

**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:** Regusci Simone Track I Erosion Control Plan Application (ECPA) #P21-00117-ECPA
2. **Property Owner(s):** Regusci Simone Ranch Limited Partnership
3. **Contact Person, Phone Number and Email:** Daniel Zador, Planner II, (707) 259-8239, Daniel.Zador@countyofnapa.org
4. **Project Location and APN:** 5584 Silverado Trail, Napa, CA 94558, Assessor's Parcel Number (APN) 039-030-023 (Figures 1 and 2)
5. **Project Sponsor:** Regusci Vineyard Management
5584 Silverado Trail
Napa, CA 94558-9411 **Agent:** PPI Engineering Inc.
James R. Bushey (Registered Professional Engineer No. 49931)
2800 Jefferson Street
Napa, CA 94558
6. **General Plan Description:** Agriculture, Watershed and Open Space (AWOS)
7. **Zoning:** Agricultural Watershed (AW) and Agricultural Preserve (AP)
8. **Description of Project:**

The proposed project involves the clearing of vegetation, earthmoving, and installation and maintenance of erosion control measures associated with the development of approximately 14.0 gross acres of new vineyard (i.e., development area, proposed clearing limits; approximately 8.9 net acres of vines) within eight vineyard blocks, located on an approximate 162.62-acre parcel (i.e., project site) (**Figure 3**). Average slopes within the development area range from 18 percent (%) to 28%, with 1.2 acres occurring on slopes over 30%. There are 68 native trees proposed for removal as part of the project, consisting of in descending order predominantly coast live oak, blue oak, valley oak and willow trees ranging in size from 6-inches diameter-at-breast-height (DBH) to 49-inches DBH. Trees are proposed to be replanted and preserved at a 3:1 ratio to ensure compliance with Napa County Code (NCC) Section 18.108.020(D), refer to the Habitat Mitigation and Monitoring Plan (**Exhibit B-3**) for locations of replanting areas.

Rock generated as a result of site preparation would be used to construct rock aprons and rock-filled avenues at the edges of certain vineyard areas. Temporary rock stockpiles and staging areas would be located inside of proposed clearing limits. No grading activities or ground disturbance would occur outside of the proposed clearing limits. Blocks 17 and 19 would be hand-farmed with a proposed vine and row spacing of 4 feet by 4 feet, except where cross-slope exceeds 15%, when the row spacing shall be increased as needed to ensure there is adequate room for equipment. The remaining blocks would be tractor-farmed with a proposed vine and row spacing of 4 feet by 7 feet, except where cross-slope exceeds 15%, when the row spacing shall be increased as needed to ensure there is adequate room for equipment. The vineyard would be irrigated with water sourced from an existing groundwater well, and pipelines would be located in existing roadways, vineyard avenues and/or within the proposed clearing limits. There is existing wildlife exclusion fencing located around the perimeter of the project site; no new wildlife exclusion fencing is proposed (**Exhibit A**).

Erosion Control Measures: Temporary erosion control measures include straw wattles, water bars, straw bale dikes, and the application of straw mulch at a rate of 3,000 pounds per acre. Permanent erosion control measures include ditches, rock aprons, surface drainage pipelines, rock-filled avenues, concrete drop inlets, and a permanent no-till cover crop maintained at a minimum vegetation cover density of 80% (Blocks 13 – 19) and 90% (Block 12). Details of the proposed erosion control measures are provided in the Regusci Simone Erosion Control Plan (ECP) #P21-00117-ECPA, dated November 2021, prepared by James R. Bushey (Registered Professional Engineer No. 49931) of PPI Engineering, Napa, California (**Exhibit A**).

Earthmoving: Earthmoving and grading activities associated with the installation of erosion control measures and subsequent vineyard operation include, but are not limited to vegetation removal, soil ripping, rock removal, disking, and development of erosion 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 4-foot spacing pattern (Blocks 17 and 19) and 4 foot by 7-foot spacing pattern (Blocks 13-19) for an approximate vine density ranging between ±1,556 and ±2,723 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, pest and disease control), weed control, cover crop mowing, irrigation and trellis system maintenance, and fruit harvesting. No pre-emergent herbicides would be used, and contact or systemic herbicides may be applied in the spring. The width of the spray strip shall be no wider than 1 foot in order to achieve 80% vegetative cover for Blocks 13-19 (based on a 7-foot row spacing). Only spot-spraying of contact or systemic herbicides may be used in Block 12 where 90% vegetative cover shall be maintained, or other methods that do not result in a continuous bare strip.

Table 1 lists a general schedule for the construction of the proposed project as identified in #P21-00117-ECPA and **Table 2** outlines typical general ongoing vineyard operations. The final implementation schedule is pending action on #P21-00117-ECPA.

Table 1 – Implementation Schedule

April 1	Commence clearing and tillage operations.
October 15	All tillage and erosion control complete.
October 15 ¹	All winterization complete, including seeding, straw mulching, and straw wattle installation.

¹ During the winter months (October 15 to April 1 of the succeeding year), no earthmoving work is allowed by the NCC Section 18.108.070(L).

Table 2 – Typical Annual Operations Schedule

January to April	a. Prune vines. b. Weed control.
April to July	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.

Project construction activities are anticipated to require up to approximately 12 one-way worker trips per day for work crews of between 10 and 15 workers. Approximately six additional one-way trips are anticipated for project mobilization and demobilization for equipment and materials delivery and pick up. Construction equipment is anticipated to include a crawler tractor (D-8 or larger), tractor/trailers, backhoes, trencher, and pickup trucks, passenger vehicles, and other small to medium service vehicles.

Vineyard operations, including pruning and harvest is anticipated to require up to approximately 10 one-way worker trips per day for work crews of approximately 20 workers who are anticipated to carpool. No additional truck trips are anticipated for grape haul trucks during harvest because all grapes are processed at the onsite winery. Anticipated equipment for vineyard operations is anticipated to include a tractor/trailer, a forklift, pickup trucks, passenger vehicles and other small to medium service vehicles, and ATVs.

Implementation of the proposed project would be in accordance with the Regusci Simone ECP prepared by PPI Engineering (November 2021 - **Exhibit A**). The proposed project is further described in the application materials including the Supplemental Project Information sheets. All documents are incorporated herein by reference and available for review in the Napa County Department of Planning, Building and Environmental Services (PBES).

9. Describe the environmental setting and surrounding land uses.

The proposed project would occur on one parcel totaling approximately 162.26 acres located at 5584 Silverado Trail in Napa, California (**Figures 1-3**). The project site is located approximately 5 miles north of the City of Napa. The

project site consists of residences, winery and vineyard buildings, four groundwater wells, vegetable gardens, vineyard blocks, driveways and associated landscaping, as well as undeveloped areas consisting of nonnative grassland, chamise chaparral, and coast live oak woodland. The project site is grazed for fire protection purposes. Surrounding land uses include rural residences, wineries, livestock grazing and vineyards.

The project site is located within the Chase Creek watershed. There are no blueline streams on the project site, but there are several ephemeral drainages and seasonal wetlands on the project site that would be avoided with appropriate setbacks. All drainages flow southwest off the project site and eventually drain to the Napa River.

General topography of the project site is gently to moderately sloped, and elevations ranging from 100 to 570 feet above mean sea level (msl), within the eastern hills of Napa Valley. The project site contains slopes within the development area that are gently to moderately sloped on a west-facing hill, with elevations ranging from approximately 142 to 496 feet above msl.

The closest large active fault (the West Napa fault) is located 2.3 miles west of the project site. No landslides have been identified within the project site; however proposed Block 15 has an identified area of soil creep in the west side of the vineyard block, adjacent to proposed Block 16. Soils on the project site have been classified according to the Soil Survey of Napa County (USDA 2014, USDA 1978, and USDA 1972) as Boomer-Forward-Felta complex with 30-50% slopes and Rock Outcrop-Hambright complex with 50-75% slopes (PPI Engineering, November 2021 - **Exhibit A**).

The vegetation types in the project site generally consist of developed and landscaped area (26.0 acres), nonnative annual grassland (67.0 acres), chamise chaparral (4.5 acres), coast live oak woodland (31.7 acres), and developed coast live oak woodland (1.5 acres). Three primary ephemeral drainages and associated tributaries and six wetlands occur on the project site. The 14.0 acres of development area proposed for conversion to vineyard consists of 0.5 acre of developed area, 11.0 acres of nonnative grassland, and 2.4 acres of coast live oak woodland.

- 10. Background & History:** The approximately 162.62-acre project site includes residences, winery and vineyard buildings, vegetable gardens, vineyard blocks, driveways and associated landscaping. There are also livestock pens and pastures, as the majority of the undeveloped portions of the project site are grazed by livestock. The project site was burned in the 2017 Napa Complex Fire (also known as the Atlas 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)) be based on the June 2018 aerial. While the existing residence, winery, and accessory structures on the project site survived the fire, a large number of existing trees were lost.

This application was submitted after the effective date of the Napa County Water Quality and Tree Protection Ordinance (WQTPO - Ordinance #1438, effective on May 9, 2019); therefore, processing and review of this application will be subject to the County Conservations Regulations (NCC Chapter 18.108) as amended by the WQTPO.

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

Responsible (R) and Trustee (T) Agencies

California Department of Fish and Wildlife (CDFW) (T)
U.S. Army Corps of Engineers (USACE) (R)
Regional Water Quality Control Board (Regional Water Board) (R)

Other Agencies Contacted

Middletown Rancheria
Mishewal Wappo Tribe of Alexander Valley
Yocha Dehe Wintun Nation

- 11. 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 to Middletown Rancheria, Mishewal Wappo Tribe of Alexander Valley, and Yocha Dehe Wintun Nation on April 21, 2023. The only response was from Yocha Dehe Wintun Nation on May 9, 2023 and they concluded it was not within their territories.

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 checked="" 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, where necessary, a visit to the site. For further information, see the environmental background information contained in the permanent file on this project.

Other sources of information used in the preparation of this Initial Study include site-specific studies conducted by the applicant and filed by the applicant in conjunction with ECP #P21-00117-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:

- PPI Engineering, Revised November 2021, Original Submittal May 2021, Erosion Control Plan, Regusci Simone Vineyard, 5584 Silverado Trail (**Exhibit A**).
- WRA, Inc., May 2021, Biological Resources Reconnaissance Survey Report, Regusci Winery, Napa County, California (**Exhibit B-1**).
- WRA, Inc., November 9 2021, Response to Comments Memorandum, Regusci Simone Ranch Vineyard Compliance ECP #P21-00118 and Regusci Simone Ranch New Vineyard ECP #P21-00117 (**Exhibit B-2**).
- WRA, Inc., November 2021, Habitat Mitigation and Monitoring Plan, Regusci Simone Ranch, Napa County, California (**Exhibit B-3**).
- PPI Engineering, November 9, 2021, Soil Loss Analysis, Regusci Simone Track I ECP, 5584 Silverado Trail (APN: 039-030-023) (**Exhibit C**).
- RCS Associates LLC, May 11, 2021, Results of Napa County Tier I Water Availability Analysis, Regusci Winery Vineyard Development Project, Vicinity Stags Leap, Soda Canyon Area, Napa County, California (**Exhibit D**).
- PPI Engineering, November 10, 2021, Revised Hydrologic Analysis, Regusci Simone Track I ECP #P21-00117 & Compliance ECP #P21-00118, 5584 Silverado Trail (APN: 039-030-023) (**Exhibit E**).
- Flaherty Cultural Resource Services (FCRS), January 7, 2021, Cultural Resource Reconnaissance of 20+/- Acres, Yountville, Napa County, California (a portion of APN 039-030-023, Regusci Winery, 5584 Silverado Trail).
- Site inspections conducted by Napa County Planning and Engineering Division staff conducted on July 7, 2021.
- Napa County Geographic Information System (GIS) sensitivity maps/layers.

On the basis of this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a (SUBSEQUENT) 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 (SUBSEQUENT) 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.

Daniel Zador
Signature

9/8/2023
Date

Daniel Zador
Printed Name

Napa County Planning, Building and Environmental Services

ENVIRONMENTAL CHECKLIST FORM

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
I. AESTHETICS. Except as provided in Public Resources Code Section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?	<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-b. The project site is approximately 0.5 mile east of Silverado Trail, which is a Napa County-designated scenic roadway (Napa County GIS, Scenic Corridors Layer). The project site includes existing vineyard land; the use is consistent with the Napa County General Plan designation for the site and it would remain vineyard land after the project is implemented. While construction equipment and activities at the project site may disrupt views from the county-designated scenic roadway, visual impacts related to construction equipment and activities at the development area would be short-term and temporary in nature.

As described in the Project Description and in **Section IV (Biological Resources)**, trees would be removed during project construction; however, the majority of the trees are not visible from public viewpoints and this would not result in damage to a scenic resource. Although not located on a major or minor ridgeline (Napa County GIS, Ridgelines Layer), the project site is located on a prominent hillside, and the proposed vineyard would be partially visible through oak tree canopy and natural topography. The surrounding land uses and project site include vineyard land and views of the proposed project would be consistent with this existing use. The Regusci Winery Building on the project site is a historic structure; however, no impact to the winery building would result from the proposed project. There are no significant rock outcroppings or geologic features on the project site that would be impacted by the proposed project. Therefore, for the reasons described above, the proposed project would have a less-than-significant impact on a scenic vista, scenic highway, historic buildings, scenic trees, or rock outcrops.

c. The proposed project would result in the removal of existing vegetation within the development area and includes the development of new vineyard. The proposed project is consistent with the Napa County AWOS land use designation and with adjacent land uses, which include rural residences, wineries, livestock grazing, and vineyards. Although trees would be removed, as explained in questions a-b above (and discussed in **Section IV [Biological Resources]** below), the majority of the trees are not visible from public viewpoints, and their removal would not substantially degrade the existing visual character or quality of public views of the site or its surroundings. For these reasons, the impact would be less than significant.

d. Proposed agricultural operations on the project site would require some lighted nighttime activities consistent with the nighttime activity already occurring on 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 and October), that could include nighttime activity (typically from 10 p.m. to 7 a.m.). The proposed project would include sulfur applications that could occur between 7 p.m. and 5 a.m. approximately seven times per year. Although some nighttime activity would occur for limited periods, the proposed project

would not introduce a new source of substantial light or glare, and the type of nighttime lighting would be consistent with surrounding land uses. Therefore, the proposed project would result in a less-than-significant impact.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
II. AGRICULTURE AND FORESTRY RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<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 checked="" type="checkbox"/>	<input 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 not mapped as Prime Farmland, Unique Farmland, or Farmland of Local Importance by the California Department of Conservation. The proposed project would result in an increase in agricultural land; 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 AWOS designation and is zoned Agricultural Watershed (AW) and Agricultural Preserve (AP). Therefore, the establishment of vineyard totaling approximately 14.0 gross acres (8.9 net acres) is consistent with project site's land use and zoning designations. The eastern portion of the project site has a Williamson Act contract associated with it (Contract 1769-A). However, implementation of the proposed project would not change the primary agricultural activity within the development area and the proposed project would not conflict with its land use designation or a Williamson Act contract. This impact would be less than significant.
- 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 project site does not contain forest land or coniferous forest (Napa County GIS). The project site is not zoned 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 does not include the construction of roadways or other infrastructure that would 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"/>

Discussion

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

On June 2, 2010, the Bay Area Air Quality Management District (BAAQMD) Board of Directors unanimously adopted thresholds of significance to assist in the review of projects under the California Environmental Quality Act (CEQA). These guidelines were updated in May 2017 to address the California Supreme Court’s 2015 opinion in Cal. Bkdg. Indus. Ass’n vs. Bay Area Air Quality Mgmt. Dist., 62 Ca 4th 369. These thresholds are designed to establish the level at which BAAQMD believed air pollution emissions would cause significant environmental impacts under CEQA, and were posted on the BAAQMD website and included in the BAAQMD updated CEQA Guidelines (BAAQMD CEQA Guidelines, May 2017). The thresholds are advisory and may be followed by local agencies at their own discretion.

