

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

**Initial Study Checklist**  
**(form updated January 2019)**

1. **Project Title:** Trust Vineyard Partners, Agricultural Erosion Control Plan (ECPA) Application #P19-00194-ECPA
  2. **Property Owner:** Wells Fargo Bank NA, and Phillips Family Co-Trustees c/o Trust Vineyard Partners
  3. **County Contact Person, Phone Number and email:** Donald Barrella, (707) 299-1338, Donald.barrella@countyofnapa.org
  4. **Project Location and Assessor's Parcel Number (APN):**

Approximately 1.8 miles northwest of downtown Yountville, more specifically approximately 0.25 miles southeast of the terminus of Dwyer Road, in the Oakville area of Napa County (No situs address)  
APN: 027-490-006 ("Subject Property")  
Section 34, Township 7 North, Range 5 West Mount Diablo Principal Meridian  
Latitude 38° 24' 39.44" N / Longitude 122° 23' 52.33" W

Additional off-site Preservation Area is proposed on APN 027-490-012 (lands of Wells Fargo Bank NA, and Phillips Family Co-Trustees) that abuts the Subject Property to the southwest ("Preservation Property").

Project water sources are located on APNs 027-500-032 (7353 North St. Helena Highway) and 027-381-015 (7349 North St. Helena Highway) both Lands of Phillips R Bruce Trustee ETAL ("Water Source Properties") abutting and located immediately east of the Subject Property. Project water storage is located on APN 027-500-016 (Lands of William Kelham TR) within an existing pond ("Water Storage Property") that abuts the Subject Property to the east.
  5. **Project sponsor's name and address:** Trust Vineyard Partners c/o Bill Kelham, PO Box 2066, Yountville CA 94599
  6. **General Plan description:** Agriculture, Watershed and Open Space (AWOS)
  7. **Zoning:** Agricultural Preserve (AP) and Agricultural Watershed (AW)
  8. **Description of Project:** The proposed project involves the clearing of existing coast live oak woodland (consisting of predominantly coast live oaks and madrone, with white oak, blue oak, black oak, scrub oak, buckeye, manzanita, almond and olive trees occurring with less frequency), non-native grassland, chamise chaparral and fallow vineyard, earthmoving, and the installation and maintenance of erosion control measures in connection with the development of 13.8 gross acres (11.2 net planted acres) of new vineyard on the 42.9-acre parcel (**Figures 1-3**). The project also includes the installation of a new irrigation mainline from the pump station of an existing off-site pond to the new vineyard footprint, resulting in a temporary disturbance of roughly 1,000 sf. Typical slopes within the project area range from 9-27%, with ±0.95 acres occurring on slopes over 30%. The project would include the removal of 9.4 acres of coast live oak woodland, 3.5 acres of non-native grassland, 0.5 acres of chamise chaparral, and approximately 0.4 acres of fallow vineyard: approximately 660 trees with a diameter of 6" or greater at breast height are proposed to be removed. The project proposes to avoid and permanently preserve 28.6-acres (75%) of the Subject Property's oak woodland and permanently preserve 4.5-acres of oak woodland and associated cover canopy on the Preservation Property resulting in a total preservation area of 33.1-acres (**Exhibit A-3**). and is under the same ownership of the Subject Property.
- The new vineyard would be irrigated with groundwater provided from three (3) existing wells located on two nearby properties (7353 St. Helena Highway APN 027-500-032 and 7349 St. Helena Highway APN 027-381-015) under easement agreements (**Exhibits F and G**): these properties are under the ownership of Bruce Phillips, Trustee of the Phillips Trust, which is an ownership entity of the Subject Property. These three groundwater wells will serve as the project wells and source of water for the new vineyard. Frost protection or heat protection via water application is not proposed as part of the project. Project water storage would be in an existing off-site pond located on an abutting parcel to the east (APN 027-500-016, Lands of William Kelham TR): installation of the approximate 100-foot-long main irrigation line to the project site would result in the 1,000 sf of temporary disturbance previously disclosed.

Rock generated as a result of site preparation would be used to construct erosion control features such as outsloped vineyard avenues with rock bench and rock energy dissipaters. Rock may be crushed and returned back into the vineyard as rock mulch or used on avenues where needed. No long-term stockpiles of rock or soil are anticipated, temporary stockpiles will be kept within the vineyard development areas.

An existing wildlife exclusion fence is located along the northern property line and cuts through proposed Vineyard Block 2. The existing fence along the northern property line will remain while the portion within Vineyard Block 2 will be removed and replaced along the boundary of Vineyard Block 2 meeting up with new fencing proposed to enclose the western, southern and eastern portions of Vineyard Blocks 1 and 2 (see **Exhibit A-1**). A total of three (3) wildlife exit gates are also proposed as part of the project's fencing.

**Erosion Control Measures:** Temporary erosion control measures include straw wattles, silt fence, erosion control blankets, and application of straw mulch at a rate of 3,000 lbs. per acre. Permanent erosion control measures include: rock-filled avenues, establishment of a permanent cover crop, installation of permanent structural vineyard stormwater runoff, surface erosion, and sediment control measures that include; outsloped vineyard avenues with rock bench, water bars and rolling dips, and agricultural storm/sub drain system with energy dissipater in Vineyard Block 1. The permanent no-till cover crop would be maintained at a minimum vegetation cover density of 85%. Details of the proposed erosion control measures are provided in the Trust Vineyard ECP #P19-00194-ECPA, submitted April 9, 2019, revised November 4, 2019; prepared by Applied Civil Engineering Inc. (Registered Professional Engineer No. 67435) Napa, California (**Exhibit A-1** and **Exhibit A-2**).

