

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:** Acierno Vineyard, Agricultural Erosion Control Plan Application (ECPA) File #P23-00348-ECPA
2. **Property Owner(s):** Michael A. Acierno
3. **Contact Person, Phone Number and Email:** Donald Barrella, Planner III, (707) 299-1338, Donald.Barrella@countyofnapa.org
4. **Project Location and Assessor's Parcel Number:** 7070 Silverado Trail, Napa, CA 94558
 Assessor's Parcel Number (APN) 032-070-024 (**Figures 1 and 2**)
 Section 30, Township 07 North Range 04 West, Mt. Diablo Base and Meridian
 Latitude 38° 25' 53.82" N / Longitude 122° 20' 55.21"
5. **Project Sponsor:** Michael A. Acierno
 7070 Silverado Trail
 Napa, CA 94558
Plan Preparer: Nicholas Aaron Warnock (RPE #85746)
 RSA+
 1515 Fourth Street
 Napa, CA 94559

6. **General Plan Designation:** Agriculture, Watershed & Open Space (AWOS)

7. **Zoning:** Agricultural Watershed (AW)

8. **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 0.73 gross acre of vineyard (i.e., proposed development area or project area) with approximately 0.63 net planted acres in three proposed vineyard blocks (Blocks G, H and I), located on an approximate 40.3-acre property (i.e., project site). The acreages of each of the three proposed vineyard blocks are indicated in **Table 1**. Fifteen oak trees greater than 6-inch diameter at breast height (DBH) were previously removed within the proposed vineyard blocks. The proposed project also includes the removal and restoration/revegetation of an existing vineyard block (Block F, ±0.9 acre), that was developed without an approved ECPA and portions of which are located within stream setbacks and on slopes above 30%, and the revegetation of a portion of this area and other areas totaling 0.63-acres that includes the planting of 52 oak trees (see **Exhibits A-1 and B-2**).

Rock removed during vineyard development would be used within the development area for proposed erosion control features. 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 on-site well with an anticipated demand of approximately 0.63 acre-feet (AF) of groundwater annually, which includes heat and frost protection. Anticipated water use associated with irrigating the proposed replanted oak trees would be approximately 0.006 AF per year for three years until the trees are established. Existing wildlife exclusion fencing would be removed within designated stream setback areas and retained in the proposed development area such that the fencing encloses only the vineyard blocks. Irrigation pipelines would be located in existing roads, vineyards and vineyard avenues, and/or within the proposed development area.

Table 1 – Proposed Vineyard Block Acreage

Block	Gross Acreage	Net Acreage
G	0.22	0.21
H	0.19	0.16
I	0.32	0.26
Total	0.73	0.63

Erosion Control Measures: Temporary erosion control measures include installation of fiber roll sediment barriers and silt fences, erosion control blankets, the application of straw mulch at a rate of 3,000 pounds per acre, and a temporary cover crop maintained at a minimum vegetation cover density of 80%. Permanent erosion control measures include rock and fabric lined diversion swales, subsurface drain-lines, rock outfalls (energy dissipator or energy dissipation swale), and a permanent cover crop maintained at a minimum vegetation cover density of 80%. Once existing vineyard Block F is removed, the areas outside the tree replanting setback would be seeded and mulched per the Standard Erosion Control Mix per the seeding specifications in the ECP. Details of the proposed erosion control measures are provided in the Acierno

Silverado Trail Vineyard Development Erosion Control Plan (February 23, 2024) prepared by Nick Warnock (RPE #85746) of RSA+, Napa, California (**Exhibits A-1 through A-3**).

Earthmoving: Earthmoving and grading activities associated with land contouring (250 cubic yard balanced onsite) and the installation of erosion control measures and subsequent vineyard operations include, but are not limited to, vegetation removal, soil ripping and tilling, rock removal, discing, trenching for irrigation pipelines, 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 4-foot by 6-foot spacing pattern for an approximate vine density of ±2,200 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 #P23-00348 -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 #P23-00348-ECPA.

Table 2 – Implementation Schedule

April 1 – October 15	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 10 round trips per day for anticipated work crews of between 1 and 10 employees, including truck trips for equipment and supply delivery. Anticipated construction equipment would include bulldozers, tractors, excavators, backhoes, dump trucks, water trucks, and ATVs and passenger vehicle and/or light trucks.

Existing and proposed vineyard operations are anticipated to generate 80 truck trips annually for anticipated work crews of between 8 to 10 employees. 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 ten round trips per day, including grape haul trucks, for anticipated work crews of up to 10 employees. Anticipated equipment for vineyard operations would include tractors, backhoes, grape haul trucks, and ATVs and passenger vehicles and/or light trucks.

Implementation of the proposed project would be in accordance with the Acierno Silverado Trail Vineyard Development Erosion Control Plan prepared by RSA+ (February 2024 - **Exhibits A-1 through A-3**). The proposed project is further described in the application materials including the Supplemental Project Information sheets. All documents are incorporated herein by reference and available for review in the Napa County Department of Planning, Building and Environmental Services (PBES), and at <https://www.countyofnapa.org/2876/Current-Projects-Explorer>

9. Describe the environmental setting and surrounding land uses.

The approximately 40.3-acre project site (APN 032-070-024) is located at 7070 Silverado Trail, near its intersection with Yountville Cross Road, approximately 2 miles northeast of Yountville, in Napa County, California (**Figures 1-3**). An existing private driveway from Silverado Trail would provide access to the proposed development area. Existing improvements on the project site include an existing residence and associated

structures, a driveway, approximately 3.3 acres of permitted vineyard, 0.8 acre of unpermitted vineyard in Block F proposed for removal, PG&E transmission lines, a sediment basin, and a groundwater well. Existing wildlife exclusion fencing would be located around the proposed vineyard blocks. Surrounding properties are generally used for agricultural and rural residential purposes. Residential development generally consists of single-family residences.

The general topography in the vicinity of the project site consists of the flats of Napa Valley to the west and south and rolling mountains to the east and north. The topography of the project site is characterized by moderate to steep slopes with slopes in the area ranging from 6% to 23%, with an average slope of approximately 13%. Slopes within the proposed development area range from 20% to 25%. The proposed vineyard blocks are located adjacent to existing vineyard blocks in the south and southwest part of the project site at elevations ranging from 200 to 275 feet above mean sea level.

The project site is located within the Napa River Watershed, Caymus Creek Drainage. Conn Creek, the nearest U.S. Geological Survey (USGS) blue-line stream, is located approximately 0.8 mile to the southwest. Drainage from the project area is by direct infiltration or by sheet flow into an ephemeral drainage located west of the proposed development area, which is a tributary of the Napa River located approximately 1 mile east of the project site. The project site is not located within a municipal drinking water supply watershed, nor in any designated groundwater-deficient area.

Soils in the proposed development area have been classified according to the Soil Survey of Napa County (USDA 1978) as Boomer-Forward-Felta complex, 5-30% slopes, Bale clay loam, 2-5% slopes, Hambright rock-Outcrop complex, 30-75% slopes, and Rock outcrop. The closest active fault is the West Napa fault, located approximately 2 miles west/southwest of the project site (Napa County GIS Faults Layer).

The vegetation alliances (or habitat types) on the project site include mixed oak woodland, grasslands (both native and semi-natural), and disturbed areas.

10. Background

Existing vineyard Block F was planted in two phases by the previous property owner (circa 2007 and 2011) without a permit. After vineyard Block F is removed with the proposed project, it will be used for the replanting of trees removed for proposed vineyard Blocks G, H, and I.

The proposed vineyard blocks would fill in gaps between existing vineyard blocks that are currently being replanted under #P22-00412-ECPA. (approved March 13, 2023). A field modification to ECPA #P22-00412 was approved on August 21, 2023, changing vinerow spacing from 4'x4' to a 4'x6' spacing pattern. On April 30, 2024, a second field modification to #P22-00412-ECPA was approved, that added 2 new cross-slope diversion swales in Vineyard Block A.

The original vineyard located on the project site/parcel was developed under #98544-ECPA, approved on September 14, 2001. A portion of the vineyard along the western periphery of Block A was developed outside the approved boundaries of #98544-ECPA. Under #P22-00412-ECPA, vineyard Block A was replanted to comport with the with footprint of the original ECPA approval (98544-ECPA) in this area. A portion of Vineyard Block B along the western periphery, which was developed outside of the boundary of #98544-ECPA was incorporated into #P22-00412-ECPA.

The project site was burned in the 2017 Atlas Fire and 2020 Glass Fire and 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. In 2022, Pacific Gas and Electric (PG&E) removed 59 oak trees (over 4-inch DBH) in the project site as part of their expanded fuel break vegetation removal project along the Fulton-Pueblo 115kv Transmission Line Right-of-Way. PE&E has a standing Utility Exemption for all vegetation work within PG&E's jurisdiction. In total it is estimated that approximately 70 trees have been removed from the project site in the recent past due to: PG&E required removal within utility easements, removal of dead, dying or hazardous trees, and inadvertent removal. Of this removal, 15 oak trees would have needed to be removed for the proposed project, four of which were removed within proposed vineyard Block I as part of this PG&E work.

The project site has a metered municipal water connection to the Town of Yountville and municipal water use is limited to indoor residential water usage only (limited to 100,000 gallons per year). Metered water from the Town of Yountville is not allowed to be used for landscape or agricultural irrigation.

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)

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 November 1, 2023. The County discussed the project with a Tribal representative from the Mishewal Wappo Tribe of Alexander Valley on February 6, 2024, and agreed to conditions that would be included with any approving actions for the project to ensure that tribal cultural resources are protected. The County sent consultation closure notices to Mishewal Wappo Tribe of Alexander Valley, Middleton Rancheria, and the Yocha Dehe Wintun Nation on February 6, 2024, because no request for consultation was received and more than 30 days had elapsed since the County's consultation invitations were provided. This is discussed in detail in **Section XVIII (Tribal Cultural Resources)**.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

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

- | | | |
|--|---|--|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture and Forestry Resources | <input type="checkbox"/> Air Quality |
| <input checked="" type="checkbox"/> Biological Resources | <input 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 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 #P23-00348-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://www.countyofnapa.org/2876/Current-Projects-Explorer>.

