

COUNTY OF NAPA
DEPARTMENT OF PLANNING, BUILDING AND ENVIRONMENTAL SERVICES
1195 THIRD STREET, SUITE 210
NAPA, CA 94559
(707) 253-4416

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

1. **Project Title:** Haas Vineyard, Track 1 Erosion Control Plan Application (ECPA) File #P23-00355-ECPA
2. **Property Owner(s):** Charles Haas
3. **Contact Person, Phone Number and Email:** Dana Morrison, Supervising Planner, (707) 253-4437, dana.morrison@countyofnapa.org
4. **Project Location and Assessor's Parcel Number:** 2 Swanston Road, St. Helena, CA 94574
 Assessor's Parcel Number vineyard (APN) 021-352-036 (**Figures 1 and 2**)
 Assessor's Parcel Number wells (APNs) 021-390-012 and 021-390-014
 Section 23, Township 8 North Range 6 West, Mt. Diablo Base and Meridian
 Latitude 38° 31' 45" N / Longitude 122° 28' 38" W
5. **Project Sponsor:** Charles Haas
 2 Swanston Road,
 St. Helena, CA 94574
Agent: Coda Rainsford (CPESC #9225)
 HDVine LLC
 Santa Rosa, CA
6. **General Plan Designation:** Agriculture, Watershed & Open Space (AWOS)
7. **Zoning:** Agricultural Watershed (AW)
8. **Background:**

The project site contains 0.7 net acre of existing vineyard. This vineyard was installed in 2019 and 2020 without an ECP. This document includes this existing vineyard in its analysis and proposed new vineyard as described in the ECP application package to demonstrate that the project is and will be in compliance with Napa County Planning and Zoning requirements.

Water to the project site is served by the Vailima Estates Mutual Water Company, which serves approximately 81.2 acres with a total of 14 water connections within the homeowner's association. One project well (Well 2), one backup well (Well 1), and one abandoned well (Old Well) are located on a nearby parcel to the south of the project site (APN 021-390-012). Well 1 is idle and serves as a backup to Well 2 which is currently used as the primary water supply for the homeowner's association. The "Old Well" was abandoned in 2017 and is no longer in use. Water is pumped to the top of the hill (at the end of Bournemouth Rd) into a 61,000-gallon storage tank. There is a common line for tank fill and water delivery to customers. Well 2 would be used to irrigate vineyard in the proposed development area.

The project site was burned in the 2020 Glass Fire, and it is therefore subject to the County's Disaster Recovery ordinance (NCC Chapter 8.80). NCC Section 8.80.130, this requires the vegetation canopy cover analysis (per NCC Section 18.108.020(C)) use a baseline of June 19, 2018, for evaluating canopy impacts. The vegetation within the project site before the Glass Fire consisted of Douglas fir forest and coastal live oak woodland. An Emergency Forest Restoration Program Forest Management Plan is being implemented to restore and manage approximately 10 acres of forest impacted by the 2020 Glass Fire (**Exhibit J**).

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 5 gross acres of vineyard (i.e., proposed development area or project area) with approximately 3.9 net planted acres in four vineyard blocks (Blocks 1-4), including 0.7 acre of existing vineyard in Blocks 1 and 4, located on an approximately 23.9-acre property (i.e., project site). The acreages of each of the four vineyard blocks are indicated in **Table 1**. The proposed project includes the removal of 200 trees greater than 6-inch diameter at breast height (DBH) within the proposed development area and would convert 4.9 acres of the existing 14.9 acres of Douglas fir forest on the parcel, and would convert 0.1 acres of existing developed land.

Table 1 – Proposed Vineyard Block Acreage

Block	Net Acreage	Gross Acreage
1	0.8 ¹	1.1
2	0.6	0.9
3	2.1	2.6
4	0.4 ²	0.5
Total	3.9	5.0

Notes:

1. Includes 0.3 net acre of existing vineyard and 0.5 net acre of proposed vineyard.
2. All existing vineyard

Rock removed during vineyard development would be used in the proposed development area for vineyard avenues or may be buried or used for landscaping. Short-term stockpiles, if needed, would be located within the proposed development area; no long-term stockpiles are proposed. There would be no transport of spoils off-site. The proposed vineyard would be irrigated from an existing well (located on APN 021-390-012) which is part of a shared water system operated by Vailima Estates Mutual Water Company, with an anticipated demand of approximately 1.4 acre-feet (AF) of groundwater annually. New wildlife exclusion fencing is proposed to the west and south of the proposed development area, and the proposed fencing would connect to existing fencing which extends from the northwest to the south of the proposed development area. Irrigation pipelines would be located in roads, vineyards and vineyard avenues, and/or within the proposed development area. Per Ordinance No. 1438, Section 17 earthmoving activities associated with an agricultural project of five (5) acres or less on slope of less than 30% can utilize a one-time exemption whereby the project is required to comply with the Conservation Regulation in effect prior to the effective date of Ordinance No. 1438. As such, the project is exempt from the vegetation requirements of Napa County Code (NCC) Section 18.108.020. Per new Bay Area Air Quality District Management District policies in regard to Green House Gas (GHG) emissions, the project is required to result in no net decrease in sequestration capabilities. A GHG analysis was prepared for the project and demonstrated no net decrease in sequestration capabilities of the parcel as a result of the proposed project (see **Exhibit H**) which includes 10 acres of existing fire impacted forest that will be managed through an Emergency Forest Restoration Program Forest Management Plan (**Exhibit J**) to help the area return to naturally forested state through hand planting seeds from native tree species and clearing of dead brush and non-natives. While the site does contain 5.9 acres of Coast Live Oak Woodland none of the proposed vineyard development involves conversion of oak woodlands, and such the project is in compliance with General Plan Policy CON-24.

Erosion Control Measures: Temporary erosion control measures include installation of fiber rolls, silt fences, straw bale dikes, surface roughening where practical on slopes 3:1 and steeper, and a temporary cover crop for the first three years at 75%. Permanent erosion control measures include rock benches, straw mulch applied at 4,000 pounds per acre, and a permanent cover crop to achieve minimum densities of 75%. Details of the proposed erosion control measures are provided in the Haas Vineyard Track I Erosion Control Plan and Narrative (dated November 2024) prepared by Coda Rainsford (CPESC #9225) of HDVine LLC, Santa Rosa, California (**Exhibits B and C**).

Earthmoving: Earthmoving and grading activities associated with the land contouring (60 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 6-foot by 3-foot spacing pattern for an approximate vine density of approximately 2,420 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-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 # P23-00355-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 # P23-00355-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 5 trips per day for anticipated work crews of up 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 two truck trips per day with approximately 2 workers. Typical operations include, but are not limited to, irrigation and trellis system inspection and repair, cover crop inspection and management, erosion control measure monitoring and maintenance, and vine/vineyard inspection, on the days when these activities occur. During peak operations, activities such as vineyard pruning, weed and pest control, and harvest are anticipated to generate up to five round trips per day, including grape haul trucks, for anticipated work crews of up to 10 employees. Anticipated equipment for vineyard operations would be limited to tracklaying vehicles, ATVs, and hand tools.

Implementation of the proposed project would be in accordance with the Haas Vineyard Track I Erosion Control Plan prepared by HDVine LLC (November 2024 – **Exhibits B and C**). 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://pbes.cloud/index.php/s/T7HqnQ52nLbt6aM>.

10. Describe the environmental setting and surrounding land uses.

The approximately 23.9-acre project site (APN 021-352-036) is located on Swanston Road, approximately 0.5 mile north of the City of St. Helena, California (**Figures 1-3**). An existing private driveway from Swanston Road would provide access to the proposed development area. Existing improvements on the project site include a driveway, dirt and gravel roads, a single-family residence, a garden and 0.7 acre of vineyard, a cabin, and two tennis courts, as well as powerlines operated by PG&E and waterlines operated by Vailima Estates Mutual Water Company. Surrounding properties are generally used for agricultural and rural residential purposes.

The project site is located on Glass Mountain on the east side of Napa Valley. The general topography in the vicinity of the project site consists of the relatively flat Napa Valley to the west and rolling mountains to the east. Average slopes in the proposed development area range from 5% to 24%, with an average slope of approximately 15%. Approximately 0.13 acre is on slopes over 30%. The proposed vineyard blocks are located adjacent to rural residential uses to the east, west, and south of the project site at elevations ranging from 295 to 570 feet above mean sea level.

Soils in the proposed development area have been classified according to the Soil Survey of Napa County (USDA 1978) as Boomer gravelly loam, volcanic bedrock, 14 to 60% slopes (**Exhibit I – Soil Report**). The closest active faults are the West Napa Fault and Mayacama Fault located approximately 1.6 and 2.3 miles southwest of the project site (Napa County GIS Faults Layer).

The project site is located within the Upper St. Helena Reach, within the Napa River Watershed. The Napa River, a U.S. Geological Survey (USGS) blue-line stream, is located approximately 1,530 feet to the southwest of the project well and Canon Creek is located approximately 1,600 feet northwest of the project site. Drainage from the project site is by sheet flow and runs into a drainage ditch along the driveway located within the project site to the northwest of the proposed development area. Runoff flows toward 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 and coastal live oak woodland, the project will convert 4.9 acres of existing fire impacted Douglas fir forest (which included 0.7 acres of area already converted to vineyard), and 0.1 acres of developed area.

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

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

Other Agencies Contacted

Middletown Rancheria
Mishewal Wappo Tribe of Alexander Valley
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 February 16, 2024. On March 22, 2024 the County received a response from Middletown Rancheria requesting consultation. County staff has since worked with a Middletown Rancheria representative to mitigate and condition the project to ensure there

are no significant impacts to tribal and cultural resources; see the recommendations that have been incorporated into the conditions of approval and mitigation measures for the project in **Section V (Cultural Resources)**. On March 25, 20224 the Yocha Dehe responded to the consultation invitation and deferred consultation to the Mishewal Wappo Tribe of Alexander Valley and Middletown Rancheria. No response for consultation was received from the Mishewal Wappo. This is discussed in detail in **Section XVIII (Tribal Cultural Resources)**.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

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

- | | | |
|--|---|--|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture and Forestry Resources | <input type="checkbox"/> Air Quality |
| <input checked="" type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural Resources | <input type="checkbox"/> Energy |
| <input type="checkbox"/> Geology/Soils | <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Hazards & Hazardous Materials |
| <input type="checkbox"/> Hydrology/Water Quality | <input type="checkbox"/> Land Use/Planning | <input type="checkbox"/> Mineral Resources |
| <input type="checkbox"/> Noise | <input type="checkbox"/> Population/Housing | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Recreation | <input type="checkbox"/> Transportation | <input checked="" type="checkbox"/> Tribal Cultural Resources |
| <input type="checkbox"/> Utilities/Service Systems | <input type="checkbox"/> Wildfire | <input checked="" type="checkbox"/> 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 # P23-00355-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/T7HqnQ52nLbt6aM>.