**Earthmoving:** Earthmoving and grading activities associated with the installation of erosion control measures and subsequent vineyard operation including, but are not limited to vegetation and tree removal, soil ripping (maximum depth of 48 inches), grading of approximately 2,000 cubic yards of cut and fill (balanced on-site) for land contouring, rock removal, disking, and the development or 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 planting rootstock on a 7-foot by 4-foot spacing pattern for a vine density of 1,556 vines per acre.
- b. Ongoing inspection and maintenance of temporary and permanent erosion and runoff control measures.
- c. Ongoing operation and maintenance of the vineyard, which includes vine management (pruning, fertilization, pest, and disease control), weed control, cover crop mowing, irrigation and trellis system maintenance, and fruit harvesting. Herbicide used to control weeds within the vineyard would be limited to contact or systemic herbicides. Spot spraying would be allowed in the spring (no earlier than February 15<sup>th</sup> to ensure adequate vegetative cover for the remainder of the rainy season). No pre-emergent herbicides would be used for weed management, and no strip spraying would be performed.
- d. Environmental Commitment(s) - the owner/permittee, as part of this ECPA, has included the following elements into its design and plan's Narrative and Project Notes<sup>1</sup>:
  - i. Drainage swales have been provided with a minimum 25-foot setback buffer from top of bank, and County Definitional Streams pursuant to NCC Section 18.108.030 have been provided 65-foot stream setback buffers compliant with NCC Section 18.108.025(B).
  - ii. Raptor and Passerine Bird Protection: Implementation of the following protection measures i) pre-construction surveys for work conducted between February 1 and August 31; ii) implementation of no disturbance buffer from active nests if identified; and, iii) maintaining the no-disturbance buffer until nestlings have fledged. See **Section IV (Biological Resources)** and **Exhibit A-1** for additional details.
  - iii. Bat Protection: Implementation of the following protection measures: pre-construction bat habitat and presence surveys prior to the commencement of development activities; and removal of potential habitat trees in two phases. See **Section IV (Biological Resources)** and **Exhibit A-1** for additional details.
  - iv. Archeological Resources: Ceasing all work if archeological or cultural resources are discovered. See **Section V (Cultural Resources)** and **Exhibit A-1** for additional details.
  - v. Air Quality: Implementing of measures consistent with standard air quality and construction best management practices (BMPs) consistent with BAAQMD measures identified in Table 8-1 of the CEQA Guidelines. See **Section III (Air Quality)** and **Exhibit A-1** for additional details.
  - vi. Noise: Rock blasting, if required, will be performed in isolated areas and will be scheduled to occur between the hours of 10:00 A.M. and 2:00 P.M. See **Section XIII (Noise)** and **Exhibit A-1** for additional details.

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<sup>1</sup> The complete language of the Environmental Commitments can be found in **Exhibit A-1** under 'General Notes' in the ECPA plan set.

**Table 1 – Implementation Schedule**

April 16:	Commence clearing and tillage operations.
October 1:	All tillage and erosion control completed.
October 15 <sup>1</sup> :	All winterization complete, including seeding, straw mulching, and straw wattle installation.

<sup>1</sup> During the winter months (October 15 to April 1 of the succeeding year), no earthmoving work is allowed by the Napa County Code (NCC) Section 18.108.070(L).

**Table 2 – Annual Operations Schedule**

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

Implementation of the proposed project would be in accordance with the Trust Vineyard ECPA prepared by Applied Civil Engineering, Napa (November 4, 2019 - **Exhibits A-1, A-2**). The proposed project is further described in the application materials including the Supplemental Project Information sheets. All documents are incorporated herein by reference and available for review in the Napa County Department of Planning, Building and Environmental Services (PBES) and at: [www.countyofnapa.org/2876/Current-Projects-Explorer](http://www.countyofnapa.org/2876/Current-Projects-Explorer)

9. **Describe the environmental setting and surrounding land uses.** The proposed project would occur on one parcel totaling approximately 42.9 acres located west of St. Helena Highway at APN 027-490-006 in Napa Valley California (**Figures 1-3**), approximately 1.9 miles northwest of central Yountville and 7.2 miles southwest of central St. Helena. Existing development on the parcel consists of fallow vineyard (approximately 0.4 acres), access roads, fencing and utility lines. The parcel is primarily southeast facing, with moderate slopes, and elevations ranging from 230 to 635 feet above mean sea level. An existing paved driveway, at the southeastern property line, provides access to the proposed vineyard area from a shared access driveway that connects to State Highway 29, located approximately 0.6 miles east of the project parcel.

The project parcel is located within the Yount Mill Creek Drainage/watershed. There is one unnamed blue-line tributary located immediately adjacent to the eastern corner of the property, at the location where the existing paved driveway enters the site. While the existing driveway is located within the stream setback all new development associated with the proposed project will be outside of the required setback. There is also one drainage course located between proposed Vineyard Blocks 1 and 2. Only a small portion of the drainage located at the eastern propriety line is considered a definitional stream, the remainder of the drainage does not meet the county definition of a stream. The definitional portion of the stream is provided with a 65-foot setback pursuant to NCC Section 18.108.025, the remainder of the drainage course is provided with a 25-foot setback between the drainage course and vineyard development limits<sup>2</sup>. A potential wetland (~0.1 acres) was identified within this drainage course at the western limits of proposed Vineyard Block 1 that will be avoided as part of the project's design.

General topography of the area consists of foothills on the western side of Napa Valley floor. Surrounding land uses include scattered residences, extensive agriculture (e.g., vineyards), and undeveloped areas (naturally vegetated and/or wooded hillsides). The nearest wineries are Harlan Estate on Oakville Grade (approximately 0.4 miles northwest) and Bond Estate (approximately 0.5 miles west). No other wineries are within a half mile of the parcel. The nearest school is Yountville Elementary which is located approximately 1.8-miles southeast of the project site.

No potentially active faults have been mapped on the project site; the nearest active faults are the West Napa fault approximately 1.3 miles southeast of the project site, and an unnamed fault located approximately 1.6 miles southeast. In addition, to the south, there is an identified thrust fault (0.55 miles) and an unnamed non-active fault (0.95 miles) (Napa County GIS: Faults and Earthquake Layers). Soils on the project site have been classified according to the Soil Survey of Napa County (USDA, 1978) as Hambright rock-outcrop complex 2 to 30% slopes, Hambright rock-outcrop complex 30 to 50% slopes, and Perkins gravelly Loam 5 to 9% slopes. A small landslide deposit was identified on the far western portion of the parcel located approximately 500 feet west of Vineyard Block 2. No landslides or areas of

<sup>2</sup> While this drainage course would be considered an ephemeral drainage pursuant to NCC Section 18.108.025, as disclosed in the Background Section (Page 1), because the original submittal (dated April 9, 2019) contained the requisite application materials required by the County ECPA Application Checklist at that time, the application was determined to be 'substantially conforming' and a 'qualified permit application' pursuant to the recently enacted Water Quality and Tree Protection Ordinance (WQTPO) (Ordinance #1438), that became effective May 9, 2019. Therefore, continued processing and review of this application will not be subject to the County Conservations Regulations (NCC Chapter 18.108) as amended by the WQTPO: this application is subject to the County Conservations Regulations that were in effect prior to May 2019.

instability have been identified within the project parcel or immediately adjacent areas (Napa County GIS: Landslide Polygon and Landslide Lines layers).