- RSA+, February 23, 2024, Acierno Silverado Trail Vineyard Erosion Control Plan (ECPA) (**Exhibit A-1**).
- RSA+, December 4, 2023, Revised February 23, 2024, Supplemental Narrative to the Erosion Control for Acierno Track I - Vineyard Blocks G, H and I (**Exhibit A-2**).
- RSA+, February 26, 2024, Application Completeness Determination Responses, Acierno Vineyard Agricultural Erosion Control Plan (ECPA) # P23-00348-ECPA 7070 Silverado Trail; APN 032-070-024-000 (**Exhibit A-3**).
- Kjeldsen Biological Consulting, February 2024, Biological Resource Survey, Acierno Vineyard Block G, H, I (0.73-Acres), 7070 Silverado Trail, Napa County (**Exhibit B-1**).
- Kjeldsen Biological Consulting, February 21, 2024, Native Oak Replanting Plan, Acierno Vineyard, Proposed Block G, H, I, 7070 Silverado Trail, Napa County (**Exhibit B-2**).
- Evans & De Shazo, February 21, 2023. Cultural Resources Study for the Proposed Vineyard Development Project Located at 7070 Silverado Trail in Unincorporated Napa County, California (contents confidential).
- RSA+, December 4, 2023. Universal Soil Loss Equation (USLE) Calculations for Acierno Track I – Vineyard Blocks G, H, and I Erosion Control Plan (**Exhibit C**).
- RSA+, February 12, 2024, Revised February 23, 2024, Water Availability Analysis for Acierno Track I—Vineyard Blocks G, H, and I (**Exhibit D**).
- RSA+, December 4, 2023, Revised February 23, 2024, Hydrology Report for Acierno Track I- Vineyard Blocks G, H, and I (**Exhibit E**).
- Site inspection conducted by Napa County Conservation and Engineering Division staff Donald Barrella (Planner III) and Alexei Belov (Associate Engineer) on February 9, 2024.
- Napa County Geographic Information System (GIS) sensitivity maps/layers.

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



Signature

Donald Barrella

Printed Name

August 6, 2024

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 on the east of Silverado Trail, which is a Napa County-designated Viewshed road (Napa County GIS, Viewshed roads and Scenic Corridors Layers). The project site includes existing vineyard land and there is existing vineyard on the abutting properties to the northwest and southeast, to the west of Silverado Tral and the project site is the Napa Valley AP (Agricultural Preserve) zoning district which is dominated by vineyards which typifies the visual character of the area.

The project site is not located on a prominent hillside, or a major or minor ridgeline (Napa County GIS, Ridgelines Layer) or 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. Additionally, the project site is not located within the vicinity of an officially designated state scenic highway (California State Scenic Highway System Map).

Further, a majority of the trees that have been removed within the project area were/are not visible from public viewpoints given the existing vegetation screening and development along Silverado Trail.

The surrounding land uses and project site include vineyard land and views of the proposed project would be consistent with this existing use and dominate use 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 2 a.m. to 10 a.m.) approximately two to five days per year. The proposed project would include sulfur applications that could occur between 12 a.m. and 6 a.m., approximately seven days per year. Although some nighttime activity would occur for limited periods, the proposed project would not introduce a new source of substantial light or glare, and the type of nighttime lighting would be consistent with existing project site uses and surrounding land uses. Therefore, the proposed project would result in a less-than-significant impact.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>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:</p>				
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 type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

- a. The project site is mapped as Unique Farmland by the California Department of Conservation. The proposed project would result in an increase in productive agricultural farmland on the project site and mapped Unique Farmland. Therefore, the proposed project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use, and there would be no impact.
- b. The project site has an Agriculture, Watershed & Open Space designation and is zoned Agricultural Watershed. Therefore, the establishment of vineyard totaling approximately 0.73 gross acre with approximately 0.63 net planted acre is consistent with project site's land use and zoning designations. The project site does not have a Williamson Act contract associated with it. Therefore, implementation of the proposed project would not 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 does not contain forest land or coniferous forest (Napa County GIS). The project site is zoned as AW and is not zoned as forest land as defined in Public Resource Code Section 12220(g), timberland as defined in Public Resource Code Section 4526, or a Timberland Production Zone (TPZ) as defined in Government Code Section 51104(g). Therefore, no impact would occur.
- e. The proposed project would not construct new roads to the project site. Construction of the proposed vineyard would not result in the conversion of existing farmland or forestland in the area to non-agricultural or non-forestland uses. As such, the proposed project would have no impact on agricultural or forest resources of Napa County.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
III. AIR QUALITY. Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<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"/>

Discussion¹

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

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

- a. The project site is located within the Napa County climatological subregion of the SFBAAB, which is under the jurisdiction of BAAQMD. The topographical and meteorological features of the Napa Valley subregion facilitate accumulation of pollutants and increase the potential for air pollution. The proposed project has the potential to generate air quality impacts from both construction activities as well as operational 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, and vehicular haul and worker trips. In the long term, potential air quality impacts would likely result from ongoing activities associated with the operation and maintenance of the proposed vineyard. Operational-related emissions, which are seasonal in nature, are primarily generated from vehicular trips associated with workers going to and from the site and equipment necessary for ongoing vineyard maintenance.

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 designated for the federal 8-hour ozone standard, state 1-hour and 8-hour ozone standards, state annual and 24-hour PM₁₀ standards, federal 24-hour PM_{2.5} standard and the state annual PM_{2.5} standard. Therefore, the criteria air pollutants of concern in the SFBAAB are reactive organic gases (ROG) and oxides of nitrogen (NO_x) which are referred to as ozone precursors, as well as PM₁₀ and PM_{2.5}.

Air quality attainment plans are required to be prepared for nonattainment areas both under federal and state law. The most recently adopted air quality plan to address nonattainment issues in the SFBAAB is the 2017 Bay Area Clean Air Plan (Clean Air Plan).³ The Clean

¹ [CEQA Thresholds and Guidelines Update \(baaqmd.gov\)](https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines); <https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines>

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

³ BAAQMD, 2017. *Spare the Air, Cool the Climate, Final 2017 Clean Air Plan*. Adopted April 19, 2017. Available at https://www.baaqmd.gov/~media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a_-_proposed-final-cap-vol-1-pdf.pdf?la=en.

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”⁴ that are potent climate pollutants in the near-term; and decrease emissions of carbon dioxide by reducing fossil fuel combustion.⁵

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

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

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

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

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 BAAQMD Guidelines provide thresholds of significance for air quality impacts from both construction and operation. According to BAAQMD, a project would have a significant impact on air quality if emissions from construction or operation would exceed the thresholds of significance shown in **Table 4**.

Table 4 – BAAQMD Thresholds of Significance for Construction and Operation

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

^a Includes PM emissions from exhaust only.
Sources: BAAQMD CEQA Guidelines April 2023.

For construction-related emissions of fugitive dust, the BAAQMD recommends that lead agencies take a qualitative approach to determine impact significance; the CEQA Air Quality Guidelines state that a project would be considered to have a less-than-significant impact with

⁴ “Super-GHGs” are climate pollutants that have a powerful ability to contribute to global warming, such as methane, black carbon, and fluorinated gases.

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

regard to fugitive dust emissions of PM₁₀ and PM_{2.5} if BAAQMD Basic Construction Mitigation Measures are implemented during construction.

In order to assess potential air pollutant emissions by the project, a review of the analysis of emissions associated with vineyard development/construction and operations performed for three certified Environmental Impact Reports (EIR) in Napa County was completed: Suscol Mountain Vineyards⁶ for an approximately 560-acre vineyard development, Walt Ranch Vineyard⁷ for an approximately 507-acre vineyard development, and Circle-S Ranch Vineyards⁸ for an approximately 400-acre vineyard development⁹.

The analysis for the Circle-S EIR anticipated construction in phases of approximately 150 acres, which would generate approximately 100 15-mile one-way trips per day (75 worker trips and 25 truck trips). The analysis anticipated that maximum operational emissions occurring during harvest of an approximately 400-acre vineyard which would generate approximately 170 15-mile one-way trips per day (approximately 160 worker trips and eight grape haul truck trips). The Walt Ranch EIR analysis anticipated vineyard development in phases of approximately 127 acres, which would generate approximately 160 15-mile one-way trips per day, and annual vineyard operations generating up to approximately 160 one-way trips of approximately 15 miles per trip occurring during harvest. The Suscol Mountain EIR analysis anticipated vineyard development in phases of either approximately 150 or 250 acres, which would generate approximately 50 to 60 15-mile one-way trips per day, and annual vineyard operations generating up to approximately 116 15-mile one-way trips occurring during harvest.

Table 5 shows the approximate anticipated construction emissions associated with the development of vineyards of the sizes described above. Variations or similarities in 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, and operational equipment operation and trips.

Table 5 – Emissions from Vineyard Development and Operation

Emissions and Thresholds	Criteria Pollutants – Constituents			
	ROG	NO _x	PM _{2.5}	PM ₁₀
Construction Emissions (pounds per day)				
Pounds per day: 150-acre vineyard development¹	8.43 to 11.39	34.39 to 52.16	3.93 to 4.47	13.93 to 14.53
Pounds per day: 150- to 250-acre vineyard development²	9.43 to 11.03	43.85 to 53.16	3.91 to 4.62	12.87 to 17.22
Pounds per day: 127-acre vineyard development^{3,4}	4.6	42.3	5.21 ⁴	24.21 ⁴
Construction threshold	54	54	54	82
Operational Emissions (pounds per day)				
Pounds per day: 400-acre vineyard operation¹	7.78	2.85	0.80	4.22
Pounds per day: 560-acre vineyard operation²	6.58	1.84	0.75	3.91
Pounds per day: 507-acre vineyard operation³	4.3	22.3	1.4	2.3
Operational threshold (pounds per day)	54	54	54	82
Tons per year: 400-acre vineyard operation^{1,5}	0.78	0.35	0.11	0.58
Operational threshold (tons per year)	10	10	10	15

¹ As identified in Circle-S EIR; ² As identified in Suscol Mountain EIR; ³ As identified in Walt Ranch EIR; ⁴ Includes dust and exhaust emissions; ⁵ Calculation based on 365 days of operation. Project emissions are anticipated to be less than identified as vineyard operations are seasonal in nature.

Sources: Circle-S Ranch Vineyard EIR 2011; Suscol Mountain Vineyard EIR 2013; Walt Ranch Vineyard EIR 2016; BAAQMD CEQA Guidelines April 2023.