- Application Submittal Materials and Correspondence, Haas Vineyard – Track I ECPA (P23-00355) – Application, Attachment A, Supplemental Environmental Information and Correspondence, APN 021-352-036, 2 Swanston Road, St. Helena, CA 94574 (**Exhibit A**).
- ECP Narrative, Haas Vineyard – Track I ECPA (P23-00355), APN 021-352-036, 2 Swanston Road, St. Helena, CA 94574 (**Exhibit B**)
- HDVine LLC, November 7, 2024, Haas Vineyard – Track 1 ECPA (P23-00355), APN 021-352-036, 2 Swanston Road, St. Helena, CA 94574 (**Exhibit C**).
- Wildlife Research Associates Inc., December 2023, Revised July 2024, Biological Resources Reconnaissance Survey, 2 Swanston Road (APN: 021-352-036), St. Helena, Napa County, California (**Exhibit D**).
- Wolf Creek Archeology, January 27, 2023, Cultural Resource Evaluation of a Portion of 2 Swanston Road, Saint Helena, CA 94574 APN 021-352-036 (contents confidential).
- HDVine LLC, December 8, 2023, Hydrology Report – Haas Vineyard (**Exhibit E**)
- HDVine LLC, December 8, 2023, Soil Loss Analysis Haas Vineyard (**Exhibit F**).
- HDVine LLC, Revised October 2, 2024, Haas Vineyards Water Availability Analysis (WAA): Tier 1 and Tier II (**Exhibit G**)
- O'Connor Environmental Inc., February 16, 2024, Water Availability Analysis (Tier II), Charles Haas 2 Swanston Road, Saint Helena, CA 94575 (**Exhibit G.1**)
- HDVine LLC, October 30, 2024, Haas Vineyard – Analysis of Greenhouse Gas Impacts on Land Conversion, APN 021-352-036, 2 Swanston Road, St. Helena, CA 94574 (**Exhibit H**).
- USDA NCRS – Custom Soil Resource Report, May 9, 2023 (**Exhibit I**)
- USDA Farm Service Agency, July 2023, Emergency Forest Restoration Program Forest Management Plan, Charles J and Ellen J Haas (**Exhibit J**)
- Project Revision Statement (**Exhibit K**)
- Site inspection conducted by Napa County Planning, Building and Environmental Services staff Dana Morrison and Raulton Haye on January 10, 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 K** 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

Dana Morrison

Printed Name

3/19/2025

Date

Napa County Planning, Building and Environmental Services

ENVIRONMENTAL CHECKLIST FORM

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
I. AESTHETICS. Except as provided in Public Resources Code Section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

a-c. The project site is located directly east of Deer Park Road, which is a Napa County-designated viewshed road. However, due to topography and existing vegetation, the project site is not visible from the roadway (Napa County GIS, Viewshed roads and Scenic Corridors Layers; Baseline Report, Chapter 12, 2005). The project site is not located within the vicinity of an officially designated state scenic highway. State Route 29, which is listed as eligible, is located approximately 0.8 mile to the southwest (Napa County GIS Road Layer; California State Scenic Highway System Map). While the project is within a scenic corridor, the project site includes existing vineyard land and open space, and there is existing vineyard on the adjacent properties to the north, east, and the south. The project site is in the Napa Valley 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 GIS, Ridgelines Layer). Therefore, the approximately 200 trees in the proposed development area that are proposed for removal would not be visible from public roadways. The project site is not located near a scenic vista, and there are no historic buildings on site. There are also no significant rock outcroppings or geologic features on the project site that would be impacted by the proposed project.

The surrounding land uses and project site include vineyard and rural residential. The proposed project would be consistent with existing surrounding land uses within the area (i.e., vineyard). 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 two days per year. The proposed project would include sulfur applications that could occur between 4 a.m. and 7 a.m., up to five 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.

Mitigation Measures:

None.

	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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))?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

- a. The project site is not mapped as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance by the California Department of Conservation (California Important Farmland Finder¹). 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 General Plan designation and is zoned Agricultural Watershed (Napa County GIS Zoning Layer). Therefore, the establishment of vineyard totaling approximately 5 gross acres with approximately 3.9 net planted acres is consistent with project site's land use and zoning designations. The project site does not have a Williamson Act contract associated with it (Napa County GIS, Williamson Act Parcels). 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-d. "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 Agricultural Watershed 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; therefore, the applicant is pursuing a Timber Conversion Permit from CalFire pursuant to Forest Practice Rules. Project approval, if granted, would be subject to the Forest Land Condition of Approval described below and the applicant would implement a Timber Harvest Plan. While the proposed project would convert 5 acres of timberland, the project would be consistent with

¹ <https://maps.conservation.ca.gov/DLRP/CIFF/>

Agricultural Watershed zoning and surrounding land uses. Therefore, with the incorporation of the Forest Land 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 # P23-00355-ECPA, the owner/permittee shall provide documentation to Napa County demonstrating that a Timber Conversion Permit for the proposed project has been obtained from the California Department of Forestry and Fire Protection (CalFire).

- e. The proposed project would not construct new roads to access the vineyards on the project site. Construction of the proposed vineyard would not result in the conversion of existing farmland to non-agricultural. Although the proposed project would convert 5 acres of timberland to non-forestland uses, the applicant is pursuing a Timber Conversion Permit from CalFire (see the Forest Land Condition of Approval above) and the proposed project would be consistent with agricultural watershed zoning and surrounding land uses. Therefore, the impacts would be less than significant.

Mitigation Measures:

None.

	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion²

The Bay Area Air Quality Management District (now known as the Bay Area Air District) (BAAD) has published CEQA guidance titled *BAAD 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.³ 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 BAAD CEQA Guidelines do not replace the State CEQA Statute and Guidelines; rather, they are designed to provide BAAD-recommended procedures for evaluating potential air quality and climate impacts during the environmental review process that are consistent with CEQA requirements. The BAAD 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 BAAD’s previous CEQA guidance titled *BAAD CEQA Air Quality Guidelines* (2017). The potential air quality impacts associated with construction and operation of the proposed project were evaluated consistent with BAAD’s 2022 CEQA Guidelines.

- a. The project site is generally located along the eastern side of Napa Valley, within the Napa County climatological subregion of SFBAAB, which is under the jurisdiction of BAAD. 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 from construction equipment, vehicular haul and worker trips, and the burning of any project area vegetation⁴. 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 traveling to and from the site, truck trips hauling harvested grapes, and use of 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 (PM₁₀), fine particulate matter less than 2.5 microns (PM_{2.5}), and lead. Air basins (or portions thereof) are categorized as “attainment,” “nonattainment” or “unclassified” for each criteria air pollutant based on whether ambient air quality standards have been achieved. The SFBAAB is currently designated as a nonattainment area for the federal 8-hour ozone standard, state 1-hour and 8-hour ozone standards, state annual and 24-hour PM₁₀ standards, federal 24-hour PM_{2.5} standard and the state annual PM_{2.5} standard. Therefore, the criteria air pollutants of concern in the SFBAAB are reactive organic gases (ROG) and oxides of nitrogen (NO_x) which are referred to as ozone precursors, as well as PM₁₀ and PM_{2.5}.

² See **Section VIII (Greenhouse Gas Emissions)** for the greenhouse gas (GHG) emissions disclosure and impact assessment.

³ BAAD, 2023. *2022 California Environmental Quality Act Air Quality Guidelines*. April 2023. Available at <https://www.baad.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines>.

⁴ Assuming burning to be conservative.

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).⁵ 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”⁶ that are potent climate pollutants in the near-term; and decrease emissions of carbon dioxide by reducing fossil fuel combustion.⁷

The BAAD’s current guidance requires consideration of the following questions in determining whether a project is consistent with an air quality plan. A project would be considered to be consistent with the Clean Air Plan if:

- 1) the project supports the primary goals of the Clean Air Plan
- 2) the project includes all applicable control measures from the Clean Air Plan
- 3) the project does not disrupt or hinder implementation of any control measures in the Clean Air Plan.

The BAAD-recommended guidance for determining if a project supports the goals of the current Clean Air Plan is to compare project-estimated emissions with BAAD 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 BAAD 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 BAAD has provided more than \$38 million to replace and/or upgrade hundreds of pieces of older, often uncontrolled equipment used in construction, cargo-handling and agricultural operations with newer units that have engines certified to the cleanest available standards. The proposed project would benefit from this ongoing program and would not conflict with its implementation. Therefore, the proposed project would not be inconsistent with nor hinder implementation of any of the Clean Air Plan control measures.

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

- b. The 2022 BAAD Guidelines provide thresholds of significance for air quality impacts from both construction and operation. According to BAAD, 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 – BAAD 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.
Source: BAAD CEQA Guidelines April 2023.

⁵ BAAD, 2017. Spare the Air, Cool the Climate, Final 2017 Clean Air Plan. Adopted April 19, 2017. Available at https://www.baad.gov/~media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a_-proposed-final-cap-vol-1-pdf.pdf?la=en.

⁶ “Super-GHGs” are climate pollutants that have a powerful ability to contribute to global warming, such as methane, black carbon, and fluorinated gases.

⁷ BAAD, 2017. Spare the Air, Cool the Climate, Final 2017 Clean Air Plan. Adopted April 19, 2017. Available at https://www.baad.gov/~media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a_-proposed-final-cap-vol-1-pdf.pdf?la=en.

For construction-related emissions of fugitive dust, the BAAD recommends that lead agencies take a qualitative approach to determine impact significance; the CEQA Air Quality Guidelines state that a project would be considered to have a less-than-significant impact with regard to fugitive dust emissions of PM₁₀ and PM_{2.5} if BAAD 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 Vineyards⁸ for an approximately 91-acre vineyard development, KJS and Sorrento Vineyard⁹ for an approximately 98-acre vineyard development, and Le Colline Vineyards¹⁰ for an approximately 28-acre vineyard development¹¹.

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 5 gross acres of vineyard. During construction, vineyard installation is anticipated to generate about two trips per day for anticipated work crews of up to eight employees, including truck trips for equipment and supply delivery. Anticipated construction equipment would be limited to tracklaying and rubber-tired vehicles and could include typical vineyard construction equipment including 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 5 gross acre vineyard development (approximately 3.9 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 BAAD's daily construction thresholds.