The thresholds were challenged in court. Following litigation in the trial court, the court of appeal, and the California Supreme Court, all of the thresholds were upheld. However, in an opinion issued on December 17, 2015, the California Supreme Court held that CEQA does not generally require an analysis of the impacts of locating development in areas subject to environmental hazards unless the proposed project would exacerbate existing environmental hazards. The Supreme Court also found that CEQA requires the analysis of exposing people to environmental hazards in specific circumstances, including the location of development near airports, schools near sources of toxic contamination, and certain exemptions for infill and workforce housing. The Supreme Court also held that public agencies remain free to conduct this analysis regardless of whether it is required by CEQA.

In view of the Supreme Court’s opinion, local agencies may rely on thresholds designed to reflect the impact of locating development near areas of toxic air contamination where such an analysis is required by CEQA or where the agency has determined that such an analysis would assist in making a decision about the proposed project. However, the thresholds are not mandatory and agencies should apply them only after determining that they reflect an appropriate measure of a project’s impacts. The BAAQMD CEQA Guidelines may inform environmental review for development projects in the Bay Area, but do not commit local governments or BAAQMD to any specific course of regulatory action.

BAAQMD published a new version of the BAAQMD CEQA Guidelines dated May 2017, which includes revisions made to address the Supreme Court's opinion. The BAAQMD CEQA Guidelines update does not address outdated references, links, analytical methodologies, or other technical information that may be in the Guidelines or Thresholds Justification Report. BAAQMD is currently working to revise any outdated information in the BAAQMD CEQA Guidelines and thresholds of significance as part of its next update.

a-b. The project site is generally located in the Chase Creek Watershed along the eastern side of Napa Valley, within the Napa County climatological subregion of the San Francisco Bay Area Air Basin, which is under the jurisdiction of BAAQMD. The topographical and meteorological features of the Napa Valley subregion create the potential for air pollution. In the short term, potential air quality impacts are most likely to result from construction activities. Construction-related emissions, which are temporary in nature, mainly consist of particulate matter (PM) generated from fugitive dust during grading or other earthmoving activities and other criteria pollutants generated through the exhaust 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. Refer to **Section XVII (Transportation)** for the anticipated number of construction- and operation-related trips.

The impacts associated with implementation of the proposed project were evaluated consistent with guidance provided by BAAQMD. 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. The criteria air pollutants emitted by development, traffic, and other activities anticipated under the proposed development include ozone (O₃), ozone precursors oxides of nitrogen and reactive organic gases (NO_x and ROG), carbon monoxide (CO), nitrogen dioxide (NO₂), and suspended PM of ten micrometers or less and two and a half micrometers or less (PM₁₀ and PM_{2.5}). Other criteria pollutants, such as lead (Pb) and sulfur dioxide (SO₂), would not be substantially emitted by the proposed development or associated traffic, and air quality standards for them are being met throughout the Bay Area.

BAAQMD has not officially recommended the use of its thresholds in CEQA analyses, and CEQA ultimately gives lead agencies the discretion to determine whether a particular environmental impact would be considered significant, as evidenced by scientific or other factual data. BAAQMD also states that lead agencies need to determine appropriate air quality thresholds to use for each project they review based on substantial evidence that they include in the administrative record of the CEQA document. One resource BAAQMD provides as a reference for determining appropriate thresholds is the BAAQMD CEQA Guidelines described above, which outline substantial evidence supporting a variety of thresholds of significance.

The thresholds of significance identified in **Table 3** are consistent with the BAAQMD CEQA Guidelines, and are used to determine if an air quality impact would be significant.

In order to assess potential air quality and GHG emissions, a review of the emissions analysis associated with vineyard development/construction and operations performed for three certified Environmental Impact Reports (EIR) in Napa County was completed: Suscol Mountain Vineyards¹ for an approximately 560-acre vineyard development, Walt Ranch Vineyard² for an approximately 507-acre vineyard development, and Circle-S Ranch Vineyards³ for an approximately 400-acre vineyard development⁴.

The analysis within 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 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 day

¹ #P09-00176-ECPA, Analytical Environmental Services (AES) March 2012, SCH #2009102079 certified February 3, 2013

² #P11-00205-ECPA, AES March 2016, SCH #2008052075 certified August 1, 2016

³ #P06-01508-ECPA, AES April 2011, SCH #2007062069 certified December 22, 2011

⁴ These EIRs are incorporated herein by reference and available for review in the Napa County Department of Planning, Building and Environmental Services permanent files.

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 3 shows the approximate anticipated construction emissions associated with the development of vineyards of the sizes described above. Also shown in **Table 3** are the BAAQMD CEQA Guidelines draft thresholds of significance for emission of the following criteria pollutants: ROG, NO_x, PM₁₀, and PM_{2.5}.

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 quantities and types of vegetation to be removed, construction trips, construction equipment and duration of use/operation, and operational equipment operation and trips.

Table 3 – 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: 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: 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 (lbs/day)	54	54	54	82
Tons per year (Metric)^{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 May 2017.

Because the proposed project's 14.0 gross acre vineyard (approximately 8.9 net-planted acres) 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 3** and therefore below identified thresholds. Additionally, project approval, if granted, would be subject to the standard Air Quality Conditions of Approval described below, which includes standard air quality and construction best management practices (BMPs) consistent with BAAQMD measures identified in Table 8-2 of the BAAQMD CEQA Guidelines that would further reduce potential air quality impacts associated with construction and ongoing operation of the proposed project. These BMPs would be incorporated into the proposed project.

Air Quality – Conditions of Approval:

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

- Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. The BAAQMD's phone number shall also be visible.
- Water all exposed surfaces (e.g., parking areas, staging areas, soil piles, grading areas, and unpaved access roads) two times per day.
- Cover all haul trucks transporting soil, sand, or other loose material offsite.
- Remove all visible mud or dirt tracked onto adjacent public roads by using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.

- All vehicle speeds on unpaved roads shall be limited to 15 miles per hour (mph).
- Idling times shall be minimized either by shutting off equipment when not in use or reducing the maximum idling time to five minutes (as required by state regulations). Clear signage shall be provided for construction workers at all access points.
- Water and/or dust palliatives shall be applied in sufficient quantities during grading and other ground disturbing activities onsite to minimize the amount of dust produced. Outdoor construction activities shall not occur when average wind speeds exceed 20 mph.
- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator. Any portable engines greater than 50 horsepower or associated equipment operated within the BAAQMD's jurisdiction shall have either a California Air Resources Board (ARB) registration Portable Equipment Registration Program (PERP) or a BAAQMD permit. For general information regarding the certified visible emissions evaluator or the registration program, visit the ARB FAQ⁵ or the PERP website⁶.

Installation of the proposed project is expected to generate emissions that are below the thresholds presented in **Table 3**, would contain other features that minimize fugitive dust (such as vineyard cover crop), and would introduce fewer new vehicle trips than the projects shown in **Table 3** during both installation and operation (see **Section XVII [Transportation]** for anticipated project trips). Therefore, implementation of the proposed project would result in less-than-significant air quality impacts, and would not conflict with or obstruct implementation of an air quality plan or result in cumulatively considerable effects.

- c-d. Land uses such as schools, playgrounds, child care 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.

Land uses adjacent to the project site include rural residences, wineries, livestock grazing and vineyards. The project site consists of approximately 162.26 acres of land and existing facilities include residences, winery and vineyard buildings, vegetable gardens, vineyard blocks, driveways and associated landscaping, as well as undeveloped areas consisting of nonnative grassland, chamise chaparral, and coast live oak woodland. The closest schools are located approximately 2.7 miles west (Yountville Elementary, Closed) within the Town of Yountville and 3.8 miles south (Sunrise Montessori of Napa Valley) within the City of Napa (Napa County GIS, Schools Layer). The closest offsite residences are located approximately 800 feet south and 1,000 feet east of the project site.

During installation of the ECP, vineyard planting, and subsequent vineyard operations, airborne pollutants and odors would be created through the use of grading and farm equipment (e.g., tractors, trucks, trailers, and passenger vehicles). These sources would be temporary and/or seasonal in nature and would occur approximately 2.7 miles from the closest school and approximately 800 feet from the nearest residence, providing dilution of pollutants and odors. For the reasons identified above, the proposed project would not expose sensitive receptors or a substantial number of people to pollutants or objectionable odors. Therefore, impacts would be less than significant.

⁵ http://www.arb.ca.gov/portable/perp/perpfaq_04-16-15.pdf

⁶ <http://www.arb.ca.gov/portable/portable.htm>

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES. Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input 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 sources were utilized in this analysis and are incorporated herein by reference and available in the project file for review:

- WRA, Inc., May 2021, Biological Resources Reconnaissance Survey Report, Regusci Winery, Napa County, California (**Exhibit B-1**)
- WRA, Inc., November 9 2021, Response to Comments Memorandum, Regusci Simone Ranch Vineyard Compliance ECP #P21-00118 and Regusci Simone Ranch New Vineyard ECP #P21-00117 (**Exhibit B-2**).
- WRA, Inc., November 2021, Habitat Mitigation and Monitoring Plan, Regusci Simone Ranch, Napa County, California (**Exhibit B-3**).

WRA, Inc. conducted an assessment of biological resources and protocol-level special-status plant surveys on the project site on April 11 and June 6, 2018, August 23, 2019, and April 8 and July 16, 2020. The surveys covered the majority of the project site.

The surveys were completed to document: biological communities; existing conditions and to determine if suitable habitat to support special-status plant or wildlife species exists; aquatic natural communities; and any special-status species that may be present onsite. The survey dates corresponded to blooming periods sufficient to observe and identify special-status plant species determined to have the potential to occur in the project site. The field surveys were conducted by botanists familiar with the flora of Napa County and surrounding counties. The surveys followed the protocol for plant surveys described by resource agency guidelines (CNPS, 2001; CDFW, 2018; USFWS, 1996). Plants were identified using *A Manual of California Vegetation, 2nd Edition* (Sawyer et al., 2009), *A Manual of*

California Vegetation Online (CNPS 2020b), California Native Plant Society Electronic Inventory (CNPS 2020a), and The Jepson Manual: Vascular Plants of California, 2nd Edition (Baldwin, et al, 2012), amongst other consulted sources, to the taxonomic level necessary to determine whether they were rare.

A list of special-status plant and animal species that have the potential to occur within the vicinity of the project site was compiled based on data in the California Natural Diversity Database (CNDDB), California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants (CNPS, 2020), and the Napa County Baseline Data Report (Napa County, 2005) that may be affected by projects in the Yountville and surrounding 7.5-minute topographic quadrangles (i.e., Saint Helena, Chiles Valley, Lake Berryessa, Rutherford, Capell Valley, Sonoma, Napa, and Mount George).

The project site consists of the following biological communities (or habitat types): developed areas, wild oat grassland, chamise chaparral, coast live oak woodland, seasonal wetlands, and ephemeral streams. Coast live oak woodland, ephemeral streams, and wetlands (including Italian rye grass grassland) are considered sensitive habitat types. The habitats and their acreages are shown in **Table 4**. These habitats were mapped according to the definitions in the CNPS *Manual of California Vegetation* and are based on post-Atlas Fire conditions.

Table 4 – Biological Communities and Habitat Types on the Project Site

Biological Communities or Habitat Type	Approximate Pre-Project Conditions (acreages)
Developed	26.0
Wild Oat Grassland	67.0
Chamise Chaparral	4.5
Coast Live Oak Woodland	31.7 ¹
Wetland (Italian Rye Grass Grassland)	0.1
Ephemeral Streams	-- ²
Total	129.3

Notes:

¹ Does not include 1.5 acres of developed Coast Live Oak Woodland.

² Acreage of the ephemeral streams in the project site was not calculated in the Biological Resources Reconnaissance Survey Report. (**Exhibit B-1**).

³ The acreage differs slightly from the total identified in the ECP due to differing mapping platforms, spatial characters, and rounding. Because approximate biological communities identified herein are based on a project site specific biological resources report, the values disclosed herein are considered by the County to be adequate for CEQA review and disclosure purposes of the subject application.

Source: WRA, May 2021 (**Exhibit B-1**)

- a. **Special-Status Plants:** Based upon a review of the resource databases listed in **Exhibit B-1**, 82 special-status plant species have been documented in the vicinity of the project site, and 33 of these plants have the potential to occur within the project site. The remaining 49 special-status plants documented from the greater vicinity are unlikely or have no potential to occur. Results of the plant survey identified four special-status plant species on the project site parcel: (Narrow-anthered brodiaea [*Brodiaea leptandra*], Greene's narrow-leaved daisy [*Erigeron greenei*], Nodding harmonia [*Harmonia nutans*], and Napa blue curls [*Trichostema ruygtii*]) and determined no special-status plant species are present within the development area except Greene's narrow-leaved daisy [*Erigeron greenei*], which is slightly overlapping a southern corner of proposed Block 16 (**Exhibit B-1**). Therefore, the proposed project would have no direct impacts on special-status plant species except for Greene's narrow-leaved daisy. Six subpopulations of Greene's narrow-leaved daisy are located within 100 feet of the development area and two of those subpopulations are within 50 feet of the development area with the Block 16 overlapping edge being one of them. The existing land use management regime that includes livestock grazing over the project areas would be considered beneficial to the continued growth of these native plants. Making sure the grazing land use is significantly not interfered with by the new vineyard and vineyard fencing would be necessary to avoid negative impacts to the rare plants. Both indirect and direct impacts to special-status plant species would be a significant impact. **Mitigation Measure BR-1** would be implemented to prevent indirect impacts to Greene's narrow-leaved daisy.