Because the proposed project's 0.73 gross acre vineyard (approximately 0.63 net-planted acre) is smaller than any of the projects presented above, construction and operational emissions from the proposed project that could negatively affect air quality are expected to be less than those identified in **Table 5** and would therefore result in a less than significant impact during both construction and operation.

Additionally, project approval, if granted, would be subject to the Air Quality Conditions of Approval described below, which includes measures consistent with BAAQMD BMPs for Construction-Related Fugitive Dust Emissions to not result in a significant impact with respect to mass criteria pollutant emissions of fugitive dust. These BMPs would be incorporated into the proposed project and therefore, the proposed project would result in a less-than-significant impact with respect to fugitive dust emissions.

Air Quality – Conditions of Approval:

The owner/permittee shall implement the following air quality BMPs during construction activities and vineyard maintenance and operations:

1. Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. The BAAQMD's phone number shall also be visible.

⁶ #P09-00176-ECPA, Analytical Environmental Services (AES) March 2012, SCH #2009102079 certified February 3, 2013

⁷ #P11-00205-ECPA, AES March 2016, SCH #2008052075 certified August 1, 2016

⁸ #P06-01508-ECPA, AES April 2011, SCH #2007062069 certified December 22, 2011

⁹ These EIRs are incorporated herein by reference and available for review in the Napa County Department of Planning, Building and Environmental Services permanent files.

2. Water all exposed surfaces (e.g., parking areas, staging areas, soil piles, grading areas, and unpaved access roads) two times per day.
3. Cover all haul trucks transporting soil, sand, or other loose material offsite.
4. 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.
5. All vehicle speeds on unpaved roads shall be limited to 15 mph.
6. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
7. All trucks and equipment, including their tires, shall be washed off prior to leaving the site.
8. Unpaved roads providing access to sites located 100 feet or further from a paved road shall be treated with a 6- to 12-inch layer of compacted layer of wood chips, mulch, or gravel.
9. 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.

Implementation of the proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard.

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. As such, health risk impacts from exposure to air pollution are evaluated for these sensitive receptors in the vicinity of projects. In its 2022 CEQA Guidelines, BAAQMD also recommends that health risk impacts also be evaluated for worker receptors.

Surrounding land uses consist primarily of valley floor vineyard developments and undeveloped woodland east of Silverado Trail. The project site consists of approximately 40.3 acres of land and existing improvements including an existing residence and associated structures, a driveway, approximately 3.3 acres of permitted vineyard, 0.8 acre of unpermitted vineyard in Block F proposed for removal, PG& E transmission lines, a sediment basin, and a groundwater well. The closest schools are located approximately 2 miles southwest (Yountville Elementary) within the Town of Yountville (Napa County GIS, Schools Layer). The closest offsite residence is located approximately 300 feet west and northwest 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 2 miles from the closest school and approximately 300 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.

	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 type="checkbox"/>	<input checked="" 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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 checked="" type="checkbox"/> | <input 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 source was utilized in this analysis and is incorporated herein by reference and available in the project file for review:

- Kjeldsen Biological Consulting, February 2024, Biological Resource Survey, Acierno Vineyard Block G, H, I (0.73-Acres), 7070 Silverado Trail, Napa County (**Exhibit B-1**).
- Kjeldsen Biological Consulting, February 21, 2024, Native Oak Replanting Plan, Acierno Vineyard, Proposed Block G, H, I, 7070 Silverado Trail, Napa County (**Exhibit B-2**).

Kjeldsen Biological Consulting conducted an assessment of biological resources present or potentially present in the proposed development area on March 8, April 6, May 17, June 15, and July 18, 2023. The surveys focused on the proposed development area and immediate surrounding habitat and documented: the presence or potential for special-status plant and animal species, 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 California Natural Diversity Data Base (CDFW CNDDDB Rare Find), the U.S. Fish and Wildlife Service (USFWS) IPaC resource list for listed species known for the project site’s USGS 7.5-minute topographic quadrangle and surrounding eight quadrangles (Yountville, St. Helena, Chiles Valley, Lake Berryessa, Rutherford, Capell Valley, Sonoma, Napa, and Mt. George), and California Native Plant Society (CNPS) Electronic Inventory of Rare or Endangered Plants for the project site’s quadrangle and surrounding eight quadrangles.

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 habitat and vegetation types/alliances in the proposed development area consists of ruderal, or semi-natural herbaceous grassland. The project area was previously classified as mixed oak woodland prior to removal of 15 oak trees from the area. The vegetation types/alliances found in the project site outside of the proposed development area include mix oak woodland and native bunch grasslands.

- a. **Special-Status Plants:** Based upon a review of the biological resource databases listed in **Exhibit B-1**, 32 special-status plant species are known to occur within the region. There are no records of special-status plants that occur within the project site and the biological surveys of the proposed development area did not identify any special-status plants or habitat that would support special-status plant species. While there are known records of special-status Sonoma beardtongue (*Penstemon newberryi* var. *sonomensis*) in the vicinity of the project site, no habitat for this species occurs in the project site (Kjeldsen Biological Consulting, February 2024 – **Exhibit B-1**).

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-3.¹⁰ Additionally, pursuant to Napa County General Plan Policy CON-13,¹¹ 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.

¹⁰ 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.

¹¹ 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.

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 0.73 acre 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. Policy CON 24c¹², specifically provides for the preservation of oak woodland (on an acreage basis) at a 2:1 ratio where feasible, where preservation/avoidance of oak woodland is not feasible replacement of oak woodland at a 2:1 ratio is required. NCC Section 18.108.020(D) (Vegetation Removal Mitigation) further 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. Oak woodland impacts and mitigation are discussed in Question e below.

Special-Status Animals: Based upon a review of the biological resource databases listed in **Exhibit B-1**, 17 special-status animal species are known to occur within the region of the project site. There are no records of special-status animals that occur within the project site and the biological surveys of the proposed development area did not identify habitat for special-status animal species and no special-status animals were observed.

The proposed project would not have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species or their habitat; impacts would be less than significant.

- b-c. No wetland or riparian vegetation habitat has been identified on the project site or the project area. An ephemeral drainage occurs to the west of the proposed development area that would be considered a water of the State. This drainage only contains water during storm events, and therefore is classified as a Class III drainage. The drainage is not a USGS blueline drainage, but it does contain woody vegetation greater than 10 feet in height and contains banks steeper than 3:1; therefore, it would meet the Napa County stream definition pursuant to NCC 18.108.025. Minimum 65-foot stream setbacks have been maintained from the drainage in accordance with NCC 18.108.025 (**Exhibit A-1**). 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.

A small patch of Purple Needlegrass Grassland was identified within the northern periphery of proposed vineyard Block G during the biological surveys of the proposed development area (see Plate III in Kjeldsen Biological Consulting, February 2024 – **Exhibit B-1**). This grassland encompassed approximately 0.05-acre. Purple Needlegrass Grassland is a native grassland that is a sensitive natural plant community in Napa County (Napa County, 2005). While the plan was designed to avoid this grassland it was inadvertently disturbed or otherwise removed in the spring/summer of 2023 prior to application submittal as a result of vineyard redevelopment and replanting under #P22-00412-ECPA.

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

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

To protect and enhance Purple Needlegrass Grassland within the County and replace the Purple Needlegrass Grassland that has been removed from within proposed vineyard Block G to reduce potential impacts to this sensitive natural plant community to a less-than-significant level, **Mitigation Measure BIO-1** shall be implemented.

Mitigation Measure BIO-1: Prior to the commencement of vegetation removal or earth-disturbing activities associated with #P23-00348-ECPA, the owner/permittee shall submit to the County for review and approval a Purple Needlegrass Grassland

¹² Policy CON 24(c): Provide replacement of lost oak woodlands or preservation of like habitat at a 2:1 ration when retention of existing vegetation is found to be infeasible. Removal of oak species limited in distribution shall be avoided to the maximum extent feasible.

Replacement/Revegetation Plan to replace approximately 0.05-acre of Purple Needlegrass grassland removed at a 3:1 ratio because of the project. The Plan and area(s) determine suitable for Purple Needlegrass revegetation shall be determined and prepared by a qualified biologist or restoration ecologist and include the following: i) a site plan showing the area(s) of revegetation, ii) a plant pallet composed primarily of Purple Needle Grassland (*Nassella pulchra*) and other compatible native plant species common to the area, that includes planting densities and plant sizes and/or application rates, iii) planting notes and details including any recommended plant protection measures, iv) invasive species removal and management recommendations, specifications and goals, v) an implementation and monitoring schedule with a minimum of 5-years of monitoring, and vi) performance standards with a minimum success rate of 80% to ensure the success of Purple Needlegrass Grassland replacement and re-vegetation efforts.

To reduce impacts on the oak woodland biological community to a less-than-significant level and comply with NCC Section 18.108.020(D) (and Policy CON-24c), **Mitigation Measure BIO-2** would be implemented (see Question e below).

With the implementation of **Mitigation Measures BIO-1** and **BIO-2**, impacts on Purple Needlegrass Grassland and oak woodland would be reduced to a less-than-significant level. No impacts to wetlands or riparian habitat would occur because of the 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, reduction of population fluctuations, and 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. There are no identifiable wildlife corridors or unique wildlife habitat that would be impacted by the proposed project.

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.

Wildlife exclusion fencing, which would be removed within designated stream setback areas and retained around the vineyard blocks, 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 condition of approval shall be implemented, should the project be approved.

Fencing – Conditions of Approval:

The owner/permittee shall revise Erosion Control Plan #P23-00348-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 #P23-00348-ECPA, and include the following components:

1. 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.
2. Exit gates shall be installed at the corners of deer fencing to allow trapped wildlife to escape.
3. Any modifications to the location of wildlife exclusion fencing as specified in Erosion Control Plan #P23-00348-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. As noted in Questions b-c above, the proposed development area previously contained 15 oak trees and was considered mixed oak woodland prior to their removal (**Exhibit B-1**). Four of these oak trees were removed as part of PG&E's fuel break vegetation removal work on the project site and in the vicinity. Approximately 9,021 square feet (0.21 acre) of oak canopy was removed with the removal of the 15 oak trees with DBH greater than 6 inches in the proposed development area.

