in the project site would require some lighted nighttime activities consistent with the nighttime activity already occurring in the project site and 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), that could include nighttime activity (typically from 9 p.m. to 7 a.m.) approximately five days per year. The proposed project would include sulfur applications that could occur between 9 a.m. and 7 a.m., approximately 12 times 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 existing project site uses and 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. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. 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 project site is mapped as Unique Farmland and Other Land by the California Department of Conservation (Important Farmland Finder; Napa County GIS). The proposed project would result in an increase in productive agricultural farmland on the project site. Therefore, the proposed project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use, and there would be no impact.

b. The project site has an Agriculture, Watershed & Open Space designation and is zoned Agricultural Watershed (Napa County GIS Zoning Layer). Therefore, the establishment of vineyard totaling approximately 14.1 gross acres with approximately 11 net planted acres is consistent with project site's land use and zoning designations. The project site is not associated with a Williamson Act contract (Napa County GIS, Ag Contracts). The proposed project would not convert any land within the project site to non-agricultural use; therefore, implementation of the proposed project would not conflict with the project site's land use designation or a Williamson Act contract. No impact would occur.

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." "Timberland" is defined in California Public Resource Code Section 4526 as "land, other than land owned by the federal government and land designated by the board as experimental forest land, which is available for, and capable of, growing a crop of trees of any commercial species used to produce lumber and other forests products, including Christmas Trees. Commercial species shall be determined by the board on a district basis after consultation with the district committees and others." The proposed development area contains coniferous forest (Napa County GIS Zoning Layer, Napa County GIS Vegetation Layer); however, 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 project site is considered timberland according to the California

Forest Practice Rules; a Timber Harvest Plan and Timber Conversion Permit are required for the proposed vineyard development. The Applicant will file the required applications concurrently with the final processing of this erosion control plan, utilizing this IS/MND for its CEQA compliance in issuing the Timber Conversion Permit. The Timber permit process has its own environmental procedural protections built into the process; and will only proceed once this CEQA process is completed. Project approval, if granted, would be subject to the Forest Land Conditions of Approval described below. While the proposed project would convert 12.9 acres of timberland, the project would be consistent with Agricultural Watershed zoning and surrounding land uses. Therefore, with the conditions of approval the impacts would be less than significant.

Forest Land – Condition of Approval: Prior to the commencement of vegetation removal and earth-moving activities pursuant to #P23-00360-ECPA, the owner/permittee shall provide documentation to Napa County Conservation Division demonstrating that a Timber Harvest Plan and Timber Conversion Permit for the proposed project have been obtained from the California Department of Forestry and Fire Protection (CalFire).

		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?	☐	☐	☒	☐

Discussion[1]

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

The Bay Area Air Quality Management District (BAAQMD) 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 along the western side of Napa Valley, within the Napa County climatological subregion of the San Francisco Bay Area Air Basin, which is under the jurisdiction of BAAQMD. The topographical and meteorological features of the Napa Valley subregion 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

[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.

from construction equipment, vehicular haul and worker trips, and the burning of any project area vegetation[3]. 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 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 air 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 (PM_{10}), 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 PM_{10} 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 PM_{10} 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

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

[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.

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.

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 4**.

Table 4 – 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 PM_{10} 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 Vineyards[7] for an approximately 91-acre vineyard development, KJS and Sorrento Vineyard[8] for an approximately 98-acre vineyard development, and Le Colline Vineyards[9] for an approximately 28-acre vineyard development[10].

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 5 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 14.1 gross acres of vineyard. Vineyard construction is anticipated to generate about 15 to 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, and ATVs and passenger vehicle and/or light trucks.

Daily construction emissions associated with the proposed project's 14.1 gross acre vineyard development (approximately 11 net-planted acres) were estimated using the average pounds per day estimated of the three vineyard projects described above and is shown in **Table 5**. As shown in **Table 5** short-term construction emissions associated with the proposed project would be well below the

[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.

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.

Proposed vineyard operations are anticipated to generate at most 850 truck trips annually for anticipated work crews of up to 14 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 harvest season, operations are anticipated to generate up to ten round trips per day, including grape hauling trucks. 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 5 – 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)	1.69	16.64	<0.01	<0.01
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)	0.14	0.42	0.14	0.14
Operational threshold (pounds per day)	54	54	82	54
Significant?	No	No	No	No
	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)	0.14	0.14	0.14	0.14
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 5**, 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 5** 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 approximately 225.08-acre project property is located on Schramsberg Road, approximately 0.6-mile southwest of State Highway 29 and approximately 2.5 miles southeast of the City of Calistoga. Access to the project areas is via the existing driveways and access roads. Access to a majority of the project area, including Blocks 1, 1a, 4, 5 and 6, is via a paved private road (Schramsberg Road) off of State Route 29 and existing gravel and dirt vineyard access roads that serve the existing winery, vineyard and residential uses. Access to Blocks 2 and 3 is via Peterson Driveway and an existing paved private driveway and existing onsite vineyard access roads serving the existing adjacent residence and onsite vineyards.

Surrounding properties are generally used for agricultural and rural residential purposes north and northwest of the project property, with open space (Bothe State Park) immediately south and southeast of the project property. The nearest known schools are Calistoga Elementary School, Calistoga Junior-Senior High School, Palisades High School, located approximately 2.5 miles to the northwest of the project parcel (Napa County GIS: Schools Layer). The nearest residences are in the vicinity of Blocks 2 and 3 along Tucker Road and Summit Drive, with the nearest neighboring residence located approximately 60 feet to the southeast of Block 2. The City of Calistoga is located approximately 2.5 miles to the north.

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 2.6 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:

- Forest Ecosystem Management and Salix Natural Resources Management, Inc., February 8, 2023, Biological Resource Reconnaissance Survey for Schramsberg Winery, 1400 Schramsberg Road, Calistoga, CA APNs 020-390-007, 020-390-008, 020-390-011, 020-200-015 & 020-300-014 (**Exhibit B-1**)
- Forest Ecosystem Management and Salix Natural Resources Management, January 30, 2024, Addendum to Biological Resource Reconnaissance Survey Report – Schramsberg Winery, and Forest Ecosystem Management, January 25, 2024, Northern Spotted Owl Assessment for Schramsberg Timber Harvest Plan & Timber Conversion Plan (**Exhibit B-2**)
- Salix Natural Resource Management, Inc., August 27, 2024, Re: Schramsberg #P23-00360-ECPA, Review Letter #2 Biological Opinion; and Environmental Resource Management, July 15, 2025 Letter (**Exhibit B-3**)
- Applied Civil Engineering, August 30, 2024, Schramsberg Vineyards Co Vegetation Canopy Cover Exhibit (**Exhibit B-4**)
- Correspondence from CDFW following early review of project Biological Resource Reconnaissance Survey (**Exhibit F)**

Forest Ecosystem Management and Salix Natural Resources Management 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. Botanical surveys were conducted on April 4, 2022, April 11, 2022, April 15, 2022, June 21, 2022 and June 12, 2022; and the wildlife and habitat evaluation survey was conducted on April 18, 2022. The surveys focused on the proposed development area and immediate surrounding habitat and documented: the presence or potential for special-status plant and animal species and their habitats, potential substantial adverse effects on

sensitive habitats or communities, potential impacts to federal or state protected wetlands and waters of the U.S., and interference with native wildlife species, wildlife corridors, or native wildlife nursery sites.

The study area includes all lands within one-mile of the boundaries of the parcels involved, as well as the CalFire defined drainage upstream and including the subject parcel utilizing a standard community classification scheme for identifying natural communities from species data. The study area includes the Ritchie Creek watershed and a small portion to the southeast and west of the property ownership (an area outside the Ritchie Creek watershed but within 1 mile of the Property Boundary). The watershed used for this report is larger than the County GIS layer and the ECP narrative. Using a larger watershed for the Biological Report increased the size of the area scoped for listed plant and animal species. As animals move more freely than plants, the scoping area was further expanded to include 5-miles outside the Study Area.

Prior to conducting the biological surveys, biological information for the project area and extending 5 miles from the ownership boundary was obtained from the following sources: the California Department of Fish and Wildlife (CDFW) California Sensitive Natural Communities List, California Natural Diversity Database (CNDDB), California Native Plant Society Electronic Inventory, and the U.S. Fish and Wildlife Service (USFWS) List of Federal Endangered and Threatened Species, Spotted Owl Database (focused on 1.3-mile assessment area surrounding project area), USFWS Information for Planning and Consultation, National Wetlands Inventory, California Aquatic Resources Inventory, Manual of California Vegetation Online, Napa County Checklist of Common Birds of Napa County (Napa-Solano Audubon).

Field surveys were conducted by qualified biologists familiar with the resources of Napa County and surrounding counties, with the goal of identifying the presence of sensitive biological communities, the potential for biological communities on the site to support special-status plant and wildlife species, and the presence of any other sensitive natural resources protected by local, State, or federal laws and regulations. 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), *The Jepson Manual* (Baldwin, 2012), and other relevant materials. Wildlife was identified by their sight, sign, or call. Field surveys were conducted identifying and recording all species in the proposed development area and in the near proximity. Field surveys were completed in 2019 prior to the 2020 Glass Fire. A CalFire-approved Emergency Notification Exemption logging operation was completed in the fall/winer of 2021 to remove some of the dead and dying material within the ownership, primarily within proposed vineyard blocks, around structures and access roads. Follow-up (post-fire) botanical and wildlife habitat surveys were completed on April 4, April 11, April 15, April 18 and June 12 and 21, 2022.

Northern spotted owl surveys were conducted for this project in 2019 (6 surveys), 2020 (3 spot-check surveys), 2021 (3 spot-check surveys), 2022 (6 surveys) and 2023 (6 surveys) and were performed following Protocol for Surveying Proposed Management Activities that May Impact Northern Spotted Owls (USFWS 2012) (**Exhibit B-2**).

The project site was significantly impacted by the 2020 Glass fire, which (resulted in removal of fire-damaged trees through an Emergency Timber Harvest Notice from CalFire) removed a number of trees from the project areas. The pre-fire vegetation communities in the proposed development area consisted of Douglas fir forest, coast live oak woodland, Douglas fir-Ponderosa Pine, Redwood-Douglas fir-CA Laurel, agriculture (vineyards), and ruderal (developed). The project proposes to convert 14.1 gross acres in seven (7) vineyard blocks, including 12.9 acres of pre-fire woodland or forest, and 1.2 acres of existing vineyard. Note that, in conformance with Napa County Code Section 8.80.130, vegetation types were mapped and assessed as they existed prior to June 19, 2018, and as they existed at the time of the original biological resource assessment in 2020, three months prior to the Glass Fire. The Registered Professional Forester opined that the post-fire habitat types would remain basically the same since most species are resprouting post-fire, and that the Douglas fir would reseed the area over the next century (**Exhibit B-3**).

Table 6 – Vegetation Types in the Proposed Development Area and Project Property

Vegetation Types	Approximate Pre-Fire Acres in Development Area	Approximate Pre-Fire Acres on the Project Property
Douglas Fir Forest	11.4	122.7
Coast Live Oak Forest	1.5	23.7
Douglas Fir-Ponderosa Pin	0	10.2
Redwood Douglas fir-CA Laurel	0	15.0
Vineyard	1.2	52.5
Ruderal/Urban	0	4.8
Total	**14.1**	**228.9**

Source: Forest Ecosystem Management and Salix Natural Resources Management, Inc. **Exhibit B-1 and B-2**

a. Special-Status Plants: Based upon a review of the biological resource databases listed in **Exhibit B-1** (Attachment 2), 28 special-status plant species have a high potential to occur within the project study area. Of those, 10 have been documented within the project study area and have a high chance to occur in the proposed development area: Napa false-indigo (*Amorpha californica* var. *napensis*), narrow-anthered brodiaea (*Brodiaea leptandra*), Calistoga ceanothus (*Ceanothus divergens*), holly-leaved ceanothus (*Ceanothus purpureus*), Jepson's leptosiphon (*Leptosiphon jepsonii*), redwood lily (*Lilium rubescens*), Napa lomatium (*Lomatium repostum*), green monardella (*Monardella viridis*), Cobb Mountain lupine (*Lupinus sericatus*), and Coast Range triplet lily (*Triteleia lugens*). The biological surveys, which were timed to correspond to the period sufficient to observe and identify those special-status plants that have the potential to occur in the proposed development area, did not identify any special-status plant species, with the exception of the Coast Range triplet lily (**Exhibit B-1**).

Coast range triplet lily is a member of the brodiaea family, and is found in Lake, Napa, Solano, Monterey and San Benito counties. It is a perennial which grows from a corm. Flowers are dark yellow with purple-brown mid-ribs and can be seen blooming from May through July. It grows on rocky, shallow volcanic or sedimentary soils in partial shade or sun. It is common after fires. These plants do not have a State or Federal Listing but are listed by the California Native Plant Society (CNPS) as 4.3, meaning that these plants are on the watch list for plants of limited distribution, not very threatened in California (low degree and immediacy of threat or no current threats known). Approximately 200 plants were found along a 700-foot span along the ephemeral drainage just north of Block 4 The headwaters of this drainage are situated near the boundary of the Bothe-Napa State Park, with several individuals located within the State Park as well. This plant is relatively common after fires with potential threats being the incidental introduction of non-native and invasive plants; primarily French Broom for this population. The population found in this location would likely be quickly outcompeted and destroyed due to the invasive French Broom (*Genista monspessulana*). The project, as proposed, would remove approximately 5% of the population.