Vegetation types of the area generally consist of non-native grassland, oak woodland, and vineyards and other developed lands. Vegetation types occurring within the project site consists of a coast live oak woodland (38 acres), non-native grasses (3.5 acres), chamise chaparral (0.5 acres), and a remnant fallow vineyard to be partially replaced and abandoned (0.4 acres) (**Exhibit B-1**).

10. **Background/Project History:** The project parcel (APN 027-490-006), also referred to as the Subject Property, is owned by Trust Vineyard Partners. The property is not developed with any buildings, but it is developed with several dirt, gravel and paved access roads, fencing along portions of the property lines, and utility lines; there is also fallow vineyard block (~0.4 acres), installed without ECPA approval, located at the southeastern corner of the parcel. A portion of this fallow vineyard block (~0.3 acre) will be incorporated into proposed Vineyard Block 2, while the remaining ~0.1-acre portion will be removed and seeded with cover crop consistent with the project's erosion control plan.

Because the original submittal (dated April 9, 2019) contained the requisite application materials required by the County ECPA Application Checklist at that time, the application was determined to be '*substantially conforming*' and a '*qualified permit application*' pursuant to the Water Quality and Tree Protection Ordinance (WQTPO) (Ordinance #1438), that became effective May 9, 2019. Therefore, continued processing and review of this application will not be subject to the County Conservations Regulations (NCC Chapter 18.108) as amended by the WQTPO: this application is subject to the County Conservations Regulations that were in effect prior to May 2019.

The agricultural electrical service for the pump station at the existing off-site pond located on APN 027-500-016 (Lands of William Kelham TR) that would store water for the project from the 3 off-site project wells was installed under Building Permit #55970 (June 7, 1995).

In January of 2025, the owner elected to include off-site preservation on the Preservation Property to offset potential impacts.

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)

**Other Agencies Contacted**

The Middletown Rancheria

The Mishewal Wappo Tribe of Alexander Valley

The Yocha Dehe Wintun Nation

12. **Tribal Cultural Resources.** Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resource, procedures regarding confidentiality, etc.?

Notice of the proposed project was sent to Middletown Rancheria, Mishewal Wappo Tribe of Alexander Valley, and Yocha Dehe Wintun Nation on April 18, 2019. None of the tribes requested consultation within the 30-day notification period, and because no response to the consultation invitation was received, the consultation period elapsed. Official Closure letters were mailed out on June 3, 2019.

**Note:** Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21080.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.

## ENVIRONMENTAL IMPACTS AND BASIS OF CONCLUSIONS:

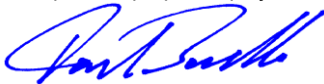
The conclusions and recommendations contained herein are professional opinions derived in accordance with current standards of professional practice. They are based on a review of the Napa County Environmental Resource Maps, the other sources of information listed in the file, and the comments received, 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 #P19-00194-ECPA as listed below, and the environmental background information contained in the permanent file on this project. These documents and information sources are incorporated herein by reference and available for review at the Napa County Department of Planning, Building and Environmental Services located at 1195 Third Street, Suite 210, Napa, CA 94559 or at [Current Projects Explorer | Napa County, CA](#):

- Applied Civil Engineering Inc., April 3, 2019 (revised November 4, 2019), Erosion Control Plan, Trust Vineyard Partners (**Exhibit A-1**)
- Applied Civil Engineering Inc., April 3, 2019, Erosion Control Plan Narrative, Trust Vineyard Partners (**Exhibit A-2**)
- Applied Civil Engineering Inc., February 6, 2025, Oak Woodland Preservation Exhibit, Trust Vineyard Partners (**Exhibit A-3**)
- Wildlife Research Associates, April 8, 2019 (Revised August 9, 2019), Habitat Assessment for Trust Vineyard Partners (**Exhibit B-1**)
- Denise Kelley, November 15, 2018, Arborist Survey/Inventory Proposed Vineyard Blocks 1 and 2, Trust Vineyard Partners (**Exhibit B-2**)
- Wildlife Research Associates, Applied Civil Engineering Inc., March 2019, Vineyard Planning Exhibit with Vegetation Communities (Vegetation Mapping) (**Exhibit B-3**)
- Jane Valerius Environmental Consulting, March 10, 2025, Oak Woodland Preservation Plan and Mitigation (**Exhibit B-4**)
- Archaeological Resource Survey, November 13, 2018, Cultural Resource Evaluation of Trust Vineyard Partners, Napa County, California
- David Steiner (CPESC, CPSWQ) for Applied Civil Engineering, September 2019 (Revised November 2020), USLE Soil Loss Analysis, Trust Vineyard Partners ECP (**Exhibit C**).
- David Steiner (CPESC, CPSWQ) for Applied Civil Engineering, March 2019 (Revised September 2019), Hydrologic Analysis, Trust Vineyard Partners ECP (**Exhibit D**).
- Applied Civil Engineering Inc., June 1, 2023, Tier I Water Availability Analysis for Trust Vineyard Partners (**Exhibit E-1**).
- Richard C. Slate & Associates, October 31, 2023, Tier 3 Water Availability Analysis, Trust Vineyard Partners (**Exhibit E-2**)
- Water agreement letter Vine Hill Ranch, agreement to supply water resources for P19-00194 from APNs: 027-381-015, 027-381-016, 027-490-007 and 027-500-032, August 19, 2019, Trust Vineyard Partners. Water System Agreement, Rights to Use of Reservoir, December 30, 1993, Trust Vineyard Partners (**Exhibit F**)
- Site inspections conducted by Napa County Planning Division staff on June 5, 2019.
- 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 MITIGATED NEGATIVE DECLARATION will be prepared. Attached, as **Exhibit G** 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.



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Donald Barrella, Principal Planner  
Napa County Planning,  
Building and Environmental Services Department

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April 10, 2025  
Date

I. <b>AESTHETICS.</b> Except as provided in Public Resources Code Section 21099, would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" 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 a 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 not readily visible from viewshed roads (i.e., Silverado Trail and Highway 29). The site is not located on a prominent hillside or a major or minor ridgeline. There are no significant rock outcroppings or geologic features on the project site that would be impacted by the project (site visit conducted by Napa County staff on June 5, 2019). The project is not visible from a state scenic highway. Furthermore, portions of the proposed project that may be visible from nearby roadways and neighboring properties would be consistent with the surrounding land uses and visual character, which predominately consists of vineyards. Therefore, the project would have no impact on a scenic vista, on scenic resources or on a state scenic highway.