Mitigation Measure BR-1: The owner/permittee, prior to approval, shall revise # P21-00117-ECPA to include the following provisions to minimize and avoid potential impacts to Greene's narrow-leaved daisy:

- a. Revise the Erosion Control Plan within proposed Block 16 at the south-southwest corner to move the outer block boundary 50 feet back from the corner of the block that overlaps with the mapped location of Greene's narrow-leaved daisy, including relocation of all infrastructure such as wildlife exclusion fencing, so that the outer boundary of the project in this area should follow a straight

line as shown on the Project Revision Map and in this manner that would maintain the ability for livestock passage between the project design features and the adjacent rock outcrop so that the existing grazing regime, which is proposed to continue and would maintain the conditions that are beneficial to native plant regeneration.

- b. Install high visibility fencing and erosion controls (e.g., weed-free straw wattle) between the grading limits and the plants of the two subpopulations of Greene's narrow-leaved daisy within 50 feet of the development area. The remaining four subpopulations within 100 feet of the development area shall be staked or flagged, but fencing and erosion controls are not necessary.
- c. Construction personnel shall be informed of the specific location of the six subpopulations of Greene's narrow-leaved daisy within 100 feet of the development area. No materials or equipment shall be laid down within or near the six subpopulations, and spill prevention materials shall be deployed for all construction equipment.

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-3.⁷ Additionally, pursuant to Napa County General Plan Policy CON-13,⁸ the County shall require that all discretionary agricultural projects consider and address impacts to wildlife habitat and avoid impacts to habitat supporting special-status species to the extent feasible, and where impacts to special-status species and their habitat cannot be avoided, projects shall include effective mitigation measures and management plans to provide protection for habitat supporting special-status species through buffering or other means, and enhance existing habitat values particularly for special-status species through restoration and replanting as part of the project or its mitigation.

The project as proposed and mitigated would not remove special-status plants and/or populations, which is consistent with the following Napa County General Plan Conservation Element Goals and 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 new development of up to approximately 12.27 acres of agriculture on the project site (mitigated as further disclosed and assessed below); Policy CON-17⁹ 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 habit, slope stabilization, soil protection and species diversity. Policy CON-24c¹⁰ specifically calls for the preservation of oak woodland (on an acreage basis) at a 2:1 ratio. The project site contains approximately 31.7 acres of coastal live oak woodland, with 2.4 acres occurring in the development area. To maintain the minimum amount of 2 acres preserved for 1 acre impacted in compliance with Policy CON-24c, 2:1 preservation ratio, up to a maximum of approximately 10.57 acres can be converted to vineyard to comply with this policy. The proposed project would retain/preserve more than the 2 acres of oak woodland for each acre impacted; therefore, the project is consistent with Policy CON-24c. However, to maintain consistency with Policy CON-24, mitigations are required as discussed below. See **Mitigation Measure BR-2**, **Mitigation Measure BR-6**, and question e below for further discussion.

The acreages of each biological community (or habitat type) within the project site and development area are listed in **Table 5**.

⁷ 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.

⁸ 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.

⁹ Policy CON-17: Preserve and protect native grasslands, serpentine grasslands, mixed serpentine chaparral, and other sensitive biotic communities and habitats of limited distribution. The County, in its discretion, shall require mitigation that results in the following standards: Prevent removal or disturbance of sensitive natural plant communities that contain special-status plant species or provide critical habitat to special-status animal species.

¹⁰ 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.

Table 5 – Retention of Biological Communities with Proposed Project

Biological Feature	Approximate Acres in the Project Site	Proposed Vineyard Blocks	
		Acreage ³	% Retention
Biological Communities			
Developed	26.0	0.5	98%
Wild Oat Grassland	67.0	11.0	84%
Chamise Chaparral	4.5	0	100%
Coast Live Oak Woodland	31.7 ¹	2.4	92%
Italian Rye Grass Grassland	0.1	0	100%
Ephemeral Streams	--- ²	0	100%

Notes:

¹ Does not include 1.5 acres of developed Coast Live Oak Woodland.

² Acreage of the ephemeral streams in the project site was not calculated in the Biological Resources Reconnaissance Survey Report (**Exhibit B-1**).

³ The acreage differs slightly from the total identified in the ECP due to differing mapping platforms, spatial characters, and rounding. Because approximate biological communities identified herein are based on a project site specific biological resources report, the values disclosed herein are considered by the County to be adequate for CEQA review and disclosure purposes of the subject application.

Source: WRA, May 2021 (**Exhibit B-1**)

To reduce potential impacts to the oak woodland biological community to a less-than-significant level, and comply with Napa County General Plan Conservation Element Policy CON-24 (discussed further under question e), the Habitat Mitigation and Monitoring Plan prepared for the proposed project (**Exhibit B-3**) and **Mitigation Measure BR-2** would be implemented; however **Mitigation Measure BR-6** would also be implemented and would reduce the total acreage needed to mitigate the woodland removal. The project site contains approximately 31.7 acres of coast live oak woodland. As described in the Habitat Mitigation and Monitoring Plan, trees would be replanted at a 3:1 ratio. In order to maintain 2 acres preserved for 1 acre impacted in compliance with Policy Con 24(c) (2:1 preservation ratio), approximately 4.8 acres would be preserved within the replanting area as a result of removal of approximately 2.4 acres located in the development area. However, **Mitigation Measure BR-6** would reduce the woodland removal by 1.7 acres, resulting in 0.7 acre of oak woodland removal. Implementation of **Mitigation Measures BR-2 and BR-6** would not substantially affect the feasibility of the proposed project or the continued viability of agricultural use of the project site, in that it would allow the owner/permittee to develop approximately 12.27 gross acres of new vineyard on the approximately 162.62-acre project site.

Mitigation Measure BR-2: The owner/permittee, prior to approval, shall revise # P21-00117-ECPA to include the following provisions to minimize and avoid potential impacts to oak woodlands and comply with Policy CON-24(c), 2:1 preservation ratio:

- a. A minimum 1.4-acre Oak Woodland Preservation Area within the areas mitigated by **Mitigation Measure BR-6** shall be designated for preservation in a mitigation easement with an organization such as the Land Trust of Napa County as the grantee, or other means of permanent protection acceptable to the County prior to project approval.
- b. Land placed in protection shall be restricted from development and other uses that would degrade the quality of the habitat (including, but not limited to conversion to other land uses such as agriculture or urban development, and excessive off-road vehicle use that increases erosion) and should be otherwise restricted by the existing goals and policies of Napa County.
- c. The owner/permittee shall record the mitigation easement within 60 days of approval of # P21-00117-ECPA by the County; however, in no case shall the ECPA be initiated until said mitigation easement is recorded.

Special-Status Animals: A total of 62 special-status wildlife species have been documented in Napa County (CDFW 2021a, Napa County 2005). Eight of these species have a moderate potential to occur within the project site: pallid bat (*Antrozous pallidus*), fringed myotis (*Myotis thysanodes*), grasshopper sparrow (*Ammodramus savannarum*), golden eagle (*Aquila chrysaetos*), long-eared owl (*Asio otus*), white-tailed kite (*Elanus leucurus*), American peregrine falcon (*Falco peregrinus anatum*), and foothill yellow-legged frog (FYLF; *Rana boylei*). The remaining 63 species are unlikely or have no potential to occur.

Pallid bats prefer open, dry habitats with rocky areas, but the bats are also found in oak savanna grasslands, and in open forest and woodlands with access to riparian and open water for feeding and drinking in northern California. Foraging occurs over open country. These bats prefer the cool summer temperatures of caves, crevices, and mines as roosting sites where they are known to wedge

themselves into small spaces; they will also roost in buildings, bridges, and hollow trees. Preferred roosts are high above the ground and inaccessible to terrestrial predators, although they are occasionally found roosting on the ground underneath sacks and other items left by humans. Trees within the project site (conifers and oaks) may contain cavities or snags suitable for roosting by this species, and there are CNDDDB occurrences in the vicinity (CDFW 2021a) (WRA, May 2021 – **Exhibit B-1**).

The fringed myotis ranges through much of western North America from southern British Columbia, Canada, south to Chiapas, Mexico and from Santa Cruz Island in California, east to the Black Hills of South Dakota. This species is found in desert scrubland, grassland, sage-grass steppe, old-growth forest, and subalpine coniferous and mixed deciduous forest. Oak and pinyon-juniper woodlands are most commonly used. The fringed myotis roosts in colonies from 10 to 2,000 individuals, although large colonies are rare. Caves, buildings, underground mines, rock crevices in cliff faces, and bridges are used for maternity and night roosts, while hibernation has only been documented in buildings and underground mines. Tree-roosting has also been documented in Oregon, New Mexico, and California (WBWG 2018). The trees within the project site may contain cavities or exfoliating bark suitable for roosting (WRA, May 2021 – **Exhibit B-1**).

Grasshopper sparrow generally prefers moderately open grasslands and prairies with patchy bare ground. They select different components of vegetation, depending on grassland ecosystem. This sparrow typically avoids grasslands with extensive shrub cover, although some level of shrub cover is important for birds in western regions (Vickery 1996). Grasshopper sparrows are ground-nesting birds. The nest cup is domed with overhanging grasses and a side entrance. Eggs are usually laid in early to mid-June and hatch 12 days later. Males and females provide care to the young and second broods are common. This species feeds primarily on insects (Vickery 1996). This species was not observed during the field surveys but could be present in the development area (WRA, May 2021 – **Exhibit B-1**).

The golden eagle is a large raptor that occurs in open and semi-open areas from sea level to high elevation. Typical occupied habitats include grasslands, shrublands, deserts, woodlands, and coniferous forests. Breeding activity occurs broadly from January through August, and in California is usually initiated from January to March. The large stick nests of this species are reused across years and may be maintained throughout the year. Nests are most often placed on the ledges of steep cliffs, but nesting also occurs in trees and on tall manmade structures (e.g., utility towers) (Kochert et al. 2002). Golden eagles forage over wide areas, feeding primarily on medium-sized mammals (e.g., ground squirrels and rabbits), large birds, and carrion. This species was not observed during field surveys but could be present in the development area (WRA, May 2021 – **Exhibit B-1**).

The long-eared owl, a generally uncommon species, is resident throughout much of California outside of the Central Valley. Long-eared owls breed in a variety of woodland and forest habitats, including coniferous, oak and riparian, as well as planted tree groves. Nearby open habitats with small mammal populations, such as grasslands, meadows and marshes, are also required for foraging. Breeding typically relies on the presence of old nests made by similar-sized birds including hawks and crows (Shuford and Gardali 2008). Communal roosting often occurs during the winter. This species was not observed during field surveys but could be present in the development area (WRA, May 2021 – **Exhibit B-1**).

White-tailed kite is resident in open to semi-open habitats throughout the lower elevations of California, including grasslands, savannahs, woodlands, agricultural areas, and wetlands. Vegetative structure and prey availability seem to be more important habitat elements than associations with specific plants or vegetative communities (Dunk 1995). Nests are constructed mostly of twigs and placed in trees, often at habitat edges. Nest trees are highly variable in size, structure, and immediate surroundings, ranging from shrubs to trees greater than 150 feet tall (Dunk 1995). This species preys upon a variety of small mammals, as well as other vertebrates and invertebrates. The project site provides suitable year-round habitat for white-tailed kites, including strands of oaks for nesting and open areas in close proximity for foraging. This species was not observed during field surveys but could be present in the development area (WRA, May 2021 – **Exhibit B-1**).

American peregrine falcons occur throughout North America, with year-round occurrences along the coast and Klamath Range of California, and non-breeding in Central Valley and Sierra Nevada. They occur in grasslands, woodlands, and open forests. Nesting is on ledges of cliffs, transmission towers,

quarries faces, skyscrapers, and bridges, and the nest is either one that has been abandoned by other birds or is scraped depression. Clutches range from two to five eggs, with only one brood a year. Falcons primarily hunt small birds, taking them on-the-wing, but also take bats, rodents, fish, and small raptors. This species was not observed during field surveys but could be present in the development area (WRA, May 2021 – **Exhibit B-1**).

FYLF historically occurred in coastal and mountain streams from southern Oregon to Los Angeles County, but has declined in many parts of this range. This species is strongly associated with rivers and perennial creeks, and prefers shallow, flowing water with a rocky substrate. FYLF individuals do not typically move over land and are rarely observed far from a source of permanent water (typically less than 10 feet). Aquatic breeding sites are in-stream, often near confluences, with eggs typically deposited behind or sometimes under rocks in low-flow areas with cobble and/or gravel (Thomson et al. 2016). Metamorphosis takes at least 15 weeks. The lower reach of the central stream within the project site provides a rocky substrate and may be occupied when the stream is flowing; any individuals present would presumably retreat downstream when flow ceases. Breeding within the stream is unlikely given the limited water depth and ephemeral nature of the flow. One FYLF was observed on the project site during the field surveys in 2018. Protocol-level surveys were not performed (WRA, May 2021 – **Exhibit B-1**).

The above described special-status species were not observed during the reconnaissance-level biological survey (**Exhibit B-1**). No evidence of bats was found during the field surveys; however, potential habitat for fringed myotis and pallid bats in the development area includes trees with cavities or snags as well as exfoliating bark suitable for roosting (WRA, Inc., May 2021 - **Exhibit B-1**). Impact to special-status bat species during removal of the approximately 68 trees during project construction would be a significant impact. In addition, migratory birds and raptors have the potential to nest within the trees throughout and adjacent to the development area. Tree removal and temporary and intermittent increases in noise levels may cause nest abandonment and death of young or loss of reproductive potential at active nests located near project activities. Potential direct and indirect impacts to special-status and protected bird species would be significant. Finally, potential impacts to FYLF would be significant.

To reduce potentially direct and indirect significant impacts special-status bat species as a result of the project to a less-than-significant level, **Mitigation Measure BR-3** would be implemented.

Mitigation Measure BR-3: The owner/permittee shall revise Erosion Control Plan # P21-00117-ECPA prior to approval to include the following measures to minimize impacts associated with the potential loss and disturbance of special-status bat species:

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

To reduce potentially direct and indirect significant impacts to special-status and protected bird species as a result of the project to a less-than-significant level, **Mitigation Measure BR-4** would be implemented to include pre-construction bird surveys and measures to avoid any nests with an exclusion buffer.