Once completed, primary project operations would include activities such as vineyard pruning, weed and pest control, and harvest. During peak harvest season, operations are anticipated to generate up to five round trips per day, including grape hauling trucks for anticipated work crews of up to 10 employees. Vineyard operations would be similar to the other three vineyard projects discussed above and the project proposes to develop a vineyard in a smaller area than the projects shown in **Table 5**. Therefore, operational emissions associated with the proposed project would be less than those shown in **Table 5** and well below both the daily and annual thresholds.

⁸ #P18-00446-ECPA, November 2022, SCH #2019100250

⁹ #P17-0432-ECPA, March 2023, SCH #2018092042

¹⁰ #P14-00410-ECPA, December 2022, SCH #2016042030

¹¹ These EIRs are incorporated herein by reference and available for review in the Napa County Department of Planning, Building and Environmental Services permanent files.

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)	0.60	5.83	0.25	0.23
Construction threshold	54	54	82	54
Significant?	No	No	No	No
Emissions and Thresholds	Operational Emissions ^{4, 5}			
	ROG	NO _x	PM ₁₀	PM _{2.5}
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)	0.01	0.15	0.02	<0.01
Operational threshold (pounds per day)	54	54	82	54
Significant?	No	No	No	No
Emissions and Thresholds	Operational Emissions ⁴ (tons per year)			
	ROG	NO _x	PM ₁₀	PM _{2.5}
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)	<0.01	0.03	<0.01	<0.01
Operational threshold (tons per year)	10	10	15	10
Significant?	No	No	No	No

¹ As identified in Stagecoach North IS/MND

² As identified in KJS and Sorrento IS/MND

³ As identified in Le Colline Vineyard IS/MND

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; BAAD 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 BAAD measures identified in **Table 5-2** of the BAAD 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 BAAD'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.
- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator. Any portable engines greater than 50 horsepower or associated equipment operated within the BAAD's jurisdiction shall have either a California Air Resources Board (ARB) registration Portable Equipment Registration Program (PERP) or a BAAD permit. For general information regarding the certified visible emissions evaluator or the registration program, visit the ARB FAQ¹² or the PERP website¹³.

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). Therefore, implementation of the proposed project would result in less-than-significant air quality impacts and would not conflict with or obstruct implementation of an air quality plan or result in cumulatively considerable effects.

- 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 23.9-acre project site is located on Swanston Road, approximately 0.5 mile north of the City of St. Helena. An existing private driveway from Swanston Road would provide access to the proposed development area. Existing improvements on the project site include a driveway, dirt and gravel roads, a single-family residence, a garden and 0.7 acre of vineyard, a cabin, and two tennis courts, as well as powerlines operated by PG&E and waterlines operated by Vailima Estates Mutual Water Company. Surrounding properties are generally used for agricultural and rural residential purposes. The closest schools, Foothill Adventist Elementary and Robert Louis Stevenson Elementary, are located approximately 0.9 mile east and 1.6 miles southwest of the project site, respectively (Napa County GIS, Schools Layer). The nearest residence to the project site is located approximately 450 feet north of the project site.

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 0.9 mile from the closest school and approximately 450 feet from the nearest rural 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.

Mitigation Measures:

None.

¹² http://www.arb.ca.gov/portable/perp/perpfaq_04-16-15.pdf

¹³ <http://www.arb.ca.gov/portable/portable.htm>

	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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

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

- Wildlife Research Associates Inc., December 2023, Revised July 2024, Biological Resources Reconnaissance Survey, 2 Swanston Road (APN: 021-352-036), St. Helena, Napa County, California (**Exhibit D**).
- USDA Farm Service Agency, July 2023, Emergency Forest Restoration Program Forest Management Plan, Charles J and Ellen J Haas (**Exhibit J**).

Wildlife Research Associates conducted an assessment of biological resources present or potentially present in the project site. Biological resource surveys were conducted on April 28 and June 16, 2022. The surveys focused on the proposed development area and immediate surrounding habitat located within the project site 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.

Prior to conducting the biological surveys, biological information for the project site was obtained from the following sources: the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB) (CDFW, 2023), California Native Plant Society Electronic Inventory (CNPS, 2023), and the U.S. Fish and Wildlife Service (USFWS) List of Federal Endangered and Threatened Species California Bird Species of Special Concern (USFWS, 2023). For plants, the Detert Reservoir, Aetna Springs, Walter Springs, Calistoga, St. Helena, Chiles Valley, Kenwood, Rutherford, and Yountville USGS 7.5-minute quadrangles were included in the search. For wildlife, the entirety of Napa County was considered.

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.

The vegetation types in the project site consist of Douglas fir forest and coastal live oak woodland, with only Douglas fir in the proposed development area. The vegetation types and their acreages are shown in **Table 6**.

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

Vegetation Types	Approximate Pre-Project Acres in Project Site ¹	Approximate Acres in Proposed Development Area
Coast Live Oak Woodland	5.9	0
Douglas Fir Forest	14.9	4.9
Total	20.8²	4.9³

Notes:

1 Approximately 0.7 net acre of vineyard currently existing in the proposed development area; this area is treated as undeveloped in the Biological Resources Survey Report.

2 An additional 3.1 acres of developed land occurs in the project site.

3 An additional 0.1 acre of developed land occurs in the proposed development area.

Source: Wildlife Research Associates, July 2024 – **Exhibit D**

- a. **Special-Status Plants:** Based upon a review of the biological resource databases listed in **Exhibit D**, 97 special-status plant species have been documented in the vicinity of the project site. Of those, eight species have a moderate to high chance to occur in the proposed development area, including: Napa false indigo (*Amorpha californica* var. *napensis*), streamside daisy (*Erigeron biolettii*), redwood lily (*Lilium rubescens*), Cobb Mountain lupine (*Lupinus sericatus*), Mt. Diablo cottonweed (*Micropus amphibolus*), Victor's gooseberry (*Ribes victoris*), dark-mouthed triteleia (*Triteleia lugens*), and oval-leaved viburnum (*Viburnum ellipticum*). The biological surveys, which were timed to correspond to the period sufficient to observe and identify those special-status plants determined to have the potential to occur in the proposed development area, did not identify any special-status plant species (Wildlife Research Associates, July 2024 – **Exhibit D**).

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-3.¹⁴ Additionally, pursuant to Napa County General Plan Policy CON-13,¹⁵ 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.

The project as proposed would not remove special-status plants and/or populations, which 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 5 gross acres of agriculture in the project site; 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.

Specific to oak woodland, 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. The proposed development area does not contain any coast live oak woodland, and there would be no impacts to coast live oak woodland.

Special-Status Animals: Based upon a review of the biological resource databases listed in **Exhibit D**, 59 special-status animal species have been documented to occur in Napa County. Five of these species have a moderate to high potential to occur in the proposed development area, including: olive-sided flycatcher (*Contopus cooperi*), purple martin (*Progne subis*), pallid bat (*Antrozous pallidus*), fringed myotis (*Myotis thysanodes*), and long-legged myotis (*Myotis volans*). The biological surveys identified habitat for these special-status animal species within the proposed development area; no special-status animal species were observed. These species are discussed in further detail below (Wildlife Research Associates, July 2024 – **Exhibit D**).

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. They require large, tall trees, usually conifers, for nesting and roosting sites, and often use dead tips of uppermost branches of the tallest trees in the vicinity for singing posts and hunting perches. These birds

¹⁴ 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.

¹⁵ 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.

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. Habitat degradation and loss is the most important threat. The trees within the proposed development area may contain cavities or exfoliating bark suitable for roosting.

Purple martins 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. They forage over riparian areas, forests, and woodlands. They also occur in coniferous habitats, including closed-cone pine-cypress, ponderosa pine, Douglas fir, and redwood forests. Their nests are in old woodpecker cavities (often a tall, large cavity tree), but they will use human-made structures such as nesting box, buildings, on utility poles, under bridges, or in a culvert. Purple martins forage on insects, especially large ones like dragonflies. 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. The trees within the proposed development area may contain cavities or exfoliating bark suitable for roosting.

Pallid bat is a relatively common species of low elevations in California. The species 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. The species' day roosts are in caves, crevices, mines and hollow trees or buildings. Roosts must protect bats from high temperatures. Night roosts may be in more open sites. Tree roosting has been documented within snags, basal hollows of conifers, and within bole cavities in oak trees. Prey items are primarily insects and arachnids, including beetles, orthopterans, homopterans, moths, spiders, scorpions, solpugids, and Jerusalem crickets. The species mates from late October to February with maternity colonies forming in early April and young are born April – July, with most in May and June. Typically, young pallid bats have been observed flying in July and August. The species is also sensitive to disturbance of roosting sites. Trees within the proposed development area may contain cavities or snags suitable for roosting by this species.

Fringed myotis ranges through much of western North America from southern British Columbia, Canada, south to Chiapas, Mexico and from Santa Cruz Island in California, east to the Black Hills of South Dakota. This species is found in desert scrubland, grassland, sage-grass steppe, old growth forest, and subalpine coniferous and mixed deciduous forest. Oak and pinyon-juniper woodlands are most commonly used by this species. The fringed myotis roosts in colonies from 10 to 2,000 individuals, although large colonies are rare. Caves, buildings, underground mines, rock crevices in cliff faces, and bridges are used for maternity and night roosts, while hibernation has only been documented in buildings and underground mines. Tree-roosting has also been documented in Oregon, New Mexico, and California. The trees within the proposed development area may contain cavities or exfoliating bark suitable for roosting.

Long-legged myotis ranges across western North America from southeastern Alaska to Baja California and east to the Great Plains and central Texas. This species is usually found in coniferous forests but also occurs seasonally in riparian and desert habitats. They use abandoned buildings, cracks in the ground, cliff crevices, exfoliating tree bark and hollows within snags as summer day roosts. Caves and mines are used as hibernation roosts. Long-legged myotis forage in and around the forest canopy and feed on moths and other soft-bodied insects. The trees within the proposed development area may contain cavities or exfoliating bark suitable for roosting.

The special-status bat and bird species identified above have the potential to be impacted during removal of the approximately 200 trees during project construction. Further, in addition to the special-status bird species discussed above, other migratory birds and raptors protected by the Migratory Bird Treaty Act and California Fish and Wildlife Code may also nest onsite, as the project site contains a variety of nesting habitat. Temporary and intermittent increases in noise levels during construction may cause nest abandonment and death of young or loss of reproductive potential at active nests located near project activities. These are considered potentially significant impacts. To reduce potentially direct and indirect significant impacts on special-status bat species to a less-than-significant level, **Mitigation Measure BIO-1** would be implemented.