**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 property's Napa County Agriculture, Watershed & Open Space (AWOS) and Agricultural Resource (AR) land use designations, the AP and AW zoning districts and with adjacent land uses which predominately consist of agricultural/vineyard and rural residential uses. Although trees would be removed, as disclosed in subsection a-b above (and discussed in **Section IV [Biological Resources]**), a majority of the trees are not readily 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 parcel require some lighted nighttime activities consistent with the nighttime activity already occurring in the surrounding area, which includes vineyard and agricultural uses. Lighting would be in the form of headlights or downward direction lights on equipment being used during nighttime harvest, sulfur and pesticide/herbicide applications. The proposed project would include nighttime harvest (typically from 8 p.m. to 8 a.m.) occurring up to four days per year, and sulfur applications (typically from 9 p.m. to 2 a.m.) occurring approximately 7 days per year, and pesticide / herbicide applications (typically from 9 p.m. to 2 a.m.) occurring approximately 7 days per year. While some nighttime activities may occur for limited periods, the project would not introduce a new source of substantial light or glare, and the types and extent of nighttime lighting would be consistent with surrounding land uses that predominately consist of vineyards, resulting in a less than significant impact.

II.	AGRICULTURE AND FOREST RESOURCES. <sup>3</sup> Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
	a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Important (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	c) Conflict with existing zoning for, or cause rezoning of, forest land as defined in Public Resources Code Section 12220(g), timberland as defined in Public Resources Code Section 4526, or timberland zoned Timberland Production as defined in Government Code Section 51104(g)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	d) Result in the loss of forest land or conversion of forest land to non-forest use in a manner that will significantly affect timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, or other public benefits?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Discussion:**

**a.**

The Napa County Important Farmland 2016 map prepared by the California Department of Conservation, Division of Land Resource Protection identifies that no portions of the project site contain areas mapped as Prime Farmland, Unique Farmland or Farmland of State Importance; the site is labeled as Other Land. The proposed project would result in an increase in agricultural land from previously undeveloped uses onsite; 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 a General Plan land use designation of Agriculture, Watershed and Open Space (AWOS) and is zoned Agricultural Watershed (AW) and Agricultural Preserve (AP). Therefore, the operation of a vineyard totaling approximately 13.8-acres is consistent with property's land use and zoning designations. The subject property does not have a Williamson Act contract associated with it. Therefore, the project would not conflict with its land use designation or a Williamson Act contract resulting in no impact.

**c-d.**

The project parcel does not include or support identified hardwood forest/woodland, hardwood forests are typically associated with higher elevations and mountainous areas compared to hardwood woodlands which typically occur on lower elevations. Based on the CALFIRE FRAP mapping, the proposed project site supports hardwood woodland with hardwood forest and conifer forest located outside the project area (WRA October 2019). The project area is not zoned as forest land as defined in Public Resource Code Section 12220(g), timberland as defined in Public Resource Code Section 4526, or a Timberland Production Zone (TPZ) as defined in Government Code Section 51104(g). Therefore, a less than significant 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

<sup>3</sup> "Forest land" is defined by the State as "land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits." (Public Resources Code Section 12220(g)) The Napa County General Plan anticipates and does not preclude conversion of some "forest land" to agricultural use, and the program-level EIR for the 2008 General Plan Update analyzed the impacts of up to 12,500 acres of vineyard development between 2005 and 2030, with the assumption that some of this development would occur on "forest land." In that analysis specifically, and in the County's view generally, the conversion of forest land to agricultural use would constitute a potentially significant impact only if there were resulting significant impacts to sensitive species, biodiversity, wildlife movement, sensitive biotic communities listed by the California Department of Fish and Wildlife, water quality, or other environmental resources addressed in this checklist.



or forestland in the area to non-agricultural or non-forestland uses, and installation of vineyard would result in the increase in farmland. The project area and parcel are not located within land mapped as Prime or Unique Farmland. As such, the proposed project would have a less than significant impact on agricultural or forest resources of Napa County.

III.	AIR QUALITY. Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
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:**

On June 2, 2010, the Bay Area Air Quality Management District's (BAAQMD) Board of Directors unanimously adopted thresholds of significance to assist in the review of projects under the California Environmental Quality Act. 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 BAAQMD's website and included in BAAQMD's updated CEQA Guidelines (updated May 2012). 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 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 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. These 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.

The Air District published a new version of the Guidelines dated May 2017, which includes revisions made to address the Supreme Court's 2015 opinion in Cal. Bkdg. Indus. Ass'n vs. Bay Area Air Quality Mgmt. Dist., 62 Ca 4th 369.

**a-b.**

The project site is located in the foothills bordering the west side of the Napa Valley approximately 1.6 miles northeast of the City of Yountville, which is within the Napa County climatological subregion of the San Francisco Bay Area Air Basin, which is under the jurisdiction of BAAQMD. The mountains bordering Napa Valley block much of the prevailing northwesterly winds throughout the year. Sunshine is plentiful in Napa County, and summertime can be very warm in the valley, particularly in the northern end. Winters are usually mild, with cool temperatures overnight and mild-to-moderate temperatures during the day. Wintertime temperatures tend to be slightly cooler in the northern end of the valley. Winds are generally calm throughout the county. Annual precipitation averages range from about 24 inches in low elevations to more than 40 inches in the mountains.

The topographical and meteorological features of the Napa Valley subregion create the potential for air pollution. In the short term, potential air quality impacts are most likely to result from construction activities. Construction-related emissions, which are temporary in nature, mainly consist of particulate matter (PM) generated from fugitive dust during grading or other earthmoving activities and other criteria pollutants generated through

the exhaust from construction equipment, vehicular haul and worker trips. 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.