Mitigation Measure BR-4: The owner/permittee shall revise Erosion Control Plan # P21-00117-ECPA prior to approval to include the following measures to minimize impacts associated with the potential loss and disturbance of special-status and nesting birds and raptors consistent with and pursuant to California Fish and Game Code Sections 3503 and 3503.5:

- a. For earth-disturbing activities occurring between February 1 and August 31 (which coincides with the grading season of April 1 through October 15 – NCC Section 18.108.070.L, and bird breeding and nesting seasons), a qualified biologist (defined as knowledgeable and experienced in the biology and natural history of local avian resources with the potential to occur at the project site) shall conduct a preconstruction surveys for nesting birds within all suitable habitat on the project site, and where there is potential for impacts adjacent to the project areas (typically within 500 feet of project activities). The preconstruction survey shall be conducted no earlier than seven days prior to when vegetation removal and ground disturbing activities are to commence. Should ground disturbance commence later than seven days from the survey date, surveys shall be repeated. A copy of the survey shall be provided to the Napa County Conservation Division and the CDFW prior to commencement of work.
- b. After commencement of work if there is a period of no work activity of seven days or longer during the bird breeding season, surveys shall be repeated to ensure birds have not established nests during inactivity.
- c. In the event that nesting birds are found, the owner/permittee shall identify appropriate avoidance methods and exclusion buffers in consultation with the County Conservation Division and the USFWS and/or CDFW prior to initiation of project activities. Exclusion buffers may vary in size, depending on habitat characteristics, project activities/disturbance levels, and species as determined by a qualified biologist in consultation with the County Conservation Division and the USFWS and/or CDFW.
- d. Exclusion buffers shall be fenced with temporary construction fencing (or the like), the installation of which shall be verified by Napa County prior to the commencement of any earthmoving and/or development activities. Exclusion buffers shall remain in effect until the young have fledged or nest(s) are otherwise determined inactive by a qualified biologist.
- e. Alternative methods aimed at flushing out nesting birds prior to preconstruction surveys, whether physical (i.e., removing or disturbing nests by physically disturbing trees with construction equipment), audible (i.e., utilizing sirens or bird cannons), or chemical (i.e., spraying nesting birds or their habitats) would be considered an impact to nesting birds and is prohibited. Any act associated with flushing birds from project areas should undergo consultation with the USFWS/CDFW prior to any activity that could disturb nesting birds.

To reduce potentially direct and indirect significant impacts to FYLF as a result of the project to a less-than-significant level, **Mitigation Measure BR-5** would be implemented to include a worker education program, pre-construction FYLF surveys and measures to avoid any FYLF with exclusion fencing.

Mitigation Measure BR-5: The owner/permittee shall revise Erosion Control Plan # P21-00117-ECPA prior to approval to include the following measures to minimize potential impacts to FYLF:

- a. A qualified biologist shall conduct a worker education program to construction personnel prior to commencement of earthmoving activities with information regarding the identification and ecology of FYLF, the potential for occurrence of the species within work areas, the legal status of the species and ramifications for take, the specific measures being implemented to avoid impacts to FYLF, and the role of the on-site biologist.
- b. If water is present at the time of construction, a qualified biologist (defined as knowledgeable and experienced in the biology and natural history of FYLF) shall conduct two surveys along the intermittent stream at least 14 days prior to commencement of earthmoving activities. The surveys shall have remarkably different light angles (e.g., early morning and early afternoon), but can be conducted on the same day. Survey areas (streams) shall be systematically walked upstream, zig-zagging between the bank and the thalweg in wide areas, and bank-to-bank in narrow areas. All areas along the streams that could support frogs shall be searched, including rocks, ledges, woody debris, overhanging vegetation, etc., as well as accessible natural cover within 50 feet of the wetted perimeter where frogs could be present. Surveyors shall use binoculars to reduce the likelihood of disturbing frogs and flashlights for searching darkened crevices and shaded areas. Slow-moving and/or still waters shall be closely inspected for the presence of tadpoles. If water is not present, no pre-construction surveys are required.
- c. If no FYLF are present during the pre-construction survey, no additional measures are warranted.

- d. If FYLF are determined to be present, a qualified biologist shall conduct one daytime survey for pre-construction activities within 48 hours of commencement of earthmoving activities. If FYLF are or will likely be present at the time of commencement of earthmoving activities, protective measures shall be deployed. Such measures include: (1) installation of exclusion fencing, (2) presence of on-site biologist during ground disturbance activities, and (3) implementation of a worker education program. Exclusion fencing shall be installed along the inhabited stream(s) immediately adjacent to the vineyard blocks, extending 100 feet beyond the terminus of the proposed vineyard blocks in each direction. The on-site biologist shall be present to perform a survey of the vineyard blocks in the morning prior to that day's commencement of earthmoving activities. If a FYLF is present within the vineyard block, individual frogs shall be allowed to leave the disturbance area of their own accord, as confirmed by the biologist. Alternatively, other measures shall be derived and approved in coordination with CDFW and the County Conservation Division.

b-c. The project site contains coast live oak woodland which is considered sensitive habitat. Coast live oak woodlands occur in the outer and inner Coast Ranges, Transverse Ranges, and southern coast from northern Mendocino County south to San Diego County. These woodlands are typically situated on terraces, canyon bottoms, slopes, and flats underlain by deep, well-drained sandy or loam substrates with high organic content. The dominant tree in this habitat type is coast live oak (*Quercus agrifolia*), with scattered cover of blue oak (*Quercus douglasii*) and California bay (*Umbellularia californica*). The majority of the project site woodlands have relatively open canopy with extensive herbaceous cover between the trees (WRA, May 2021 – **Exhibit B-1**).

The project site contains approximately 31.7 acres of oak woodland, with 0.7 acres occurring in the development area after project mitigations (approximately 2.2% of the total community type on the project site).¹¹

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.

With the implementation of **Mitigation Measure BR-2 and BR-6**, potential impacts to oak woodland would be reduced to a less-than-significant level by permanently preserving 1.4 acres of woodland onsite (consistent with the 2:1 preservation ratio requirement).

The project site contains approximately 0.1 acre of aquatic resources, consisting of six seasonal wetlands, and three primary ephemeral streams with tributaries (shown in Figure A-5 in **Exhibit B-1**; WRA – May 2021). The wetlands and streams on the project site are considered sensitive natural resources. The streams have minimum 35-foot setbacks in accordance with NCC 18.108.025. The wetlands are avoided with minimum 50-foot setbacks in accordance with NCC Section 18.108.026. The proposed project has also been designed to maintain existing soil loss (sedimentation) and hydrologic/runoff characteristics (i.e., result in no net increase in soils loss or runoff as compared to existing conditions); therefore, the proposed project would not result in significant impacts to these drainages.

- d. The proposed project involves the installation of vineyard totaling which after implementation of **Mitigation Measure BR-1 and BR-6**, would total approximately 12.27 gross acres across a single 162.62-acre parcel comprising the project site. The project site has existing wildlife exclusion fencing around the perimeter of some of the project site but not the entire parcel, the majority is only fenced with livestock fencing. At least approximately four of the proposed vineyard blocks would require new wildlife exclusion fencing, including Blocks 12, 13, 15, & 16. The proposed project would not install any additional fencing (**Exhibit A**).

¹¹ This does not include 1.5 acres of developed coast live oak woodland located along the lower portion of the central stream, residence and winery buildings on the project site. These areas were mapped as developed coast live oak woodland due to the manipulation of the understory (comprised of common garden weeds and non-native ornamentals) for landscaping and fire protection purposes.

The project site is not located within a mapped wildlife corridor identified in the Napa County Baseline Data Report. For local diurnal movement (daily movement between sources of food, cover, and water), wildlife generally follow stream courses when moving up and down slopes and use adjacent habitats (often preferring woodlands) for cover, browse, or hunting. The actual width of usable corridors would continually change based on the density of vegetation, steepness of adjacent slopes or presence of unsuitable habitat such as fenced vineyards and residential areas. Due primarily to the steepness of the slopes in this segment of the East Napa Range, most of the vegetation community and woodland here remain undisturbed by agricultural and residential development. This continuous woodland and chaparral is accessed through the principal undeveloped canyons and associated watercourses. Due to extensive agricultural and residential development within the Napa Valley, access to the Napa River along the eastern edge of the valley and to the East Napa Range beyond is limited to a few remaining drainages that have retained at least a portion of their adjacent riparian habitat. Within the project area, the remaining access across the Napa Valley is Chase Creek. The project site is located within a much larger tract of lightly forested land within a rural portion of Napa County. While common wildlife species presumably utilize the site to some degree for movement at a local scale, the project site itself does not provide corridor functions beyond connecting similar forested and heavily wooded land parcels in surrounding areas. While the proposed vineyard blocks would result in a portion of the site having reduced potential for on-site wildlife movement, the preservation/avoidance of streams within the project site, as well as the condition of the surrounding lands, would continue to allow for movement through the vicinity. No new wildlife exclusion fencing is proposed and impacts to wildlife movement are expected to be less than significant.

In addition, with the implementation of **Mitigation Measure BR-2 and Mitigation Measure BR-6**, the preservation of stands of oak woodland would provide movement and shelter habitat for a variety of common wildlife species and include connectivity to adjacent properties. Maintaining this connectivity should provide for continued cross-pollination and gene flow, as well as local wildlife movement. The proposed project would be consistent with General Plan Policy CON-18, which encourages the reduction of impacts to habitat conservation and connectivity. However, overall wildlife movement would be reduced if blocks are not fenced individually, thus the below condition would be required to address all proposed blocks currently outside of wildlife exclusion fencing. Barbed wire to retain large livestock is not a complete barrier to wildlife and is not considered wildlife exclusion fencing.

Because wildlife nursery sites were not identified in the project site, there would be no impacts to wildlife nursery sites. While the proposed project application says fencing would not result in significant impacts to wildlife movement and use, in fact approximately four of the proposed vineyard blocks would require new wildlife exclusion fencing, including Blocks 12, 13, 15, & 16 because they are located outside of the existing wildlife exclusion fencing. Therefore, all blocks currently outside of existing wildlife exclusion fencing including Blocks 12, 13, 15, & 16, will be required to be fenced along their perimeter so that no existing wildlife movement areas are blocked that are located outside of the project boundaries. To ensure that wildlife exclusion fencing is installed in a manner that is consistent with CDFW recommendations to minimize impacts to wildlife movement, habitat use and availability, and vegetation removal, and to ensure maintenance of the greatest amount of existing wildlife movement possible, the following condition of approval would be incorporated should the proposed project be approved.

Fencing – Condition of Approval: The owner/permittee shall revise Erosion Control Plan #P21-00117-ECPA prior to its approval to include an updated Vineyard Fencing Plan. The Vineyard Fencing Plan shall be submitted to the Napa County Planning Department for review and approval prior to its incorporation into #P21-00117-ECPA, and include the following components:

- New fencing shall use a design that has 6-inch square gaps at the base (instead of the typical 3-inch by 6-inch rectangular openings) to allow small mammals to move through the fence.
- Exit gates shall be installed at the corners of wildlife exclusion fencing to allow trapped wildlife to escape. Smooth wire instead of barbed wire shall be utilized to top wildlife exclusion fencing to prevent entanglement.
- Erosion Control Plan #P21-00117-ECPA is required to be modified to provide a new Vineyard Fencing Plan subject to review and approval by the Napa County Planning Department - Engineering and Conservation Division. The Vineyard Fencing Plan shall only allow wildlife exclusion fencing along the outer perimeter of Blocks 12, 13, 15, & 16 because they are currently located outside of the existing wildlife exclusion fencing on the project parcel. Proposed Blocks 15 and 16 are adjacent, so they may be fenced together.

- Any modifications to the location of wildlife exclusion fencing as specified in Erosion Control Plan #P21-00117-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. Based on the Biological Resources Reconnaissance Survey Report, the project site contains a total of 31.7 acres of coast live oak woodland (2.40 acres within the proposed development area) and the proposed project would result in the removal of 2.40 acres of oak woodland (92.4% retention). Staff review of the proposed project identified approximately 68 trees with a diameter at breast height ranging from 6 inches to 49 inches are proposed for removal within the 14.0 gross acre development area.

Oak woodland is the most common land cover in the County occurring on approximately 162,000-acres (32% of the County's area). Approximately 1,124 acres of oak woodland or 0.7% of the total area of oak woodland in the County has been cleared for vineyard development between 1993 and 2014 (Napa County GIS, 2018). 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 both on a project specific level and a cumulative level for projects that remove oak woodland.

Per the biological report, the oak woodlands in the project site area consist of coast live oak woodland (*Quercus agrifolia*); however, there are also blue oak (*Quercus douglasii*) and valley oak trees (*Quercus lobata*). The oak woodlands in the project area are mostly mature, and the xeric conditions result in a woodland that exhibit open savanna characteristics. The project parcel starts on the valley floor at around 80 feet of elevation and climbs upward to the east up to 700 feet of elevation and is generally west southwest facing. Therefore, as the elevation gains, the conditions become more and more xeric up the slope, and the woodlands become increasingly sparse. As documented by staff observations and photographs taken during site visits as well as the Napa County GIS aerial photo layers, the density of the oak woodlands decline farther up the slope. Along the lower elevations nearer to the valley floor, the oak woodlands are more dense and individual trees are greater in canopy, trunk size and height. Soils in these lower elevation locations are deeper and the conditions more hospitable; therefore, the trees in the lower elevations appear more prominent, long-lived, and healthy.

In the initial "completeness letter" correspondence from the county to the applicant dated July 16, 2021, which evaluated the overall completeness of the application, a professional biological opinion was requested from the project biologist comparing the ecological health of the woodland being removed versus the woodlands being retained as well and the ability of the area proposed for tree planting to grow trees in areas that were mostly grassland. Correspondence dated November 9, 2021, from the project biological consultant team reiterates the informational request for evaluation of the ecological health of the oak woodland being removed versus the area being retained and the feasibility of the proposed tree planting plan to grow a viable, ecologically valuable woodland. However, after repeating the informational request, the response memo simply directs the reader to, "see WRA drafted plan, Habitat Mitigation and Monitoring Plan." Review of the subject Habitat Mitigation and Monitoring Plan reveals that the plan is silent on both the comparison between the oak woodland proposed for removal versus the woodlands to be retained and does not provide a professional biological opinion of the feasibility of the success potential for the tree planting plan. While the proposed planting plan is detailed, it does not evaluate for the fact that the location of the tree planting is an area which currently only supports grassland habitat. Some of the locations proposed for tree planting include areas with steep slopes and shallow soils which potentially may not have good soil depth for tree growth. Moreover, some of the locations on southwest facing slopes which may not be hospitable for large plant growth due to xeric conditions. Other areas of limited size that are closer in proximity to intermittent streams may have greater potential for survival success.