Mitigation Measure BIO-1: The owner/permittee shall revise Erosion Control Plan #P23-00355-ECPA prior to approval to include the following measures to minimize impacts associated with the potential loss and disturbance of special-status 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.

To reduce potentially direct and indirect significant impacts on special-status and protected bird species to a less-than-significant level, **Mitigation Measure BIO-2** would be implemented.

Mitigation Measure BIO-2: The owner/permittee shall revise Erosion Control Plan #P23-00355-ECPA prior to approval to include the following measures to minimize impacts associated with the potential loss and disturbance of special-status and nesting birds and raptors 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 September 15 – NCC Section 18.108.027(C), and bird breeding and nesting seasons), a qualified biologist (defined as knowledgeable and experienced in the biology and natural history of local avian resources with the potential to occur at the project site) shall conduct a preconstruction surveys for nesting birds within all suitable habitat on the development area, and where there is potential for impacts adjacent to the development area (typically within 500 feet of project activities). The preconstruction survey shall be conducted no earlier than 7 days prior to when vegetation removal and ground disturbing activities are to commence. Should ground disturbance commence later than 7 days from the survey date, surveys shall be repeated. A copy of the survey shall be provided to the Napa County Conservation Division and the 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 the County Conservation Division and the U.S. Fish and Wildlife Service (USFWS) and/or CDFW prior to initiation of project activities. Exclusion buffers may vary in size, depending on habitat characteristics, project activities/disturbance levels, and species as determined by a qualified biologist in consultation with County Conservation Division and the USFWS and/or 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.
- 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) would be considered an impact to nesting birds and is prohibited. Any act associated with flushing birds from project areas should undergo consultation with the USFWS/CDFW prior to any activity that could disturb nesting birds.

b-c. The Napa River, a blue-line stream, is located approximately 1,530 feet southwest of the project well and Canon Creek is located 1,600 feet northwest of the project site. Within the project site, one ephemeral tributary to the Napa River also occurs approximately 400 feet southwest of the proposed development area. Minimum 105-foot stream setbacks have been maintained from this ephemeral drainage in accordance with NCC Section 18.108.025 (**Exhibit A**). 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 not result in significant impacts to this drainage. No wetlands or riparian habitat occur in the project site. Therefore, no impacts to wetlands or riparian habitat would occur because of the proposed project.

The project site contains approximately 5.9 acres of coast live oak woodland. This community is considered sensitive by Napa County. There is no coast live oak woodland within the proposed development area; therefore, there would be no impact on coast live oak woodland from the proposed project.

- 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.

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. The project site is located within a mapped, course-scale corridor that

provides connectivity between southern and northern Napa County. However, most of the project site would remain undeveloped, including the bulk of the site's coast live oak woodland and Douglas fir forest. More specifically, a corridor of burnt forest and woodland oriented roughly northwest-southeast would remain intact, resulting in direct connectivity with similar habitats on neighboring (largely underdeveloped) properties to the north and south. This would allow for continued wildlife movement. Given the relatively small size of the proposed development area (relative to the width of the greater corridor tract), the apparent lack of development impacts within the more central portion of this tract, and the retention of the northwest-southeast corridor, the proposed project is not anticipated to result in any potentially significant impacts to wildlife movement or migration. (Wildlife Research Associates, July 2024 – **Exhibit D**).

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.

The proposed project would be consistent with General Plan Policy CON-18, which encourages the reduction of impacts to habitat conservation and connectivity. Wildlife nursery sites were not identified in the project site, and there would thus be no impacts to wildlife nursery sites. Impacts to wildlife movement, habitat use and availability, and vegetation removal would be less than significant.

New wildlife exclusion fencing is proposed to the west and south of the proposed development area, and the proposed fencing would connect to existing fencing which extends from the northwest to the south of the proposed development area. The new fencing would not result in significant impacts to wildlife movement and use. In order to ensure that wildlife exclusion fencing is installed in a manner that is consistent with the biologist and CDFW recommendations to minimize impacts to wildlife movement, the following conditions shall be implemented, should the project be approved.

Fencing – Conditions of Approval:

The owner/permittee shall revise Erosion Control Plan # P23-00355-ECPA prior to approval to include a Vineyard Fencing Plan. The Vineyard Fencing Plan shall be submitted to the Planning Department for review and approval prior to its incorporation into # P23-00355-ECPA, and include the following components:

- 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.
- Exit gates shall be installed at the corners of deer fencing to allow trapped wildlife to escape.
- Any modifications to the location of wildlife exclusion fencing as specified in Erosion Control Plan # P23-00355-ECPA pursuant to the Vineyard Fencing Plan required by this condition 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 site contains approximately 14.9 acres of Douglas fir forest (with 4.9 acres in the proposed development area) and 5.9 acres of coast live oak woodland (none of which occurs in the proposed development area). The proposed development area contains 200 trees with DBH greater than 6 inches that are proposed for removal. 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. The project site was burned in the 2020 Glass Fire, and it is therefore subject to NCC Section 8.80.130, which requires the vegetation canopy cover analysis (per NCC Section 18.108.020(C)) use a baseline of June 19, 2018, for evaluating canopy impacts. Approximately 22.5 acres of tree canopy cover existed in the project site in 2018 (**Exhibit D**). The proposed project would retain approximately 17.6 acres (or 77%) of the tree canopy (or vegetation canopy cover) that existed in the project site, exceeding the 70% retention requirement (**Exhibit B**).

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 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. However, the proposed project qualifies for Section 17 of the Water Quality and Tree Protection Ordinance (Ordinance No. 1438 adopted by the Board of Supervisors), which allows for a one-time exemption from NCC Sections 18.108.020(C) and (D) for projects less than 5 acres and less than 30% slopes (**Exhibit B**).

The approximately 4.9 acres of Douglas fir forest proposed for removal is a commercial timber species, and therefore, the applicant is pursuing a Timber Conversion Permit and will file a Timber Harvest Plan with CalFire under the direction of a Registered Forestry Professional (RFP) (see the Forest Land Conditions of Approval in **Section II [Agriculture and Forestry Resources]**). Additionally, an Emergency Forest Restoration Program Forest Management Plan is being implemented to restore approximately 10 acres of forest impacted by the 2020 Glass Fire (**Exhibit J**); this is discussed further in **Section VIII (Greenhouse Gas Emissions)**.

With implementation of **Mitigation Measures BIO-1 and BIO-2** and the identified fencing condition of approval, the proposed project would have less-than-significant impacts on special-status plants and wildlife as well as 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 average 24 tons per acre per year across the proposed development area depending on soil type, slope length, and gradient. Under proposed project conditions, soil loss is anticipated to total 13.2 tons per acre per year, or a reduction of approximately 45% 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 and BIO-2** 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.

Mitigation Measures:

Mitigation Measure BIO-1: The owner/permittee shall revise Erosion Control Plan #P23-00355-ECPA prior to approval to include the following measures to minimize impacts associated with the potential loss and disturbance of special-status 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-2: The owner/permittee shall revise Erosion Control Plan #P23-00355-ECPA prior to approval to include the following measures to minimize impacts associated with the potential loss and disturbance of special-status and nesting birds and raptors 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 September 15 – NCC Section 18.108.027(C), and bird breeding and nesting seasons), a qualified biologist (defined as knowledgeable and experienced in the biology and natural history of local avian resources with the potential to occur at the project site) shall conduct a preconstruction surveys for nesting birds within all suitable habitat on the development area, and where there is potential for impacts adjacent to the development area (typically within 500 feet of project activities). The preconstruction survey shall be conducted no earlier than 7 days prior to when vegetation removal and ground disturbing activities are to commence. Should ground disturbance commence later than 7 days from the survey date, surveys shall be repeated. A copy of the survey shall be provided to the Napa County Conservation Division and the 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 the County Conservation Division and the U.S. Fish and Wildlife Service (USFWS) and/or CDFW prior to initiation of project activities. Exclusion buffers may vary in size, depending on habitat characteristics, project activities/disturbance levels, and species as determined by a qualified biologist in consultation with County Conservation Division and the USFWS and/or 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.
- 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) would be considered an impact to nesting birds and is prohibited. Any act associated with flushing birds from project areas should undergo consultation with the USFWS/CDFW prior to any activity that could disturb nesting birds.

	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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

See **Section XVIII (Tribal Cultural Resources)** for disclosures and the impact assessment pursuant to 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: Wolf Creek Archeology, January 27, 2023, Cultural Resource Evaluation of a Portion of 2 Swanston Road, Saint Helena, CA 94574 APN 021-352-036 (contents confidential).

Wolf Creek Archeology conducted a cultural resources evaluation within the project site¹⁶, which included a check of information on file with the regional office of the California Historical Resources Information System (CHRIS) and consultation with the Native American Heritage Commission for a search of the Sacred Lands File to determine presence or absence of previously recorded historic or prehistoric cultural resources; a check of relevant historic references to determine the potential for historic era archaeological deposits or structures; and a surface reconnaissance survey of all accessible parts of the proposed development area¹⁷ to locate any visible signs of potentially significant historic or prehistoric cultural deposits.

a-b. The cultural resources evaluation (Wolf Creek Archeology, 2023) identified a previously unknown prehistoric resource in the project site. The areas of the proposed vineyard blocks in the cultural resources evaluation were from an early planning design and have since been revised and reduced with the proposed project to meet recommendations to fully avoid the prehistoric site. Further, through consultation with Middletown Rancheria, **Mitigation Measure CUL-1** and the Cultural Resources Conditions of Approval below were developed and will be implemented to mitigate and condition the project to ensure there are no significant impacts to cultural resources. Therefore, to reduce potentially significant impacts to cultural resources to a less-than-significant level, **Mitigation Measure CUL-1** shall be implemented. 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.

Mitigation Measure CUL-1: Property owner shall enter into a Tribal Monitoring Agreement with Middletown Rancheria and shall comply with the Tribal Monitoring Agreement which will include a requirement for tribal monitors on site during project development and ground disturbance activities, and a requirement for cultural sensitivity training for all project personnel prior to implementing the project.

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,

¹⁶ The proposed vineyard blocks in the cultural resources evaluation were from an early planning design and have since been revised and reduced with the proposed project to meet recommendations to fully avoid the prehistoric site.

¹⁷ The cultural resources evaluation surveyed approximately 10.5 acres of the 23.9-acre project site.

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 (RPA) and a Middletown Rancheria Tribal Cultural Monitor have 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.

Mitigation Measures:

Mitigation Measure CUL-1: Mitigation Measure CUL-1: Property owner shall enter into a Tribal Monitoring Agreement with Middletown Rancheria and shall comply with the Tribal Monitoring Agreement which will include a requirement for tribal monitors on site during project development and ground disturbance activities, and a requirement for cultural sensitivity training for all project personnel prior to implementing the project.