Ozone and fine particle pollution, or PM<sub>2.5</sub>, are the major regional air pollutants of concern in the San Francisco Bay Area. Ozone is primarily a problem in the summer, and fine particle pollution in the winter. In Napa County, ozone rarely exceeds health standards, but PM<sub>2.5</sub> occasionally does reach unhealthy concentrations. There are multiple reasons for PM<sub>2.5</sub> exceedances in Napa County. First, much of the county is wind-sheltered, which tends to trap PM<sub>2.5</sub> within the Napa Valley. Second, much of the area is well north of the moderating temperatures of San Pablo Bay and, as a result, Napa County experiences some of the coldest nights in the Bay Area. This leads to greater fireplace use and, in turn, higher PM<sub>2.5</sub> levels. Finally, in the winter easterly winds often move fine-particle-laden air from the Central Valley to the Carquinez Strait and then into western Solano and southern Napa County (BAAQMD, *In Your Community: Napa County*, April 2016)

The potential impacts associated with implementation and operation of the 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, ozone precursors oxides of nitrogen and reactive organic gases (NO<sub>x</sub> and ROG), carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), and suspended particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>). Other criteria pollutants, such as lead and sulfur dioxide (SO<sub>2</sub>), would not be substantially emitted by the proposed development or 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 allows 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 *California Environmental Quality Act Air Quality Guidelines* developed by its staff in 2010 and as updated through May 2017. These guidelines outline substantial evidence supporting a variety of thresholds of significance.

As mentioned above, in 2010, the BAAQMD adopted and later incorporated into its 2011 CEQA Guidelines project screening criteria (Table 3-1 – Operational-Related Criteria Air Pollutant and Precursors Screening Level Sizes) and thresholds of significance for air pollutants, which have now been updated by BAAQMD through May 2017. These air pollutant thresholds of significance are identified in **Table 3** below.

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

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 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<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>.

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 <sub>x</sub>	PM <sub>2.5</sub>	PM <sub>10</sub>
	Construction Emissions			
Pounds per day: 150-acre vineyard development <sup>1</sup>	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 development <sup>2</sup>	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 <sup>3, 4</sup>	4.6	42.3	5.21 <sup>4</sup>	24.21 <sup>4</sup>
Construction threshold	54	54	54	82
	Operational Emissions			
Pounds per day: 400-acre vineyard operation <sup>1</sup>	7.78	2.85	0.80	4.22
Pounds per day: 560-acre vineyard operation <sup>2</sup>	6.58	1.84	0.75	3.91
Pounds per day: 507-acre vineyard operation <sup>3</sup>	4.3	22.3	1.4	2.3
Operational threshold (lbs./day)	54	54	54	82
Tons per year (Metric) <sup>1,5</sup>	0.78	0.35	0.11	0.58
Operational threshold (tons per year)	10	10	10	15

<sup>1</sup> As identified in Circle-S EIR; <sup>2</sup> As identified in Suscol Mountain EIR; <sup>3</sup> As identified in Walt Ranch EIR; <sup>4</sup> Includes dust and exhaust emissions; <sup>5</sup> 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 this project’s proposed approximate 13.8-acre vineyard is significantly 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 condition described below, which includes standard air quality and construction best management practices (BMPs) consistent with BAAQMD measures identified in Table 8-1 of the 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, should the proposed project be approved. Additionally, these conditions are consistent with the Project’s Air Quality Environmental Commitments.

**Air Quality – Conditions of Approval (AQ- 1):** The owner/permittee shall implement the following air quality BMPs during construction activities and vineyard maintenance and operations:

- Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. The BAAQMD’s phone number shall also be visible.
- Water all exposed surfaces (e.g., parking areas, staging areas, soil piles, grading areas, and unpaved access roads) two times per day.
- Cover all haul trucks transporting soil, sand, or other loose material offsite.
- Remove all visible mud or dirt tracked onto adjacent public roads by using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved roads shall be limited to 15 mph.
- Idling times shall be minimized either by shutting off equipment when not in use or reducing the maximum idling time to five (5) 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 FAQ<sup>4</sup> or the PERP website<sup>5</sup>.

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 it would not conflict with or obstruct implementation of an air quality plan or result in cumulatively considerable effects.

<sup>4</sup> [http://www.arb.ca.gov/portable/perp/perpfaq\\_04-16-15.pdf](http://www.arb.ca.gov/portable/perp/perpfaq_04-16-15.pdf)

<sup>5</sup> <http://www.arb.ca.gov/portable/portable.htm>

**c-d.**

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

Land uses in the vicinity of project parcel include rural residential, and agriculture (primarily vineyard). The project site contains approximately 49.2 acres of land and is developed with roads (paved and unpaved), fencing and utility lines. The closest school (Yountville Elementary) is located approximately 1.8 miles southeast of the project site in Yountville (Napa County GIS, Schools Layer). The two closest residences are located approximately 165 feet east and 270 feet southeast of proposed Block 2. There are two other residences located within 600 feet of the proposed vineyard block developments: a residence located approximately 250 feet northeast of proposed Block 1 and a residence located approximately 350 feet southwest of proposed Block 2. These residences are under the ownership or in common ownership with the project applicant. The nearest residences to the project site that are not under the ownership or common ownership of the applicants are over 2,000 feet away to the northeast. The closest residential area (Yountville) is approximately 1.6 miles southeast of the project.

During installation of the ECPA, 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, and ATV's). These sources would be temporary and/or seasonal in nature and would occur at least 1.8 miles from the closest school and 1.6 miles from the nearest residential neighborhood, 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, resulting in a less than significant impact.

IV. <b>BIOLOGICAL RESOURCES.</b> Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
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 Wildlife or the U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input 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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Discussion:**

The following were utilized in this analysis and are incorporated herein by reference and available in the project file for review.

- Wildlife Research Associates (WRA) and Jane Valerius Environmental Consulting (JVEC), August 9, 2019, Habitat Assessment Trust Vineyard Partners (**Exhibit B-1**).

- Denise Kelley, November 15, 2018, Arborist Survey/Inventory Proposed Vineyard Blocks 1 & 2, Trust Vineyard Partners (**Exhibit B-2**)

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

WRA and JVEC conducted an assessment of biological resources on the Subject Property on March 6, 2018, and July 23, 2018. The surveys were completed to determine: the presence of sensitive biological communities; the potential for biological communities on site to support special-status plant or wildlife species; and the presence of sensitive natural resources protected by local, state, or federal laws and regulations. The field surveys were conducted by botanists familiar with the flora of Napa County and surrounding counties.

Information on special status plant and animal species was compiled through a review of the literature and database search. Database searches for known occurrences of special status species focused on the Rutherford, Yountville, Napa, and Sonoma U.S. Geologic Service 7.5-minute topographic quadrangles, which provided a five-mile radius around the proposed project area. A list of special-status plant and animal species that have the potential to occur within the vicinity of the project area was compiled based on data in the California Natural Diversity Database records (CNDDDB)(CDFW, 2019), California Native Plant Society (CNPS), Inventory of Rare and Endangered Plants (CNPS, 2019), State and Federally Listed Endangered and Threatened Animals of California (CDFW 2019) and the U.S. Fish and Wildlife Service Information on Planning and Conservation (USFWS 2019).