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-3.[11] Additionally, pursuant to Napa County General Plan Policy CON-13,[12] 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.

As proposed, the project would remove approximately 5% of the Coast range triplet lily population as a result of development of Block 4. This would be considered a potentially significant impact. Implementation of **Mitigation Measure BIO-1** would require a reconfiguration of the Block 4 footprint to avoid the Coast range triplet lily populations with a minimum 25-foot setback, as recommended by the biologist (**Exhibits B-1 and B-2**). Avoidance with a 25-foot buffer is necessary to decrease incidental introduction of non-native and invasive plants utilized in vineyard plantings from encroachment, thereby reducing potential indirect impacts to these plant populations. Implementation of **Mitigation Measure BIO-1** would also require that any plants that are inadvertently removed as a result of vineyard development associated with this erosion control plan shall be replaced on-site at a 2:1 ratio, which would reduce potential cumulative impacts. With implementation of **Mitigation Measure BIO-1,** potential direct, indirect and cumulative impacts on special status plant species would be less than significant.

Mitigation Measure BIO-1: The Owner/Permittee shall revise #P23-00360-ECPA prior to approval to minimize potential impacts to special-status plant species (i.e., Coast range triplet lily) as follows:

a. Based on the footprint of Block 4 as shown on the Schramsberg Vineyard Development Erosion Control Plans, dated May 17, 2024, and stamped by Michael R. Muelrath (RPE No. 67435), revise the block boundary prior to approval to avoid and create a minimum 25-foot buffer from the Coast range triplet lily populations identified in Map #7 in the Biological Resource Survey (Forest Ecosystem Management and Salix Natural Resources Management, Inc., February 8, 2023 – **Exhibit B-1**), The minimum 25-foot setback shall be accurately demarcated in consultation with a qualified biologist with GPS.
b. Prior to the commencement of earthmoving activities associated with #P23-00360-ECPA, the minimum 25-foot setback (i.e., clearing limits) shall be accurately demarcated by a qualified engineer in consultation with a qualified biologist with GPS equipment and the clearing limits shall be accurately flagged with temporary construction flagging/fencing. The precise

[11] Goal Con-3: Protect the continued presence of special-status species, including special-status plants, special-status wildlife, and their habitats, and comply with all applicable state, federal, or local laws or regulations.

[12] Policy Con-13: The County shall require that all discretionary residential, commercial, industrial, recreational, agricultural, and water development projects consider and address impacts to wildlife habitat and avoid impacts to fisheries and habitat supporting special-status species to the extent feasible. Where impacts to wildlife and special-status species cannot be avoided, projects shall include effective mitigation measures and management plans including provisions to: Provide protection for habitat supporting special-status species through buffering or other means.

locations of said demarcation shall be inspected and approved by the Conservation Division prior to the commencement of any earthmoving activities.

c. No equipment or materials shall be laid down outside of the demarcated clearing limits of #P23-00360-ECPA during vineyard development and operation.
d. Prior to the removal of temporary flagging/fencing adjacent to the Coast range triplet lily populations, the Owner/Permittee shall install signage at regular intervals that inform vineyard personnel of the sensitivity and avoidance of the special status plants,
e. Herbicide use shall be limited to those products that pose no negative effect to Coast range triplet lily or to habitat adjacent to streams.
f. In accordance with Napa County Code Section 18.108.100, Erosion hazard areas – Vegetation preservation and replacement) any Coast range triplet lily plants/population inadvertently removed as a result of vineyard development authorized under #P23-00360-ECPA shall be replaced on-site at a ratio of 2:1 at locations within 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 of the special-status plant species being removed including sizes and/or application rates: seed mixes shall not contain species known to be noxious weeks and any non-native grasses should be sterile varieties, iii) planting notes and details including any recommended plant protection measures, iv) invasive species removal and management specifications, v) an implementation schedule, vi) performance standards with a minimum success rate of 80%, and vii) a monitoring schedule for a period of at least three years to ensure success criteria are met.

With implementation of **Mitigation Measure BIO-1,** the project as proposed would avoid existing Coast range triplet lily populations and provide protection from indirect impacts associated with adjacent vineyard development, resulting in a less than significant impact.

This is consistent with the following Napa County General Plan Conservation Element goals, policies, and Zoning Ordinance: General Plan Goal CON-3 as it protects the continued presence of special-status plant species or its habitat; Policy CON-13 in that impacts to special-status habitat can be avoided while allowing for the development of up to approximately 13.9 gross acres of agriculture on the project property; Policy CON-17 because the removal and disturbance of a sensitive natural plant community that contains special-status plant species is prevented; and, the purpose and intent of the Conservation Regulations (NCC Chapter 18.108) in that it preserves natural habitat or existing vegetation, and does not adversely affect sensitive, rare, threatened, or endangered plants. Less than significant impacts would result related tor project impacts on special status plants, following implementation of **Mitigation Measure BIO-1**.

See item (e), below, for discussion on oak woodland.

Special-Status Animals: Based upon a review of the biological resource databases listed in **Exhibit B-1**, 86 special-status animal species have the potential to occur on the project site and/or within one (1) mile of the project site. Of these, fifteen (15) species have the potential to occur in the Study Area (i.e,, proposed development area and the entire Schramsberg property ownership), including: Cooper's hawk (*Accipiter cooperii*), sharp-shinned hawk (*Accipiter straitus*), Vaux's swift (*Chaetura vauxi*), olive-sided flycatcher (*Contopus cooperi*), purple martin (*Progne subis*), northern spotted owl (*Strix occidentalis caurina*), pallid bat (*Antrozous pallidus*), ringtail (*Bassariscus astutus)*, Townsend's big-eared bat (*Corynorhinus townsendii),* western red bat (*Lasiurus blossevillii*), and long-eared myotis (*Myotis evotis*), California giant salamander (*Dicamptodon ensatus),* western pond turtle (*Emys marmorata*), California red-legged frog (*Rana draytonii*), and western bumblebee (*Bombus occidentalis).* These species are discussed in further detail below and in **Exhibit B-1**.

Northern spotted owls (NSO) are typically residents within suitable habitat and do not engage in migratory behavior. Northern spotted owl's habitat includes a forest with dense, multi-layered canopy of several tree species including mixed conifer, redwood and Douglas-fir habitats; tree species of varying sizes and ages; abundant snags/cavity trees, broken tops, or platform-like structures; and open spaces among the lower branches to allow for flight. USFWS further defines northern spotted owl habitat as having at least 40% overstory canopy cover, with nesting/roosting habitat within stands exceeding 60% overstory canopy (with over 80% preferred). In the interior region of their range (as seen in Napa County), there appears to be a preference for well-shaded habitat in narrow, steep-sided canyons with north or east-facing slopes to assist in thermoregulatory needs, as they are intolerant of high temperatures. They feed primarily upon woodrats and deer mice, but also are known to eat squirrels, mice, voles, and rabbits. Northern spotted owls breed February through August, with peak activity in April and May. Sensitive to habitat destruction and fragmentation as well as invading barred owls displacing northern spotted owls from their territories. NSO breed from February through August, with peak activity in April and May. NSO are known to breed in Napa County.

Cooper's hawks are mostly yearlong, breeding residents throughout most of the wooded portion of California, in habitat that includes dense stands of live oak, riparian deciduous, or other forest habitats near water. The Cooper's hawk hunts in broken woodland and habitat edges, and nests in deciduous and coniferous trees, and are known to have nested in Napa County. They breed in March through August, with peak activity in May through July. Potential threats include habitat degradation, as well as direct or indirect human disturbance at nest sites.

Sharp-shinned hawks are migratory and are typically winter residents throughout California. Preferred nesting habitats include dense, pole and small tree stands of conifers within cool, moist, well shaded, dense stands of forests with little ground cover and often near water. Often sharp-shinned hawks will forage in openings at the edge of woodlands, hedgerows, brushy pastures, and shorelines. They breed in April through August with peak late May to July. The total breeding population within California is small and vulnerable to impact from falconry, logging and competition with Cooper's Hawks.

Vaux's Swift are summer residents of northern California, with preferred nesting habitats that include redwood, Ponderosa pine, and Douglas fir forests, often near water. Nests and roost sites are typically built on the vertical inner wall of a large, hollow tree or snag, especially tall stubs charred by fire. They arrive in California mid-April and breeds from early May to mid-August. Solitary nesting is typical; however, communal roosts are common, particularly during migration. Vaux's Swifts are known to have nested in Napa County. Potential threats include removal of nest sites and lice.

Olive-sided flycatchers are summer residents in a wide variety of forest and woodland habitats below 9,000 feet throughout California. Preferred nesting habitats include mixed conifer, montane hardwood-conifer, Douglas fir, redwood, red fir, and lodgepole pine; usually along forest edges. These birds forage for flying insects in forest openings, burns, edges, and other mixed open areas in forest habitats. The peak of egg-laying is in June; they are known to have nested in Napa County. Habitat degradation and loss is the most important threat.

Purple martin are uncommon to rare residents in a variety of wooded, low-elevation habitats throughout the state. Purple martins frequent old-growth, multi-layer, open forests and woodlands with snags during the breeding season. Purple martins breed April through August, with peak activity in June. Populations have declined because of loss of large snags, fire suppression, and competition for nest cavities from European starlings and house sparrows.

Ringtail are widely distributed, common to uncommon permanent residents in California. Their habitat includes various riparian habitats, and in brush stands of most forest and shrub habitats at low to middle elevations. Use hollow trees, logs, snags, cavities in talus or other rocky areas, and other recesses are used for cover. Nests in rock recesses, hollow trees, logs, snags, abandoned burrows, or woodrat nests. Usually found within ½ mile of permanent water. Breeding season is from May to June. Potential threats include bobcats, raccoons, foxes, and large owls. Potential competition for food exists between ringtails and raccoons, foxes, coyotes, large owls, rattle and gopher snakes.

Pallid bat is a relatively common species of low elevations in California and occurs in a wide variety of habitats including grasslands, shrublands, woodlands, and forests; but it is most common in open, dry habitats with rocky areas for roosting. Pallid bats mate from late October to February with maternity colonies forming in early April. Young are born April – July, with most in May and June. Young have been observed flying in July and August. The species is sensitive to disturbance of roosting sites.

Townsend's big-eared bats are found throughout California, in all but subalpine and alpine habitats, being most abundant in mesic habitats. Caves, mines, tunnels, buildings, or other human-made structures are used for roosting with separate day, night, hibernation and maternity roosts used. Small clusters or groups (less than 100 individuals) of females and young form the maternity colony. They glean insects from brush or trees and feeds along habitat edges. Mating occurs from November – February. Births occur in May and June with a peak in late May.

Western red bats are locally common in some areas in California. There is migration between summer and winter ranges, and migrants may be found outside the normal range. Foraging occurs over a wide variety of habitats including grassland, shrub lands, open woodlands, forests, and croplands. They roost primarily in trees, less often in shrubs. Roosts are often along the edges of habitats and are often adjacent to streams, fields, or urban areas. Western red bats mate in August and September, births are from late May through early July, with young capable of flight between 3 to 6 weeks of age. A variety of animals including hawks, owls, opossums, cats, and jays prey on them.

The long-eared myotis is widespread in California but believed to be uncommon throughout its range. This species has been found in nearly all brush, woodland, and forest habitats, from sea level to 9,000 feet with coniferous woodlands and forests preferred. This

species roosts in buildings, crevices, spaces under bark, and snags. Caves are used as night roosts. It feeds primarily along edges, in open habitats often near water. Mating occurs in the fall. Young are born from May to July, with a peak in June. Most young are flying by early August. The species is sensitive to disturbance of roosting sites.

California giant salamander seasonal activity pattern is unknown; adults have been observed active on rainy nights moving toward streams. Habitat includes preferably cold and flowing water, which is necessary for egg-laying sites and for aquatic larvae. Usually found in cool, moist forest habitats and associated with rocky streams and springs, and occasionally found in lakes and ponds. They breed from March to May. Potential threats include predators (water shrews and aquatic garter snakes); additionally, adults cannibalize larvae.

Western pond turtles move overland for up to 325 feet during spring or early summer. Habitat includes permanent ponds, lakes, streams, irrigation ditches, or permanent pools along intermittent streams in a wide variety of habitats. Require basking sites such as partially submerged logs, rocks, mats of floating vegetation, or open mud banks. Nesting includes sandy banks along slow-moving streams; or along foothill streams, females may climb hillsides with nests within many soil types (sandy to very hard). Breeding season is from March to August. Hatchlings may be subject to rapid death by desiccation if exposed to hot, dry conditions. Hatchlings and juveniles are preyed upon by fish, bullfrogs, garter snakes, wading birds, and mammals. There is a pond within the Study Area that might be suitable for this species.