	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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.

Mitigation Measures:

None.

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

	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.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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 faults are the West Napa fault and Mayacamas fault, located approximately 1.6 and 2.3 miles southwest of the project site (Napa County GIS Faults 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 Boomer gravelly loam, volcanic bedrock, 14 to 60% 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 15 and April 1. 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 75% for vineyard Blocks 1 through 4 as specified in the ECP. The cover crop provides the ability to trap eroded soils onsite, thereby reducing soil loss and sedimentation potential.

Based on USLE modeling calculations prepared by HDVine LLC (**Exhibit F and F.1**), the proposed conversion of approximately 5 acres of vegetation to vineyard is anticipated to reduce 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 24 tons per acre per year across the proposed development area depending on soil type, slope length, and gradient. Under proposed project conditions, annual soil loss is anticipated to total 13.2 tons per acre per year, or a reduction of approximately 45% as compared to existing conditions.

Table 7 – USLE Soil Loss Analysis

Vineyard ID	Pre-project Soil Loss (tons/acre/year)	Post-project Soil Loss (tons/acre/year)	Difference	Percent Change (approximate)
1a	1.5	0.8	-0.7	-47%
1b	3.0	1.7	-1.3	-43%
2a	3.6	2.0	-1.6	-44%
2b	0.4	0.2	-0.2	-50%
3a	5.3	2.9	-2.4	-45%
3b	6.2	3.4	-2.8	-45%
4a	2.8	1.5	-1.3	-46%
4b	1.2	0.7	-0.5	-42%
Total	24.0	13.2	-10.8	-45%

Source: HDVine LLC, December 8, 2023, Soil Loss Equation – **Exhibit F**

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 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 referenced into Erosion Control Plan # P23-00355-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, rock benches 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 (#P23-00355-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 75% for vineyard Blocks 1 through 4. Cover crop may be disced between rows and sprayed under vines or otherwise cultivated after April 1; after three years a permanent, no-till cover shall be established. Should the permanent no-till cover crop need to be replanted/renewed during the life of the vineyard, cover crop renewal efforts shall follow the County "Protocol for Replanting/Renewal of Approved Non-Tilled Vineyard Cover Crops" July 19, 2004, or as amended.

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

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

- c. As discussed above, there are no landslide deposits located on or near the project site. The proposed development area is in an area prone to low chances of ground failure or liquefaction and the proposed project would address any potential soil instability. The proposed vineyard development is not expected to cause any significant decrease in slope stability nor any increase in erosion associated with landslide processes. Therefore, the proposed project would not result in any significant impacts of on- or off-site landslides, lateral spreading, subsidence, liquefaction or collapse.
- d. Soils in the proposed development area exhibit a low to moderate 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.

Mitigation Measures:

None.

	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

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

GHGs are the atmospheric gases whose absorption of solar radiation is responsible for the greenhouse effect, including CO₂, methane, nitrous oxide, and fluorocarbons, which contribute to climate change. CO₂ is the principal GHG emitted by human activities, and its concentration in the atmosphere is most affected by human activity. It also serves as the reference gas to which to compare other GHGs. Agricultural sources of carbon emissions include forest clearing, land-use changes, biomass burning, and farm equipment and management activity emissions. GHG emissions are reported as carbon dioxide equivalent (CO_{2e}) which is a metric used to compare the emissions from various GHGs on the basis of their global warming potential (GWP), by converting amounts of other gases with different GWPs to an equivalent amount of carbon dioxide with a GWP of one. CO₂ is used as the reference gas to calculate atmospheric carbon effects of GHGs. Carbon stocks and sequestration are converted to CO_{2e} by multiplying the carbon total by 44/12 (or 3.67), which is the ratio of the atomic mass of a carbon dioxide molecule to the atomic mass of a carbon atom (<http://ncasi2.org/COLE/faq.html>).¹⁸

On April 20, 2022, the BAAD adopted updated thresholds of significance for climate impacts (CEQA Thresholds for Evaluating the Significance of Climate Impacts, BAAD April 2022)¹⁹ and included them in its updated CEQA guidance published in April 2023 (referred to as the 2022 CEQA Guidelines). The updated thresholds to evaluate greenhouse (GHG) and climate impacts are qualitative in nature and geared toward reducing building energy and transportation emissions from land use development projects. Per the BAAD, all other projects should be analyzed against either an adopted local Greenhouse Gas Reduction Strategy (i.e., a qualified 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 the 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 construction-related climate impact threshold at this time. As GHG emissions from construction represent a 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 a project’s GHG emissions.

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

¹⁸ “Carbon stock” refers to the total amount of carbon stored in the existing plant material including trunks, stems, branches, leaves, fruits, roots, dead plant material, downed trees, understory, and soil organic material. Carbon stock is expressed in units of metric tons of carbon per acre. When land is cleared, some percentage of the carbon stored is released back to the atmosphere as CO₂. Land clearing or the loss of carbon stock is thus a type of GHG emission (County of Napa, March 2012, Napa County Draft Climate Action Plan).

¹⁹ <https://www.baad.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines>.

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 BAAD or a qualified CAP for the County, construction and operational GHG emissions from the project are evaluated against the 1,100 metric tons (MT) per year GHG 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 BAAD 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 sequestration refers to the ongoing process by which plants, such as vines, trees, and grasses absorb CO₂ from the atmosphere through photosynthesis, converting it into carbon that is stored in their biomass (roots, stems, leaves) and soil. This process helps remove CO₂ from the atmosphere over time. Any changes in land use or vegetation that reduce carbon sequestration—such as removing natural vegetation or converting land for other uses—lead to ongoing reductions in this CO₂-capturing benefit, potentially increasing the amount of CO₂ that remains in the atmosphere annually. A decrease in carbon sequestration is considered an increase in CO₂ emissions.

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

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 BAAD does not provide significance thresholds for operational emissions that could be applied to the proposed project, the 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 project are quantified and 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 below); iii) ongoing carbon sequestration that is gained or lost by altering vegetation or conserving specific vegetation types (referred to as Carbon Sequestration Emissions below).

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 County Certified CEQA documents assessed and analyzed potential air quality and GHG emissions associated with vineyard development. Within those EIRs 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 EIR anticipated approximately 1,880 metric tons (MT) CO_{2e} of construction emissions for a 142-acre vineyard development, resulting in approximately 19.2 MT CO_{2e} of construction equipment emissions per acre of vineyard development.²⁰ Using this emission factor it is anticipated that Construction Equipment Emissions associated with the proposed project's 5 gross acres of vineyard development would be approximately 96.2 MT CO_{2e} (5 acres multiplied by 19.24 MT CO_{2e}). Construction emissions are seasonal in nature and would only occur during the dry season (April-October) of any given year. While BAAD has no quantitative GHG threshold for

²⁰ 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.

comparison, the project's construction equipment emissions are well below the SMAQMD GHG emission threshold of 1,100 MT CO_{2e} and therefore can be considered less than significant.

Operational Emissions:

Emissions associated with the operation of the vineyard capture ongoing emissions from the use of equipment and vehicles to maintain and farm the vineyard, including vehicles (such as haul trucks, pick-up trucks) and worker vehicle trips. The three vineyard development project analyses referenced above also assessed ongoing vineyard operation emissions associated with vehicles and equipment. Estimated potential operational emissions per acre of vineyard development were derived using the highest emissions results of the three projects; the Stagecoach North Vineyard EIR estimated approximately 322 MT CO_{2e} of operational emissions per year for a 116-acre vineyard, resulting in approximately 2.77 MT CO_{2e} of operational emissions per acre of vineyard per year. Using this emission rate, it is anticipated that operational equipment emissions associated with the proposed 5-acre agricultural development would be approximately 13.9 MT CO_{2e} per year (5 multiplied by 2.77 MT CO_{2e}). Operational emissions are also seasonal in nature, mostly occurring during the harvest season. While the BAAD's qualitative operational thresholds do not apply to projects such as the proposed project which do not generate emissions from building energy and transportation, the project's operational emissions can be considered less than significant when compared to SMAQMD's operational threshold of 1,100 MT CO_{2e} per year.

Emissions from Change in Vegetation:

Carbon Stock Emissions: Table 8 shows Carbon stock emissions resulting from vegetation removal and soil preparation associated with converting existing vegetation within the project site to approximately 3.9 acres of vineyard, 1.1 acres of grassland, and 10 acres forest and woodlands. Converting existing vegetation to vineyard and grassland will decrease the project site's carbon stock, while reforesting existing shrubland to forest and woodland will increase the project site's carbon stock. Because there is not yet a universally accepted scientific methodology or modeling method to calculate GHG emissions due to vegetation conversion and soil disturbance, this analysis uses the carbon stock factors from the *Regional Carbon Stock Inventory Report for Napa County* to estimate carbon stock in aboveground vegetation and belowground in the soil in the project site. For the purposes of this GHG analysis, existing vegetation within the project site is considered mixed shrubland due to post-fire conditions from the Glass Fire that occurred in 2020. The CALAND report indicates that non-regenerative forests after a high-severity wildfire should be categorized as mixed shrubland. Utilizing these factors and the acreages of existing adjusted vegetation types within the project site, total existing carbon stock emissions for the project site are estimated to be approximately 449.6 MT C or approximately 1,648.7 MT CO_{2e} (Table 8). This includes carbon stored in aboveground vegetation and belowground in soil. The proposed project includes converting 5 acres of the project site from mixed shrubland into 3.9 acres of vineyard and 1.1 acres of grassland. Additionally, 10 acres of shrubland on the project site is being reforested into 5 acres of woodland and 5 acres of forest per the Emergency Forest Restoration Program Forest Management Plan (Exhibit J). With this reforestation, total carbon storage of the proposed project would be approximately 834.6 C or approximately 3,060.2 MT CO_{2e}. As shown in Table 8, the project would result in an increased carbon stock of approximately 385.0 MT C which equates to approximately 1,411.5 MT CO_{2e}.

Table 8 – Project Site Carbon Stocks/Storage

Vegetation Type/Carbon Storage	Project Site Acreage	Soil Carbon Storage per Acre (MT C/acre)	Vegetation Carbon Stock per Acre (MT C/acre)	Total Carbon Storage (MT)	Total Carbon Storage in MT CO _{2e}
Existing					
Mixed Shrublands ¹	20.8	5.44	16.18	449.6	1,648.7
Project					
Vineyard	3.9	17.08	1.78	73.5	269.6
Grassland	1.1	25.08	1.4	29.1	106.9
Forest ²	5	10.87	72.1	414.9	1,521.1
Woodland ³	5	20.12	18.21	191.7	702.8
Mixed Shrublands	5.9	5.44	16.18	125.4	459.7
Project Totals				834.6	3,060.2
Change in Carbon Stock in Project Site with Project				385.0	1,411.5

Note: Totals may not add up due to rounding

1 Post-fire conditions of forest and woodland categorized as mixed shrublands per CALAND report

2 Includes Douglas fir forest vegetation type

3 Includes coast live oak woodland vegetation types

Sources: Table compiled by ESA in 2024 based on Regional Carbon Stock Inventory Report for Napa County, August 2023.