The approximate 42.9-acre project parcel and survey area consists of the following upland biological communities (or habitat types): non-native grassland, coast live oak woodland, chamise chaparral, and a seasonal wetland. Coast live oak woodland and seasonal wetlands are considered sensitive habitat types. The acreages of each biological community to be removed within the development area is listed in **Table 4** below.

**Table 4: Vegetation Community and Acreages Removed and Preserved as a Percentage of the Total Acreage**

Biological Communities or Habitat Type	Acreages				Percent of Total Acreage
	Vineyard Block 1	Vineyard Block 2	Total Removed	Total on Parcel	% retained
Non-native grassland	1.1	2.4	3.5	4.0	13
Chamise chaparral	0.0	0.5	0.5	0.5	0
Coast live oak woodland	3.0	6.4	9.4	38	75
Existing development	0.0	0.4	0.4	0.4	0
Seasonal Wetland	0.0	0.0	0.0	<0.1	100
<b>Total</b>	4.1	9.7	13.8	42.9	-

Source: WRA JVEC, August 2019, **Exhibit B-1**

**a.**

**Special-Status Plants:** Based upon a review of the resources databases listed in **Exhibit B-1** and **Exhibit B-2**, 57 special-status plant species have been documented in the vicinity of the project site. Seasonal protocol-level surveys were conducted for special status plants in March, April, May and June 2018. Eight special status plants were identified as having a low to moderate potential to occur within the study area: franciscan onion, narrow-anthered brodiaea, hayfield tarplant, bristly leptosiphon, broad-lobed leptosiphon, jepson’s leptosiphon, green monardella and two-fork clover. However, none of these plants were observed during the March to June surveys, as such they were determined not to be present in the study area. Additionally, no special status mosses or lichens were identified during the surveys.

The proposed project does not include the removal of special-status plant species or their habitat and would be consistent with the following Napa County General Plan Conservation Element Goals and Policies and Zoning Ordinance: General Plan Goal CON-2<sup>6</sup> because it would assist in maintaining the existing level of biodiversity in the County, as well as contribute to minimization of potential cumulative impacts associated with the loss of special-status plant species and associated habitat due to agricultural conversion projects; Goal CON-3<sup>7</sup> as it protects the continued presence of special-status plant species or its habitat; Policy CON-13<sup>8</sup> in that impacts to special-status habitat can be avoided while allowing for

<sup>6</sup> Goal CON-2: Maintain and enhance the existing level of biodiversity.

<sup>7</sup> 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.

<sup>8</sup> 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.

up to approximately 13 acres of agriculture on the project site; Policy CON-17<sup>9</sup> 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 affects sensitive, rare, threatened or endangered plants.

Because the project site and parcel do not contain special-status plants or potential habitat for special-status plants, the project is not anticipated to have any potentially significant direct or indirect impacts on special-status plant species or their habitat. Because the trenching for the proposed main irrigation line from the existing pond and pump station located on APN 027-500-016 to the property line and limits of clearing of the Subject Property is located in an area that has historically been disturbed due to the ongoing agricultural use and operations on APN 027-500-016 no impacts are anticipated as a result of this project component. Furthermore, the vegetation replacement condition (if approved) will be implemented to replace any vegetation inadvertently removed.

#### **Vegetation Replacement – Condition of Approval**

In accordance with Napa County Code Section 18.108.100, Erosion hazard areas – Vegetation preservation and replacement) any vegetation or plant populations inadvertently removed as a result of vineyard development authorized under #P19-00194-ECPA shall be replaced on-site at a ratio of 2:1 at locations within similar habitat. For such removal, a replacement plan shall be prepared by a qualified botanist or ecologist for review and approval by the Director prior to vineyard planting. At a minimum, the replacement plan shall include i) a site plan showing the locations where replacement plants will be planted, ii) a plant pallet composed of the special-status plant species being removed including sizes and/or application rates: seed mixes shall not contain species known to be noxious weeds and any non-native grasses should be sterile varieties, iii) planting notes and details including any recommended plant protection measures, iv) invasive species removal and management specifications, v) an implementation schedule, vi) performance standards with a minimum success rate of 80%, and vii) a monitoring schedule for a period of at least three years to ensure success criteria are met.

#### Special Status Animals:

The Habitat Assessment identified that 25 special-status wildlife species have a potential to occur within the project site: western bumblebee, obscure bumble bee, California red-legged frog, California quail, common poorwill, nuttall's woodpecker and lewis's woodpecker, rufous-crowned sparrow, fox sparrow, olive-sided fly catcher, allen's hummingbird, oak titmouse, wrenit, nesting raptors (red-shouldered hawk, cooper's hawk, great horned owl, and white-tailed kite), northern spotted owl, and roosting bats (big brown bat, California myotis, long-eared myotis, hoary, pallid, western red, and Yuma myotis). Additionally, a variety of native bird species with protections under the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (CFG) may use vegetation within the development area for nesting. The project site is located outside of the critical habitat in Napa identified for the California Red-Legged Frog and the Northern Spotted Owl.

*Western Bumblebee* occur from the Channel Islands to the northern extent of the state, primarily in the coastal and Sierra Nevada ranges and mostly excluding the Central Valley and drier, warmer areas. Western bumble bees primarily nest in underground cavities such as old squirrel burrows or other animal nests on open west-southwest slopes bordered by trees, although a few nests have been reported in aboveground locations. This species nests, forages, and overwinters in meadows and grasslands with abundant floral resources and may be found in some natural areas within urban environments. While grasslands occur on the site, the diversity of flowering plants therein are not enough to provide nectar and pollen between February and November. Therefore, it is unlikely that these bumble bees occur on the parcel, and as indicated in the Habitat Assessment this species was not observed. No potentially significant impact to this species or its habitat is anticipated as a result of the proposed project.