Oak woodland is the most common land cover in the County occurring on approximately 167,000 acres (33% of the County's area). Approximately 733 acres of oak woodland or 0.5% of the total area of oak woodland in the County has been cleared for residential and agricultural purposes between 1993 and 2002 (Napa County Baseline Date Report, Biological Resources Section, pages 4-22 and 4-25,

Version 1, November 2005). While oak woodlands may be one of the most common land covers within the County, their past conversion to residential and agricultural uses in conjunction with foreseeable oak woodland conversion to agricultural use is considered a potentially significant impact on both a project-specific level and a cumulative level (Napa County General Plan, Draft Environmental Impact Report, Volume 1, Section 5.4 Biological Resources, Pacific Municipal Corporation, February 2007).

NCC Section 18.108.020(C) (General Provisions: Vegetation Retention Requirements) requires that parcels in the Agricultural Watershed zoning district retain 70% of the vegetation canopy cover based on the on-site canopy present on June 16, 2016. Because the project site burned in the 2017 Atlas Fire and 2020 Glass Fire it is subject to NCC Section 8.80.130 (amended through Urgency Ordinance No. 1463), which requires the vegetation canopy cover analysis be based on the June 19, 2018, aerial. Approximately 1.06 acres of tree canopy cover on slopes less than 30% existed in the project site prior to tree removal in the proposed development area (**Exhibit A-1**). The proposed project would retain approximately 0.85 acre (or 80.5%) of the vegetation canopy on slopes less than 30% that exists on the subject parcel, exceeding the 70% retention requirement. An additional approximately 2.67 acres of tree canopy on slopes greater than 30% and less than 50% and 5.61 acres of tree canopy on slopes greater than 50% would also be retained (**Exhibit A-1**).

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. NCC 18.108.020(D) prioritizes where the mitigation replacement and preservation areas should be considered, whereby the first priority is for onsite replacement and/or preservation areas that generally occur on slopes less than 30% and outside of stream and wetland setbacks. If this cannot be reasonably accomplished, then onsite permanent replacement and preservation may occur within stream setbacks at a minimum 2:1 preservation ratio where a restoration plan prepared by a qualified professional biologist has been prepared, and where consistent with Section [18.108.025\(D\)](#). (NCC Section 18.108.020(D)(4). NCC Section 18.108.020(E) (Preserved Vegetation Canopy Cover) requires preserved or replaced vegetation canopy cover to be protected (or otherwise enforceable restricted) through a perpetual protective easement or deed restriction preserving and conserving the preserved vegetation canopy cover.

For the proposed project to comply with NCC Section 18.108.020(D) and preserve 3 acres of oak woodland for every 1 acre impacted, a minimum of 0.62-acres (27,063 square feet) of oak woodland occurring on slopes less than 30% and outside of stream and wetland setbacks would need to be preserved on the project site for the approximate 0.21-acre (9,021 square feet) of oak canopy that was previously removed in the proposed development area.

As proposed the project includes the restoration of 0.63-acres (27,557 square feet) of oak woodland canopy, 0.47-acres (20,609 square feet) of which are located within stream setbacks, which would meet the 2:1 provision of NCC Section 18.108.020(D)(4) (**Exhibit A-1**, Sheets C2 and C2.1), because a Native Oak Replanting Plan prepared by professional biologists, Chris Kjeldsen and Daniel Kjeldsen of Kjeldsen Biological Consulting (**Exhibit B-2**), is a component of the project. The additional ±0.15-acres (6,675 square feet) would further meet the intent of NCC Section 18.108.020(D) by including an overall minimum 3:1 acreage replacement ratio and a minimum 3:1 tree replacement ratio through the planting of 52 replacement oak trees.

While the proposed project includes the restoration of oak woodland canopy to meet the provisions of NCC Section 18.108.020(D) the restoration areas are not proposed to be permanently preserved. The lack of permanent preservation of replacement oak woodland canopy would be inconsistent with NCC Section 18.108.020(D) and considered a potentially significant to oak woodlands and associated canopy.

To reduce impacts on oak woodlands and associated canopy habitat to a less-than-significant level, and to comply with NCC Section 18.108.020(E) and Policy CON-24c, **Mitigation Measure BIO-2** would be implemented.

Mitigation Measure BIO-2: The owner/permittee, prior to approval, shall implement to following measures to minimize impacts to oak woodlands:

- a. The Native Oak Replanting Plan prepared for Erosion Control Plan #P23-00348-ECPA (**Exhibit B-2**), which includes specifics on the oak tree replanting, erosion control measures within the replanting area, maintenance, and monitoring, shall be implemented. Areas of replanting shall also include those areas identified in **Exhibit A-1**, Sheets C2 and C2.1. Annual monitoring reports shall be prepared and submitted to the County, with interim success criteria included to ensure that the plan is on track to meet the mitigation goals. After the 5-year monitoring period, a report shall be prepared and submitted to the County evaluating the success of the mitigation program and recommending further actions if necessary. If the success criteria have not been met at the conclusion of the 5-year monitoring period, monitoring shall continue until the success criteria have been achieved.
- b. A Preservation Area, totaling a minimum of 0.62-acres (27,063 square feet) of oak woodland and associated canopy generally as shown on Plate III in **Exhibit B-2** and Sheets C2 and C2.1 in **Exhibit A-1**, shall be designated as such in a deed restriction or conservation easement or other means of permanent protection. Land placed in protection shall be restricted from development and other uses that would degrade the quality of the habitat (including, but not limited to conversion to other land uses such as agriculture or urban development and excessive off-road vehicle use that increases erosion) and should be otherwise restricted by the existing goals and policies of Napa County. The owner/permittee shall record the deed restriction or conservation

easement prior to construction or within 90 days of project approval, whichever comes first. The area to be preserved shall obtain final approval from Napa County prior to recordation of the preservation mechanism.

The land placed in protection shall be restricted from development and other uses that would potentially degrade the quality of the habitat (including, but not limited to conversion to other land uses such as agriculture or urban development, and excessive off-road vehicle use that increases erosion), and should be otherwise restricted by the existing goals and policies of Napa County.

- c. Prior to any earthmoving activities temporary fencing shall be placed at the edge of the dripline of trees to be retained that are located adjacent to the development area (typically within approximately 50-feet of the proposed development area). The precise locations of said fences shall be inspected and approved by the Planning Division prior to the commencement of any earthmoving activities. No disturbance, including grading, placement of fill material, storage of equipment, etc. shall occur within the designated protection areas for the duration of erosion control plan and vineyard installation.
- d. The owner/permittee shall refrain from severely trimming the trees (typically no more than 1/3rd of the canopy) and vegetation to be retained adjacent to the proposed development area.
- e. In accordance with County Code Section 18.108.100 (Erosion hazard areas – Vegetation preservation and replacement) trees that are inadvertently removed that are not within the boundary of the project and/or not identified for removal as part of #P23-00348-ECPA shall be replaced on-site with fifteen-gallon trees at a ratio of 2:1 at locations approved by the planning director. A replacement plan shall be prepared for county review and approval that includes at a minimum, the locations where replacement trees will be planted, success criteria of at least 80%, and monitoring activities for the replacement trees. The replacement plan shall be implemented before vineyard planting activities. Any replaced trees shall be monitored for at least three years to ensure an 80% survival rate. Replacement trees shall be installed and documented that they are in good health prior to completion and finalization of the erosion control plan.

With implementation of **Mitigation Measures BIO-1** 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, 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 35 tons per acre across the proposed development area depending on soil type, slope length, and gradient. Under proposed project conditions, soil loss is anticipated to total 1.16 tons per acre, or a reduction of approximately 6% 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.

	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 type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" 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 was utilized in this analysis and is incorporated herein by reference, in addition to Napa County GIS archeological sensitive areas and archeological sites layers: Evans & De Shazo, Inc., February 21, 2023, Cultural Resources Study for the Proposed Vineyard Development Project Located at 7070 Silverado Trail in Unincorporated Napa County, California (contents confidential).

Evans & DeShazo, Inc. conducted a cultural resources evaluation for the project site, 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 area (1.2 acres including Block F that is currently planted with vineyard) to locate any visible signs of potentially significant historic or prehistoric cultural deposits.

a-b. The cultural resources study (Evans & DeShazo, Inc., 2024) did not identify any significant or potentially significant cultural resources in the proposed development area.

Although no cultural resources were found, there is the possibility that buried archaeological deposits could be present and accidental discovery could occur. Therefore, the proposed project would be subject to the standard conditions of approval identified below to protect cultural resources that may be discovered accidentally.

c. The cultural resources study did not locate any human remains in the proposed development area and does not anticipate the discovery of human remains due to implementation of the proposed project. Therefore, impacts on human remains are anticipated to be less than significant. Furthermore, the following conditions of approval would be incorporated should the proposed project be approved, which would ensure that potential impacts on human remains would be less than significant.

Cultural Resources – Conditions of Approval:

Discovery of cultural, historical or archaeological resources, or human remains during construction, grading, or other earth moving activities:

1. In accordance with CEQA Subsection 15064.5(f), should any previously unknown historic or prehistoric resources, including but not limited to charcoal, obsidian or chert flakes, grinding bowls, shell fragments, bone, pockets of dark, friable solids, glass, metal, ceramics, wood or similar debris, be discovered during grading, trenching or other onsite excavation(s), earth work within 100-feet of these materials shall be stopped until a professional archaeologist certified by the Registry of Professional Archaeologists has had an opportunity to evaluate the significance of the find and suggest appropriate mitigation(s), as determined necessary.
2. 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.
3. All persons working onsite shall be bound by contract and instructed in the field to adhere to these provisions and restrictions.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VI. ENERGY. Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<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 consume more than 16 billion gallons of gasoline and more than 3 billion gallons of diesel each year, making California the second largest consumer of gasoline in the world (CEC 2016). 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 2018 - <https://www.countyofnapa.org/DocumentCenter/View/9247/Revised-Draft-Climate-Action-Plan>).