Carbon Sequestration Emissions: Emissions associated with change in carbon sequestration due to vegetation change (i.e., the conversion of existing vegetation to vineyard) have been calculated based on the annual carbon sequestration rates in the CALAND report and are presented in **Table 9**. Sequestration rates include carbon sequestration in both vegetation and soil. While the removal of existing vegetation in the area would reduce carbon sequestration, development of the proposed vineyard would offset some of that reduction as the vineyard would function as a sink for atmospheric CO₂, depending on the longevity of grapevine roots and the quantity of carbon stored in deep roots. Grapevines are photosynthetic plants and therefore have value in terms of carbon capture. The use of cover crops between vine rows, which are also photosynthetic plants, tends to result in less soil CO₂ loss from vineyard soils which has been conservatively excluded from the estimates. Replanting and permanently managing 10 acres of forest and woodland within the project site through the Emergency Forest Restoration Program Forest Management Plan (**Exhibit J**) would result in additional carbon sequestration that would keep the project from exceeding the County's no net increase threshold for GHG emissions; project approval, if granted, would be subject to the condition of approval below to require the project to implement and adhere to all requirements noted in the Forest Management Plan.

As shown in **Table 9**, existing vegetation sequesters approximately 17.1 MT CO₂e per year. The proposed project (with the reforestation) would sequester approximately 48.0 MT CO₂e per year resulting in a net increase in carbon sequestration equivalent to approximately 30.9 MT CO₂e per year compared to existing conditions.

Table 9 – Change in Carbon Sequestration Associated with the Project

Vegetation Type/Carbon Storage	Project Site Acreage	Carbon Sequestration Rate ¹ (MT C/acre/year)	Total Carbon Sequestration (MT CO ₂ e/year)
Existing			
Mixed Shrublands ²	20.8	0.82	17.1
Project			
Vineyard	4.9	0.22	0.9
Grassland	1.1	-4.12	-4.5
Forest ³	5	7.46	37.3
Woodland ⁴	5	1.92	9.6
Mixed Shrublands ²	5.9	0.82	4.8
Project Total			48.0
Change in Carbon Sequestration in Project Site with Project			30.9

Note: Totals may not add up due to rounding

1 Includes both aboveground and belowground sequestration

2 Post-fire conditions of forest and woodland categorized as mixed shrublands per CALAND report

3 Includes Douglas fir forest vegetation type

4 Includes coast live oak woodland vegetation types

Source: Table compiled by ESA in 2024

Project Emissions:

Based on the above estimates, the proposed project (with the reforestation) is estimated to result in one-time carbon stock emissions of 1,648.7 MT CO₂e and carbon sequestration emissions of 17.1 MT CO₂e over the assumed 40-year lifetime of the project, totaling 685.8 MT CO₂e of emissions over the project's lifetime (**Table 10**). The project is estimated to result in one-time carbon stock emission reductions of 1,411.5 MT CO₂e and carbon sequestration emission reductions of 30.9 MT CO₂e over the assumed 40-year lifetime of the project, totaling 1,234.6 MT CO₂e of emission reductions over the project's lifetime compared to existing conditions. Negative emissions shown in **Table 10** are due to an increase in carbon sequestration.

Table 10 – Estimated Overall Project-Related GHG Emissions

Source	MT CO ₂ e
Carbon stock emissions from vineyard development	-1,411.5
Carbon sequestration emissions from vineyard development ¹	-1,234.6
Project Total	-2,646.1

Notes: Totals may not add up due to rounding

¹Estimated over a project lifetime of 40 years

Source: Table compiled by ESA in 2024

With implementation of the Emergency Forest Restoration Program Forest Management Plan (**Exhibit J**), the proposed project would result in replanting and managing approximately 5 acres of Douglas fir forest and 5 acres of coast live oak woodland. The carbon stock and sequestration gained from restoring these habitats and permanently preserving this land that could have been developed results in an increase of net carbon sequestration beyond the no net increase threshold for GHG emissions. Therefore, the proposed project would not

have a significant impact on the environment or conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs. This impact would be less than significant.

Forest Management Plan – Condition of Approval: The property owner shall adhere to and implement the Emergency Forest Restoration Program Forest Management Plan as detailed in **Exhibit J** of this ECP P23-00355.

Mitigations:

None.

	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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.

No onsite storage of hazardous materials is proposed, and materials would be brought in as needed. Chemical mixing or cleaning and washing of chemical application equipment would occur at an existing chemical mixing area on site. Fertilizers (i.e., 12-61-00, and 03-18-18) would be applied via drip up to two times per year. Mildewcides (i.e., sulfur) would be dusted up to five times per year. Herbicides (i.e., Roundup) would be sprayed up to two times per year.

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

The proposed development area does not contain aquatic resources. One unnamed ephemeral tributary to the Napa River is located on the project site, approximately 400 feet southeast of the proposed development area. Minimum 105-foot stream setbacks have been maintained from the ephemeral drainage in accordance with NCC Section 18.108.025 (**Exhibit C**). 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, Foothill Adventist Elementary and Robert Louis Stevenson Elementary, are located approximately 0.9 mile east and 1.6 miles southwest of the project site, respectively (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 3.7 miles northeast. Therefore, no impact would occur.
- f. During construction, there would be negligible numbers of workers (up to eight employees) visiting the project site on a temporary basis to implement the project and install vineyards. Up to 10 employees would also visit the site on a seasonal basis for subsequent vineyard operations. 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 very 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.

Mitigation Measures:

None.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
X. HYDROLOGY AND WATER QUALITY. Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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, in a manner which would:				
i. Result in substantial erosion or siltation on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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; or	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv. Impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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 GSA Subbasin/Hillside and therefore is subject to a parcel-specific Water Availability Analysis.

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 guidance²¹ 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.”²²

²¹ The County’s Water Availability Guidelines (adopted May 2015)

²² Refer to Figure 1: Significant Streams for Tier 3, located at www.countyofnapa.org/3074/Groundwater-Sustainability. The “Significant Streams” and “Significant Streams_1500ft_buffer” GIS layers are published as publicly-available open data through the County’s ArcGIS Online Account.

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

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

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

The proposed project has been designed with site-specific temporary and permanent erosion control measures and features to prevent sediment, runoff, and pollutants from leaving the project site. Agricultural Erosion Control Plan # P23-00355-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.

The proposed vineyard would be irrigated using groundwater supplied by an existing groundwater well, Well 2 owned by Vailima Estates Mutual Water Company, located on a nearby parcel to the south of the project site (APN 021-390-012). No water for frost protection or heat protection is proposed as part of the project. No surface water would be used on the vineyard.

Tier 1 Water Availability Analysis: A parcel specific 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 (HDVine LLC, October 2024 – **Exhibit G**), and Tier 2 WAA was prepared because the project well would be located within 500 feet of an offsite well (O’Connor Environmental Inc., February 2024 – **Exhibit G.1**). The Tier 1 WAA estimates the onsite groundwater recharge and both existing and proposed groundwater use to disclose and assess potential impacts on groundwater in accordance with the WAA Guidance Document adopted by the County on May 12, 2015..

Existing water demands for the Vailima Estates Mutual Water Company consist of 28.4 AF/yr of groundwater for irrigation of vineyard and landscaping, residential uses and fire protection. With the proposed development of 3.9 net acres of new vineyard, water demand would increase by approximately 1.4 AF/yr, for a total water demand of approximately 29.8 AF/yr.

Long-term average groundwater recharge can be estimated as the percentage of rainfall that falls on the project aquifer recharge area that percolates into the underlying aquifer. The percentage of rain that has the potential to infiltrate varies depending on factors such as rates of evaporation and transpiration, soil type and geology that exists at the site, and average annual rainfall. Based on available climatological data, site-specific information, and other available data and analysis relevant to potential recharge, the WAA, which uses an average annual rainfall of 30 inches per year over an approximately 23.9 acre aquifer recharge area (i.e., the project site) and a 14% infiltration rate, estimates the average annual groundwater recharge to be approximately 8.4 AF/yr (see **Exhibit G** for details and calculations). The

average annual rainfall utilized in the recharge analysis includes times of below-average and above-average rainfall over the past 10 years, and therefore inherently includes drought year conditions. The estimated annual future groundwater demand (with the proposed project's 1.4 AF/yr and residential use on the project site using 2.6 AF/yr) in the project well recharge area of 3.9 AF/yr is below the estimated average annual recharge volume of 8.4 AF/yr identified in the WAA.

Tier 2 Water Availability Analysis: According to the County's WAA Guidelines (Napa County, 2015), if a project well is within 500 feet of a non-project well a Tier 2 WAA is required. The Tier 2 WAA also considered springs that originate as groundwater. Four offsite well exists within 500 feet of the three wells owned by Vailima Estates Mutual Water Company, including the project well (HDVine LLC, October 2024 – **Exhibit G**; O'Connor Environmental Inc., February 2024 – **Exhibit G.1**). No changes in the flows from the offsite well were attributable to the pumping test of the project well in February 2024 (**Exhibit G.1**). Observations and data discussed in the report support the assertion that the project well does not have a significant hydraulic effect on the offsite well.

Considering: i) anticipated annual water use of the proposed project and project well groundwater recharge area of approximately 3.9 AF/yr is below the anticipated annual groundwater recharge rate screening criteria of approximately 8.4 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:

This condition is implemented by the PBES Department:

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 well. 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.

Tier 3 Water Availability Analysis: The nearest blue-line streams are the Napa River located approximately 1,530 feet southwest of the project well and Canon Creek located approximately 1,600 feet northwest of the project site. Because the project well is not located within 1,500 feet of a significant stream per Napa County GIS information; therefore, no Tier 3 WAA is needed.

- 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.

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 establishment of a no-till cover crop with vegetative cover density minimum densities of 75% for vineyard Blocks 1 through 4, and the application of straw mulch cover on all disturbed areas as needed to achieve the required coverage. These features would slow and filter surface runoff water, thereby minimizing sediment, nutrients, and chemicals from leaving the project site and entering nearby aquatic resources. Refer to **Exhibit E** for details related to the following discussion.