*Obscure bumble bee* occurs along the Pacific Coast, from southern California to southern British Columbia, with scattered records from the east side of California's Central Valley. Analyses suggest very high population decline range-wide, including range size reductions, persistence reductions, and relative abundance declines. *Bombus caliginosus* inhabits open grassy coastal prairies and Coast Range meadows. Nesting occurs underground as well as above ground in abandoned bird nests. Males patrol circuits in search of mates. Nests are often located underground in abandoned rodent nests, or above ground in tufts of grass, old bird nests, rock piles, or cavities in dead trees. While suitable food plants may occur within the grasslands within the project area, the project site grasslands are drier than grasslands that are typically occupied by this species, and as indicated in the Habitat Assessment this species was not observed (WRA JVEC, August 2019). No potentially significant impact to this species or its habitat is anticipated as a result of the proposed project.

*California red-legged frog* breeds primarily in ponds, but will also breed in slow moving streams, or deep pools in intermittent streams. Inhabited ponds are typically permanent, at least 2 feet (0.6 meters) in depth, and contain emergent and shoreline vegetation. Sufficient pond depth and shoreline cover are both critical, because they provide means of escape from predators of the frogs. Non-breeding CRF have been found in both aquatic and upland habitats. Although the majority of individuals prefer dense, shrubby or emergent vegetation, closely associated with deep (>0.7 meters) still, or slow-moving water, some individuals use habitats that are removed from aquatic habitats. Lack of suitable breeding habitat on the

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<sup>9</sup> 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.

site and that the known occurrences of the species are more than 5 miles from the project site, and that this species was not observed, results in no potential impacts to this species by the proposed project. No further action is required.

**Nesting Passerines:** *California Quail, Common poorwill, lewis's and nuttall's woodpeckers, wrentits, oak titmouse, rufous-crowned and fox sparrow, olive-sided flycatcher, and allen's hummingbird.* As early as February, passerines begin courtship and once paired, they begin nest building, often around the beginning of March. Nest structures vary in shapes, sizes and composition and can include stick nests, mud nests, matted reeds and cavity nests. For example, black phoebes may build a stick nest under the eaves of a building. Depending on environmental conditions, young birds may fledge from the nest as early as May and, if the prey base is large, the adults may lay a second clutch of eggs. Several passerine (perching birds) species may nest on the site in the various habitats, including, but not limited to, common poorwill on bare ground the grasslands, and white-breasted nuthatch and western bluebirds in cavities in the trees. Approximately 3.5-acres of non-native grasslands, 0.5-acres of chamise chaparral and 9.4-acres of coast live oak woodland are proposed for removal. Removal of the 0.5-acres of chamise chaparral habitat may result in a removal of habitat potentially suitable for wrentits. This may result in a localized edge effect, but not one that is anticipated to significantly impact this species. Furthermore, the eastern portion of Napa County provides better and larger acreages of suitable nesting habitat than the western area of Napa County (WRA August 2019 – **Exhibit B-1**).

**Nesting Raptors:** *Red-shouldered hawk, Cooper's hawk, Great horned owl and White-tailed kite.* **General Ecology and Distribution:** Raptors nest in a variety of substrates including, cavities, ledges and stick nests. For example, Cooper's hawks are small bird hunters, hunting on the edges of forests in broken forest and grassland habitats where passerines forage for seeds and insects. Nests occur in heavily forested areas near a water source. Research sites on nesting Cooper's hawks rarely show the nests more than a quarter of a mile away from water, whether it is a cattle tank, stream or seep. Trees typically used by Cooper's hawks include coast live oaks, cottonwoods, and black oaks, as well as second growth conifer stands or deciduous riparian areas. White-tailed kites typically nest in oak woodlands, valley oak or live oak, or trees along marsh edges. The nest made by this species is a frail platform of sticks, leaves, weed stalks, and similar materials located in tree or bush. This species nests during the months of February through October, with peak from May to August, typically in dense tree groves. In general, the breeding season for raptors occurs in late March through June, depending on the climate, with young fledging by August or October. A cooper's hawk was observed foraging in the southern portion of the parcel outside of the proposed development area. A white-tailed kite was observed on the northwest side of the parcel in the tall conifer trees located outside the development area, in the designated corps Douglas fir trees to be avoided. This sighting was sent to the CNDDDB.

Potential impacts to nesting raptors and passerines as a result of the project would be significant. However, to reduce potentially significant impacts to special-status bird species to a less than significant level, the owner/applicant has included protection and avoidance measures as part of the project so that special-status bird species would not be adversely affected during project implementation (See 'Environmental Commitments' and **Exhibit A-1**). To ensure the implementation of the proposed environmental commitments are consistent with, and in accordance with, California Department of Fish and Wildlife (CDFW) and County protocol and practice the following conditions of approval will be implemented, should the project be approved. The project as proposed, with incorporation and implementation of proposed environmental commitments and conditions of approval, will result in less than significant impacts to special-status bird species.

**Environmental Commitment - Bird protection condition:** The Permittee shall include in #19-00171-ECPA the following measures to minimize impacts associated with the loss and disturbance of nesting birds and raptors consistent with and pursuant to California Department of Fish and Wildlife (CDFW) Code Sections 3503 and 3503.5, the following nesting birds preconstruction survey(s) shall be conducted prior to the commencement of vineyard development and implementation activities:

- i. For earth-disturbing activities occurring between February 1 and August 31 (which coincides with bird breeding and nesting seasons), a qualified biologist (defined as knowledgeable and experienced in the biology and natural history of local avian resources with potential to occur at the project site) shall conduct 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 f the project area. The preconstruction survey shall be conducted no earlier than seven (7) days prior to vegetation removal and ground disturbing activities are to commence. Should ground disturbance commence later than seven (7) days from the survey date, surveys should be repeated. A copy of the survey will be provided to the Conservation Division and CDFW prior to commencement of work.
- ii. After commencement of work if there is a period of no work activity of seven (7) days or longer during the bird breeding season, surveys shall be repeated to ensure birds have not established nests during inactivity.
- iii. In the event that nesting birds are found, the permittee shall identify appropriate avoidance methods and exclusion buffers in consultation with Napa County PBES, and with CDFW and/or the USFWS as necessary, 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 PBES, and with CDFW and/or the USFWS.
- iv. 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.

- v. Alternative methods aimed at flushing out nesting birds prior to pre-construction 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.