Napa County General Plan Conservation Element Policy CON-24 requires that oak woodland be maintained to the extent feasible to provide oak woodland and wildlife habitat, slope stabilization, soil protection and species diversity. Policy CON-24(c) specifically calls for the preservation of oak woodland (on an acreage basis) at a 2:1 ratio. Further, General Plan Policy CON-24(e) requires the maintenance of a mixture of oak species needed to ensure acorn production. Since the proposed project would result in 2.4 acres of many of the best stands of oak woodland to be removed, avoidance of only 1.7 acres of the high value oak trees and woodland would be highly feasible. Not avoiding these limited areas could cause a potentially significant impact.

Implementation of **Mitigation Measure BR-6(a)** would require that the project be redesigned as shown on the Project Revision Map to reduce removal of oak woodland to a maximum of 0.7 acres, thereby retaining 1.4 acres from the project site woodland. This would result in consistency with the 2:1 by acreage retention ratio and retention of a mixture of species as required by Policy CON-24 (c) and (e). Avoidance of Vineyard Blocks 17 and 19 entirely and redesign of Vineyard Block 13, 14, 15, 16 & 18 would result in the retention of what appears to be the healthiest remaining stand of oak woodland resulting in greater connectivity and contiguous oak woodland area remaining on the parcel, thereby offering additional biological and water quality protections related to the streams pursuant to General Plan Policy CON-24. Finally, implementation of **Mitigation Measure BR-6(c)** would result in the permanent preservation of approximately 1.4 acres of mixed oak woodland on the parcel, resulting in consistency with oak woodland preservation policies found in the General Plan. With implementation of **Mitigation Measure BR-6**, impacts would be less than significant in this regard.

The University of California, Division of Agricultural and Natural Resources (UC-ANR), and the County's *Voluntary Oak Woodland Management Plan* (October 2010) have identified several factors, such as irrigation, soil compaction (resulting in decreased infiltration and oxygen availability to roots), pesticide and herbicide use, fertilizer use, and mechanical practices such as disking or seeding for cover crops, when conducted within the dripline of oak trees can contribute to their decline¹². These sources identify a root protection zone (RPZ) that is roughly one-third larger than the drip line so that associated root structure is not adversely affected. Therefore, **Mitigation Measure BR-6** will also include providing an RPZ consistent with the County's *Voluntary Oak Woodland Management Plan*, and a permanent means of RPZ demarcation (such as rock wall, cattle fencing or similar) will be installed to protect root structures during ongoing vineyard operation.

Implementation of this measure, as shown on the Project Revision Map, is anticipated to reduce the project by approximately 1.7 acre and reduce tree removal from 68 trees to 28 trees, resulting in approximately 0.7 acres of oak woodland and associated cover canopy removal. Some of the project area removed from the plan because of this avoidance measure will be included in a Preservation Area (as further described below) that is also required by this Mitigating Measure. To ensure that avoided oak trees, oak woodland, and associated cover canopy removed as a result of this measure are preserved consistent with applicable General Plan Goals and Policies, the Conservation Regulations, and to and to reduce potentially significant cumulative impacts on oak woodlands to a less than significant level, **Mitigation Measure BR-6** will require the permanent preservation of a minimum of 1.4 acres of oak woodland and associated vegetation cover canopy on the project site. This area will be identified as the *Preservation Area*.

Regarding the twenty-eight (28) oak trees to be removed, **Mitigation Measure BR-6** will also require their replacement at a 3:1 ratio to effectively replace this species of limited distribution, and associated woodland and canopy cover removed, consistent with NCC Section 18.108.020. To comply with Section 18.108.020, the Habitat Mitigation and Monitoring Plan includes a total of 5.3 acres of potential planting area to choose from, some of which involves areas less than 30% slope and some over 30% slope. Due to the way that the Conservation Regulations are written, limited areas of over 30% slope are allowed to be developed within polygons that also have less than 30% slope. Due to the mixed slopes within the tree planting polygons proposed, these areas could likely be developed without a Use Permit Exception due to those allowances. Thus, the first protocol step in Section 18.108.020 could be met by using areas that are blended between under 30 and over 30% slope, especially when taking into account that **Mitigation Measure BR-6** brings down the total oak woodland removed to only 0.7 acre, necessitating only 2.1 acre of tree planting as a result of this project. Moreover, those areas immediately adjacent to previously developed areas would be the most highly developable from a feasibility standpoint due to the simplicity of adjacent access. Secondly, any tree planting on slopes of slopes over 30% would have high biological and water quality protection value because the proposed locations are near or adjacent to stream zones and/or are at the interface between the upper steeper slopes and the developed area because the additional tree canopy would give rainwater a chance to slow down and infiltrate prior to running off into the developed areas, and would also provide valuable fringe and edge habitat. Thirdly, planting trees in the areas near stream setbacks would also enhance infiltration and provide habitat. In conclusion, the project as mitigated would reduce the need for tree planting to such as small area (2.1 acres) that the project would meet the intent of the provisions of Section 18.108.020.

The project as proposed with implementation of **Mitigation Measure BR-6** would reduce potentially direct, indirect, and cumulative impacts to oak trees and oak woodland, to a less than significant level, as well as achieve consistency with applicable General Plan Goals and Policies and the Conservation Regulations. Further,

¹² The University of California – Division of Agricultural and Natural Resources, Publication 21577, "Vineyards in an Oak Landscape", 1998.

this measure will also address potential GHG impacts as disclosed in **Section VIII (Greenhouse Gas Emissions)**.

Mitigation Measure BR-6: The owner/permittee shall revise Erosion Control Plan #P21-00117-ECPA prior to approval to include the following measures to reduce potentially significant direct, indirect and cumulative impacts to oak species of limited distribution and to oak woodlands in general:

- a. Revise Erosion Control Plan #P21-00117-ECPA prior to approval to avoid the oak trees located within the fringes of project area or are of biological value and provide them with a with a root protection zone (RPZ) buffer that is larger than their driplines. The Revised Erosion Control Plan shall include avoidance of Vineyard Blocks 17 and 19 entirely and redesign of Vineyard Block 13, 14, 15, 16 & 18 consistent with and as shown by the *Project Revision Map*. The RPZs shall be subject to review and approval by the County prior to incorporation into Erosion Control Plan #P21-00117-ECPA.
- b. Prior to the commencement of vegetation removal or earth-disturbing activities associated with #P21-00117-ECPA the owner/permittee shall submit to the County for review and approval the updated locations of the Tree Replacement Plan replacing at a 3:1 ratio for the 28 oak trees being removed (resulting in a required 84 trees to be planted within a 2.1-acre area). Combined with the adjacent Erosion Control Plan identified as #P21-00118-ECPA, a compliance permit, which was required to plant a minimum of 87 oak trees to be planted within a 0.6-acre area, the total trees and area required for the updated Tree Replacement Plan to accommodate the requirements of both project files would be one hundred seventy-one (171) trees within a 2.7-acre area. The Replacement Plan shall include: i) a site plan showing replanting area(s) with similar habitat of the trees being removed, ii) a plant pallet that includes tree species and minimum plant/container size of 1 gallon iii) planting notes and details, and plant protection measures, iv) invasive species removal and management specifications, v) a monitoring schedule that includes a minimum of 5 years, vi) a performance standard with a minimum success rate of 80%. Replacement trees shall be installed and inspected by the county prior to the commencement of vegetation removal and earth disturbing activities associated with vineyard development under #P21-00117-ECPA.
- c. Revise the proposed wildlife exclusion fencing layout to limit all new wildlife exclusion fencing to only the periphery of development areas as modified by this mitigation measure. Fencing revisions shall also be reflected in the *Vineyard Fencing Plan* pursuant to: Fencing – Condition of Approval: The Vineyard Fencing Plan shall only allow wildlife exclusion fencing along the outer perimeter of Blocks 12, 13, 15, & 16 because they are currently located outside of the existing wildlife exclusion fencing on the project parcel.
- d. Revise Erosion Control Plan #P21-00117-ECPA prior to approval to identify a Preservation Area, totaling a minimum of 1.4-acres of oak woodland and associated vegetation cover canopy that includes areas removed because of **Mitigation Measure BR-6(a)**, ideally said Preservation Area should be identified as the location of Proposed Blocks 17 and 19 (totaling 1.1 acres), and portions of the Proposed Block 14 to be avoided totaling 0.3 acre (such as oak woodland around the water tanks) for a total of 1.4 acres of Preservation Area including high value oak woodland. The Preservation Areas identified would preserve the highest value trees adjacent to the project area, and in combination with the Tree Replacement Plan, identified by WRA as the Habitat and Monitoring Plan, would result in a net increase in trees overall, which would be an overall benefit. Any proposed alternative to these areas if so desired by the applicant, must preserve oak woodlands in comparably developable areas within the project parcel subject to review by the Napa County Planning Department - Engineering and Conservation Division. The area shall be designated for preservation in a deed restriction, mitigation easement with an organization such as the Land Trust of Napa County as the grantee, or other means of permanent protection acceptable to Napa County. Land placed in protection shall be restricted from development and other uses that would degrade the quality of the oak woodland (e.g., conversion to other land uses such as agriculture or urban development, and excessive off-road vehicle use that increases erosion) and should be otherwise restricted by the existing goals and policies of Napa County. The preservation areas shall be determined as above identified by the County, or otherwise as stated above and with concurrence with qualified botanist/biologist: determinations by a qualified botanist/biologist shall be submitted to Napa County for review and approval prior to their incorporation into the ECPA. The owner/permittee shall record the deed restriction or mitigation easement within 90 days of the County's approval of #P21-00117-ECPA. In no case shall the erosion control plan be initiated until said deed restriction or mitigation easement is recorded.
- e. To protect trees, woodlands, and RPZs during construction, prior to the initiation of any vegetating removal or earthmoving activities temporary fencing shall be placed at the edge of the dripline or

RPZ of trees to be retained that are located within 50-feet of the project area prior to any vegetating removal or earthmoving activities. The precise locations of protective fencing shall be inspected and approved by the Planning Division prior to the commencement of any vegetation removal or earthmoving activities. No disturbance, including grading, planting, placement of fill material, storage of equipment, etc. shall occur within the designated areas for the duration of erosion control plan installation and vineyard installation and maintenance. Prior to vineyard planting the RPZ buffer temporary fencing shall be replaced with the permanent barrier identified in **Mitigation Measure BR-6(a)**.

- f. The owner/Permittee shall refrain from severely trimming (typically considered more than 1/3rd of the canopy) trees and vegetation to be retained adjacent to the vineyard conversion areas.
- g. 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 #P21-00117-ECPA shall be replaced on-site with fifteen-gallon native trees at a ratio of 2:1 at locations approved by the planning director. Replacement trees shall be installed and documented that they are in good health prior to completion and finalization of the erosion control plan. Replacement trees shall be monitored and maintained as necessary for a minimum of 5 years to ensure they achieve at least 80% survival. If tree plantings are not achieving this success criterion during any monitoring year, the owner/Permittee shall be responsible for replacement tree plantings and monitoring them for an additional 5 years to ensure they achieve at least 80% survival.

- 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:

- Flaherty Cultural Resources Services, January 7, 2021, Cultural Resource Reconnaissance of 20+/- Acres, Yountville, Napa County, California (a portion of APN 039-030-023, Regusci Winery, 5584 Silverado Trail)

Flaherty Cultural Resource Services conducted a cultural resources study for the proposed project which included archival research at the Historical Resources Information System Northwest Information Center, Sonoma State University, 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 structure; and a surface reconnaissance survey of the development area and a portion of the project site (approximately 20 acres total surveyed) to locate any visible signs of potentially significant historic or prehistoric cultural deposits.

a-b. The cultural resources study (Flaherty Cultural Resource Services, January 2021) identified no cultural resources within the development area. The Regusci Winery Building on the project site is a historic structure; however, no impact to the winery building would result from the proposed project.

Although no cultural resources were found within the development area, 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:

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

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VI. ENERGY. Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<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 last up to seven months (as shown in Table 1). 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.

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

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
VII. GEOLOGY AND SOILS. Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

- a. The project site could experience potentially strong ground shaking and other seismic related hazards based on the number of active faults in the San Francisco Bay region. The proposed project consists of earthmoving activities associated with the installation of erosion control measures for agricultural development but does not include the construction of new residences or other facilities (i.e., enclosed areas where people can congregate) that would be subject to seismic forces. Additionally, the proposed project would not result in a substantial increase in the number of people to the site. Therefore, the proposed project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving fault rupture, ground shaking, liquefaction, and landslides and impacts would be less than significant. Additional information supporting this conclusion is identified below.
- i) The project site is not located on an active fault or within an “Earthquake Fault Hazard Rupture Zone” designated by the Alquist-Priolo Earthquake Zoning Act. The closest large active fault (West Napa Fault) is approximately 2.3 miles west of the project site. The closest minor fault is located approximately 1.1 miles east 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 strong or very strong seismic ground shaking potential during an earthquake (California Geological Society, 2016), the proposed project does not include construction of any new residences or enclosed areas where people would congregate. Therefore, this impact would be less than significant.
 - iii) The project site is not in an area subject to high liquefaction potential. The Napa County General Plan identifies the project site as having low to 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) Active landslides have not been identified through the majority of the project site; however, proposed Block 15 has an identified area of soil creep in the west side of the vineyard block, adjacent to proposed Block 16 (Napa County landslide shapefile). This area is presumed to be stable for agricultural development, and the proposed project is not anticipated to result in landslides or unstable areas as a result of this feature. Therefore, this is considered to be a less-than-significant impact (also see question c below for additional discussion regarding slope stability and landslides).
- b. The project site is underlain by the following soil mapping units: Boomer-Forward-Felta complex, 305 to 50% slopes and Rock Outcrop-Hambright complex, 50 to 75% slopes. Installation and implementation of the ECPA would involve vegetation removal and earthmoving activities within the proposed vineyard areas. Pursuant to NCC Section 18.108.070(L) (Erosion Hazard Areas), earthmoving activities 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) in order 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 Blocks 13-19 and 90% for Block 12, as specified in the ECP. For the first three years, the cover crop may be disked or otherwise cultivated after April 1; after the three years a no-till cover crop would be established. 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 PPI Engineering (**Exhibit C**), the proposed conversion of approximately 14.0 acres of woodland and grassland to vineyard and vineyard avenues 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 average 20.34 tons per acre per year across the development area depending on soil type, slope length, and gradient. Under proposed project conditions, annual soil loss is anticipated to average 13.76 tons per acre per year, or a reduction of approximately 32% as compared to existing conditions.