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 will need to comply with State requirements designed to minimize idling and associated emissions, which also minimizes use of fuel. Specifically, idling of commercial vehicles and off-road equipment would be limited to five minutes in accordance with the Commercial Motor Vehicle Idling Regulation and the Off-Road Regulation.¹³ The proposed project would comply with these State requirements and the Air Quality conditions of approval presented in **Section III (Air Quality)**. Napa County has not implemented an energy action plan. Therefore, the proposed project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency or impede progress towards achieving goals and targets, and impacts would be less than significant.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
VII. GEOLOGY AND SOILS. Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<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 checked="" 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"/>

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

- f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Discussion

- a. The project site could experience potentially strong ground shaking and other seismic related hazards based on the number of active faults in the San Francisco Bay region. The proposed project consists of earthmoving activities associated with the installation of erosion control measures for agricultural development but does not include the construction of new residences or other facilities (i.e., enclosed areas where people can congregate) that would be subject to seismic forces. Additionally, the proposed project would not result in a substantial increase in the number of people to the site. Therefore, the proposed project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving fault rupture, ground shaking, liquefaction, and landslides and impacts would be less than significant. Additional information supporting this conclusion is identified below.
- i) The project site is not located on an active fault or within an “Earthquake Fault Hazard Rupture Zone” designated by the Alquist-Priolo Earthquake Zoning Act. The closest active fault is the West Napa fault, located approximately 2 miles west 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, 2009). 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): 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-Forward-Felta complex, 5-30% slopes, Bale clay loam, 2-5% slopes, Hambright rock-Outcrop complex, 30-75% slopes, and Rock outcrop. 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 Universal Soil Loss Equation (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 80% for proposed vineyard Blocks G, H and I 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 RSA+ (Exhibit C), the proposed conversion of approximately 0.73 acre of vegetation to vineyard is anticipated to reduce soil loss, or surface erosion, within the project site as compared to existing conditions (Table 6). Under existing conditions, the annual soil loss is anticipated to total 1.24 tons per acre across the proposed development area depending on soil type, slope length, and gradient. Under proposed project conditions, annual soil loss is anticipated to total 1.16 tons per acre, or a reduction of approximately 6% as compared to existing conditions.

Table 6 – USLE Soil Loss Analysis

Vineyard Block	Pre-project Soil Loss (tons/acre)	Post-project Soil Loss (tons/acre)	Difference	Percent Change (approximate)
G	0.45	0.44	-0.01	-2%
H	0.37	0.34	-0.03	-8%
I	0.42	0.38	-0.04	-10%
Total	1.24	1.16	-0.08	6%

Source: RSA+, December 2024, Soil Loss Analysis – Exhibit C

Other proposed erosion control features that are anticipated to further reduce potential soil loss as a result of the proposed project, including soil loss experienced during vineyard and cover crop development and establishment, consist of installation of straw mulching 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 #P23-00348-ECPA pursuant to NCC Chapter 18.108 (Conservation Regulations):

1. 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, diversion swales, subsurface drain-lines, rock outfalls (energy dissipator or energy dissipation swale) 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 (#P23-00348-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.
2. 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 80% for proposed vineyard Blocks G, H, and I. 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 landslides located in the vicinity of the project site, and there are no observed signs of gullies, landslides, slope instability, or excessive erosion within the proposed development area. An existing landslide feature is located to the south of the project area on a neighboring property. The proposed development area is not in an area prone to 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 high shrink-swell potential (USDA, 1978). However, no structures are proposed as part of the project and expansive soils pose little risk to vineyards and related agricultural improvements. Therefore, there would be no impacts associated with expansive soils.

- e. The proposed project involves the development of a vineyard. No septic tanks or alternative wastewater disposal systems are needed or proposed for the proposed project. Therefore, no impact would occur with regard to soils supporting septic tanks or alternative wastewater disposal systems.
- f. The proposed project would not destroy any unique geologic features on the project site. Due to the nature of the soils in the project site and the nature of the proposed project (which would involve a relatively shallow vineyard), the probability of encountering paleontological resources within the project site is minimal. Furthermore, project approval, if granted, would be subject to the standard conditions described below that would avoid and reduce potential paleontological resource impacts. Therefore, impacts to geologic features and paleontological resources are anticipated to be less than significant.

Paleontological Resources – Conditions of Approval:

Discovery of paleontological resources during construction, grading, or other earth moving activities:

1. In the event that a discovery of a brea, 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.
2. All persons working onsite shall be bound by contract and instructed in the field to adhere to these provisions and restrictions.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
VIII. GREENHOUSE GAS EMISSIONS. Would the project:				
a) Generate a net increase in greenhouse gas, either directly or indirectly, that may have a significant impact on the environment?	<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.

On April 20, 2022, the BAAQMD adopted updated thresholds of significance for climate impacts (CEQA Thresholds for Evaluating the Significance of Climate Impacts, BAAQMD April 2022).¹³ The updated thresholds to evaluate GHG and climate impacts from land use projects are qualitative and geared toward building and transportation projects. Per the BAAQMD, all other projects should be analyzed against either an adopted local Greenhouse Gas Reduction Strategy (i.e., Climate Action Plan [CAP]) or other threshold determined on a case-by-case basis by the Lead Agency. If a project is consistent with the State’s long-term climate goals of being carbon neutral by 2045, then a project would have a less-than-significant impact as endorsed by the California Supreme Court in *Center for Biological Diversity v. Department of Fish & Wildlife* (2015) *62 Cal. 4th 204). There is no proposed construction-related climate impact threshold at this time. GHG emissions from construction represent a very small portion of a project’s lifetime GHG emissions. The proposed thresholds for land use projects are designed to address operational GHG emissions which represent the vast majority of project GHG emissions.

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, 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.

¹³ <https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines>, April 2022

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

In the absence of quantitative GHG thresholds from BAAQMD or a qualified CAP for the County, a no net increase threshold is applied for the evaluation of GHG emissions generated by the proposed project. A no net increase in GHG would ensure that the proposed project would not generate GHGs, either directly or indirectly, that may 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.

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.

Consistent with these General Plan action items, Napa County participated in the development of a community-wide GHG emissions inventory and "emission reduction framework" for all local jurisdictions in the County in 2008-2009. This planning effort was completed by the Napa County Transportation and Planning Agency in December 2009 and served as the basis for development of a refined inventory and emission reduction plan for unincorporated Napa County.

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.

GHGs are the atmospheric gases whose absorption of solar radiation is responsible for the greenhouse effect, including carbon dioxide (CO₂), methane, ozone, 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. Equivalent Carbon Dioxide (CO_{2e}) is the most commonly reported type of GHG emission and a way to get one number that approximates total emissions from all the different gasses that contribute to GHG, as described in BAAQMD's CEQA Guidelines. In this case CO₂ is used as the reference atom/compound to obtain atmospheric carbon CO₂ effects of GHG. Carbon stocks 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>).¹⁴

One-time "Construction Emissions" associated with vineyard development projects include: i) the carbon stocks that are lost or released when site vegetation is removed, including any woody debris and downed wood and soil is ripped in preparation for vineyard development (referred to as Carbon Stock Emissions below) and iii) emissions associated with the energy used to develop and prepare the development area and plant vineyard, including construction equipment and worker vehicle trips (referred to as Equipment Emissions below).

As stated above, the April 2022 update to BAAQMD thresholds of significance do not include construction-related impact thresholds, as GHG emissions associated with the energy used to develop, prepare and plant the project area represent a very small portion of a project's lifetime GHG emissions. The construction emissions analysis below is for disclosure purposes only and are considered with the ongoing operational emissions for comparison with the no net increase threshold.

"Operational Emissions" of the vineyard are quantified and include: i) any reduction in the amount of carbon sequestered by existing vegetation that is removed as part of the project (referred to as Operational Sequestration Emissions below); and ii) ongoing emissions from the energy used to maintain and farm the vineyard, including vehicles (such as haul trucks, pick-up trucks) and worker vehicle trips (referred to as Operational Equipment Emissions below).

¹⁴ "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).

Construction Emissions:

Equipment Emissions: As discussed in **Section III (Air Quality)**, three County Certified EIRs 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 from these EIRs. The Circle-S Ranch EIR anticipated approximately 4,293 metric tons (MT) CO_{2e} of construction equipment emissions for a 459-acre vineyard development, resulting in approximately 9.4 MT CO_{2e} of construction equipment emissions per acre of vineyard development.¹⁵ Using this emission factor it is anticipated that Construction Equipment Emissions associated with the proposed 0.73 gross acre of vineyard would be approximately 6.86 MT CO_{2e} (0.73 acre multiplied by 9.4 MT CO_{2e}).

Carbon Stock Emissions: Proposed development area emissions are emissions resulting from vegetation removal and soil preparation associated with the conversion of approximately 0.73 acre of existing vegetation to vineyard. 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 in the proposed development area. This report uses data from the California Natural and Working Lands Carbon and Greenhouse Gas Model (CALAND) and the factors for aboveground vegetation are consistent with the carbon stock factors developed as part of the 2012 Draft CAP efforts. There is currently no scientific agreement about the percentage of carbon that would be lost (or emitted) from soils through grading for redevelopment. Some analyses have suggested 20 to 25 percent while others have suggested 50%.¹⁶ Using 50 percent as a more conservative estimate, the analysis uses carbon stock emission rates for soil disturbance due to vegetation removal in the 2012 Draft CAP. Utilizing these factors and the acreages of existing vegetation types within the development area, total existing carbon stock emissions for the development area are estimated to be approximately 1.61 MT C or approximately 5.94 MT CO_{2e} (**Table 7**). This includes carbon stored in above ground vegetation and soil. **Table 7** also presents the addition of carbon storage to the area with the development of the vineyard. Addition of soil carbon from vineyard development is conservatively excluded from the calculations. As shown in **Table 7**, the net change in carbon storage in the proposed development area would be a reduction (or emissions) of approximately 0.5 MT C or approximately 4.1 MT CO_{2e}.

Table 7 – Estimated Development Area Carbon Stocks/Storage

Vegetation Type/Carbon Storage	Development Area Acreage	Carbon Storage/Stock per Acre (MT C/acre)	Total Carbon Storage (MT)	Total Carbon Storage in MT CO _{2e}
Existing				
Grasslands - Vegetation	0.73	1.416	1.03	3.79
Grasslands - Soil	0.73	0.8	0.58	2.14
Existing Total			1.61	5.94
Proposed Project				
Vineyard - Vegetation	0.63	1.77	1.11	4.10
Vineyard - Soil	0.63	0.0	0.0	0.0
Project Total			1.11	4.10
Change in Carbon Stock in the Development Area with Project			0.5	1.84

Sources: Napa County Draft Climate Action Plan, March 2012; Napa County Conservation Division, November 2018; California Natural and Working Lands Carbon and Greenhouse Gas Model (CALAND), 2019.