California red-legged frogs are active all year coastally, but with periods of inactivity elsewhere. A highly aquatic species with little movement away from streamside habitats, this species requires permanent or nearly permanent pools for larval development, which takes 11 to 20 weeks. Occurs in vicinity of quiet, permanent pools of streams, marshes, and occasionally ponds. They breed January to July with a peak in February in the south, and March to July in the north. Populations are highly restricted and consist of small numbers of individuals. Human activities that result in habitat destruction and/or the introduction of exotic competitors (i.e. bullfrogs and sunfish) may have a negative effect.

Western bumble bees inhabit a wide variety of natural, agricultural, urban, and rural habitats; although species richness tends to peak in flower-rich meadows of forests and subalpine zones. Western Bumble Bees are often found in wetter areas. Bumble Bees nest and hibernate in the ground in abandoned rodent burrows or similar holes, or above ground in log cavities, dense tufts of grass, or dead vegetation. They require floral resources and undisturbed nest sites and overwintering areas. They are often associated with the following plants: Cirsium, Erigonum, Solidago, Ceanothus, Centaurea, Penstemon, Fabaceae, Asteraceae, Rhamnaceae, and Rosaceae. Primitively eusocial insect that live in colonies made up of one queen, female workers, and near the end of the season reproductive members of the colony (new queens and males). New colonies are initiated by solitary queens, generally in the early spring. The flight period of queens is early February to late November, peaking in late June and late September. The flight period for workers and males is from early April to early November with worker abundance peaks in early August and male abundance peaks in early September. Potential threats include pathogens from commercial bumble bees and other sources, impacts from reduced genetic diversity, and habitat alterations (conifer encroachment, grazing). Other threats include pesticide use, fire, agricultural intensification, urban development, and climate change. The project property does contain habitat for Western bumble bees, with Cirsium, Erigonum, Asteraceae, Ceanothus, Fabaceae, Rhamnaceae, and Rosaceae all identified. The CNDDB lists occurrences near the Napa River within the 5-mile assessment area, however, this species was not identified within the project area.

The biological surveys identified habitat for these special-status animal species within the proposed development area and immediately adjacent areas; no special-status animal species were observed. Prior to the Glass Fire, suitable habitat existed for northern spotted owl, Cooper's hawk, sharp-shinned hawk, Vaux's swift, olive-sided flycatcher, purple martin, pallid bat, ringtail, Townsend's big-eared bat, western red bat, and long-eared myotis. The impact of the Glass Fire may have improved the potential for habitat for some species by creating snags and cavity trees; however, post-fire logging of dead and dying trees within the project areas under the Emergency Notice resulted in the elimination of suitable habitat within the project areas for these species. Marginal suitable habitat for NSO exists within ¼-mile of some of the project area; no NSO individuals were detected within the study area during the nocturnal protocol surveys completed for the project. During protocol-level nocturnal NSO surveys, bats were observed near the south/southeastern property boundary; however, a targeted bat survey was not completed as part of the biological resources assessment.

Broken topped trees, snags, and cavity trees were identified throughout the Study Area, with many created by the Glass Fire. These structures could be used by nesting birds (including the special status bird species discussed above, in addition to other migratory birds and raptors protected by the Migratory Bird Treaty Act and California Fish and Wildlife Code) and/or nesting/roosting bats. The lack of live "screen" trees (due to the wildfire) may decrease the value of these trees for habitat.

Within the Project Area, nearly all burned dead/dying trees were removed under a CalFire Emergency Timber Operations Permit; however, many cavity trees occur outside the Project Area, providing potential habitat for bats and other cavity-dependent species (i.e., ringtail). The project as proposed would remove approximately 163 trees which were left standing. According to the Registered Professional Forester who implemented the Emergency Timber Permit, the trees left standing were assumed to have a better chance of survival, but many of those did not survive. A bat habitat assessment was not prepared for this project.

Removal of trees and development activities within the project areas could result in direct and indirect impacts on nesting birds, roosting bats and ringtail. Temporary and intermittent increases in noise levels during construction may cause nest abandonment and death of young or loss of reproductive potential at active bird nests located near project activities. These are considered potentially significant impacts.

Implementation of **Mitigation Measure BIO-2** would ensure that a bat habitat assessment is performed prior to tree removal to identify potential bat habitat trees within the project area and surrounding area, and to ensure a phased trimming and removal of trees to allow bats to relocate. Implementation of **Mitigation Measure BIO-3** would require a preconstruction survey for ringtail, and, if dens are found within the project area, the implementation of an avoidance plan developed in consultation with CDFW. Implementation of **Mitigation Measure BIO-4** would ensure that a preconstruction nesting bird survey is performed and that any nesting birds and raptors within or adjacent to the project area be avoided by appropriate setbacks in consultation with CDFW, pursuant to Fish and Game Code Section 3500 et seq. and the federal Migratory Birds Treaty Act. Implementation of **Mitigation Measure BIO-2, BIO-3 and BIO-4** would reduce potentially significant direct and indirect impacts on bats, ringtail and special-status and protected bird species, including raptors, migratory birds, Vaux's swift, purple martin, and olive-sided flycatcher to a less than significant level.

Mitigation Measure BIO-2: The owner/permittee shall revise Erosion Control Plan #P23-00360-ECPA prior to approval to include the following measures to minimize impacts associated with the potential loss and disturbance of bat species:

a. August 31 through October 15, and March 1 to April 15: Under the supervision of a qualified biologist (defined as having demonstrable qualifications and experience with the particular species for which they are surveying), bat habitat trees shall be removed or trimmed in a two-phased system conducted over two consecutive days. The first day (in the afternoon), limbs and branches will be removed by a tree cutter using chainsaws only. Limbs with cavities, crevices and deep bark fissures will be avoided, and only branches or limbs without those features will be removed. On the second day, the entire tree will be removed. All felled trees shall remain on the ground for at least 24 hours prior to disposal to allow any present bats within the trees to escape.
b. Bat habitat tree removal or trimming between October 16 and February 28/29 of the following year or between April 16 and August 30: A qualified biologist shall conduct pre-construction survey within 14 days of project initiation to determine absence or presence of special-status bat species. A copy of the survey results shall be provided to the County Planning Division and CDFW prior to commencement of work. If special-status bat species are not present removal can proceed as prescribed. If bats are found to be present a plan for removal or exclusion will be developed by a qualified biologist in conjunction with the County Planning Division and CDFW. The removal or exclusion plan shall be reviewed and authorized by the County Planning Division and implemented prior to commencement of the ECPA.

Mitigation Measure BIO-3: The owner/permittee shall revise Erosion Control Plan #P23-00360-ECPA prior to approval to include the following measures to minimize impacts associated with the potential loss and disturbance of ringtail:

c. No more than 14 days before the start of ground disturbance activities within open grassland, oak woodland, or riparian forest habitat, a qualified biologist shall conduct pre-construction surveys to determine if ringtail dens are present. If no active ringtail dens are observed, no further mitigation shall be recommended.
d. If active ringtail dens are determined to be present within the project development area, the biologist shall notify Napa County and develop an avoidance plan using best available scientific practices, in consultation with CDFW, to ensure impacts to the species are avoided prior to the initiation of construction activities. The plan shall include an appropriately-sized avoidance based on environmental conditions of the den site and project activities proposed in the vicinity.

Mitigation Measure BIO-4: The owner/permittee shall revise Erosion Control Plan #P23-00360-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 (including Vaux's swift, purple martin and olive-sided flycatcher) and raptors consistent with and pursuant to California Fish and Game Code Sections 3503 and 3503.5:

a. For earth-disturbing activities occurring between February 1 and August 31 (which coincides with the grading season of April 1 through October 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, and specifically familiar with the vocalizations of Vaux's swift, purple martin and olive-sided flycatcher) shall

conduct preconstruction surveys for nesting birds within all suitable habitat (including snags and cavity trees) 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.

b. 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.

c. In the event that nesting birds are found, the owner/permittee shall identify appropriate avoidance methods and exclusion buffers in consultation with CDFW, the County Conservation Division and the U.S. Fish and Wildlife Service (USFWS) 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 the USFWS and/or CDFW. The buffer distances shall be specified to protect the bird's normal behavior to prevent nesting failure and abandonment and comply with Fish and Game Code Section 3500 et seq. and the federal Migratory Bird Treaty Act. The qualified biologist shall have authority to order the cessation of all nearby Project activities if the nesting birds exhibit abnormal behavior which may cause reproductive failure (nest abandonment and loss of eggs and/or young) until an appropriate buffer is established. The qualified biologist shall monitor the behavior of the birds (adults and young, when present) at the nest site to ensure that they are not disturbed by Project work. Nest monitoring shall continue during project development until the young have fully fledged, as determined by the qualified biologist, unless otherwise approved in writing by CDFW.

d. 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 as approved in writing by CDFW.

e. 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.

Specific to NSO, a Northern Spotted Owl Assessment was included in the Biological Resources Report for the proposed project (**Exhibit B-2**). There is one known northern spotted owl territory within 1.3 miles of the proposed project. Protocol nocturnal surveys for NSO were conducted for this project in 2018 (6 surveys), 2019 (6 surveys), 2020 (3 spot-check surveys), 2021 (3 spot-check surveys), 2022 (6 surveys) and 2023 (6 surveys). There were no NSO detected during the surveys. The pre-fire NSO habitat within the project area contained all NSO habitat types as defined by USFWS (i.e., from low quality foraging habitat to high quality nesting/roosting habitat). In the pre-fire condition, Blocks 1, 5 and 6 had the vegetation characteristics of nesting/roosting. The 2020 Glass Fire downgraded and/or removed much of the NSO habitat in this region. Post-fire, there was no longer any suitable NSO habitat within the project area due to lack of overstory canopy. The project would not remove any NSO habitat, nor will it increase fragmentation of the existing living forests left in the area (**Exhibit B-2**). Less than significant direct impacts are anticipated.

The project is located along the edge of the highly developed Napa Valley. Much of the area within 1.3 miles of the project area consists of commercial vineyards, wineries, commercial property, and residential houses. Immediately to the south is Bothe Napa Valley State Park. There are some living forests within ¼-mile of the project area, and the NSO movement is unknown post-fire. As such, the project could result in potentially significant indirect and cumulative impacts on NSO.

Implementation of **Mitigation Measure BIO-5** would require that qualified project biologist(s) provide a NSO nesting habitat assessment within the 0.25-mile radius of the project areas, and follow appropriate protocol surveys and 0.25-mile radius buffers from nests if necessary, with written approval by CDFW. With implementation of **Mitigation Measure BIO-5**, the project would result in less than significant impacts related to northern spotted owl.

> **Mitigation Measure BIO-5:** Prior to initiation of project development activities, a qualified biologist shall provide an assessment of potential NSO nesting habitat within the Project area and a 0.25-mile radius and obtain CDFW's written acceptance of the assessment. Alternatively, if the assessment is not completed, or if it concludes that NSO nesting habitat is present, then no Project activities within 0.25 miles of potential NSO nesting habitat shall occur between March 15 and July 31 unless a qualified biologist approved in writing by CDFW conducts NSO surveys following the U.S. Fish and Wildlife Service (USFWS) *Protocol for Surveying Proposed Management Activities That May Impact Northern Spotted Owls*, dated (revised) January 9, 2012. Surveys shall be conducted in accordance with Section 9 of the survey protocol, *Surveys for Disturbance-Only Projects*.

If breeding NSO are detected during surveys, a 0.25 mile no-disturbance buffer zone shall be implemented around the nest until the end of the breeding season, or a qualified biologist determines that the nest is no longer active, unless otherwise approved in writing by CDFW. The Project shall obtain CDFW's written acceptance of the qualified biologist and survey report prior to Project construction occurring between March 15 and July 31 each year.

Alternate buffer zones may be proposed to CDFW after conducting an auditory and visual disturbance analysis following the USFWS guidance, *Estimating the Effects of Auditory and Visual Disturbance to Northern Spotted Owls and Marbled Murrelets in Northwestern California*, dated October 1, 2020. Alternative buffers must be approved in writing by CDFW.

Regarding special-status amphibians and reptiles, there is a pond and other watercourses within the study area that would be marginally suitable for California giant salamander, Western pond turtle and California red-legged frogs, however, the seasonal watercourse and pond do not have the water flow, suitable pools and rocky substrate for California giant salamander, Western pond turtle and California red-legged frogs. The closest proposed vineyard block (Block 4) is over 1,000 feet from the pond. Other watercourses within the ownership are seasonal and may lack suitable substrate and water flow for these species. None of these special-status species were observed during the survey on April 18, 2022; however, it is noted that the overcast and cooler temperatures was not ideal for observing frogs and basking turtles. Disturbance within these watercourses and near the pond could result in potentially significant impacts on these species. The project, as proposed, would occur over 1,000-feet from the pond and avoid the watercourses with minimum required setbacks pursuant to NCC Section 18.108.025; therefore, project impacts on California giant salamander, Western pond turtle and California red-legged frog are anticipated to be less than significant. Further, implementation of the following standard condition of approval regarding stream protection would ensure that the on-site streams, their habitat and potential special-status species are protected from development impacts.