Table 6 – USLE Soil Loss Analysis

Proposed Block	Proposed Development Acres	Pre-project Soil Loss (tons/year)	Post-project Soil Loss (tons/year)	Net Increase/Decrease (tons/year)	Percent Change (approximate)
<u>12</u>	0.98	0.99	0.36	0.63	-64%
13	2.07	2.11	1.47	0.63	-30%
14	3.85	7.65	5.25	2.41	-31%
15	2.10	3.33	2.33	1.00	-30%
16	1.63	2.39	1.67	0.72	-30%
17	0.50	0.27	0.18	0.09	-33%
18	2.28	3.17	2.22	0.95	-30%
<u>19</u>	0.59	0.43	0.28	0.14	-35%
Total	14.00	20.34	13.76	6.58	-32%

Source: PPI Engineering, November 2021, USLE 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 ditches, rock aprons, surface drainage pipelines, rock-filled avenues, concrete drop inlets, a permanent no-till cover crop, 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 #P21-00117-ECPA pursuant to NCC Chapter 18.108 (Conservation Regulations):

- Permanent Erosion and Runoff Control Measures: Pursuant to NCC Section 18.108.070(L) installation of runoff and sediment attenuation devices and hydromodification facilities including, but not limited to, ditches, rock aprons, surface drainage pipelines, rock-filled avenues, concrete drop inlets, and a 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 #P21-00117-ECPA shall oversee its implementation throughout the duration of the proposed project, and that installation of erosion control measures, sediment retention devices, and hydromodification facilities specified for the vineyard have been installed and are functioning correctly. Prior to the first winter rains after construction begins, and each year thereafter until the proposed project has received a final inspection from the county or its agent and been found complete, the qualified professional shall inspect the site and certify in writing to the planning director, through an inspection report or formal letter of completion verifying that all of the erosion control measures, sediment retention devices, and hydromodification facilities required at that stage of development have been installed in conformance with the plan and related specifications, and are functioning correctly.
- Cover Crop Management/Practice: The permanent vineyard cover crop shall not be tilled (i.e., shall be managed as a no-till cover crop) for the life of the vineyard and the owner/permittee shall maintain a plant residue density of 80% for Blocks 13-19 and 90% for Block 12. Cover crop may be disked 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 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, the development area is not in an area prone to landslides, ground failure or liquefaction and the proposed project would address any potential soil instability. 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 within the development area consist of Boomer-Forward-Felta complex which exhibits moderate shrink-swell potential, and Rock Outcrop-Hambright complex which exhibits low shrink-well potential (USDA, 1978). 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 at the project site. Therefore, no impact would occur with regard to soils supporting septic tanks or alternative wastewater disposal systems.
- f. The proposed project would not destroy any unique geologic features on the project site. Due to the nature of the soils in the project site and the nature of the proposed project (which would involve a relatively shallow vineyard), the probability of encountering paleontological resources within the project site is minimal. Furthermore, project approval, if granted, would be subject to the standard conditions described below that would avoid and reduce potential paleontological resource impacts. Therefore, impacts to geologic features and paleontological resources are anticipated to be less than significant.

Paleontological Resources – Conditions of Approval:

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

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

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

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

related climate impact threshold at this time. Greenhouse gas (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 Climate Action Plan (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 greenhouse gas (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 greenhouse gas, to acknowledge and credit past accomplishments and voluntary efforts, and to allow more time for establishment of a cost-effective local offset program. The BOS also requested that best management practices be applied and considered when reviewing projects until a revised CAP is adopted to ensure that projects address the County's policy goal related to reducing GHG emissions. In addition, the BOS recommended utilizing the emissions checklist and associated carbon stock and sequestration factors in the Draft CAP to assess and disclose potential GHG emissions associated with project development and operation pursuant to CEQA.

In July 2015, the County re-commenced preparation of the CAP to: i) account for present day conditions and modeling assumptions (such as but not limited to methods, emission factors, and data sources), ii) address the concerns with the previous CAP effort as outlined above, iii) meet applicable State requirements, and iv) result in a functional and legally defensible CAP. On April 13, 2016, the County, as 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.

For the purposes of this assessment the carbon stock and sequestration factors identified within the 2012 Draft CAP are utilized to calculate and disclose potential GHG emissions associated with agricultural "construction" and development and with "ongoing" agricultural maintenance and operation, as further described below. The 2012 Draft CAP carbon stock and sequestration factors are utilized in this assessment because they provide the most generous estimate of potential emissions. As such, the County considers that the anticipated potential emissions resulting from the proposed project that are disclosed in this Initial Study reasonably reflect proposed conditions and therefore are considered appropriate and adequate for project impact assessment.

Regarding operational emissions, 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 CEQA *Guidelines* and the OPR Technical Advisory 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) 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, 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.

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 the 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; ii) underground carbon stocks, or soil carbon, released when soil is ripped in preparation for vineyard development and planting (referred to as Project Site 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, as there is no threshold against which to analyze the potential significance of impact.

"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

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).

vineyard, including vehicles (such as haul trucks, pick-up trucks) and worker vehicle trips (referred to as Operational Equipment Emissions below).

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 most generous 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 14.0 gross acres of vineyard development would be approximately 131.6 MT CO_{2e} (14.0 acres multiplied by 9.4 MT CO_{2e}).

Project Site Emissions: Project site emissions are emissions resulting from vegetation removal and soil preparation associated with the conversion of approximately 14.0 acres 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, the GHG Emissions Checklist and associated carbon stock factors developed as part of the 2012 Draft CAP efforts are utilized to determine potential project site carbon stocks and emissions. Utilizing the 2012 Draft CAP carbon stocks and the acreages of vegetation types within the development area, total carbon stocks for the development area are estimated to be approximately 244.34 MT C or approximately 896.73 MT CO_{2e} (**Table 7**).

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}
Grassland ¹	11.5	1.4	16.1	59.09
Oak Woodland	2.4	95.1	228.24	837.64
Total			244.34	896.73

¹ For the purpose of these GHG calculations, the most conservative option was chosen; therefore, the 0.5 acres of developed land use type in the development area was included with the acreage for grasslands.

Sources: Napa County Draft Climate Action Plan, March 2012; Napa County Conservation Division, November 2018

There is currently no scientific agreement about the percentage of carbon that would be lost (or emitted) from soils through grading. Some analyses have suggested 20 to 25% while others have suggested 50%.¹⁶ Using 50% as a more conservative estimate, the proposed project could result in one-time development area construction emissions from vegetation removal and soil preparation (i.e., grading and soil ripping) of approximately 836.11 MT CO_{2e} (**Table 8**).

Table 8 – Estimated Project Carbon Emissions Due to Vegetation Removal

Vegetation Type/Carbon Storage	Development Area Acreage	Carbon Loss/Emission per Acre (MT C/acre) ¹	Total Carbon Loss/Emission (MT)	Total Carbon Loss/Emission in MT CO _{2e}
Grassland ¹	11.5	0.8	9.2	33.76
Oak Woodland	2.4	89.6	215.04	802.35
Total			224.24	836.11

¹ For the purpose of these GHG calculations, the most conservative option was chosen; therefore, the 0.5 acres of developed land use type in the development area was included with the acreage for grasslands.

Sources: Napa County Draft Climate Action Plan, March 2012; Napa County Conservation Division November 2018.

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.

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 most generous 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 14.0-acre agricultural development would be approximately 9.38 MT CO_{2e} (14.0 multiplied by 0.67 MT CO_{2e}).

Operational Sequestration Emissions: Emissions associated with loss of sequestration due to land use change (i.e., the conversions of existing vegetation to vineyard) have been calculated based on the Annual Carbon Sequestration Factors within the 2012 Draft CAP, which indicates that oak woodlands sequester 0.425 CO₂ acre per year, while grasslands, shrublands and developed are essentially zero. Utilizing these factors it is anticipated that the annual emissions associated with changes in carbon sequestration as a result of land use changes would be approximately 1.68 MT C per year or 6.17 MT CO_{2e} per year.¹⁷

Grapevines are photosynthetic plants and therefore have value in terms of carbon capture. Additionally, the use of cover crops, which are also photosynthetic plants, tends to result in less soil CO₂ loss from vineyard soils. Carbon sequestration loss would be further offset by the proposed vineyard, which would likely 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, the proposed project could result in one-time construction emissions of up to 967.71 MT CO_{2e} and annual ongoing emissions associated with vineyard operations (including loss of sequestration) estimated to be approximately 15.55 MT CO_{2e} per year (Table 9).

Table 9 – Estimated Overall Project-Related GHG Emissions

Construction Emissions in Metric Tons of CO _{2e}		Annual Ongoing Emissions in Metric Tons of CO _{2e}	
Source	Quantity	Source	Quantity
Vehicles and Equipment	131.6	Vehicles and Equipment	9.38
Vegetation and Soil	836.11	Loss of Sequestration	6.17
Total	967.71	Total	15.55

Source: Napa County Conservation Division, November 2018

There is no adopted CEQA significance threshold at the state, regional, or local level for construction-related GHG emissions, and the County has therefore evaluated the significance of one-time project-generated emissions of up to approximately 967.71 MT CO_{2e} by considering the size of the proposed vineyard in relation to projected vineyard development in the County. The program level EIR for the 2008 Napa County General Plan Update (SCH#2005102088 certified June 3, 2008) projected 12,500 acres of new vineyard development in the County between 2005 and 2030. The County concluded in the General Plan EIR that emissions from all sources over the planning period would result in significant and unavoidable GHG emissions despite measures adopted to address the impact. Because this determination was based on emissions from all sources, not just agriculture, the General Plan did not determine that emissions solely from projected agricultural development would result in significant unavoidable impacts.

Pursuant to Section 15183(a) of the California Code of Regulation, projects that are consistent with the general plan policies for which an EIR was certified shall not require additional environmental review, except as might be necessary to examine whether there are project-specific effects which are peculiar to the proposed project or its site. Further, the BAAQMD update to the thresholds of significance do not include construction-related climate impact thresholds (April 2022). GHG emissions from construction represent a very small portion of a project's

¹⁷ 2.4 acres of oak woodland times 0.425 MT C = 1.02 MT C, and 11.5 acres of grassland (included developed) times 0.057 MT C = 0.66, totaling 1.68 MT C

lifetime GHG emissions, and the updated thresholds for land use projects were designed to address operational GHG emissions, which represent the vast majority of project GHG emissions.

In the context of 12,500 acres of projected vineyard development, the proposed project would constitute less than approximately 0.1% of the vineyard development anticipated in the General Plan EIR. The proposed project also contains measures to reduce and/or offset emissions from vineyard development and vineyard operations such as maintaining a permanent no-till cover crop density of a minimum 80% for Blocks 13-19 and 90% for Block 12, and the maintenance and establishment of grape vines. These measures in conjunction with the Air Quality conditions of approval (detailed in **Section III [Air Quality]**) would further reduce potential GHG air quality impacts associated with construction and ongoing operation of the proposed project. For these reasons, the County does not consider one-time GHG emissions from the proposed vineyard development to be a significant impact on a project-level basis or to be a “considerable” contribution to significant unavoidable cumulative impacts identified in the General Plan EIR.

As described above, total annual GHG emissions from ongoing operations are anticipated to be approximately 15.55 MT CO_{2e} per year. As stated above, the updated BAAQMD thresholds of significance for land use projects are qualitative, with no “bright-line” (quantitative) level below which to mitigate. 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). As stated in **Section IV, Biological Resources**, the proposed project would retain approximately 93% of the tree canopy that existed on the parcel in 2018. With implementation of **Mitigation Measure BR-6**, the project would result in the permanent preservation of approximately 1.4 acres of tree canopy located on developable land (i.e., outside of stream setbacks and on land with slopes less than 30%) pursuant to the 3:1 canopy cover preservation requirements found in NCC Section 18.108.020(D). **Mitigation Measure BR-6** also reduced the total area of woodland removal to 0.7 acres and requires the planting of 2.1 acre of oak woodland. Therefore, the loss in carbon sequestration from the proposed removal of trees is more than offset after incorporation of **Mitigation Measure BR-2 & BR-6**, by permanently protecting from development oak woodland and replanting three times the amount of woodland, reducing lost carbon sequestration due to tree removal.

Further, as stated above, per the OPR Technical Advisory, the addition of 110 or fewer daily trips could be presumed to have a less than significant VMT impact. As detailed in **Section XVII (Transportation)**, harvest would generate no new truck trips annually, and up to approximately 10 one-way worker trips per day for approximately three days per year. Other typical vineyard operations (as outlined above) are also anticipated to generate up to 10 one-way worker trips per day during the days these activities occur. Therefore, daily trips (including passenger vehicle trips and truck trips) generated by the proposed project would be well below the Governor’s Office of Planning and Research’s recommended screening criterion threshold for small projects generating fewer than 110 trips per day; therefore, less-than-significant impacts related to operational GHG emissions are anticipated.

Given that the proposed project would result in the permanent preservation of three times the carbon-sequestering tree canopy that it proposes to remove, and that the operational vehicle miles traveled fall well below the established threshold of 110 daily trips, the project is considered to be consistent with the State’s long-term climate goals of being carbon neutral by 2045; therefore, a less-than-significant impact is anticipated.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
IX. HAZARDS AND HAZARDOUS MATERIALS. Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

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

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

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).

No onsite storage of hazardous materials is proposed and materials will be brought in, as needed. Cleaning and washing of chemical application equipment would occur inside the proposed development area as needed. Fertilizers would be broadcast three to four times a year. Mildewcides (i.e., sulfur dust, wettable sulfur, and

contact mildicides) would be applied up to three times a year and herbicides (i.e., contact herbicide) would be applied once a year. No pre-emergent herbicides would be strip sprayed in the vinerows for weed management. Project staging areas would be located inside of the proposed clearing limits.

Streams delineated in the project site are shown in Figure A-5 in **Exhibit B-1** (WRA, May 2021). There are no blueline streams on the project site, but there are three primary ephemeral drainages with tributaries and six seasonal wetlands that would be avoided by the development area with appropriate setbacks, as outlined in Napa County Conservation Regulation 18.108.025.