Operational Emissions:

Operational Equipment Emissions: The referenced vineyard development EIRs also assessed ongoing vineyard operation emissions associated with vehicles and equipment. Estimated potential construction equipment emissions per acre of vineyard development were derived using the highest emissions results from these EIRs. The Suscol Mountain Vineyard EIR anticipated approximately 373 MT CO_{2e} of operational emissions for a 560-acre vineyard, resulting in approximately 0.67 MT CO_{2e} of operational emissions per acre of vineyard per year. Using this emission factor, it is anticipated that Operational Equipment Emissions associated with the proposed 0.73-acre agricultural development would be approximately 0.49 MT CO_{2e} per year (0.73 multiplied by 0.67 MT CO_{2e}).

Operational Sequestration Emissions: Emissions associated with loss of sequestration due to land use 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 8**. Both cultivated land (used here for vineyard) and grassland land cover types in the CALAND model only include soil carbon flux and no sequestration from vegetation. The value for grasslands is negative (i.e., carbon emission) which assumes a static

¹⁵ 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.

¹⁶ Napa County, July 12, 2010, Green House Gas Emissions Associated with Vineyard Development & Vineyard Operations, A Compilation of Quantitative Data from Three Recent Projects.

carbon density in the soil which reduces over time due to vegetation carbon uptake. It is anticipated that the annual emissions associated with changes in carbon sequestration would reduce as a result of land use changes by approximately 2.2 MT CO₂e per year.

Table 8 – Change in Carbon Sequestration in the Proposed Development Area

Vegetation Type	Average Carbon Sequestration in MT CO ₂ e
Existing	
Existing Land Cover: Grassland ^a	-2.4
Project	
Project Land Cover: Vineyard	0.18
Net Change in Carbon Sequestration	-2.23

^a Negative value for sequestration indicates emissions
Source: Table compiled by ESA

Grapevines are photosynthetic plants and therefore have value in terms of carbon capture. Carbon sequestration loss from the removal of existing vegetation would be offset by the development of the vineyard, which would act as a sink for atmospheric CO₂, depending on the longevity of grapevine roots and the quantity of carbon stored in deep roots. In addition to vines, the sequestration of atmospheric carbon is also achieved by the soil between vine rows through cover-cropping.

Project Emissions:

Based on the above estimates and as shown in **Table 9**, the proposed project would reduce enough carbon emissions for a net positive balance of approximately 75 MT CO₂e over the 40-year time span used in the evaluation. The reduction in emission is due to the removal of the existing grassland vegetation and development of vineyards which sequester more carbon. This reduction from the removal of grassland would more than offset the loss in carbon storage from removal of existing vegetation, and the generation of construction and operational emissions associated with the project.

Table 9 – Estimated Overall Project-Related GHG Emissions

Source	MT CO ₂ e
Construction vehicles and equipment	6.9
Loss of carbon stock from removal of existing grassland vegetation	5.9
Loss of carbon sequestration from removal of existing grassland vegetation ^a	-96.3
Operational vehicles and equipment ^a	19.6
Gain in carbon stock from vineyard development	-4.1
Gain in carbon sequestration from vineyard development ^a	-7.1
Total	-75.1

^a Estimated over a project lifetime of 40 years
Source: Table compiled by ESA

Therefore, the proposed project would meet the no net increase threshold and therefore would not generate GHGs, either directly or indirectly, that may 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.

Furthermore, the removal and restoration/revegetation of ±0.9 acres of existing vineyard that includes the planting of 52 oak trees encompassing 0.62-acres (**Exhibits A-1 and B-2**) is anticipated to further increase carbon sequestration and reduce project GHG emissions as identified above, which would further reduce the potential significance of this impact.

	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"/>

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| 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. No chemical mixing or cleaning and washing of chemical application equipment would occur on the project site. Fertilizers (i.e., nitrogen, magnesium, boron, and zinc) would be applied via drip and foliar up to three times per year. Mildewcides (i.e., Sonata, paraffinic oil, wettable sulfur, and sulfur dust) and herbicides (i.e., Lifeline or equivalent) 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. An ephemeral drainage occurs to the west of the proposed development area and minimum 65-foot stream setbacks have been maintained from the drainage in accordance with NCC 18.108.025 (**Exhibit A-1**). The nearest blueline stream is Conn Creek, which is approximately 0.8 mile to the southwest. 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:

1. Workers shall follow manufacturer’s recommendations on use, storage and disposal of chemical products.
2. Workers shall avoid overtopping fuel gas tanks and use automatic shutoff nozzles where available.
3. During routine maintenance of equipment, properly contain and remove grease and oils.
4. Discarded containers of fuel and other chemicals shall be properly disposed of.
5. Spill containment features shall be installed at the project site wherever chemicals are stored overnight.

6. 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.
7. To prevent the accidental discharge of fuel or other fluids associated with vehicles and other equipment, all workers shall be informed of the importance of preventing spills and of the appropriate measures to take should a spill occur.

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

- c. The closest schools are located approximately 2 miles southwest (Yountville Elementary) and 6 miles south (Sunrise Montessori of Napa Valley) within the Town of Yountville (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). Therefore, no impact would occur.
- e. The closest public airport to the project site is Napa County Airport, located over 15 miles south of the project site. No portion of the proposed project is within an airport compatibility zone identified in the Airport Compatibility Plan (Napa County Airport Land Use Compatibility Plan, and Napa County GIS Airport layer). Therefore, no impact would occur.
- f. During construction, there would be negligible numbers of workers (between 1 and 10 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 high fire severity (CalFire 2007 - <https://egis.fire.ca.gov/FHSZ/>). 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.

	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"/>

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| 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 March 28, 2022, August 9, 2022, and November 8, 2022, the Napa County Board of Supervisors adopted resolutions proclaiming a continued state of Local Emergency due to the 2021-2022 drought. On June 7, 2022, the Napa County Board of Supervisors provided direction regarding interim procedures to implement Executive Order N-7-22 for issuance of new, altered or replacement well permits and discretionary projects that would increase groundwater use during the declared drought emergency. 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 Groundwater Sustainability Agency (GSA) Subbasin. For parcels not located in the GSA Subbasin (i.e., generally located in the hillsides), a parcel-specific Water Availability Analysis (WAA) would suffice to assess potential impacts on groundwater supplies. Although the Governor, through Executive Order No. N-5-23, rolled back some of the drought emergency provisions in late March 2023, due to current water conditions, the Governor's Emergency Order N-7-22 remains in place and the remaining criteria for the County's interim actions and procedures also remain. On May 30, 2023, the Napa County Board of Supervisors terminated the Local Emergency due to the 2021-2022 drought but acknowledged that there are still adverse conditions that will continue to affect the Napa Valley groundwater subbasin and the need to continue groundwater management efforts including the interim actions and procedures still exists.

The project site is located in the Napa River watershed (40.3 Creek), which flows into the Napa River and is tributary to San Pablo Bay. The Napa River is designated critical habitat for steelhead (Napa County GIS USFWS critical habitat layer). 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).

The nearest blueline stream is Conn Creek, located approximately 0.8 mile southwest of the proposed development area.

- 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 #P23-00348-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 County requires all ECPA applicants to complete necessary water analyses to document that sufficient water supplies are available for a proposed project. On June 28, 2011, the Board of Supervisors approved the creation of a Groundwater Resources Advisory Committee (GRAC). The GRAC's purpose was to assist County staff and technical consultants with recommendations regarding groundwater, including data collection, monitoring, and well pump test protocols, management objectives, and community support. The County completed a countywide assessment of groundwater resources (Napa County Groundwater Conditions and Groundwater Monitoring Recommendations Report, 2011) and developed a groundwater monitoring program (Napa County Groundwater Monitoring Plan, 2013). The County also completed a 2013 Updated Hydrogeologic Conceptualization and Characterization of Groundwater Conditions (2013).

Groundwater availability, recharge, storage and yield are not consistent across the County. More is known about the resource where historical data have been collected. Less is known in areas with limited data or unknown geology. In order to fill existing data gaps and to

provide a better understanding of groundwater resources in the County, the Napa County Groundwater Monitoring Plan recommended 18 Areas of Interest (AOIs) for additional groundwater level and water quality monitoring. Through GRAC's well owner and public outreach efforts, approximately 40 new wells have been added to the monitoring program within these areas. Groundwater Sustainability Objectives were developed and recommended by GRAC and adopted by the Board. The recommendations included the goal of developing sustainability objectives, provided a definition of sustainability, and explained the shared responsibility for Groundwater Sustainability and the important role of monitoring as a means to achieving groundwater sustainability.

In 2009, Napa County began a comprehensive study of its groundwater resources to meet identified action items in the County's 2008 General Plan update. The study, by Luhdorff and Scalmanini Consulting Engineers (LSCE), emphasized developing a sound understanding of groundwater conditions and implementing an expanded groundwater monitoring and data management program as a foundation for integrated water resources planning and dissemination of water resources information. The 2011 baseline study by LSCE, which included over 600 wells and data going back over 50 years, concluded that "the groundwater levels in Napa County are stable, except for portions of the MST district". Most wells elsewhere within the Napa Valley floor with a sufficient record indicate that groundwater levels are more affected by climatic conditions, are within historical levels, and seem to recover from dry periods during subsequent wet or normal periods.

The proposed vineyard would be irrigated, and frost and heat protected, and the proposed replanting area would be irrigated using groundwater supplied by an existing groundwater well located south of the project area's residence. The project site has a metered municipal water connection with the Town of Yountville; however, municipal water use is limited to indoor residential water usage only. No municipal water or surface water would be used on the vineyard. The project well also serves the existing residence, landscaping and existing vineyards on the project site.

A Tier 1 WAA was prepared in order to determine if the proposed increase in groundwater water demand as a result of the proposed project would have a significant impact on groundwater supplies (RSA+, Revised February 2024 – **Exhibit D**). The 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. The project well is not located within 500 feet of another well (adjacent parcels are served by a municipal water supply from the Town of Yountville), is not located within 1,500 feet of a spring for residential or agricultural use and is not located within 1,500 feet of a significant stream per Napa County GIS information; therefore, the proposed project is not subject to a Tier 2 or Tier 3 WAA.

Existing uses within the project site (i.e., residential and vineyard) use approximately 3.62 AF of groundwater per year (AF/yr). With the proposed development of 0.63 net acres of new vineyard and tree replanting, water demand would increase to approximately 4.26 AF/yr and this amount would decrease to 4.25 AF/yr after three years once the replanted trees are established, for an overall long-term demand of 0.63 AF/yr for the proposed project.