Proposed erosion control and project features that have the potential to alter natural drainage patterns include surface roughening where practical on slopes 3:1 and steeper, rock benches, silt fences, straw bale dikes, fiber rolls, 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 HDVine LLC (December 2023 – **Exhibit E**). Given that no drainage improvements are proposed, and ground contours would remain unchanged, post-development conditions are expected to follow the same flow patterns. Further, no cut/fill is required for avenue construction; as such, there is no opportunity for a change in time of concentration (Tc) across the site as a result of development. The analysis of a comparison of cover conditions (Cn) determined that proposed vineyard development would result in no change to the area-weighted average cover conditions. These calculations indicate that the proposed project would not result in increases in peak flow and runoff, consistent with General Plan Conservation Element Policy CON-50c, which states peak runoff following development cannot be greater than predevelopment 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, or considerable on or offsite erosion, siltation, or flooding.

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. As discussed above, no overall increase in runoff volume or decrease in time of concentration is anticipated under post-project conditions. Furthermore, as discussed in **Section VII (Geology and Soils)**, a reduction in soil loss and sedimentation is anticipated under post-project conditions. 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.

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.²³

- 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 10.8 tons per acre 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

²³ 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)**.

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.

Mitigation Measures:

None.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XI. LAND USE AND PLANNING. Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

- a. The project site is located on Swanston Road and the nearest established community is St. Helena, approximately 0.5 mile south of the project site. Existing improvements on the project site include a driveway, dirt and gravel roads, a single-family residence, a garden and 0.7 acre of vineyard, a cabin, and two tennis courts, as well as powerlines operated by PG&E and waterlines operated by Vailima Estates Mutual Water Company. 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. No impact would occur.
- b. The project site is zoned as Agricultural Watershed and is designed under the Napa County General Plan as Agriculture, Watershed and Open Space. Surrounding parcels are also zoned Agricultural Watershed 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 10.8 tons per acre per year 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 and BIO-2** 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 (**Exhibit D**). 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 and BIO-2**. 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 and BIO-2**, 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. Due to the proposed project's scope and scale, its construction and operational GHG emissions, as disclosed in **Section VIII (Greenhouse Gas Emissions)**, are anticipated to be less than significant.

- 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.

Mitigation Measures:

None.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XII. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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 21 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.

Mitigation Measures:

None.

Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
--------------------------------	---	------------------------------	-----------

XIII. 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Generation of excessive groundborne vibration or groundborne noise levels? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Discussion

a-b. The project site is located in a rural setting where surrounding parcels are generally undeveloped grasslands and woodlands interspersed with vineyards, wineries, and rural residences. The nearest residence to the project site is located approximately 450 feet north of the project site.

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 11** characterizes typical equipment noise levels at a reference distance of 50 feet. As identified in **Table 11**, equipment used for vineyard development could produce a maximum of 89 (A-weighted decibels) dBA at a distance of 50 feet.

Table 11 – 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 12 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 12 – Estimated Distance to dBA Contours from Construction Activities¹

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

¹Based 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 (~450 feet north), noise associated with project construction would approximately 65 dBA at the nearest existing offsite residence.

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 13** 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 13 – Estimated Distance to dBA Contours from Farming Activities¹

Distance from Farming Source	Calculated Noise Level
50 feet	84 dBA
115 feet	75 dBA
175 feet	70 dBA
275 feet	65 dBA
400 feet	60 dBA
650 feet	55 dBA
1,000 feet	50 dBA

¹ Based on a source noise level of 84 dBA.

Source: Napa County Baseline 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 55 and 60 dBA at the closest existing offsite residence.

Napa County considers construction noise levels up to 75 dBA during daytime hours (7 a.m. to 7 p.m.) and 60 dBA during nighttime hours (7 p.m. to 7 a.m.) as compatible with residential uses (NCC Section 8.16.080), and ongoing (or established use) noise levels of approximately 55 dBA as compatible with residential uses (NCC Section 8.16.070). As the closest offsite residence would experience construction noise levels of approximately 65 dBA, noise and vibration impacts associated with project development are anticipated to be less than significant. Noise levels from routine operation and maintenance activities at the nearest offsite residence would be less than typical for compatible uses, and 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.

- c. 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 3.8 miles northeast. Therefore, no impact would occur.

Mitigation Measures:

None.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIV. 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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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 residences to the project site are located approximately 450 feet to the north, 500 feet to the northwest, 600 feet to the south, 700 feet to the west, and 2,150 feet to the east. The proposed vineyard would not interfere with existing nearby residences. Therefore, no impact would occur.

Mitigation Measures:

None.

Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
--------------------------------	---	------------------------------	-----------

XV. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii. Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii. Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv. Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
v. Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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 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.

Mitigation Measures:

None.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVI. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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.

Mitigation Measures:

None.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVII. TRANSPORTATION. Would the project:				
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Would the project conflict or be inconsistent with CEQA guidelines § 15064.3 subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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 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.

Currently, the project site includes a driveway, dirt and gravel roads, a single-family residence, a garden and 0.7 acre of vineyard, a cabin and two tennis courts, as well as powerlines operated by PG&E and waterlines operated by Vailima Estates Mutual Water Company. The

project site is accessed from an existing private driveway off Swanston Road. Trucks and other equipment would use County roads or State highways for short periods during construction and subsequent vineyard operation.

The proposed project is expected to generate up to five trips per day during construction, including truck trips for equipment supply and delivery. After vineyard installation, operational trips that include, but are not limited to, irrigation and trellis system inspection and repair, cover crop inspection and management, erosion control measure monitoring and maintenance, and vineyard inspection, are anticipated to generate up to one round trips per day. During peak operations for activities such as vineyard pruning, weed and pest control, and harvest, the project is anticipated to generate up to five round trips per day, including grape haul 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 two daily round trips during construction and up to five daily round trips for ongoing operations and maintenance, well 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 driveway off Swanston Road for project development. The proposed project does not include roadway improvements and/or modifications to the existing driveway or Swanston 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 five vehicles) during harvest, which would occur over two 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.

Mitigation Measures:

None.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVIII. TRIBAL CULTURAL RESOURCES. Would the project:				
Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion

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 February 16, 2024. On March 22, 2024, the County received a response from Middletown Rancheria requesting consultation. County staff has since worked with a Middletown Rancheria representative to mitigate and condition the project to ensure there are no significant impacts to tribal and cultural resources; see the recommendations that have been incorporated into the conditions of approval and mitigation measures for the project in **Section V (Cultural Resources)**. On March 25, 2024, the Yocha Dehe responded to the consultation invitation and deferred consultation to the Mishewal Wappo Tribe of Alexander Valley and Middletown Rancheria. No response for consultation was received from the Mishewal Wappo. No additional responses have been received since the closure of the consultation period and the consultation period is considered closed.

a-b. As discussed in **Section V (Cultural Resources)** the proposed project’s cultural resources evaluation (Wolf Creek Archeology, 2023) identified one prehistoric resource in the project site. The areas of the proposed vineyard blocks in the cultural resources evaluation were from an early planning design and have since been revised and reduced with the proposed project to meet recommendations to fully avoid the prehistoric site. Further, through consultation with Middletown Rancheria, **Mitigation Measure CUL-1** and the Cultural Resources Conditions of Approval were developed and will be implemented to mitigate and condition the project to ensure there are no significant impacts to Tribal cultural resources.

As such, the proposed project, with the Cultural Resources conditions of approval and implementation of **Mitigation Measure CUL-1**, would result in less-than-significant impacts to Tribal Cultural Resources, including those that may be eligible for the California Historical Resources Information System or local register, or cultural resources as defined in Public Resources Code Section 5024.1(c).

Mitigation Measures:

Mitigation Measure CUL-1: Property owner shall enter into a Tribal Monitoring Agreement with Middletown Rancheria and shall comply with the Tribal Monitoring Agreement which will include a requirement for tribal monitors on site during project development and ground disturbance activities, and a requirement for cultural sensitivity training for all project personnel prior to implementing the project.

	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- | | | | | |
|---|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

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

b. Typically, the annual irrigation season ranges from late May to September. The WAA prepared by HDVine LLC (**Exhibit G**) concluded that after full development, total long-term groundwater demand for the project site with the new 3.9 net acres of vineyard would be 3.9 AF/yr (for the proposed project and residential use) from one existing groundwater well. Based on the 10-year average annual rainfall of 30 inches for the project area and estimated recharge, the annual recharge rate for the project site's recharge area was calculated to be 8.4 AF/year. The project groundwater recharge area's estimated groundwater demand of 3.9 AF/yr with the proposed project and existing uses represents approximately 46% of the average annual groundwater allotment. Therefore, the proposed project 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 for vineyard avenues or may be buried or used for landscaping. 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 BAAD 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.

Mitigation Measures:

None.

	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

The project site is located in a State Responsibility Area (SRA) that is designated as Very High Fire Hazard Severity Zone (CalFire, Fire Hazard Severity Zone 2022; Napa County GIS Fire Hazard Severity Layer). Additionally, the project site was burned in the 2020 Glass Fire which destroyed much of the property. The topography in the vicinity of the project site consists of the relatively flat Napa Valley to the west and rolling mountains to the east. Average slopes in the proposed development area range from 5% to 24%, with an average slope of approximately 15%. Approximately 0.13 acre is on slopes over 30%.

- 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.

Mitigation Measures:

None.

	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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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 #P23-00355-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. Habitat for special-status bird and bat species has been identified in the project site. Implementation of **Mitigation Measures BIO-1 and BIO-2** would avoid potential impacts to special-status bird and bat species and protected bird species.

New wildlife exclusion fencing is proposed to the west and south of the proposed development area, and the proposed fencing would connect to existing fencing which extends from the northwest to the south of the proposed development area. Given the relatively small size of the proposed development area (relative to the width of the greater corridor tract), the apparent lack of development impacts within the more central portion of this tract, and the retention of the northwest-southeast corridor, the proposed project is not anticipated to result in any potentially significant impacts to wildlife movement or migration. As such, the proposed project would not introduce any new movement barriers to wildlife and impacts to wildlife movement are expected to be less than significant, and the range of special-status plant species would not be restricted, cumulative impacts are anticipated to be less than significant.

To reduce impacts on water quality within streams, the proposed project has been designed to avoid the closest ephemeral drainage with minimum 105-foot setbacks in accordance with NCC Section 18.108.025.

With the implementation of **Mitigation Measure CUL-1** and incorporation of standard conditions to protect cultural and tribal cultural resources that may be discovered accidentally, significant impacts to cultural and tribal cultural resources are not expected (**Section V [Cultural Resources]** and **XVIII [Tribal Cultural Resources]**).