Conditions of Approval - Stream Protection: The owner/permittee shall implement the following measures to prevent the inadvertent encroachment into specified stream setbacks during construction and subsequent vineyard operations:

- 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.

- 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.

As stated in the Biological Resources Report, the study area (i.e. the project area and the entire property ownership) contains habitat for western bumble bees, with Cirsium, Erigonum, Asteraceae, Ceanothus, Fabaceae, Rhamnaceae and Rosaceae all identified (**Exhibit B-1**). The CNDDB lists occurrences of the western bumble bee near the Napa River just outside of the BREA (i.e., biological resources evaluation area, which includes all lands within 1-mile of the project property boundaries, and including the project property), but within the 5-mile assessment area. Western bumble bees were not identified within the property during the field surveys.

Western bumble bee nests build ground nests that look like ant holes at the surface, and above-ground nests in snags/cavity trees or large woody debris. Large areas of heavily burned forest land have been retained around all of the proposed blocks, with snags, cavity trees and large woody debris outside of the project area but within at least 500-feet from proposed vineyards. The Schramsberg property also maintains pollinator habitat through landscaping around the winery and residential structures. While Western bumble bees were not identified during the protocol surveys, this species moves nest sites each year; therefore, the potential exists that the species may have established nests within the snags or large cavities in the trees remaining in the proposed project areas following the removal of dead and dying trees under the CalFire Emergency Notice or established ground nests within the proposed project areas.

Development of project areas or removal of vegetation that contains Western bumble bee nests would be considered a potentially significant impact. Implementation of **Mitigation Measure BIO-6** would require pre-construction surveys for Western bumble bee in accordance with CDFW protocol, and avoidance or consultation with CDFW to ensure that any take is permitted with implementation of required minimization or mitigation requirements. With implementation of **Mitigation Measure BIO-6**, potential project impacts on Western bumble bee would be less than significant.

Mitigation Measure BIO-6: Prior to initiation of project development activities, the owner/permittee shall provide a Western bumble bee habitat assessment prepared by a qualified biologist in accordance with *Survey Considerations for CESA Candidate Bumble Bee Species (*CDFW 2023 or current) to CDFW and County Conservation Division for review. Surveys shall be conducted by a qualified biologist familiar with the behavior and life history of Western bumble bee during the colony active period (i.e., April through August) and when floral resources are in peak bloom during each year that Project work activities occur. If Western bumble bee are detected during surveys, a Western bumble bee avoidance plan shall be developed and provided to CDFW and County Conservation Division for review prior to work activities involving ground disturbance or vegetation removal. The project shall incorporate CDFW's comments into the avoidance plan. If take of Western bumble bee cannot be avoided, the owner/permittee shall consult with CDFW pursuant to CESA and obtain an Incidental Take Permit before project activities may commence.

With implementation of **Mitigation Measures BIO-1 through BIO-6**, potential impacts related to special status plant and wildlife species would be less than significant.

b-c. There are several streams within the project property, primarily ephemeral, including three (3) ephemeral streams that are adjacent to proposed vineyard blocks, all of which are avoided with minimum required stream setbacks in accordance with NCC 18.108.025 (**Exhibit A**). Two (2) of those streams flow into Schramsberg Creek, a blue-line stream located on the property and that is tributary to the Napa River. These streams occur over 50-feet away from Block 1b and over 50-feet away from Block 4. There is an additional ephemeral stream that occurs between Blocks 5 and 6, and flows into Nash Creek, a blue-line stream that is tributary to the Napa River. This stream would be avoided with a 75-foot setback as proposed. Some of the burned trees that occur within the watercourse setback remain, however no live overstory canopy cover remains.

The project parcel does not contain any indicators of wetlands and there are no riparian woodlands identified on the parcel. As such, no impacts would result from project implementation related to wetlands or riparian woodlands.

The proposed project has also been designed to reduce 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); therefore, the proposed project would result in less than significant impacts to this drainage. Implementation of the Stream Protection Condition of Approval, as detailed in response (a), above, would ensure that streams are avoided and protected from development activities with temporary construction fencing for the duration of development activities.

A rocky outcrop is a visible exposure of bedrock or superficial deposits on the earth's surface where underlying rocks are exposed. Rocky outcrops can provide wildlife species with protection from the elements and potential predators (denning and hibernation sites), provide breeding or rearing sites, and thermoregulation (basking) sites. While not a biotic community, rocky outcrops provide an important habitat feature for many wildlife species that may use these areas for nesting, roosting, foraging, basking or other purposes.

Numerous areas with clustered rocks were identified throughout the Study Area. It appears these were man-made (i.e., collection of rocks moved away from farming sites); there are no steep sides or large overhangs. These sites may be suitable for basking reptiles or cover underneath for amphibians and reptiles, however they are not large or tall enough to support roosting bats or raptors. These unique rock habitat elements are located outside the project areas; less than significant impacts would result.

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 property does not connect any unique habitats together. There are ephemeral streams on the property, which, even when dry, could provide localized movement and shelter habitat for common wildlife species. The project, as proposed, provides setbacks from streams that meet or exceed the minimum required setbacks pursuant to NCC Section 18.108.025.

Wildlife nursery sites were not identified in the project site; therefore, no impacts would result.

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. Additionally, Policy CON-18(E) obligates the County to require relocation or removal of existing perimeter fencing installed on or after February 16, 2007 to offset the impact caused by new vineyard development.

There is existing fencing around existing vineyard blocks; however, due to fire damage, some fencing is down and open in many areas throughout the property, with on-going replacement of wildlife exclusion fencing around existing vineyards occurring since the fire. The project proposes new fencing that would enclose the proposed vineyard blocks and replace the fencing around existing vineyard blocks.

As proposed, the fencing for Block 4 would extend around the totality of existing vineyard in that parcel (APN 020-300-015) and from the limits of proposed Block 4 to the property line, resulting in enclosure of a large area including a forested area that contains an ephemeral stream that runs north-south as identified on Sheet C6 of the project plans (**Exhibit A**). As ephemeral streams, even when dry, can provide shelter habitat and localized movement, the enclosure of this section of stream between existing vineyard blocks as proposed would result in elimination of access and movement by larger animals north-south through the parcel. This would be considered a potentially significant impact.

Additionally, the extension of the proposed wildlife exclusion fencing beyond the vineyard block limits for proposed Blocks 3 and 4 to the eastern property line and along the property line to the existing fencing would result in reduced access to the parcel by larger animals from the east. This would be considered a potentially significant impact.

Further, as proposed, the wildlife exclusion fencing would enclose Blocks 5 and 6 together, resulting in enclosure of a section of the ephemeral stream that runs southwest-northeast through the parcel. This stream is avoided by the project with a proposed 75-foot setback, which is above the minimum required setback found in NCC Section 18.108.025. Enclosing this ephemeral stream with wildlife exclusion fencing would eliminate access and localized movement through the stream corridor between Blocks 5 and 6; this would be considered a potentially significant impact.

Implementation of **Mitigation Measure BIO-7** would require project revisions to limit installation of wildlife exclusion fencing to the perimeter of the vineyard blocks exclusively, consistent with General Plan Policy CON-18, which encourages the reduction of impacts to habitat conservation and connectivity. Following implementation of **Mitigation Measure BIO-7,** the anticipated project impacts on wildlife access and movement through the property would be less than significant level.

> **Mitigation Measure BIO-7:** The owner/permittee shall revise Erosion Control Plan #P23-00360-ECPA prior to approval to eliminate barriers to localized movement through and access to habitat on the project parcels and along ephemeral drainages, consistent with General Plan Policy CON-18, as follows:
>
> a. Proposed fencing associated with development of Block 4 shall be limited to enclosing the following vineyard blocks only: Block P1 (contains solar panels) as identified in #97085-ECPA, Block 04A as identified in #P17-00173-ECPA, and along the limits proposed Block 4 only (i.e., not extending to the property line and along the property line).
> b. Proposed fencing associated with development of Block 4 shall be limited to enclosing the following vineyard blocks only: Blocks C2 and C3 as identified in #97085-ECPA and Block C1 as identified as #P08-00374-ECPA and Blocks 98C and 08D as identified in #P17-00173-ECPA.
> c. Existing fencing installed after February 16, 2007 that traverses through the ephemeral stream on the southern end of the ephemeral stream section between the existing vineyard blocks identified in (a) and (b), above, shall be removed and replaced around the perimeter of the individual vineyard blocks so that the ephemeral stream corridor is accessible.
> d. Proposed fencing associated with development of Blocks 5 and 6 shall be limited to enclosing each proposed block separately along the limits of the development footprint of each block so that the ephemeral stream and required setbacks are not enclosed.
> e. 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.
> f. Exit gates shall be installed at the corners of deer fencing to allow trapped wildlife to escape.
> g. Any modifications to the location of wildlife exclusion fencing as specified in Erosion Control Plan #P23-00360-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.

e. The project property contains approximately 122.72 acres of Douglas fir forest (with approximately 11.4 acres in the proposed development area), 23.73 acres of coast live oak woodland (with approximately 1.5 acres occurring in the proposed development area), 10.2 acres of Douglas fir-Ponderosa Pine forest (none of which occurs in the proposed development area), and 15.0 acres of Redwood-Douglas fire-CA Laurel forest (none of which occurs in the proposed development area). The project property also contains approximately 52.5 acres of agricultural land (1.2 acres of which occurs within the proposed development area) and 4.85 acres of ruderal land (none of which occurs in the proposed development area).

Large swaths of the project property were impacted by the 2020 Glass Fire, which burned a significant portion of the oak woodland and coniferous forest populations in the project areas, which were subsequently logged under the CalFire Emergency Notice, removing dead or dying trees. As proposed, the project would remove approximately 163 trees that remained from the fire and logging, many of which did not survive, within an approximately 1-acre of canopy area (**Exhibit B-3**).

The project proposes the conversion of approximately 12.9 acres of forest and woodland to vineyard within seven (7) blocks scattered throughout the ownership (five parcels). The following describes each block:

- Block 1 (4.5 acres): This block is located along the edge of an existing vineyard. Before the Glass wildfire, the site had a mature overstory tree canopy cover of 80 to 90%, with a sparse shrub layer. Overstory trees included Douglas-fir, tanoak, black oak, live oak, and madrone. There were a few Douglas-fir and black oak trees that measured over 38" dbh. The area was impacted by the 2020 Glass Wildfire, with the CalFire Emergency Notice removing all the dead and dying trees. During the 2022 site visits, there were very few trees left alive within this block.

- Block 1b (0.7 acres): This block is located along the edge of an existing vineyard. This block was unpermitted when established sometime between 1993 and 2003 (Google Earth shows 1993 open-fallow ground and vines in place in 2003 – there are no available photos for the period in between). This site has been cultivated in grapes for over 20 years.

- Block 2 (0.3 acres): This block is located along the eastern property boundary near an existing vineyard, and has houses close by. Before the Glass wildfire, the site had a mature overstory tree canopy cover of 80 – 90% with a sparse shrub layer. Overstory trees included mature madrone, Douglas-fir, black oak, and live oak. At the time, Douglas-fir were 8 – 20" dbh and oaks about 18" dbh. The area was impacted by the Glass Wildfire, with the CalFire Emergency Notice removing the dead and dying trees. During the 2022 site visits, no trees were standing within this block, and slash piles were being burned.

- Block 3 (1.0 acres): This block is located along the eastern property boundary on the south end of an existing vineyard. Before the Glass wildfire, the site was similar to pre-wildfire Block 2, but due to less overstory tree canopy cover, the shrub layer was denser and consisted of manzanita, ceanothus, and poison oak. The area was impacted by the Glass wildfire, with the CalFire Emergency Notice removing the dead and dying trees. During the 2022 site visits, no trees were standing within this block with slash piles that required burning.

- Block 4 (1.0 acres): This block is located along the eastern property boundary and along the edge and to the east of an existing vineyard. Approximately 0.6-acre of this block contains existing vineyard established in late 2003 (according to Google Earth imagery) without benefit of a permit. Before 2003, the site had similar habitat to the remaining 0.4-acre of undeveloped area within proposed Block 4 prior to the Glass wildfire: coast live oak woodland, primarily with manzanita, chamise, and madrone with some scattered oaks and Douglas-fir. The undeveloped area (0.4-acre) was impacted by the Glass wildfire, with the CalFire Emergency Notice removing the dead and dying trees. During the 2022 site visit, no trees were standing.

- Block 5 (4.3 acres): This block is located along the western edge of an existing vineyard. Before the Glass wildfire, the site had a mature overstory canopy cover of 80 to 90%, with a sparse shrub layer. Overstory trees included Douglas-fir, tanoak, madrone, black oak, redwood, and live oak. The area was impacted by the Glass Wildfire, with the CalFire Emergency Notice removing all the dead and dying trees. During the 2022 site visits, there were no trees left standing within this block. Immediately to the west of this block is a Class III watercourse with proposed Block 6 to the west of the watercourse.