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 27.18 inches per year over the approximately 40.3-acre project aquifer recharge area available for recharge and a 14.1% deep percolate recharge estimate, estimates the average annual groundwater recharge to be approximately 12.91 AF/yr (see **Exhibit D** for details and calculations). The average annual rainfall utilized in the recharge analysis includes times of below-average and above-average rainfall, and therefore inherently includes drought year conditions. The estimated annual future groundwater demand (with the proposed project) in the project well recharge area of 4.25 AF/yr is below the estimated average annual recharge volume of 12.91 AF/yr identified in the WAA.

Considering: i) anticipated annual water use of the proposed project and project well groundwater recharge area of approximately 4.25 AF/yr is below the anticipated annual groundwater recharge rate screening criteria (or allocation) of approximately 12.91 AF/yr; ii) an estimated 6% reduction in average rainfall under extreme drought conditions would not significantly affect demand as a percentage of recharge; iii) there is no evidence to date indicating that there are groundwater problems or declining well production in the this area of the County; and iv) 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 jointly by the Public Works and PBES Departments:

The Owner/Permittee shall be required (at the Permittee's expense) to record well monitoring data (specifically, static water level no less than quarterly, and the volume of water no less than monthly) for the Project Wells and any other on-site well(s) including future wells. Such data shall be provided to the County as requested by the PBES Director, or if the Director determines that substantial evidence indicates that water usage is affecting, or would potentially affect, groundwater supplies. 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 if the Director of Public Works determines that such data could be useful in supporting the County's groundwater monitoring program. The project well shall be made available for inclusion in the groundwater monitoring network if the Director of Public Works 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.

No new on-site or off-site water sources (other than those evaluated as part of this ECPA) proposed to be used for the vineyard, including but not limited to wells, imported water, new or existing ponds/reservoir(s) or other surface water impoundments, to serve the vineyard, shall be allowed without additional environmental review, if necessary, and may be subject to a modification to this ECPA. A new Water Availability Analysis shall be required prior to approval of any new water source(s) on the property.

- 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 of 80% for proposed vineyard Blocks G, H, and I, 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 A-1** for details related to the following discussion.

Proposed erosion control and project features that have the potential to alter natural drainage patterns include fiber roll sediment barriers, silt fences, 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 RSA+ (Revised February 2024 – **Exhibit E**). The Hydrology Report used SCS TR-55 modeling to compare the pre- and post-development peak stormwater runoff rates from the proposed development area for the 2-year, 10-year, 50-year, and 100-year, 24-hour design storms. The post-development peak stormwater runoff rates for the proposed project and associated improvements were calculated to be equal to the pre-development peak stormwater runoff rates. 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.¹⁷

¹⁷ Compliance with Section 18.108.135 is achieved by including their provisions as conditions of approval for a project, if granted, as indicated in **Section VII (Geology and Soils)**.

- d. The project site is not located within a Federal Emergency Management Agency (FEMA) 100-year flood zone, in a dam or levee failure inundation area, or in an area subject to seiche or tsunami (Napa County GIS FEMA flood zone and dam levee inundation areas layers; Napa County General Plan - Safety Element. pg. 10-20). 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 0.08 tons per acre, have no negative effect on runoff rates, and maintain project site drainage characteristics as compared to existing conditions. The ECPA includes BMPs that are consistent with NCC Section 18.108.080(c), as well as with Regional Water Board guidance from the Storm Water Best Management Practice Handbooks for Construction and for New Development and Redevelopment, and the Erosion and Sediment Control Field Manual.

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

Water Quality – Condition of Approval:

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

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

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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 in a rural area of Napa County and the nearest established community is Yountville, approximately 2 miles southwest of the project site. The project site contains an existing residence and associated structures, a driveway, approximately 3.3 acres of permitted vineyard, 0.8 acre of unpermitted vineyard in Block F proposed for removal, PG& E transmission lines, a sediment basin, and a groundwater well. Surrounding areas contain agricultural and rural residential areas. Therefore, the proposed vineyard and subsequent vineyard operations is consistent with surrounding land uses and would not physically divide an established community and no impact would occur.

b. The project site is zoned as Agricultural Watershed and is designed under the Napa County General Plan as Agricultural, Watershed and Open Space. Surrounding parcels are also zoned Agricultural Watershed in the Napa County General Plan Land Use Element. Vineyards and associated improvements are permitted uses under these designations. The proposed project has been analyzed for consistency with applicable sections of the NCC and with the Napa County General Plan. With inclusion of the mitigation measure and conditions of approval, the proposed project has been found consistent with applicable code requirements and General Plan Goals and Policies, including but not limited to the following:

- The proposed project is consistent with NCC Section 18.108.010, which requires that soil loss and runoff as a result of a project be minimized to protect water quality. As discussed in **Sections VII (Geology and Soils)** and **X (Hydrology and Water Quality)**, the proposed project is anticipated to decrease soil loss and potential sedimentation by approximately 0.08 tons per acre 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 and CON-16, which require discretionary projects consider and avoid impacts to fisheries, wildlife habitat, and special-status species through evaluation of biological resources. A Biological Resources Survey Report was prepared for the proposed project (**Exhibit B-1**). 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.
- With implementation of **Mitigation Measures BIO-1** and **BIO-2**, the proposed project is consistent with Policy CON-13, which requires discretionary projects to consider and avoid impacts to fisheries, wildlife habitat, and special-status species, and Policy CON-17, which requires the preservation and protection of native grasslands, sensitive biotic communities, and habitats of limited distribution and no net loss of sensitive biotic communities.
- 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. Further the removal and restoration/revegetation of ±0.9 acres of existing vineyard that includes the planting of 52 oak trees would increase carbon sequestration consistent with this policy (**Exhibit B-2**).
- 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 its General Plan land use AWOS designation and is therefore consistent with Policy AG/LU-20.

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

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

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 and Map 2-1, Version 1, November 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 resource area in Napa County is the Napa Quarry, located approximately 12.5 miles southeast of the project site. Proposed development of vineyard on the project site would not physically preclude future mining activities from occurring. Therefore, no impact would occur.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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 residences to the project site is located approximately 300 feet west and northwest of the project site. Additionally, adjacent properties and other properties in the immediate area contain vineyards.

Activities associated with installation of the proposed project, including earthmoving, potentially blasting, and subsequent vineyard operations, could generate noise levels above existing conditions. Several different 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 vehicle and/or light trucks. **Table 10** characterizes typical equipment noise levels at a reference distance of 50 feet. As identified in **Table 10**, equipment used for vineyard development could produce a maximum of 89 (A-weighted decibels) dBA at a distance of 50 feet.

Table 10 – 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 11 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 11 – Estimated Distance to dBA Contours from Construction Activities¹

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

¹ Based on a source noise level of 90 dBA

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

Based on distances to existing residences, noise associated with project construction would be approximately 80 dBA at the nearest existing offsite residences.

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, Version 1, November 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 12** 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 12 – 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 60 and 65 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 70 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 GIS: Napa Airport Compatibility Zones and USGS Quad layers). Therefore, no impact would occur.

	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, roads, 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. Therefore, no impact would occur.

	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 these temporary workers would come from the existing labor pool in the local region and would not result in an increase in population over existing conditions. As a result, there would be no need to construct any new government facilities. Therefore, there would be no change in the demand for the listed services and amenities. No impact would occur.

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

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

The County maintains a set of Transportation Impact Study Guidelines (TIS Guidelines, February 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 is partially developed and contains an existing residence and associated structures, a driveway, approximately 3.3 acres of permitted vineyard, 0.8 acre of unpermitted vineyard in Block F proposed for removal, PG& E transmission lines, a sediment basin, and a groundwater well. The project site is accessed from an existing private driveway off Silverado Trail. 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 10 vehicle round 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 four 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 10 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 around 6 a.m. and departing around 3 p.m.

Because the proposed project would be expected to generate up to approximately 10 daily round trips during construction and up to 10 daily round trips for ongoing operations and maintenance, below the 110-trip threshold in the Office of Planning and Research guidelines and the County's TIS Guidelines and VMT screening criteria, the project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b). Impacts would be less than significant. Further, operational trips are not anticipated to increase because of the project due to the existing vineyard on the property.

- c. The proposed project would utilize the existing private driveway off Silverado Trail for project development. The proposed project does not include roadway improvements and/or modifications to the existing driveway or Silverado Trail or include any other design feature that would result in hazardous conditions due to a geometric design feature or incompatible uses. The installation of the vineyard is consistent with the allowed use of the project site and other Agricultural Watershed zoned properties as well as agricultural uses in the area. Therefore, the potential for the creation of or substantial increase in hazards due to a geometric design feature or incompatible uses would be a less-than-significant impact.
- d. The existing roads would continue to provide adequate emergency access to the project site, resulting in no impact. Refer to **Section IX (Hazards and Hazardous Materials)**, for additional discussion related to emergency access.
- e. The proposed project would generate its largest demand for parking (approximately ten vehicles) during pruning, 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.

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

Discussion

Notice of the proposed project sent certified mail to the Mishewal Wappo Tribe of Alexander Valley, Middletown Rancheria, and the Yocha Dehe Wintun Nation on November 1, 2023. The County discussed the project with a Tribal representative from the Mishewal Wappo Tribe of Alexander Valley on February 6, 2024, and agreed to conditions that would be included with any approving actions for the project to ensure that tribal cultural resources are protected. The County sent consultation closure notices to Mishewal Wappo Tribe of Alexander Valley, Middleton Rancheria, and the Yocha Dehe Wintun Nation on February 6, 2024, because no request for consultation was received and more than 30 days had elapsed since the County's consultation invitations were provided.

a-b. As discussed in **Section V (Cultural Resources)** the proposed project's cultural resources study (Evans & DeShazo, Inc., February 2023), no cultural resources were identified in the proposed development area. Furthermore, no resources that may be significant pursuant to Public Resources Code Section 5024.1(c) have been identified in the proposed development area and the Cultural Resources conditions of approval discussed in **Section V (Cultural Resources)** would avoid and reduce potential impacts to unknown resources. Furthermore, the following conditions of approval would be incorporated should the proposed project be approved, which would ensure that potential impacts on tribal cultural resources, including those that may be eligible for the California Historical Resources Information System or local register, or cultural resources would be less than significant.