Therefore, the proposed project as designed with the incorporation of **Mitigation Measures BIO-1 and BIO-2** and the conditions of approval, would have a less-than-significant potential to degrade the quality of the environment.

- b. The project site is located in the Canon Creek Drainage, and the Napa River Upper Saint Helena Reach Drainage of the Napa River watershed, which eventually flow into the Napa River.

Canon Creek: The Canon Creek Drainage area contains approximately 1900.95 acres. In 1993, vineyard acreage within this drainage was approximately 85.23 acres, or 4.48% of the drainage. Since 1993, approximately 79.5 acres of additional vineyard, or 4.18% of the drainage, have been developed to vineyard, resulting in approximately 8.66% of the drainage (or approximately 164.73 acres) containing vineyard.

It is estimated, based on evaluation of the County's GIS layer identifying Potentially Productive Soils within the Canon Creek Drainage, that there are approximately 900.36 acres (47% of the drainage) having the potential to be developed to vineyard. This, in conjunction with existing and approved vineyard development (approximately 164.73 acres), results in a total potential build out of approximately 169.73 acres or approximately 8.9% 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

Napa River Upper Saint Helena Reach: The Napa River Upper Saint Helena Reach Drainage area contains approximately 1984.78 acres. In 1993, vineyard acreage within this drainage was approximately 608.74 acres, or 30.67% of the drainage. Since 1993, approximately 101.78 acres of additional vineyard, or 5.14% of the drainage, have been developed to vineyard, resulting in approximately 35.87% of the drainage (or approximately 710.71 acres) containing vineyard.

It is estimated, based on evaluation of the County's GIS layer identifying Potentially Productive Soils within the Napa River Upper Saint Helena Reach Drainage, that there are approximately 295.92 acres (14.9% of the drainage) having the potential to be developed to vineyard. This, in conjunction with existing and approved vineyard development (approximately 710.71 acres), results in a total potential build out of approximately 1,006.63 acres or approximately 50.1% 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 quantify precisely 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 of reasonably foreseeable vineyard that may be developed over time, the acreage of vineyard development including approved vineyard projects in the cumulative environment (i.e., Canon Creek Drainage, and the Napa River Upper Saint Helena Reach 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 Canon Creek drainage, approximately 2.56-acres of agriculture were developed per year (79.5 divided by 31). Over the past 31 years within the Napa River Upper Saint Helena Reach drainage, approximately 3.28-acres of agriculture were developed per year (101.78 divided by 29).

Combined with Napa County policies and other site selection factors that limit the amount of land that can be converted to vineyard, the development of approximately 7.68 to 12.8-acres over the next three to five years within the Canon Creek drainage is considered a reasonable estimate. For the Napa River Upper Saint Helena Reach drainage, the development of approximately 9.84 to 16.4-acres over the next three to five years is considered a reasonable estimate the Napa River 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 General Plan Conservation Policy CON-24c 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.

Air Quality and GHG – Sections III and VIII:

The proposed project (#P23-00355-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 BAAD 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.

Based on the estimates in **Tables 8 and 9**, the proposed project is estimated to result in one-time carbon stock emissions of 1,648.7 MT CO_{2e} and carbon sequestration emissions of 17.1 MT CO_{2e} over the assumed 40-year lifetime of the project, totaling 685.8 MT CO_{2e} of emissions over the project's lifetime (**Table 10**). With implementation of the Emergency Forest Restoration Program Forest Management

Plan (**Exhibit J**), the proposed project is estimated to result in one-time carbon stock emission reductions of 1,411.5 MT CO₂e and carbon sequestration emission reductions of 30.9 MT CO₂e over the assumed 40-year lifetime of the project, totaling 1,234.6 MT CO₂e of emission reductions over the project's lifetime compared to existing conditions. The carbon stock and sequestration gained from restoring these habitats on land that could have been developed results in an increase of net carbon sequestration beyond the no net increase threshold for GHG emissions. 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 standard conditions of approval.

Biological Resources – Section IV:

Project-specific biological resources reconnaissance surveys (Wildlife Research Associates, July 2024 – **Exhibit D**) were performed for the proposed project to evaluate potential habitat loss and disturbance to plant and wildlife species because of the proposed project. The surveys included database records searches to identify the presence or potential presence of special-status species within the project site. The database records searches included the USFWS, CNDDDB and CNPS databases. As discussed in **Section IV (Biological Resources)**, no special-status plant or animal species were identified in the proposed development area. With incorporation of **Mitigation Measures BIO-1 and BIO-2**, special-status and protected birds and bats that could use the proposed development area would be protected. The ephemeral stream within the project site is outside of the proposed development area and would not be affected by the proposed project. Therefore, the proposed project would not contribute to a cumulatively significant impact to special-status plants and animals or habitats.

Cultural and Tribal Cultural Resources – Sections V and XVIII:

The cultural resources evaluation (Wolf Creek Archeology, 2023) did not identify any significant or potentially significant cultural resources in the proposed development area. A prehistoric resource in the project site is being avoided with the proposed project and through consultation with Middletown Rancheria, **Mitigation Measure CUL-1** and Cultural Resources Conditions of Approval were developed and will be implemented to mitigate and condition the project to ensure there are no significant impacts to cultural resource. With the implementation of **Mitigation Measure CUL-1** and the incorporation of the conditions of approval to protect cultural and tribal cultural resources that may be discovered accidentally, significant impacts to cultural and tribal cultural resources are not expected (see **Section V [Cultural Resources]** and **Section XVII [Tribal Cultural Resources]**). Therefore, the proposed vineyard development project would have a less-than-significant project-specific and cumulative impact on cultural and 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 10.8 tons/acre/year as 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 Napa River watershed. 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.

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 WAA prepared by HDVine (October 2024 – **Exhibit G**) indicate that the proposed development consisting of approximately 3.9 net acres of planted vineyard would result in approximately 1.4 AF/yr of groundwater use. The proposed project would result in less-than-significant impacts to groundwater supplies, groundwater recharge, and local groundwater aquifer levels given that anticipated annual water use of the proposed project and project well groundwater recharge area is below the anticipated annual groundwater recharge rate screening criteria); a reduction in average rainfall under extreme drought conditions would not significantly affect demand as a percentage of recharge; there is no evidence to date indicating that there are groundwater problems or

declining well production in the this area of the County; and incorporation of the standard groundwater management condition of approval would reduce potential impacts associated with groundwater use.

As discussed in **Section X (Hydrology and Water Quality)** a Hydrology Report was prepared by HDVine LLC (December 2023 – **Exhibit E**). Because the proposed project does not include new diversions, create concentrated flows, or otherwise alter site drainage patterns, and does not materially alter site slopes, no net increase in runoff volumes or time of concentrations are expected as compared to pre-project conditions with the installation and maintenance of the proposed project (**Exhibit E**). 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. 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 be subject to the Forest Land Conditions of Approval and the applicant would implement a Timber Harvest Plan. The proposed project would not result in wasteful, inefficient, or unnecessary energy use, or conflict with or obstruct a state or local plan for renewable energy or energy efficiency or impede progress towards achieving goals and targets. There are no known mineral resource areas within the proposed project site or immediate vicinity. This project would generate noise levels that are considered normal and reasonable for agricultural activities and consistent with the County's "Right to Farm" Ordinance. The potential contribution to noise or vibration impacts is considered less than cumulatively considerable. Traffic related to construction and farm worker trips would not increase by a discernible amount and the relatively low and off-peak vehicle trips associated with the proposed project are considered less than cumulative considerable. The proposed project does not include the construction of structures that would result in population growth or displacement of people and would not adversely impact current or future public services. For these reasons, impacts associated with the proposed project that may be individually limited, but cumulatively considerable, would be less than significant.

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

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

LIST OF FIGURES:

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

LIST OF TABLES:

Table 1	Proposed Vineyard Block Acreage
Table 2	Implementation Schedule
Table 3	Typical Annual Operations Schedule
Table 4	BAAD Thresholds of Significance for Construction and Operation
Table 5	Emissions from Vineyard Development and Operation
Table 6	Vegetation Types in the Project Site and Proposed Development Area
Table 7	USLE Soil Loss Analysis
Table 8	Project Site Carbon Stocks/Storage
Table 9	Change in Carbon Sequestration Associated with the Project
Table 10	Estimated Overall Project-Related GHG Emissions
Table 11	Construction Equipment Noise Emission Levels
Table 12	Estimated Distance to dBA Contours from Construction Activities
Table 13	Estimated Distance to dBA Contours from Farming Activities

LIST OF EXHIBITS:

- Exhibit A - Application Submittal Materials and Correspondence, Haas Vineyard – Track I ECPA (P23-00355) – Application, Attachment A, Supplemental Environmental Information and Correspondence, APN 021-352-036, 2 Swanston Road, St. Helena, CA 94574.
- Exhibit B - ECP Narrative, Haas Vineyard – Track I ECPA (P23-00355), APN 021-352-036, 2 Swanston Road, St. Helena, CA 94574
- Exhibit C - HDVine LLC, November 7, 2024, Haas Vineyard – Track 1 ECPA (P23-00355), APN 021-352-036, 2 Swanston Road, St. Helena, CA 94574.
- Exhibit D - Wildlife Research Associates Inc., December 2023, Revised July 2024, Biological Resources Reconnaissance Survey, 2 Swanston Road (APN: 021-352-036), St. Helena, Napa County, California.
- Wolf Creek Archeology, January 27, 2023, Cultural Resource Evaluation of a Portion of 2 Swanston Road, Saint Helena, CA 94574 APN 021-352-036 (contents confidential).
- Exhibit E - HDVine LLC, December 8, 2023, Hydrology Report – Haas Vineyard
- Exhibit F - HDVine LLC, December 8, 2023, Soil Loss Analysis Haas Vineyard.
- Exhibit G - HDVine LLC, Revised October 2, 2024, Haas Vineyards Water Availability Analysis (WAA): Tier 1
- Exhibit G.1 - O'Connor Environmental Inc., February 16, 2024, Water Availability Analysis (Tier II), Charles Haas 2 Swanston Road, Saint Helena, CA 94575
- Exhibit H - HDVine LLC, October 30, 2024, Haas Vineyard – Analysis of Greenhouse Gas Impacts on Land Conversion, APN 021-352-036, 2 Swanston Road, St. Helena, CA 94574.
- Exhibit I - USDA NCRS – Custom Soil Resource Report, May 9, 2023
- Exhibit J - USDA Farm Service Agency, July 2023, Emergency Forest Restoration Program Forest Management Plan, Charles J and Ellen J Haas
- Exhibit K - Project Revision Statement