The risk of potentially hazardous materials reaching or affecting adjacent water courses or other aquatic resources is significantly reduced because: i) wetlands are avoided with minimum 50 foot setbacks, ii) the proposed project would provide minimum setbacks buffers of 35 feet from ephemeral streams in conformance with code provisions; and iii) only federal and/or California approved chemicals would be applied to the vineyard in strict compliance with applicable state and federal law. Project approval, if granted, would also be subject to the following standard conditions of approval that would further avoid and/or reduce potential impacts associated with routine transport and use of hazardous materials during project implementation and ongoing vineyard operations and maintenance. Impacts related to routine use, transportation, and application of hazardous materials described above are anticipated to be less than significant. The following conditions of approval would be implemented to reduce potential accidental release of hazardous materials, if the project is approved:

Hazardous Materials – Conditions of Approval:

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

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

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

- c. The closest schools (Yountville Elementary and Sunrise Montessori of Napa Valley) are located approximately 2.7 miles west and 3.8 miles south of the project site. There are no schools proposed 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). The Foote Property, located approximately 1.5 miles northwest of the project site, is the closest site Geotracker site. Therefore, no impact would occur.
- e. The closest public airport to the project site is the Capell Valley Airport, located over 7 miles northeast 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 visiting the project site on a temporary basis to implement the ECP and install vineyards. Approximately 20 workers 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 moderate fire severity (CalFire 2007 - <https://egis.fire.ca.gov/FHSZ/>). However, the risk of fire in vineyards is low due to limited amount of fuel, combustibles, and ignition sources that are 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 results 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"/>
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

On April 21, 2021, Governor Gavin Newsom declared a drought emergency in the state of California and as of July 8, 2021, 50 counties are under the drought state of emergency, including Napa County. The Governor directed the Department of Water Resources to increase resilience of water supplies during drought conditions. On June 8, 2021, the Napa County Board of Supervisors adopted a resolution declaring a Proclamation of Local Emergency due to drought conditions which are occurring in Napa County. On October 19, 2021, the Governor issued a proclamation extending the drought emergency statewide. The County of Napa has not adopted or implemented any mandatory water use restrictions. The County requires all discretionary permit applications (such as use permits and ECPAs) to complete necessary water analyses in order 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.

In March 2022, Governor Newsom enacted Executive Order N-7-22, which requires prior to approval of a new groundwater well in a basin subject to the Sustainable Groundwater Management Act and that is classified as medium- or high-priority, obtaining written verification from the GSA (Groundwater Sustainability Agency) managing the basin that groundwater extraction would not be inconsistent with any sustainable groundwater management program established in any applicable GSP (Groundwater Sustainability Plan) and would not decrease the likelihood of achieving sustainability goals for the basin covered by a GSP, or that it is determined first that extraction of groundwater from the new/proposed well is (1) not likely to interfere with the production and functioning of existing nearby wells, and (2) not likely to cause subsidence that would adversely impact or damage nearby infrastructure. 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 well permits during the declared drought emergency. Because the Board's interim procedures and the Executive Order N-7-22 apply to issuance of new well permits only and the project relies on an existing well permit, the project is not subject to the EO or the Board's interim procedures.

On March 8, 2022, and August 9, 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 GSA Subbasin. For parcels not located in the GSA Subbasin (i.e., generally located in the hillsides), a parcel-specific Water Availability Analysis would suffice to assess potential impacts on groundwater supplies. Because the parcel is located outside of the GSA Subbasin, a parcel-specific Water Availability Analysis was performed. To assess the potential impacts of groundwater pumping on hydrologically connected navigable waterways, the County's WAA guidance requires applicants to perform a Tier 3 analysis for new or replacement wells, or discretionary projects that would result in an increase in groundwater demand on existing wells that are located within 1,500 feet of designated "Significant Streams." All of the project wells that are proposed to be used for the proposed project are located greater than 1,500 feet of designated significant streams and no connectivity was found. The property owner has access to recycled water from the Town of Yountville and uses that alternative source to the greatest degree it can.

Approximately 15.9 acres of the project parcel is within the GSA Subbasin whereas 146 acres are outside of the subbasin, including all of the proposed project areas. The project site is located in the Chase Creek watershed that flows into Napa River. 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).

Because vineyard properties may pose threats to water quality by discharging sediment, nutrients, and pesticides and/or by increasing storm runoff, which consequently can cause erosion and sedimentation and otherwise impact aquatic life, in July 2018 the San Francisco Bay Regional Water board adopted a water quality control permit (or General Permit) for vineyard properties in the Napa River and Sonoma Creek watersheds (Order #R2-2017-0033). The General Permit regulates parcels (including contiguous parcels under common ownership) developed with five or more acres of vineyard located in either of these watersheds. The Napa River and Sonoma Creek TMDLs adopted by the San Francisco Bay Regional Water Board have established performance standards for sediment discharge and storm runoff to protect and restore water quality. The General Permit would require actions to control pollutant discharges including sediment and storm runoff from vineyards and unpaved roads, which are located throughout

vineyard properties, and pesticides and nutrients from vineyards. The General Permit would require vineyard owners or operators of parcels that meet the enrollment criteria to do the following: develop and certify a "farm plan"¹⁸; implement the farm plan to achieve discharge performance standards; submit an annual report regarding plan implementation and attainment of performance standards; and participate in group or individual water quality monitoring programs.

In the General Permit, the San Francisco Bay Regional Water Board identified four significant sediment sources that are associated with vineyard properties: i) vineyard soil erosion; ii) offsite erosion caused by vineyard storm runoff increases; iii) road-related sediment delivery; and iv) channel incision. Napa County ECPA requirements and standards primarily address and control two of these sources, vineyard soil erosion and vineyard storm runoff. The General Permit will fill gaps in local regulation so that all four sediment sources are effectively controlled to reduce fine sediment deposition in stream channels that provide habitat for endangered steelhead populations, locally-rare Chinook salmon populations, and exceptionally diverse assemblages of native fish species in these watersheds. Additional details on the Vineyard Properties General Permit can be obtained from the Regional Water Board¹⁹.

The proposed project has been designed to avoid the ephemeral streams with minimum 35-foot setbacks in accordance with NCC 18.108.025.

- 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 #P21-00117-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 in order to document that sufficient water supplies are available for a proposed project. On June 28, 2011, the Board of Supervisors approved 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).

In general, recent studies have found that groundwater levels in the Napa Valley Floor exhibit stable long-term trends with a shallow depth to water. Historical trends in the Milliken-Sarco-Tuluca (MST) area, however, have shown increasing depths to groundwater, but recent stabilization in many locations. 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

¹⁸ A farm plan documents a vineyard property's natural features, developed areas, and BMPs. Under the General Permit, a "certified" farm plan would mean that upon its full implementation of the plan, that the vineyard property is expected to achieve the performance standards for discharge. The Water Board's Executive Officer would approve third-party programs or certify a farm plan.

¹⁹ https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/agriculture/vineyard/

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 County is also using this opportunity to acknowledge that in March 2022, Governor Newsom enacted Executive Order N-7-22, which requires prior to approval of a new groundwater well in a basin subject to the Sustainable Groundwater Management Act and that is classified as medium- or high-priority, obtaining written verification from the Groundwater Sustainability Agency (GSA) managing the basin that groundwater extraction would not be inconsistent with any sustainable groundwater management program established in any applicable Groundwater Sustainability Plan (GSP) and would not decrease the likelihood of achieving sustainability goals for the basin covered by a GSP, or that it is determined first that extraction of groundwater from the new/proposed well is (1) not likely to interfere with the production and functioning of existing nearby wells, and (2) not likely to cause subsidence that would adversely impact or damage nearby infrastructure. Because this project would rely on an existing well, it is not subject to the Executive Order and the Section 9b findings.

The proposed vineyard would be irrigated using groundwater supplied by an existing well located in the project site. No water for frost protection or heat protection is proposed as part of the project. Further, no surface water would be used to irrigate the vineyard.

A Water Availability Analysis (WAA) was prepared in order to determine if the proposed increase in groundwater water demand as a result of the proposed project would result in a significant impact to groundwater supplies (RCS Associates LLC, May 2021 - **Exhibit D**). The WAA estimates the onsite groundwater recharge, overall availability, and both existing and proposed use, in order to disclose and assess potential impacts on groundwater in accordance with the WAA Guidance Document adopted by the County May 12, 2015. There are not any neighboring groundwater wells located within 500 feet of any of the active onsite wells. Groundwater is currently used to irrigate approximately 35.7 acres of existing vineyard and to supply water to existing vineyards, lawn, trees, landscaping, and garden. Of the four wells located on the project site, two are actively used to meet the groundwater demands of the project site, one is unused, and one is abandoned. The project proposes 8.9 net acres of new vineyard. The existing groundwater demand for the project site is approximately 18.44 acre-feet per year (AF/yr) (which includes 1.84 AF/yr for winery process water, 2.55 AF/yr for potable water for residential and winery use, 12.58 AF/yr for existing vineyard irrigation, and 1.47 AF/yr for all other existing irrigation onsite such as lawn, trees, landscaping, and garden). The proposed groundwater demand for the project site is expected to increase by 2.56 AF/yr with the proposed project, to 21.00 AF/yr.

Groundwater Recharge: Long-term average groundwater recharge can be estimated as the percentage of rainfall that falls on the parcel 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 29.6 inches per year over approximately 162.6 acres of the project site’s land area available for recharge and a 14% deep percolate recharge estimate, estimates the average annual groundwater recharge of project site to be approximately 56.2 AF/year (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 post-project site is estimated to have an annual future groundwater demand of 21.00 AF/year, which is below the estimated average annual recharge volume of 56.2 AF/year identified in the WAA.

The WAA also estimated the potential groundwater in storage and the effects of a prolonged drought to assist in evaluating potential groundwater impacts of the project. The estimated groundwater in storage beneath the project site (as of February 2021) is approximately 469.2 AF, and a “prolonged” drought period” would last six years where rainfall would be 51% of the average annual rainfall.

To meet six years of proposed groundwater demand for the proposed project and existing water uses, a total onsite groundwater extraction of 126 AF is estimated to be required for the subject property (21.00 AF/year times six years). Assuming groundwater recharge is reduced to 51% of the average annual recharge during such a theoretical “prolonged drought period”, the resulting total of groundwater recharge that might occur during the six-year drought period for the project site is estimated to be approximately 193.8 AF (32.3 AF/year times six years).

Therefore, assuming a theoretical six-year drought period during which only 51% of the average annual rainfall might occur, a conservative estimate of the total drought-period recharge at the subject property (193.8 AF) would be greater than the estimated total onsite groundwater demand (126 AF) that may occur over the same six-year period (**Exhibit D**).

Considering: i) anticipated annual water use of the proposed project and existing uses of approximately 21.0 AF/year is below the anticipated annual groundwater recharge rate screening criterion (or allocation) of approximately 56.2 AF/year; ii) overall water use during a theoretical six year drought period (126 AF) would be less than anticipated recharge of approximately 193.8 AF during the same period; 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 condition 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. Such data shall be provided to the County, if the PBES 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.

- 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 Blocks 13-19 and 90% for Block 12, and the annual application of straw mulch cover on all disturbed areas at a rate of 3,000 pounds per acre. These features would slow and filter surface runoff water, thereby minimizing sediment, nutrients, and chemicals from leaving the project site and entering nearby aquatic resources. Refer to **Exhibit E** for details related to the following discussion.

Proposed erosion control and project features that have the potential to alter natural drainage patterns include ditches, rock aprons, surface drainage pipelines, straw wattles, and drop inlets. These features are not anticipated to significantly alter the exiting 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 Hydrologic Analysis for the proposed project was prepared by PPI Engineering (November 2021 [Revised] - **Exhibit E**). The development area is contained within four watershed basins. Watershed 1 flows to an ephemeral stream on the north and west side of project site. Watershed 2 flows to an intermittent stream that runs through the middle of the project site. Watershed 3 flows to a culvert outlet on the southeastern side of the project site. Watershed 4 flows into a drainage swale to the south. No peak flows were estimated for Watershed 4 because the amount of project area within the watershed was minimal and no changes to existing drainage patterns would take place as a result of the project (see **Exhibit E** for additional details).

The Hydrologic Analysis utilized the HydroCAD model to conclude that there would not be an increase in peak flow for the project watershed (**Table 10**).

Table 10 –Hydrologic Modeling Calculation Results: Runoff Rates

	Runoff (cfs)			
	2-year	10-year	50-year	100-year
Watershed 1				
Pre-project conditions	19.50	51.19	88.23	104.64
Post-project conditions	18.43	49.63	86.39	102.73
Change (cfs)	-1.07	-1.56	-1.84	-1.91
Change (%)	-5.49	-3.05	-2.09	-1.83
Watershed 2				
Pre-project conditions	55.87	112.65	173.39	199.28
Post-project conditions	55.45	112.12	172.80	198.69
Change (cfs)	-0.42	-0.53	-0.59	-0.59
Change (%)	-0.75	-0.47	-0.34	-0.30
Watershed 3				
Pre-project conditions	20.96	28.33	37.95	42.28
Post-project conditions	20.49	28.33	37.95	42.28
Change (cfs)	-0.47	0.00	0.00	0.00
Change (%)	-2.24	0.00	0.00	0.00

Source: PPI Engineering, November 2021 (**Exhibit E**)

The proposed project would not increase runoff flow rates, 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.²⁰ Furthermore, pursuant to NCC Section 18.108.135 (Oversight and Operation) projects requiring an erosion control plan will 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.

- 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.

²⁰ 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)**.

- 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 wetlands and 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 6.6 tons per year, have no negative effect on runoff rates, and maintain project site drainage characteristics as compared to existing conditions. The ECPA includes BMPs that are consistent with NCC Section 18.108.080(c), as well as with Regional Water Board guidance from the Storm Water Best Management Practice Handbooks for Construction and for New Development and Redevelopment, and the Erosion and Sediment Control Field Manual.

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

Water Quality – Condition of Approval:

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

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

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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 checked="" type="checkbox"/>	<input 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 west of the project site. The project site contains existing vineyard land and, 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 as well as Agricultural Preserve and is designed under the Napa County General Plan as AWOS. Surrounding land uses consist predominantly of rural residences, wineries, livestock grazing, and vineyards. Surrounding parcels are zoned Agricultural Watershed and Agricultural Preserve in the Napa County General Plan Land Use Element. Vineyards and associated improvements are permitted uses under these designations.