Tribal Cultural Resources – Conditions of Approval:

1. Prior to the commencement of vegetation removal and earth-moving activities pursuant to #P23-00348-ECPA, the owner/permittee shall provide documentation to Napa County demonstrating that they have engaged with the Mishewal Wappo Tribe of Alexander Valley to provide cultural monitors during project construction as necessary, and that cultural sensitivity training has been provided to site workers.
2. Should the owner/permittee be unsuccessful in engaging with the Mishewal Wappo Tribe of Alexander Valley, the owner/permittee shall provide, for review and approval by Napa County, a Cultural Monitoring Plan prepared by a professional archaeologist certified by the Registry of Professional Archeologists (RPA). The Cultural Monitoring Plan shall outline monitoring requirements including but not limited to, sensitivity training for site workers, find procedures, and monitoring documentation and reporting procedures.

Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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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 fiber roll sediment barriers, silt fences, 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 proposed vineyard would use approximately 0.63 AF/yr from one existing groundwater well to irrigate the approximately 0.63 net acres of new vineyard. An additional approximately 0.006 AF would be used per year for three years to irrigate the replanted trees until they are established. The WAA prepared by RSA+ (**Exhibit D**) concluded that after full development, total long-term groundwater demand for the project site with the new 0.63 net acre of vineyard would be 4.25 AF/yr. Based on the 10-year average annual rainfall of 27.18 inches for the project area and estimated recharge, the annual recharge rate for the parcel is calculated to be 12.91 acre-feet per year. The project groundwater recharge area's estimated groundwater demand 0.63 AF/yr with the proposed project represents approximately 5% 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 and for the proposed erosion control features. Solid waste generated during construction activities (e.g., trash, discarded building materials, debris, etc.) would be negligible and would be cleared daily, or as necessary. Implementation of the proposed project would include pruning and harvesting activities which would generate waste material (cane). This material would generally be disposed of onsite by spreading it back into the vineyard, burning it in accordance with BAAQMD regulations, or a combination of the two. Therefore, the proposed project would not generate a volume of waste that would need to be disposed of at a landfill that would exceed the permitted capacity of applicable landfills serving the project area. Furthermore, all waste would be disposed of in accordance with federal, state, and local statutes and regulations. Therefore, no impact would occur.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XX. WILDFIRE. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	<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 a High Fire Hazard Severity Zone (CalFire, 2022; Napa County GIS CalFire Layers, Fire Protection Responsibility Areas and Fire Hazard Severity Zone). Typical slopes within the proposed development area range from 20% to 25%.

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

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XXI. MANDATORY FINDINGS OF SIGNIFICANCE. Would the project:				
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- b) Does the project have the impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?
- c) Does the project have environmental effects which will cause substantial effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Discussion

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

- a. As discussed in this Initial Study, implementation of #P23-00348-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. No special-status species or their habitat have been identified in the proposed development area. The proposed development area also contains Purple Needlegrass Grassland and previously contained mixed oak woodland, which are biological communities considered sensitive by Napa County. With incorporation of **Mitigation Measures BIO-1** and **BIO-2**, Purple Needlegrass Grassland and oak woodland would be avoided (Purple Needlegrass Grassland), replanted (oak woodland), and preserved.

Existing wildlife exclusion fencing would be removed within designated stream setback areas and retained in the proposed development area such that the fencing encloses only the vineyard blocks. Given the relatively small size of the project site (relative to existing wildlife corridors), agricultural expansion within the project site is in and of itself unlikely to result in any significant impacts to wildlife movement or migration at the landscape linkage scale. While the proposed project (vineyard) would result in portions of the site having reduced potential for on-site wildlife movement, the revised fencing would be limited to the vineyard blocks and would avoid riparian corridors along existing streams in the area. 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 ephemeral drainage to the west of the proposed development with minimum 65-foot setbacks in accordance with NCC 18.108.025.

With 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 Napa River (Caymus Creek) watershed, which both flows into the San Pablo Bay. The Caymus Creek Drainage area contains approximately 903 acres. In 1993, vineyard acreage within this drainage was approximately 314 acres, or 35% of the drainage. Since 1993 approximately 40 acres of additional vineyard (or 4% of the drainage) have been developed to vineyard, resulting in approximately 39% of the drainage (or approximately 354 acres) containing vineyard.

It is estimated, based on evaluation of the County’s GIS layer identifying Potentially Productive Soils within the Caymus Creek Drainage, that there are approximately 81 acres (9% of the drainage) having the potential to be developed to vineyard. This, in conjunction with existing and approved vineyard development (approximately 354 acres), results in a total potential build out of approximately 435 acres or approximately 48% of the drainage. The Potentially Productive Soils layer includes lands with characteristics that have been found to be suitable for potential future vineyard development; however this total does not take into consideration other site-specific limitations such as water courses requiring setbacks, wetlands, other water features, rare or special-status plants and animal species, or cultural resources, nor does the layer take into account other factors influencing vineyard development, such as sun exposure, soil type, water availability, or economic factors.

While it is not possible to precisely quantify the acreage and location of additional vineyard development that may be proposed by property owners in these drainages in the future, it is possible to make a conservative estimate based on previous trends. To estimate the amount reasonably foreseeable vineyard that may be developed over time, the acreage of vineyard development including approved vineyard projects in the cumulative environment (i.e., Caymus Creek watershed) 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 Caymus Creek Drainage, approximately 1.3 acres of agriculture were developed per year (40 divided by 31). Combined with Napa County policies and other site

selection factors that limit the amount of land that can be converted to vineyard, the development of approximately 3.9 to 6.5 acres over the next three to five years within the Caymus Creek Drainage are considered reasonable estimates. NCC Chapter 18.108 includes policies that require setbacks of 35 to 150 feet from watercourses (depending on slopes), and 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 (#P23-00348-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 4** (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. Conversion of existing vegetation and disturbance of soil would result in releases of carbon dioxide, one of the gasses that contribute to climate change (**Tables 7 and 8**). As discussed in **Section VIII (Greenhouse Gas Emissions)**, the proposed project is not anticipated to result in substantial or significant GHG emissions and includes the installation of grapevines and a permanent no-till cover crop, which may off-set (in whole or in part) potential impacts related to reductions in carbon sequestration. 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.

Furthermore, the removal and restoration/revegetation of ±0.9 acres of existing vineyard that includes the planting of 52 oak trees encompassing 0.62-acres (**Exhibits A-1 and B-2**) is anticipated to further increase carbon sequestration and reduce project GHG emissions, which is anticipated to further reduce the potential GHG impacts.

Biological Resources - Section IV:

Project-specific biological resources surveys (Kjeldsen Biological Consulting, February 2024 – **Exhibit B-1**) 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 CNDDDB, CNPS, and USFWS databases. As discussed in **Section IV (Biological Resources)**, no special-status plant or animal species were identified in the proposed development area. Streams within the project site are outside of the proposed development area and would not be affected by the proposed project. With incorporation of **Mitigation Measures BIO-1 and BIO-2**, Purple Needlegrass Grassland and oak woodland would be avoided (Purple Needlegrass Grassland), replanted (oak woodland), and preserved. 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 resource reconnaissance (Evans & De Shazo, February 2023) did not identify cultural resources in the proposed development area. With the 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 (see **Section V [Cultural Resources]** and **Section XVII [Tribal Cultural Resources]**). Therefore, with the incorporation of the identified conditions of approval, 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 0.08 tons/acre as compared to existing conditions (**Table 5**). The reasons for this reduction are due to the increased vegetative cover conditions within the proposed vineyard development areas and the installation of erosion control features which reduce soil loss potential. Because the proposed project would reduce soil loss as compared to existing conditions and would implement erosion and runoff control conditions of approval, the proposed project is not anticipated to contribute cumulatively to sediment production within the Kortum Canyon Creek 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 RSA+ (Revised February 2024 – **Exhibit D**) indicate that the proposed development consisting of approximately 0.63 net acre of planted vineyard would result in approximately 0.63 AF/yr of groundwater use, with a total long-term water demand of approximately 4.25 AF/yr in the project well groundwater recharge area. Anticipated water use associated with irrigating the proposed replanted oak trees would be approximately 0.006 AF per year for three years until the trees are established. 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 (or allocation); an estimated 6% 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.c (Hydrology and Water Quality)** a Hydrologic Analysis was prepared by RSA+ (Revised February 2024 – **Exhibit D**). 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 D**). Therefore, no significant impacts due to changes in hydrology are expected.

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

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

Land Use and Planning - Section XI:

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

Proposed Project Impacts Found to be Less Than Significant:

In addition to the impact categories identified above, the following discussion summarizes those impacts considered to be less than significant with development of the proposed project: Aesthetics, Agriculture and Forestry Resources, Energy, Mineral Resources, Noise, Population and Housing, Public Services, Recreation, Transportation, Utilities and Service Systems, and Wildfire. Periodic use of lighting at the site would not create a substantial source of light and lighting would be in the form of heat lights or downward directional lights on equipment being used during nighttime harvest. The potential contribution to aesthetic impacts associated with the proposed project is considered to be less than cumulatively considerable. The proposed project would not result in wasteful, inefficient, or unnecessary energy use, or conflict with or obstruct a state or local plan for renewable energy or energy efficiency or impede progress towards achieving goals and targets. There are no known mineral resource areas within the proposed project site or immediate vicinity. This project would generate noise levels that are considered normal and reasonable for agricultural activities and consistent with the County's "Right to Farm" Ordinance. The potential contribution to noise or vibration impacts is considered less than cumulatively considerable. Traffic related to

construction and farm worker trips would not increase by a discernible amount and the relatively low and off-peak vehicle trips associated with the proposed project are considered less than cumulative considerable. The proposed project does not include the construction of structures that would result in population growth or displacement of people and would not adversely impact current or future public services. For these reasons, impacts associated with the proposed project that may be individually limited, but cumulatively considerable, would be less than significant.

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

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

LIST OF FIGURES:

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

LIST OF TABLES:

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

LIST OF EXHIBITS:

Exhibit A-1	Acierno Silverado Trail Vineyard ECPA
Exhibit A-2	Supplemental Narrative to the ECPA
Exhibit A-3	Application Completeness Determination Responses
Exhibit B-1	Biological Resource Survey
Exhibit B-2	Native Oak Replanting Plan
Exhibit C	Universal Soil Loss Equation (USLE) Calculations
Exhibit D	Water Availability Analysis
Exhibit E	Hydrology Report
Exhibit F	Project Revision Statement