- Block 6 (2.3 acres): This block is located just west of proposed Block 5. Before the Glass wildfire, the site had a mature overstory canopy cover of 80 to 90%, with a sparse shrub layer. Overstory trees included redwood, Douglas-fir, tanoak, madrone, black oak, and live oak. The area was impacted by the Glass Wildfire, with the CalFire Emergency Notice removing all the dead and dying trees. During the 2022 site visits, there were no trees left standing within this block.

Consistency with General Plan

Oak woodland is the most common land cover in the County occurring on approximately 167,000 acres (33% of the County's area). Approximately 733 acres of oak woodland or 0.5% of the total area of oak woodland in the County has been cleared for residential and agricultural purposes between 1993 and 2002 (Napa County Baseline Date Report, Biological Resources Section, pages 4-22 and 4-25, Version 1, November 2005). While oak woodlands may be one of the most common land covers within the County, their past conversion to residential and agricultural uses in conjunction with foreseeable oak woodland conversion to agricultural use is considered a potentially significant impact on both a project-specific level and a cumulative level (Napa County General Plan, Draft Environmental Impact Report, Volume 1, Section 4.5 Biological Resources, Pacific Municipal Corporation, February 2007).

Napa County General Plan Conservation Element Policy CON-24 requires that oak woodland be maintained to the extent feasible to provide oak woodland and wildlife habitat, slope stabilization, soil protection and species diversity. Policy CON-24(c) requires that, when avoidance of oak woodland is infeasible, a project replace or preserve like habitat at a 2:1 ratio by acreage. "Like habitat" is considered in this case to mean coast live oak woodland on slopes less than 30% and outside of stream setbacks. For the purpose of determining consistency with this Policy, the existing condition is considered to be the vegetation communities that existed prior to the 2020 Glass Fire, as detailed above, since, if left undisturbed, in time and possibly following one or more post-fire seral stages, the ground cover will come to resemble the pre-fire community. As stated by the Registered Professional Forester, almost all of the species that existed pre-fire on the property are able to resprout after fire, with the exception of Douglas fir. Further, if left undisturbed, in time and possibly following one or more post-fire seral stages, the ground cover will come to resemble the pre-fire community.

As previously noted, the project proposes to convert to vineyard approximately 1.5 acres of pre-fire coast live oak woodland. Additionally, the installation in 2003 of approximately 0.6-acre vineyard in Block 4 without benefit of a permit removed approximately 0.25-acre of oak woodland, based on historic aerial imagery and the adjacent habitat as identified in the Biological Resources Reconnaissance Survey (**Exhibit B-1**). To account for the historic oak woodland removal and to ensure that existing vineyard in Block 4 is consistent with County policies, the approximate 0.25-acre of oak woodland has been included in the analysis for the project's consistency with General Plan Policy CON-24(C); as such, the project would result in the conversion of a total of approximately 1.75 acres of coast live oak woodland. Following implementation of **Mitigation Measure BIO-1**, the footprint of Block 4 would be reduced by approximately 0.2-acre; as such, the total conversion to vineyard of coast live oak woodland as proposed and following implementation of **Mitigation Measure BIO-1** would be 1.55 acres. For the proposed project to comply with Policy CON-24 and preserve 2 acres of oak woodland for every 1 acre impacted, a minimum of 3.1 acres of pre-fire coast live oak woodland should be preserved on land with slopes less than 30% and outside of stream setbacks on the project parcel.

Based on pre-fire vegetation communities, the proposed project would retain in a Preservation Area approximately 6.9 acres of coast live oak woodland on like habitat, more than twice the amount required to meet the 2:1 preservation ratio in Policy CON-24(C). The oak woodland preservation areas are located on all five of the property parcels on slopes with less than 30% slope and outside of stream setbacks, and are contiguous with other areas proposed for preservation and areas with slopes over 30% and within stream setbacks, resulting in a beneficial impact of larger swaths of preserved habitat.

However, there is no mechanism proposed for permanently preserving the retained coast live oak woodland, which could result in future development encroaching into the preserved woodland. To ensure that the retained oak woodland is permanently preserved, **Mitigation Measure BIO-8** would require that an Oak Woodland Preservation Area totaling a minimum of 3.1 acres of pre-fire like habitat be permanently protected from development in the form of a deed restriction, mitigation easement or other means of permanent protection acceptable to the County. With implementation of **Mitigation Measure BIO-8**, potential impacts related to consistency with General Plan Policy CON-24 would be less than significant.

Consistency with Conservation Regulations

NCC Section 18.108.020(C) (General Provisions: Vegetation Retention Requirements) requires that parcels within the Agricultural Watershed zoning district retain 70% of the vegetation canopy cover based on the on-site canopy present on June 16, 2016. However, the project site burned in the 2020 Glass Fire and is therefore subject to NCC Section 8.80.130 (amended through Urgency Ordinance No. 1463), which requires the vegetation canopy cover analysis be based on the June 19, 2018, aerial. Approximately 161.4 acres of vegetation canopy cover existed in the project site in 2018. The proposed project would retain approximately 148.5 acres (or 92%) of the vegetation canopy cover that existed in the project site, exceeding the 70% retention requirement (**Exhibit A**).

Specific to vegetation removal mitigation and preservation, NCC Section 18.108.020(D) (Vegetation Removal Mitigation) requires that the removal of any vegetation canopy cover (i.e., oak woodland and coniferous forest) in the Agricultural Watershed zoning district be mitigated by permanent replacement or preservation of comparable vegetation canopy cover on an acreage basis at a minimum 3:1 ratio. NCC 18.108.020(D) prioritizes where the mitigation replacement and preservation areas occur , whereby the first priority as stated in NCC 18.108.020(D)(1) is for onsite replacement and/or preservation areas that generally occur on slopes less than 30% and outside of stream

and wetland setbacks; if this cannot be reasonably accomplished, then onsite replacement and/or preservation may occur on slopes greater than 30% and up to 50%, in areas that result in the highest biological and water quality protections, as stated in NCC 18.108.020(D)(2). NCC Section 18.108.020(E) (Preserved Vegetation Canopy Cover) requires preserved vegetation canopy cover to be protected (or otherwise enforceable restricted) thorough a perpetual protective easement or deed restriction preserving and conserving the preserved vegetation canopy cover.

As proposed, the project would result in removal of 12.9 acres of vegetation canopy cover; following implementation of **Mitigation Measure BIO-1**, the footprint of Block 4 (and therefore, the vegetation canopy cover removal) would be reduced by approximately 0.2-acre, resulting in a total of 12.7 acres of vegetation canopy cover that would be converted to vineyard, should the project be approved. For the project to comply with NCC Section 18.108.020(D) and preserve 3 acres of vegetation canopy cover for every 1 acre impacted, a minimum of 38.1 acres of canopy would need to be retained and preserved on the project site for the approximately 12.7 acres of canopy removed in the mitigated development area. The project proposes a Preservation Area totaling 39.4 acres of vegetation canopy cover on slopes less than 30% and outside of stream setbacks, as depicted in **Exhibit B-4**, consistent with NCC 18.108.020(D)(1). However, there is no mechanism proposed for permanently protecting the preserved canopy cover from future development, which would be considered a potentially significant impact.

To reduce impacts related to long-term consistency with General Plan Policy CON-24(C) and with NCC Section 18.108.020(D) to a less than significant level, **Mitigation Measure BIO-8** below would require permanent protection of a minimum of 38.1 acres of vegetation canopy cover, including a minimum of 3.1 acres of coast live oak woodland, in the form of a deed restriction, mitigation easement or other means acceptable to the County. Implementation of **Mitigation Measure BIO-8** would reduce potential impacts to forests and associated cover canopy to a less than significant level.

> **Mitigation Measure BIO-8**: The owner/permittee shall revise Erosion Control Plan #P23-00360-ECPA prior to approval to minimize potential impacts to oak woodland and vegetation canopy cover consistency with General Plan Policy CON-24 and Napa County Code Conservation Regulation, as follows:
>
> a. A Preservation Area, totaling a minimum of approximately 38.1 acres of pre-fire vegetation canopy cover, containing a minimum of 3.1 acres of coast live oak woodland (as shown on Vegetation Canopy Cover Exhibit, **Exhibit B-4)** shall be designated as such in a deed restriction or mitigation easement or other means of permanent protection. The Preservation Areas for oak woodland and vegetation canopy cover may overlap. 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. The owner/permittee shall record the deed restriction or mitigation easement prior to construction or within 90 days of project approval, whichever comes first. The area to be preserved shall be of like kind and quality to the woodland 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 should be selected in a manner that minimizes fragmentation of oak woodland 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. 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.
> c. The owner/permittee shall refrain from severely trimming the trees (typically no more than 1/3rd of the canopy) and vegetation to be retained adjacent to the proposed development area.
> d. 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 #P23-00360-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.

With implementation of **Mitigation Measures BIO-1 through BIO-8,** and the identified stream protection condition of approval, the proposed project would have less than significant impacts on special-status plants and wildlife, 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 246.49 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 36.14 tons per year, or a reduction of approximately 85% 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-8** 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: Tom Origer & Associates, July 17, 2019, Cultural Resources Study for the Schramsberg Vineyards Development Project, Calistoga, Napa County, California; Tom Origer & Associates, August 25, 2021, Confidential Archaeological Letter Emergency Notice, Schramsberg Emergency Notice, Napa County, CA; and Tom Origer & Associates, April 12, 2024, RE: An Addendum Report to Two Cultural Resources Studies, Schramsberg Vineyard, Calistoga, Napa County (contents confidential).

Tom Origer & Associates conducted a cultural resources evaluation within the project area, which included a check of information on file with at the Northwest Information Center, Sonoma State University, Rohnert Park 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* (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 seven 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.

The property contained approximately 100 acres of vineyards circa 1890. Schramsberg Vineyard was nominated and determined eligible for inclusion on the National Register of Historic Places (NR #98001251) due to its significance in agriculture and industry. In addition, Schramsberg Winery is listed on the California Inventory of Historic Resources (Department of Parks and Recreation 1976) and the Historic Property Directory (HPD) (Property Number 000097) of the Office of Historic Preservations (OHP 2012).

a-b. The cultural resources studies (Origer & Associates, 2019, 2021 and 2024) did not identify any significant or potentially significant cultural resources in the proposed development area that contribute to the Schramsberg Vineyard National Register District. Previously recorded archaeological resources are located in the project property, but outside of the proposed development area; no 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?	☐	☐	☒	☐
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?	☐	☐	☐	☒

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

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) 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 fault is located approximately 1.38 miles west of the project site (Napa County GIS Fault 62500 Layer). Given the agricultural nature of the proposed project, it 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 very low liquefaction potential (Napa County General Plan-Safety Element, 2023). 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 Forward gravelly loam (No. 138, 2 to 9% slopes; No. 139, 9 to 30% slopes, No. 140, 30 to 75% slopes) and Kidd loam (No. 156, 30 to 75% 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 October 16 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 70% for proposed vineyard Block 1A, 75% for proposed vineyard Block 2, 80% for proposed vineyard blocks 3 through 6, and 85% for proposed vineyard Block 1 as specified in the ECP. 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 drainpipe, water bars, rolling dips, 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 14.1 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 246.49 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 36.14 tons per year, or a reduction of approximately 85% 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 West	91.7	6.6	-85.1	-93%
Block 1 East	79.39	4.16	-75.23	-95%
Block 1A North	0.36	0.32	-0.04	-11%
Block 1A South	0.64	0.58	-0.06	-9%
Block 2	0.91	0.48	-0.43	-47%
Block 3	2.38	0.64	-1.74	-73%
Block 4 North	1.12	0.51	-0.61	-54%
Block 4 South	0.99	0.37	-0.62	-63%
Block 5 North	30.2	8.34	-21.86	-72%
Block 5 South	27.48	7.60	-19.88	-72%
Block 6	11.32	6.54	-4.78	-42%
Total	**246.49**	**36.14**	**-210.35**	-85%

Source: David Steiner, May 2024, Soil Loss Equation – **Exhibit C**

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 #P23-00360-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, rolling dips, water bars, storm drain pipes, energy dissipaters, and permanent no-till cover crop (or adequate mulch cover applied annually), shall be installed no later than October 15 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 (#P23-00360-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 70% for proposed vineyard Block 1A, 75% for proposed vineyard Block 2, 80% for proposed vineyard blocks 3 through 6, and 85% for proposed vineyard Block 1. 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 low 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 CO_2, methane, nitrous oxide, and fluorocarbons, which contribute to climate change. CO_2 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. CO_2 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).[13]

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) 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

[13] "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 CO_2. 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).

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 CO_2.

"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 CO_2, 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 CO_2 from the atmosphere through photosynthesis, converting it into carbon that is stored in their biomass (roots, stems, leaves) and soil. This process helps remove CO_2 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 CO_2 that remains in the atmosphere annually. A decrease in carbon sequestration is considered an increase in CO_2 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.[14] Using this emission factor it is anticipated that construction equipment emissions associated with the proposed 14.1 gross acres of vineyard would be approximately 271 MT CO_{2e} (14.1 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.

[14] 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.