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

- The proposed project is consistent with NCC Section 18.108.010, which requires that soil loss and runoff as a result of a project be minimized to protect water quality. As discussed in **Sections VII (Geology and Soils)** and **X (Hydrology and Water Quality)**, the proposed project is anticipated to decrease soil loss and potential sedimentation by approximately 6.6 tons per year and maintain runoff conditions as compared to existing conditions.
- The proposed project is consistent with Policies CON-48 and CON-50c, which require pre-development sediment erosion conditions and runoff characteristics following development not be greater than redevelopment 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 maintain runoff characteristics as compared to existing conditions.
- The proposed project with implementation of **Mitigation Measures BR-1** through **BR-6** 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 Resource Assessment was prepared for the proposed project. With implementation of **Mitigation Measures BR-1** and **BR-2**, the proposed project would avoid potential direct, indirect, and cumulative impacts to special-status plant species and associated habitat occurring on the project site. With implementation of **Mitigation Measures BR-3** through **BR-5** potential impacts to special-status and protected wildlife species would be avoided. 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 avoided.
- With implementation of **Mitigation Measures BR-1** through **BR-6**, 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 BR-1** through **BR-6**, 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 CON-16, which requires discretionary projects prepare an evaluation of biological resources. A Biological Resource Assessment was prepared for the proposed project (**Exhibit B-1**).
- The project site has six wetlands within its boundaries; however, the proposed project is consistent with Policy CON-30, which encourages the avoidance of wetlands, because the proposed vineyard blocks avoid wetlands within the project site with minimum 50 foot setbacks.
- The proposed project is consistent with Policy CON-18, which encourages the reduction of impacts to habitat conservation and connectivity. As no new fencing is proposed as part of the project, wildlife movement would not be impaired.
- 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 result in no change to runoff.

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

For these reasons, the proposed project, with the mitigation measures and conditions of approval incorporated, would not be in 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

a-b. The project site is not in an area with a known mineral resource of value to the region or state or within a known mineral resource recovery area (Napa County Baseline Date Report, Figure 2-2 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 Syar Napa Quarry, located approximately 9 miles southeast of the project site. Proposed site improvements and 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, agriculture (planted with vineyards), and contain wineries. The nearest residences are located approximately 800 feet south and 1,000 feet east from the development area. Additionally, adjacent properties and other properties in the immediate area contain vineyards. Activities associated with installation of the proposed project, including earthmoving and subsequent vineyard operations, could generate noise levels above existing conditions. Several different types of equipment would be necessary for implementation and operation of the proposed project, including a crawler tractor, tractor/trailers, backhoes, trencher, pickup trucks, passenger vehicles, a forklift, and ATVs. **Table 11** characterizes typical equipment noise levels at a reference distance of 50 feet. As identified in **Table 11**, equipment used for vineyard development could produce a maximum of 89 (A-weighted decibels) dBA at a distance of 50 feet.

Table 11 – Construction Equipment Noise Emission Levels

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

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

Table 12 characterizes the typical reduction in construction equipment noise levels as the distance increases from the source, based on a source noise level of 90 dBA.

Table 12 – Estimated Distance to dBA Contours from Construction Activities ¹

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

¹Based on a source noise level of 90 dBA

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

Based on distances to existing residences, noise associated with project construction would be between approximately 55 and 60 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 ATV's, tractors, grape haul trucks, passenger cars, and light trucks, which would occur on a temporary and seasonal basis. **Table 13** characterizes the typical reduction of farming activity noise levels as the distance increases from the source using a noise source level of 84 dBA.

Table 13 – Estimated Distance to dBA Contours from Farming Activities ¹

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

¹Based on a source noise level of 84 dBA

Based on distances to existing residences, it is anticipated that noise due to operation and maintenance agricultural activities would be approximately between 50 and 55 dBA at the closest existing offsite residences.

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 55 to 60 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 proposed 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 vehicle miles travelled (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 Transportation Impact Study (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, 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 developed with residences, winery and vineyard buildings, four groundwater wells, vegetable gardens, vineyard blocks, driveways, and associated landscaping. The project site is primarily accessed from 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 12 one-way worker trips per day during construction. Approximately six additional one-way trips are anticipated for project mobilization and demobilization for equipment and materials delivery and pickup. Typical construction equipment would include a crawler tractor (D-8 or larger), tractor/trailers, backhoes, trencher, and pickup trucks, passenger vehicles, and other small to medium service vehicles. Pruning would occur in February approximately three days of the year and is anticipated to require up to 15 workers. Weed control would occur under vines in February and between rows from April to July up to two times a year and would require up to two workers. Harvest would occur approximately three days during the year and is anticipated to require up to 20 workers. Up to 10 one-way worker trips per day would occur seasonally during operation. Vehicular equipment for ongoing vineyard maintenance is anticipated to include a tractor/trailer, a forklift, pickup trucks, passenger vehicles and other small to medium service vehicles, and ATVs. Some of this traffic already exists onsite due to the operation and maintenance of the existing vineyard. 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, including harvest, would also be intermittent during the non-peak hours, generally arriving around 7 a.m. and departing around 4 p.m.

Because the proposed project would be expected to generate up to approximately 24 round trips per day, and periodically up to 12 round trips for project mobilization and demobilization during construction, and up to approximately 20 worker round trips per day during 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.

- c. The proposed project would utilize the existing site access off Silverado Trail for project development (**Figures 1-3**). The proposed project does not include roadway improvements and/or modifications to 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 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 10 vehicles) during pruning and harvest periods which last up to three days each. 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"/> |
| a) 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 was sent to Middletown Rancheria, Mishewal Wappo Tribe of Alexander Valley, and Yocha Dehe Wintun Nation on April 21, 2023 and only one replay was received from Yocha Dehe Wintun Nation indicating the project was outside their territory.

a-b. As discussed in **Section V (Cultural Resources)** the proposed project’s cultural resources study (Flaherty Cultural Resource Services, January 2021), identified no cultural resources within the development area. Furthermore, no resources that may be significant pursuant to Public Resources Code Section 5024.1(c) have been identified or are anticipated in the development area. The Cultural Resources conditions of approval discussed in **Section V (Cultural Resources)** would avoid and reduce potential impacts to unknown resources.

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

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

Discussion

a. The proposed project would generate a minimal number of workers to the project site on a temporary basis during construction, and ongoing vineyard operation and maintenance would generate a minimal number of workers to the project site on an ongoing basis. It is anticipated that these workers would come from the existing labor pool in the region and would not generate an increase in the population relative to the existing conditions. Therefore, the proposed project would not create a need to construct new or modified utilities and service systems. Further, implementation of the proposed project would not result in the construction or expansion of a water or wastewater treatment facility; the proposed project would not generate wastewater and existing groundwater wells 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 within existing roads, vineyard and vineyard areas and/or within proposed clearing limits.

The proposed project also would include the installation of a limited number of onsite storm water drainage features such as ditches, rock aprons, surface drainage pipelines, rock-filled avenues, concrete drop inlets, and a permanent no-till 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), IV (Biological Resources), V (Cultural Resources) and IX (Hazards and Hazardous Materials)**, would result in a less-than-significant impact.

b. The 14.0 gross acres of vineyard (approximately 8.9 net acres) would be irrigated by existing groundwater wells located within the project site. However, after mitigation the net acreage would be lower. The WAA prepared by RCS Associates LLC (**Exhibit D**) concluded that after full development, total groundwater demand for the new 8.9 net acres of vineyard and other existing water demands on the project site is estimated to be 21.00 AF/year. Based on site-specific recharge and analysis the project site is estimated to have a total average annual groundwater recharge of 56.2 AF/year. The project site's estimated groundwater demand of 21.00 AF/year with the proposed project represents approximately 37% of the average annual groundwater allotment. The WAA estimated approximately 469.2 AF of groundwater is currently in storage beneath the project site, and that during

a prolonged drought (estimated to last six years), groundwater recharge would be reduced to 51% of the average annual recharge, or 32.3 AF/year (193.8 AF in six years). A conservative estimate of the total drought-period recharge at the project site (193.8 AF) would be greater than the estimate of the total proposed onsite groundwater demand (126 AF) that might occur over the same six-year period. Based on these estimates, there would be no recharge deficit during a prolonged drought. 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. Given the small number of workers that the proposed project would generate for construction and operation, wastewater generation by the proposed project would not be substantial enough to affect wastewater treatment capacity. The proposed project would generate no wastewater that would require treatment, resulting in no impact on wastewater treatment providers.
- d-e. Rock generated during vineyard preparation would be utilized onsite for erosion control measures. 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, 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 Moderate Fire Hazard Severity Zone (CalFire, 2007; Napa County GIS CalFire Layers, Fire Protection Responsibility Areas and Fire Hazard Severity Zone). Average slopes within the development area range from 18 % to 28%, with 1.2 acres occurring on slopes over 30% (**Exhibit A**). Elevations within the project site range from approximately 142 to 496 feet above msl.

- 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. 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. Operation and maintenance activities would be similar to activities already occurring on the project site with the existing vineyard. 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 checked="" type="checkbox"/>	<input 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)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion

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

- a. As discussed in this Initial Study, implementation of #P21-00117-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.

Implementation of **Mitigation Measures BR-1** through **BR-6** would avoid potential direct and indirect impacts to oak woodland habitat and special-status and protected plant and wildlife species and their habitat. The proposed project does not include the installation of wildlife exclusion fencing. 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 blocks) would result in portions of the site having reduced potential for on-site wildlife movement, the retention of blocks of vegetation with direct connectivity with similar habitats in the project site and on neighboring properties would allow for continued local wildlife movement. 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. The project site contains a number of ephemeral tributaries. To reduce impacts on water quality within the drainage, the proposed project has been designed to avoid streams with minimum 35-foot setbacks in accordance with NCC 18.108.025. With incorporation of standard conditions to protect cultural resources that may be discovered accidentally, significant impacts to cultural resources are not expected (**Section V [Cultural Resources]**). Therefore, the proposed project as designed with the incorporation **Mitigation Measures BR-1 through BR-6** would have a less than significant potential to degrade the quality of the environment.

- b. The project site is located in Chase Creek Drainage area, that flows into Napa River. The Chase Creek Drainage area contains approximately 2,839.2 acres. In 1993, vineyard acreage within this drainage was approximately 989 acres, or 35% of the drainage. Since 1993 approximately 114 acres of additional vineyard (or 4% of the drainage) have been developed to vineyard, resulting in approximately 39% of the drainage (or approximately 1,107 acres) containing vineyard.

It is estimated, based on evaluation of the County's GIS layer identifying Potentially Productive Soils within the Chase Creek Drainage, that there are approximately 280 acres (10% of the drainage) having the potential to be developed to vineyard. This, in conjunction with existing and approved vineyard development (approximately 1,100 acres), results in a total potential build out of approximately 1,380 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., Chase Creek watershed) over the last 28 years (1993-2021) were used to project an estimation of vineyard development for the next three to five years. Over the past 28 years within the Chase Creek Drainage, approximately 4 acres of agriculture were developed per year (114 divided by 28). 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 10 to 20 acres over the next three to five years within the Chase 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 (#P21-00117-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. For construction-related dust impacts, the Regional Water Board recommends that significance be based on the consideration of the control measures to be implemented (Regional Water Board, May 2017). As discussed in **Section III (Air Quality)** and shown in **Table 3** (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.

Biological Resources - Section IV:

Project-specific Biological Resources Reconnaissance Surveys (WRA, Inc., May 2021 - **Exhibit B-1**) were performed for the proposed project to evaluate potential habitat loss and disturbance to plant and wildlife species as a result of the proposed project. The reconnaissance surveys included database records searches to identify the presence or potential presence of special-status species within the project area. The database records searches included the CNDDDB, CNPS, and Napa County databases. As discussed in **Section IV (Biological Resources)**, wetlands were identified in the project site outside of the development area. No special-status plant species are present within the development area and eight special-status/protected animal species have the potential to occur within the development; however, with the implementation of **Mitigation Measures BR-1** through **BR-6**, impacts on these species would be less than significant. Therefore, the proposed project would not contribute to a cumulatively significant impact to special-status plants and animals or habitats.

Cultural and Tribal Resources – Sections V and XVIII:

The cultural resource reconnaissance survey (Flaherty Cultural Resources Services, January 2021) identified no cultural resources in the 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 6.6 tons per year as compared to existing conditions (**Table 6**). The reasons for this reduction is due to the increased vegetative cover conditions within the proposed vineyard development areas and the installation of straw wattles that reduce overland flow velocities and erosive power, and trap eroded soil on-site, thereby reducing 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 Chase 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 WAA prepared by RCS Associates LLC (May 2021 - **Exhibit D-1**) indicate that the proposed development consisting of less than approximately 8.9 net acres of planted vineyard would result in approximately 2.56 AF/year of additional water use compared to the approximately 18.44 AF/year used under current conditions, totaling approximately 21.0 AF/year. All 21.0 AF/yr would be met with groundwater.

As discussed in **Section X.c (Hydrology and Water Quality)** a Hydrologic Analysis utilizing the HydroCAD Model was prepared by PPI Engineering (November 2021 - **Exhibit E**). Because the proposed project does not include new diversions, create concentrated flows, or otherwise alter site drainage patterns, and does not materially alter site slopes, no net increase in runoff volumes or time of concentrations are expected as compared to pre-project conditions (**Exhibit E**). Therefore, no significant impacts due to changes in hydrology are expected.

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

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

Land Use and Planning - Section XI:

As discussed in **Section XI (Land Use and Planning)**, the proposed project, with implementation of the mitigation measures and conditions of approval identified in this Initial Study, achieves compliance with applicable NCC requirements and General Plan Goals and Policies (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 measures 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 Site and Project Area Air Photo

LIST OF TABLES:

- Table 1 Implementation Schedule
- Table 2 Typical Annual Operations Schedule
- Table 3 Emissions from Vineyard Development and Operation
- Table 4 Biological Communities and Habitat Types on the Project Site
- Table 5 Retention of Biological Communities with Proposed Project
- Table 6 USLE Soil Loss Analysis
- Table 7 Estimated Development Area Carbon Stocks/Storage
- Table 8 Estimated Project Carbon Emissions Due to Vegetation Removal
- Table 9 Estimated Overall Project-Related GHG Emissions
- Table 10 Hydrologic Modeling Calculation Results: Runoff Rates
- Table 11 Construction Equipment Noise Emission Levels
- Table 12 Estimated Distance to dBA Contours from Construction Activities
- Table 13 Estimated Distance to dBA Contours from Farming Activities

LIST OF EXHIBITS:

- Exhibit A Agricultural Erosion Control Plan #P21-00117-ECPA
- Exhibit B-1 Biological Resources Reconnaissance Survey Report
- Exhibit B-2 Response to Comments Memorandum
- Exhibit B-3 Habitat Mitigation and Monitoring Plan
- Exhibit C Soil Loss Analysis
- Exhibit D Water Availability Analysis
- Exhibit E Hydrologic Analysis
- Exhibit F Project Revision Statement
- Exhibit G Project Revision Map