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 14.1-acre agricultural development would be approximately 39.1 MT CO_{2e} per year (14.1 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 10,000 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. While the project would convert to vineyard approximately 11.4 acres of Douglas fir forest and 1.5 acres of coast live oak woodland based on pre-fire conditions, the CEQA baseline for greenhouse gas emissions is considered to be based what is on the ground now. As detailed by the project biologist and the Registered Professional Forester who was responsible for the Emergency Timber Harvest and is responsible for processing the Timber Harvest Plan and Timber Conversion Permit associated with this ECP, the majority of the project area was logged after the fire, with 163 trees remaining within an estimated canopy area of approximately 1-acre. As such, approximately 1 acre of coniferous forest / oak woodland would be removed as a result of project implementation, if approved.

Consistent with NCC Section 18.108.020(D), the ECP prepared for the proposed project identified an approximate 39.4-acre proposed preservation area on the property located on slopes less than 30% and outside of stream setbacks, as shown in **Exhibit B-4.** As described in **Mitigation Measure BIO-8**, the project would result in the permanent preservation of a minimum of 38.1 acres of vegetation canopy cover. Therefore, the proposed project would permanently preserve greater than 1:1 acres of canopy on slopes less than 30% and outside of stream setbacks. The full preservation area consists of Douglas fire forest, Douglas fir and Ponderosa pine alliance, redwood-Douglas fir-CA bay laurel alliance and a minimum of 3.1 acres of coast live oak woodland. The proposed preservation area includes large contiguous areas that can be more beneficial to wildlife compared to smaller patches of preservation areas, and also connects to streams and their setbacks, further increasing protection, use and availability of those areas by local wildlife (**Exhibits B-3 and B-4**). By preserving a minimum of 38.1 acres of vegetation, the project would result in a minimum preservation to removal ratio of 3:1, 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. Therefore, the impact would be less than significant.

	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?	☐	☐	☐	☒
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 occur in the existing barn building located southeast of Block 1A, and over 100-feet from a stream. 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) would be sprayed up to four to five times per year; herbicides would be sprayed up to four 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).

The proposed development area does not contain aquatic resources, although an ephemeral drainage occurs between Blocks 5 and 6, and near Block 4. Both ephemeral drainages are avoided with minimum required 35-foot setbacks pursuant to NCC Section 18.108.025, with the ephemeral drainage between Blocks 5 and 6 avoided with 75-foot setbacks, beyond the 35-foot minimum requirement (**Exhibit A-1**). 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; and 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 Calistoga Elementary School, Calistoga Junior-Senior High School, Palisades High School, located approximately 2.5 miles to the northwest of the project parcel (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:				
	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 guidance[3] 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 within the Schramsberg Creek Drainage and the Nash Creek Drainage, and a small portion within the Ritchie Creek Drainage of the Napa River Watershed. Ultimately, runoff concentrates in drainage courses within the property are tributary to three U.S. Geological Survey (USGS) blue-line streams (commonly known as Schramsberg Creek, Nash Creek and Ritchie Creek, which are tributary to the Napa River, thence 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).

There are two (2) blue-line streams located on the property, including Nash Creek on the northern portion and Schramsberg Creek in the central portion of the property. Ritchie Creek is located just south of the property.

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 #P23-00360-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 (O'Connor Environmental, Inc., 2023 - **Exhibit D**). 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 Documented adopted by the County on May 12, 2015.

   There are four (4) wells that provide water for existing uses and would provide water supply for the proposed project: "Claes Well" (Well 1, located on APN 020-390-020), "McEachran Well" (Well 2, located southwest of Well 1 on APN 020-030-015), "Mt. Diamond Well" (Well 3, located on the westernmost project parcel (APN 020-390-007), and "Tractor Shed Well" (Well 4, located on the north-central parcel (APN 020-390-008). There are two (2) additional wells on the property that are not used for all uses on the property, including irrigation: Well 5, located directly south of Well 1on APN 020-030-015, and Well 6, which is located on the neighboring parcel APN 020-271-007, and is the water source for the Tucker Acres Mutual Water Company. Well 5 is not presently used for irrigation, or are there plans to do so in the future. The Tucker Acres Mutual Water Company serves 200 people through 23 service connections.

   Onsite water demands for existing uses totals 32.1 af/y, which includes three (3) residences (0.5 af/y per residence for a total of 1.5 af/y), 44.9 acres of existing vineyard (0.2 af/ac/y for a total of 9 af/y), 180,000 gallon winery with 39 full-time employees and permitted tastings and events (5.67 af/y) and four (4) acres of garden and orchard (4 af/ac/y for a total of 16 af/y). Tentatively, Vineyard Block 1 would be irrigated from Well 4, Blocks 2 and 3 would be irrigated from Well 1, Block 4 would be irrigated from Well 2, and Blocks 5 (and 6?) would be irrigated from Well 3. The proposed project would result in an additional 11 net acres of vineyard in seven (7) vineyard

blocks on four (4) parcels, which would increase the acreage of vineyard on the property to 55.9 total acres. The proposed vineyard would result in an increase in estimated water use by 2.2 af/y for a total property water demand of 34.3 af/y.

The proposed vineyard in conjunction with existing uses on the property supplied with groundwater would total ±34.3 AF/yr. The project WAA also includes other groundwater uses on neighboring parcels near the project wells to provide a conservative estimate of overall groundwater use and potential effects. Other groundwater uses on non-project parcels within the ±348-acre project recharge area include approximately 39 residences and associated landscaping, approximately 33.4 acres of vineyard and a winery, resulting in an existing groundwater use of 76.5 AF/yr in the recharge area (including project parcels). Following implementation of the proposed project, future groundwater demand would be ± 78.7AF/yr within the project recharge area.

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. The Project WAA included two groundwater recharge scenarios. The first, Water Year 2010, was selected to represent average year conditions because annual precipitation totals across most of Napa County were close to their long-term 30-year averages, the second, Water Year 2014, was selected to represent drought conditions because annual precipitation totals were between 41 and 73% of long-term 30-year averages for much of Napa County. For the 348-acre project recharge area a recharge rate of 91.1 AF/yr is estimated during the drought conditions and a rate of 294.6 AF/yr for average water years. For the 225-acre project parcel an estimated recharge rate of 58.9 AF/yr is estimated during drought conditions and of 190.4 AF/yr for average water years. Using the average rainfall from the 2012-2021 Water Years, the recharge is estimated to be 196.4 AF/y for the project recharge area and 126.9 AF/y for the project parcels. (see **Exhibit D** for details and calculations).

Based on the calculated average recharge, the proposed increase in groundwater demand resulting from the proposed project would be equivalent to approximately 40% of the 196.4 AF/y recharge within the project recharge area and approximately 27% of the recharge within the project parcels during a 10-year averaged period (WY2012-2021). Given the surplus of groundwater resources in terms of estimated average annual groundwater recharge, the 2.2 AF/y increase in groundwater use associated with the proposed project is highly unlikely to result in reductions in groundwater levels or depletion of groundwater resources over time. Less than significant impacts would result.

As the portions of the project, which spans across four separate parcels, would be served by wells located on four separate parcels, the following Condition of Approval would be applied to the project, if approved, to ensure that the proposed project has reliable water sources:

> **Groundwater Easement – Condition of Approval:** The planned transfer of groundwater from any of the project property parcels (i.e., APNs 020-300-015, 020-390-007, 020-390-008 & 020-390-020, 020-390-011 and 020-300-014) to vineyard blocks (or portions thereof) located on a separate parcel (i.e., 020-300-015, 020-390-007, 020-390-008 & 020-390-020, as depicted in #P23-00360-ECPA) shall be documented and memorialized through recordation of an "Agreement for Grant of Easement and Water Right" as described in Appendix E of the Water Availability Analysis Guidance Document (Napa County, 2015). The Agreement shall be in a form approved by the County and shall be recorded by the owner/permittee prior to commencement of any activities authorized by #P23-00360-ECPA.

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 well within 500-feet of neighboring wells (Well 1, which serves existing vines associated with the Claes Vineyard and a residence on parcel APN 020-390-010). The project proposes to add 0.18 acres of vineyard to the Claes Vineyard (Block 2), along with 0.65-acre in Block 3, which would increase demand on Well 1 by 0.17 AF/y. When added to the current demand from the residence and 4.4 acres of existing vineyard, the total proposed use at Well 1 is 1.6 acre-ft/yr. The only neighboring well identified within 500 feet of Well 1 is Well 6, which is located approximately 350 feet to the southeast on the adjacent parcel APN 021-271-007. The Tier 2 Analysis concluded that pumping at Well 1 is unlikely to result in significant drawdown at neighboring wells (Well 6). 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. Nash Creek (north of the project area) and Ritchey Creek (south of project area) are identified as Significant Streams of concern for groundwater-surface interaction. Well 3 lies 1,299 feet from Nash Creek and consequently requires analysis per Tier 3 criteria. Well 2 lies 1,566 feet from Ritchey Creek, Well 4 lies 1,593 feet from Nash Creek and Well 1 lies 2,215 feet from Ritchey Creek. The Tier 3 analysis indicated that project irrigation wells, including Well 3 (when pumped at a rate of 29.9 gpm or less), conform with the

well standards in Tables 3, 4, and 5 in the County's WAA Guidance document indicating that the wells will not have a significant impact on streamflow in Nash Creek or Ritchey Creek. Less than significant impacts are expected.

Considering: i) anticipated annual water use of the proposed project and project parcels groundwater recharge area of approximately 34.3 AF/yr is below the anticipated annual groundwater recharge rate screening criteria of approximately 126.9 AF/yr; ii) there is no evidence to date indicating that there are groundwater problems or declining well production in the this area of the County; and iii) 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 erosion control blankets, establishment of a no-till cover crop with vegetative cover density minimum densities of 85% for proposed vineyard Block 1, 70% for Block 1A, 75% for Block 2, and 80% for Blocks 3, 4, 5 and 6, 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 sediment barriers, water bars, rolling dips, cross-slope diversions, storm drain pipes, energy dissipaters, straw mulch and a permanent vineyard cover crop. 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 (May 2024 – **Exhibit E**). 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., seven (7) vineyard blocks) is within seven (7) watershed basins which total approximately 84.3 acres. The analysis concluded that there would be no change in runoff time of concentration for Watersheds A, F and G; however, for Watersheds B, C and E, the analysis showed that the project would result in an increase in peak flows when compared to pre-project conditions (**Table 8**). To eliminate this increase (i.e., extend the time of concentration) the project would temporarily store runoff volume in a 100 linear foot rock-filled infiltration trench downhill from proposed Block 6 (Watershed B), in two (2) 50 linear-foot rock filled

infiltration trenches located north/northeast of Block 1 (Watershed C), and a 30 linear-foot rock-filled infiltration trench located north of Block 2 (Watershed E). The Hydrologic Analysis concluded that the specifications of the Erosion Control Plan, including planting and maintenance of the cover crops and the appropriate design and installation of the retention structures described above, assure that the project would not increase peak flow or runoff (**Exhibits A and E**).

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	4.90	9.76	15.06	17.35
Post-project conditions	4.90	9.76	15.06	17.35
Change (cfs)	0	0	0	0
Change (%)	0%	0%	0%	0%
Watershed B				
Pre-project conditions	3.76	7.11	10.70	12.23
Post-project conditions	3.84	7.22	10.81	12.35
Change (cfs)	0.08	0.11	0.11	0.12
Change (%)	2.1%	1.5%	1%	0.1%
Watershed C				
Pre-project conditions	6.42	11.94	17.79	20.29
Post-project conditions	6.43	11.96	17.82	20.32
Change (cfs)	0.01	0.02	0.03	0.03
Change (%)	0.1%	0.1%	0.1%	0.1%
Watershed D				
Pre-project conditions	4.48	8.79	13.47	15.49
Post-project conditions	4.47	8.78	13.45	15.45
Change (cfs)	-0.01	-0.01	-0.02	-0.04
Change (%)	-0.2%	-0.1%	-0.15%	-0.26%
Watershed E				
Pre-project conditions	0.09	0.18	0.27	0.31
Post-project conditions	0.1	0.19	0.28	0.32
Change (cfs)	0.01	0.01	0.01	0.01
Change (%)	11.1%	5.5%	3.7%	3.2%
Watershed F				
Pre-project conditions	2.55	4.68	6.93	7.89
Post-project conditions	2.55	4.68	6.93	7.89
Change (cfs)	0	0	0	0
Change (%)	0%	0%	0%	0%
Watershed G				
Pre-project conditions	1.58	2.86	4.21	4.78
Post-project conditions	1.58	2.86	4.21	4.78
Change (cfs)	0	0	0	0
Change (%)	0%	0%	0%	0%

Source: Applied Civil Engineering, May 2024 (**Exhibit E**)

Following implementation of the specified retention structures in Watersheds B, C and E and adherence to the other 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, 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.[15] 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.

[15] 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**).

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 210.35 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 Mitigation Incorporated	Less Than Significant Impact	No Impact
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 located at the end of a private paved driveway (Schramsberg Road); the nearest established community is the City of Calistoga, which is located 2.5 miles northwest of the project area. Existing improvements on the project site include approximately 44.9 acres of vineyard, a 180,000-gallon winery, three (3) residences, orchard and garden, agricultural structures, four (4) wells, water tanks, and related outbuildings and utility infrastructure, and dirt and gravel roads that is typical of this type of rural residential and agricultural development. 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 measure 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 36.14 tons per year (reduction of approximately 85% 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-8** 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-8**. 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-8**, 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. Wildlife movement would not be impaired.
- 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 BIO-8,** 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 26 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 less than 0.5-mile west of State Highway 29 and Napa Valley, approximately 2.5 miles south of Calistoga. Surrounding properties are generally used for agricultural and rural residential purposes north and northwest of the project property, residential, State Highway 29 and the Napa Valley to the north and east, and open space (Bothe State Park) immediately south and southeast of the project property.

The nearest residences to the project area are in the vicinity of Blocks 2 and 3 in the vicinity of Tucker Road and Summit Drive, with the nearest neighboring residence located approximately 60 feet to the southeast of Block 2, 120 feet to the northeast of Block 3, and

approximately 600 feet to the north of Block 4. Blocks 2, 3 and 4 would be expansions of existing vineyards. The nearest residence to Blocks 1 and 1A is approximately 1,600 feet to the north; approximately 2,400 feet to the northwest of Block 6.

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 Activities[1]

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 between approximately 75 and 90 dBA at the nearest existing offsite residences to Blocks 2 and 3; approximately 60 to 65 dBA at the nearest residences to Block 4, and 50 to 55 dBA at the nearest residences to Blocks 5 and 6.

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 Activities[1]

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 Date 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 between 75 and 84 dBA at the closest existing offsite residence to Block 2; between 70 and 75 dBA at the closest existing offsite residence to Block 3; between 55 and 60 dBA at the closest existing offsite residence to Block 4; and 50 dba at the closest existing offsite residence to Blocks 1, 1A, 5 and 6.

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 closest offsite residence to Blocks 1, 1A, 4, 5 and 6 would experience construction noise levels of between approximately 50 and 65 dBA, and, with the exception of the residence near Block 4, these blocks would experience operational noise levels of 50 dBA, consistent with the levels considered compatible with residential uses.

The closest offsite residence to Block 2 (0.3-acre) and Block 3 (1 acre) would experience construction noise levels of between approximately 75 and 90 dBA, and Blocks 2, 3 and 4 (0.6 new acres) would experience operation noise levels of between approximately 55 and 84 dBA, in exceedance of the levels considered compatible to residential uses. All of these blocks are expansions of existing vineyards. While the new vineyard blocks would temporarily increase the noise and vibration levels above the compatible levels, the construction noise would be short in duration, and the additional operational noise levels would be in areas further away from the homes compared to the existing vineyard, and similar to the existing noise levels.

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.

d. 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 airfield, Angwin-Parret Airfield, is located approximately 5.4 miles to the east. 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 vineyard. 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 60 feet to the southeast of Block 2. 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 Schramsberg property consists of six parcels totaling 225.08 acres, which contain approximately 44.9 acres of vineyard planted prior to 1993 (replanted under Erosion Control Plans #95654-ECPA, #97085-ECPA, #98117-ECPA, #P08-00374-ECPA, #P17-00173-ECPA), an 180,000-gallon winery (originally developed in the 1870s; Registered Historical Landmark No. 561; Use Permit Major Modification #02643), three (3) residences, orchard and garden, agricultural structures, four (4) wells, water tanks, and related outbuildings and utility infrastructure, and dirt and gravel roads.

The project site is accessed via the existing driveways and access roads. Access to a majority of the project area including Blocks 1, 1a, 4, 5 and 6 is via a paved private road (Schramsberg Road) off of State Route 29 and existing gravel and dirt vineyard access roads that serve the existing winery, vineyard and residential uses. Access to Blocks 2 and 3 is via Peterson Driveway and an existing paved private driveway and existing onsite vineyard access roads serving the existing adjacent residence and onsite vineyards. 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 15 to 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, and ATVs and passenger vehicle and/or light trucks.

Proposed vineyard operations are anticipated to generate at most 850 truck trips annually for anticipated work crews of up to 14 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 operations, activities such as vineyard pruning, weed and pest control, and harvest are anticipated to generate up to ten round trips per day, including grape haul trucks, for anticipated work crews of up to 14 employees. Anticipated equipment for vineyard operations would be limited to tracklaying and rubber-tired vehicles and could include tractors, backhoes, 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 ten 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 road (Schramsberg Road) 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 ten vehicles) during harvest, which would occur over five 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	Less Than Significant Impact	No Impact

		Mitigation Incorporated		
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 via certified mail to the Mishewal Wappo Tribe of Alexander Valley, Middletown Rancheria, and the Yocha Dehe Wintun Nation on January 11, 2024. The County did not receive responses from any of the Tribes contacted, and sent consultation closure notices Middletown Rancheria, Mishewal Wappo and Yocha Dehe on March 25, 2025.

	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 rolling dips, storm drain pipes, energy dissipaters, stray 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 O'Connor Environmental (**Exhibit D**) concluded that after full development, total long-term groundwater demand for the project property with the new 11 net acres of vineyard would be 32.2 AF/yr from four existing groundwater wells. Based on the 10-year average annual rainfall of 33.4 inches for the project area and estimated recharge area, the annual recharge rate for the project site's recharge area was calculated to be 196.4 acre-feet per year. The project groundwater recharge area's estimated groundwater demand 34.3 AF/yr with the proposed project represents approximately 27% of the average annual groundwater allotment for the project property. 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 statues 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 slop instability, or drainage changes?	☐	☐	☒	☐

Discussion
The project site is located in a State Responsibility Area (SRA) that is designated as 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 4% to 27%.

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 #P23-00360-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. As mitigated under **Mitigation Measure BIO-1**, the project would avoid the Coast range triplet lily population and provide

them with a minimum 25-foot setback buffer. Habitat for special-status birds and raptors (including northern spotted owl), ringtail, bat species, reptiles, amphibians and Western bumble bee have been identified in the project area. With implementation of **Mitigation Measures BIO-1 through BIO-6**, potential impacts related to special status plant and wildlife species would be less than significant. The proposed development area contains approximately 1.5 acres of pre-fire coast live oak woodland, which considered sensitive by Napa County. With implementation of **Mitigation Measure BIO-8**, the project would permanently preserve a minimum of 3.1 acres of pre-fire coast live oak woodland comparable in quality and habitat value as that proposed for removal, consistent with General Plan Policy CON-24(C).

New wildlife exclusion fencing is proposed around the new vineyard blocks, and also to restore damaged fencing that existed prior to the Glass wildfire. The fencing plan as proposed would enclose two ephemeral streams adjacent to or near the proposed project areas. This potentially significant impact would be minimized to a less than significant level following implementation of **Mitigation Measure BIO-7**, which would require revision to the fencing plan to enclose vineyard blocks only and to maintain access and movement through the stream areas for larger animals. 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.

To reduce impacts on water quality within streams, the proposed project has been designed to avoid nearby ephemeral drainages with minimum 35-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.

By ensuring permanent preservation of a minimum of approximately 38.1 acres of vegetation canopy cover, implementation of **Mitigation Measure BIO-8** 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.

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**]).

Therefore, with the incorporation of **Mitigation Measures BIO-1 through BIO-8** and conditions of approval, the proposed project would have a less than significant potential to degrade the quality of the environment.

b. The project site is located within the Schramsberg Creek Drainage and the Nash Creek Drainage, and a small portion (approximately 0.6-acre) within the Ritchie Creek Drainage of the Napa River Watershed.

The Schramsberg Creek drainage area contains approximately 495 acres. In 1993, vineyard acreage within this drainage was approximately 163 acres, or 33% of the drainage. Since 1993, approximately 10 acres of additional vineyard (or 2% of the drainage) have been developed to vineyard, resulting in approximately 35% of the drainage (or approximately 173 acres) containing vineyard.

The Nash Creek drainage area contains approximately 400 acres. In 1993, vineyard acreage within this drainage was approximately 18 acres, or 5% of the drainage. Since 1993, approximately 17 acres of additional vineyard (or 4% of the drainage) have been developed to vineyard, resulting in approximately 9% of the drainage (or approximately 35 acres) containing vineyard.

The Ritchie Creek drainage area contains approximately 1565 acres. In 1993, vineyard acreage within this drainage was approximately 64 acres, or 4% of the drainage. Since 1993, approximately 44 acres of additional vineyard (or 3% of the drainage) have been developed to vineyard, resulting in approximately 6.9% of the drainage (or approximately 108 acres) containing vineyard.

It is estimated, based on evaluation of the County's GIS layer identifying Potentially Productive Soils within the Schramsberg Creek drainage, that there are approximately 83 acres (17% of the drainage) having the potential to be developed to vineyard. This, in conjunction with existing and approved vineyard development (approximately 173 acres), results in a total potential build out of approximately 256 acres or approximately 52% of the drainage.

It is estimated, based on evaluation of the County's GIS layer identifying Potentially Productive Soils within the Nash Creek drainage, that there are approximately 127 acres (32% of the drainage) having the potential to be developed to vineyard. This, in conjunction with existing and approved vineyard development (approximately 35 acres), results in a total potential build out of approximately 162 acres or approximately 41% of the drainage.

It is estimated, based on evaluation of the County's GIS layer identifying Potentially Productive Soils within the Ritchie Creek drainage, that there are approximately 118 acres (8% of the drainage) having the potential to be developed to vineyard. This, in conjunction with

existing and approved vineyard development (approximately 108 acres), results in a total potential build out of approximately 226 acres or approximately 14% 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., Schramsberg Creek drainage and Nash Creek drainage) over the last 31 years (1993-2024) were used to project an estimation of vineyard development for the next three to five years.

Over the past 31 years within the Schramsberg Creek drainage, approximately 6 acres of vineyard was developed per year (173 divided by 31). Over the past 31 years within the Nash Creek drainage, approximately 1-acre of vineyard was developed per year (35 divided by 31). Over the past 31 years within the Ritchie Creek drainage, approximately 4 acres of vineyard was developed per year (108 divided by 31). 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 18 to 30 acres within the Schramsberg Creek drainage, approximately 3 to 5 acres within the Nash Creek drainage, and approximately 324 to 540 within the Ritchie 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 (#P23-00360-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-4**) and as mitigated by **Mitigation Measure BIO-8**, In compliance with NCC Section 18.108.020(D), the ECP prepared for the proposed project identified an approximate 39.4-acre proposed preservation area on the property located on slopes less than 30% and outside of stream setbacks. 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 preserving a minimum of 38.1 acres of vegetation, the project would result in a minimum preservation to removal ratio of 3.1, 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 (Forest Ecosystem Management and Salix Natural Resource Management, February 8, 2023 and January 30, 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, CNDDB and CNPS databases. As discussed in **Section IV (Biological Resources)**, the project development area contains one special-status plant (Coast range triplet lily), as well as potential habitat and/or foraging for eleven special status animal species. The project as mitigated by **Mitigation Measure BIO-1** would avoid 100% of the Coast range triplet lily population on the property (as identified in **Exhibits B-1** and **B-2**) and be provided with a 25-foot setback buffer. Regarding nesting birds and raptors, and specifically NSO, while the project would convert pre-fire habitat for many of these species, the permitted logging following the 2020 Glass fire removed nearly all of the suitable habitat for these species. Following implementation of **Mitigation Measure BIO-8,** the project would result in permanent preservation of a minimum of 38.1 acres of vegetation canopy cover, including a minimum of 31.8 acres of coniferous forest, that is of like quality to what is being converted to vineyard. Following incorporation and implementation of **Mitigation Measures BIO-1 through BIO-6 and BIO-8,** 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.

With incorporation of **Mitigation Measures BIO-7**, which would require revision to the fencing plan to enclose vineyard blocks only and to restore and maintain access and movement through the ephemeral stream setback areas for larger animals. Further, following implementation of **Mitigation Measure BIO-8**, a minimum of 38.1 acres of the 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 (Tom Origer & Associates, 2019, 2021 and 2024) did not identify any significant or potentially significant cultural resources in the proposed development area that contribute to the Schramsberg Vineyard National Register District. Previously recorded archaeological resources are located in the project property, but outside of the proposed development area; no 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 85% or 210.35 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 Schramsberg Creek, Ritchie Creek or Nash 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 O'Connor Environmental, Inc., (September 2023 – **Exhibit D**) indicate that the proposed development consisting of approximately 11 net acres of planted vineyard would result in approximately 2.2 AF/yr of groundwater use. The total calculated water recharge for the project parcels is 196.4 AF/y. Given the surplus of groundwater resources in terms of estimated average annual groundwater recharge, the 2.2 AF/y increase in groundwater use is unlikely to result in reductions in groundwater levels or depletion of groundwater resources over time.

As the water sources are in some cases on a separate parcel to the vineyard, in order to ensure that the project maintains a reliable water source, a Groundwater Easement condition of approval would be applied that would obligate the owner/permittee to record an Agreement for Grant of Easement and Water Right between the parcels, in the event that one or more parcels are under separate ownership. 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 (May 2024 – **Exhibit E).** Following implementation of the specified retention structures in Watersheds B, C and E and adherence to the other 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:

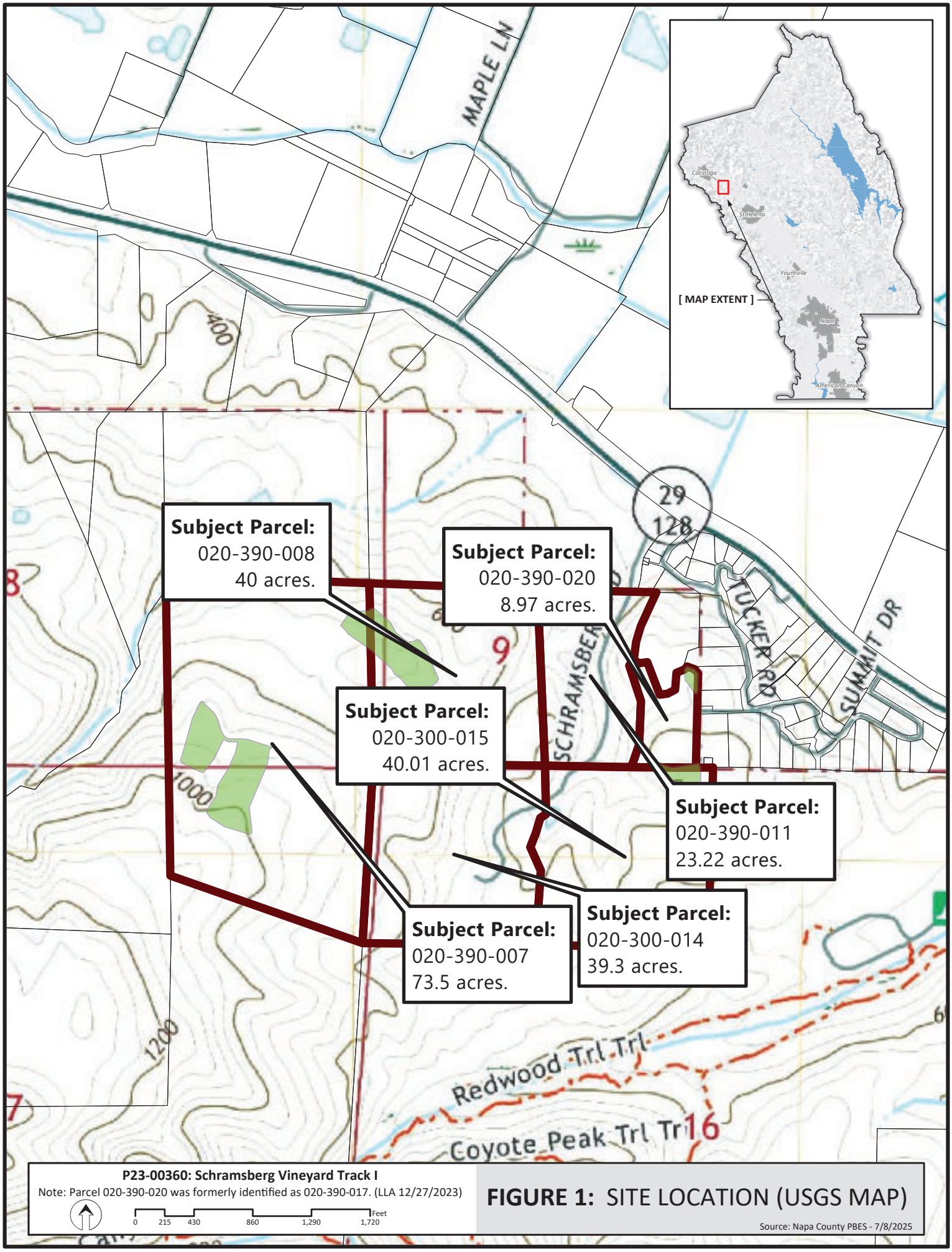
Figure 1 Site Location Map (USGS)
Figure 2 Site Location Map (Aerial)
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Table 2 Implementation Schedule
Table 3 Typical Annual Operations Schedule
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Table 10 Estimated Distance to dBA Contours from Construction Activities
Table 11 Estimated Distance to dBA Contours from Farming Activities

LIST OF EXHIBITS:

Exhibit A Schramsberg Vineyard Development Erosion Control Plan and Narrative
Exhibit B-1 Biological Resource Reconnaissance Survey
Exhibit B-2 Addendum to Biological Resource Reconnaissance Survey
Exhibit B-3 Biological Opinion
Exhibit B-4 Schramsberg Vineyard Vegetation Canopy Cover Exhibit
Exhibit C Soil Loss Analysis
Exhibit D Water Availability Analysis
Exhibit E Hydrologic Analysis
Exhibit F Application Submittal Materials & Correspondence
Exhibit G Project Revision Statement



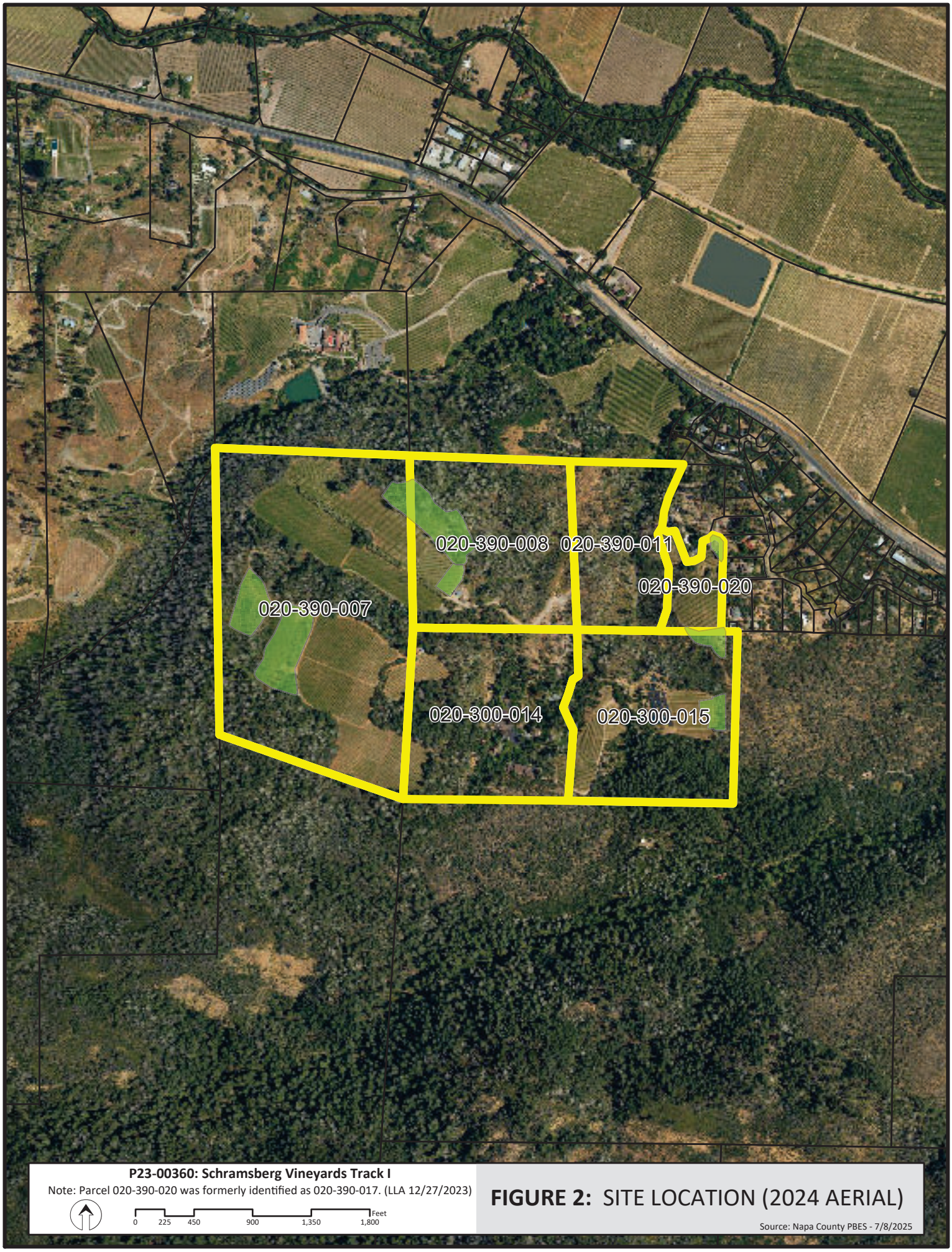
P23-00360: Schramsberg Vineyard Track I

Note: Parcel 020-390-020 was formerly identified as 020-390-017. (LLA 12/27/2023)

0 215 430 860 1,290 1,720 Feet

FIGURE 1: SITE LOCATION (USGS MAP)

Source: Napa County PBES - 7/8/2025



P23-00360: Schramsberg Vineyards Track I

Note: Parcel 020-390-020 was formerly identified as 020-390-017. (LLA 12/27/2023)

0 225 450 900 1,350 1,800 Feet

FIGURE 2: SITE LOCATION (2024 AERIAL)

Source: Napa County PBES - 7/8/2025

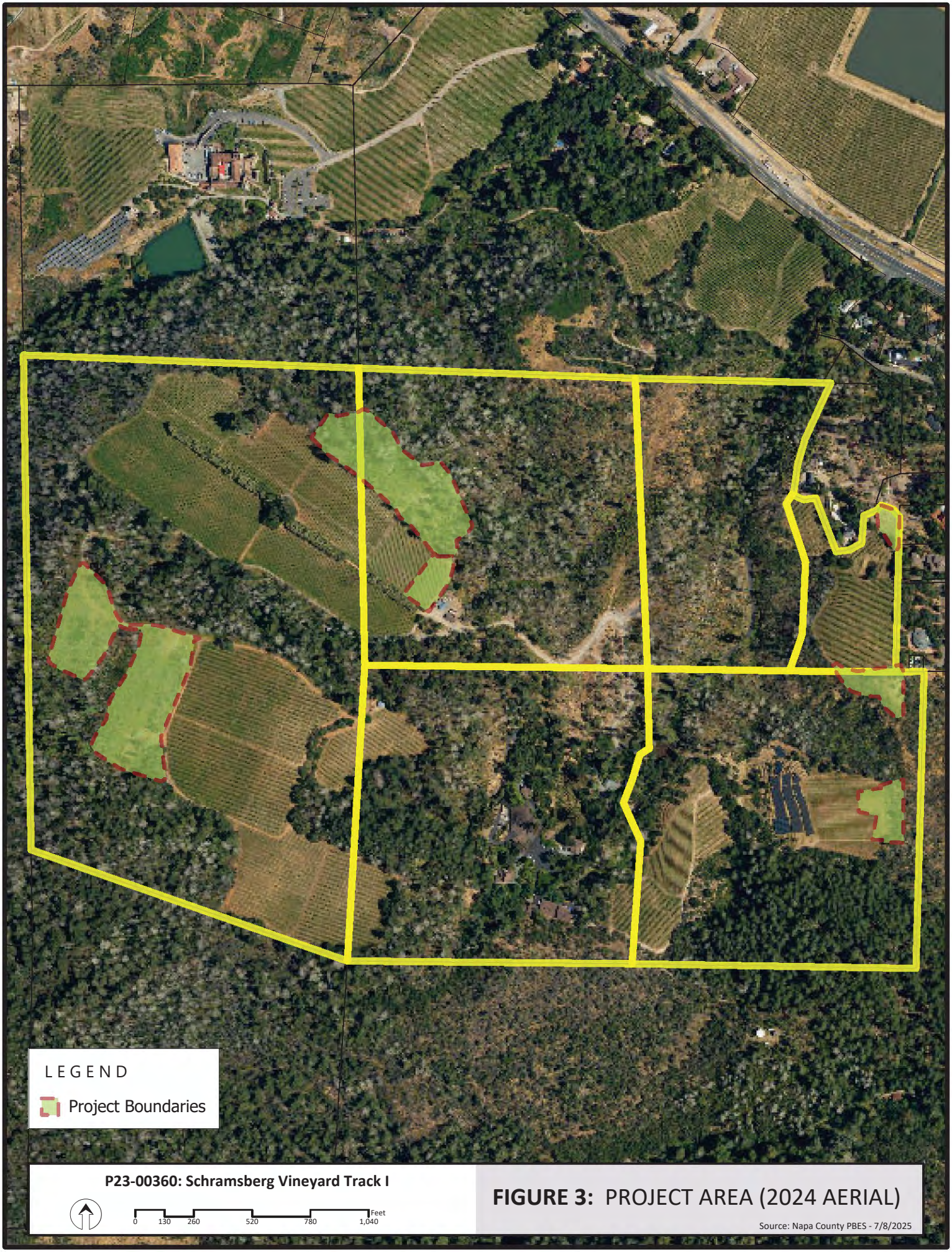


FIGURE 3: PROJECT AREA (2024 AERIAL)

Source: Napa County PBES - 7/8/2025