*Northern spotted owl* is a subspecies of spotted owl (*Strix occidentalis*) and nests in cavities or on platforms in large trees, preferentially inhabiting old growth forests, though can be found in mixed primary and secondary growth-forests in the southern part of its range (southern Oregon and California). The species requires enclosed mature forests with dense tree canopies, a diversity of vegetation heights within the understory, as well as an absence of disturbance: this species is extremely sensitive to human disturbance. The project site is located within the range of the species but is located outside the critical habitats identified by the USFWS. The spotted owl predicted habitat layer (CNDDDB) shows the project area to be located east and outside of the predicted habitat for spotted owl. An individual spotted owl is reported approximately 1,880 feet (0.35 miles) northwest of the site and belongs to the spider nesting diagram of NAP 0030 pair of spotted owls (CNDDDB). This pair was last observed in 2009, with a visit in 2012, and is considered a valid site (CNDDDB). Other reported spotted owl observations (NAP 0015) and associated spider diagrams are more than 1 mile to the west of the proposed project site and are within the predicted habitat layer for the species (CNDDDB). The vegetation used by NAP0030 is conifer forest on the edge of hardwood woodland (CNDDDB). Movements of individuals from the nest sites are into conifer forest or hardwood forests. Hardwood forests are typically associated with higher elevations and mountainous areas compared to hardwood woodlands which typically occur on lower elevations that edge the Napa Valley floor, which is predominately in vineyard. Based on the CALFIRE FRAP mapping, the proposed project site supports hardwood woodland with hardwood forest and conifer forest located outside the project area (CNDDDB). No loss of suitable nesting or foraging habitat is anticipated to occur from the proposed project based on the types of habitats being removed. Further, the project site is immediately adjacent to extensive existing vineyards and associated vineyard operations of the Napa Valley to the north and east, and rural residences to the north, south and east, that produce disturbances significant enough in the and immediate vicinity that have negatively affected the project area as suitable nesting and foraging habitat. Therefore, no potentially significant impacts to the Northern spotted owl or its habitat are anticipated as a result of the proposed project.

Roosting Bats: big brown bat, California myotis, long-eared myotis, hoary, pallid, western red, and Yuma myotis. Status: Of the 25 bats species occurring in California, 12 are classified as SSC (CDFW 2018). In addition to the Proposed Endangered and SSC bat species above, non-SSC species are also afforded consideration under the California Environmental Quality Act (CEQA), primarily when significant local breeding populations may be impacted. In addition, many bat species will roost together, including special-status bats that may form smaller colonies that are less easily detected or observed than their more commonly occurring cohorts (Tatarian, personal observations). For these reasons, protections for special-status bat species are generally also best applied to non-special-status bat species.

Bat species that could occur in the project area can be separated into two categories based on social structure. The first category consists of colonial species that roost in groups of dozens to 10s or 100s or thousand throughout the year in natural and anthropogenic (human-made) habitat including caves, rock outcrops and crevices, mines, culverts, buildings, bridges, and trees. Colonial bats found in and around the project include Brazilian free-tailed bat (*Tadarida brasiliensis*), Yuma myotis (*Myotis yumanensis*), big brown bat (*Eptesicus fuscus*), silver-haired bat (*Lasionycteris noctivagans*) and several other *Myotis* species. Colonial species with potential to occur in the Project area that will also roost in trees include California myotis (*Myotis californicus*), Yuma myotis, long-eared myotis (*Myotis evotis*), big brown bat, and pallid bat.

In addition, pallid bat (*Antrozous pallidus*), an SSC, may occur in the project area and will utilize tree cavities. This species is extremely sensitive to human disturbance of roosting sites. Another SSC, Townsend's big-eared bat (*Corynorhinus townsendii*), is known to rarely or occasionally use very large basal hollows in redwood trees and therefore is unlikely to use any of the trees within vineyard Blocks 1 or 2.

Colonial bats roost together in maternity roosts to raise young beginning in spring months into summer and concluding in early fall. Some bat species migrate to regions where they can remain active throughout the winter, but other species remain nearby or make smaller seasonal movements to winter roosts where they spend cold, rainy months in hibernation or in torpor (a light form of hibernation interspersed with occasional activity when weather conditions permit). In some cases, bat dispersing from maternity roosts may use dispersal roosts that differ from either maternity or winter roosts. Reproductive males generally roost separately from females and young during maternity season, either individually or in small groups in roosts referred to as bachelor roosts. Roosting activity in trees may occur throughout the year for many bat species. (WRA August 2019- **Exhibit B-1**).

The second category of bats that occur in the project area consists of solitary, obligate tree-roosting species that include western red bat (*Lasiurus blossevillei*) in California and hoary bat (*Lasiurus cinereus*). These species typically roost exclusively or almost exclusively alone in trees, with the exception of females when raising their young. Although solitary, obligate tree-roosting bat species do not typically form colonies, females often raise multiple pups that may remain with the mother after self-sufficient volancy (flight). These species generally select trees and sometimes shrubs that provide relatively high canopy densities, that include cottonwoods, oaks, sycamores, and walnuts. Habitat value of trees depends on availability of suitable roost features (cavities, crevices, exfoliating bark, foliage), which can vary depending on tree species, stem or limb diameter, and tree height. Suitable habitat is not limited to large trees. (WRA August 2019- **Exhibit B-1**).



Overall, less suitable potential bat roost habitat for either colonial or foliage roosting bats was available in Block 1 compared to Block 2. A larger number of snags with suitable colonial bat roost features occurred along the access road east of Block 2, and the project biologist observed more variation in tree communities and availability of suitable potential habitat along edge habitat within vineyard Block 2. Habitat suitability for colonial species was higher in the survey locations compared to the off-site preservation areas which were mostly forested and contained fewer snags and trees with suitable potential habitat features, taller canopy, and greater clutter.

Foliage habitat suitability for obligate tree-roosting bats also varied from low to high, but did not necessarily correspond to suitability of colonial bat habitat. Snags were found to be distributed through many of the Survey Locations, however a majority were either small in diameter, lower than 10 feet from the ground, contained roost features that were either exposed to light and airflow from above (snapped off at cavity), or were either partially obstructed by poison ivy, or clutter from nearby trees and vegetation. A few snags were prominent, had suitable sun exposure, and were of suitable size to provide habitat for colonial bats within vineyard Block 1.

Suitable potential habitat for foliage-roosting bats was lowest in savannah survey locations. Off-site, the denser canopy cover of the largely forested preservation areas could potentially provide abundant foliage habitat for obligate tree-roosting bat species. The Habitat Assessment (**Exhibit B-1**) and Tree Survey (**Exhibit B-2**) provided a characterization of the tree community within each surveyed location for each vineyard block and estimated the canopy cover percentage. Habitat for solitary species appears to have higher habitat suitability within the preservation areas, which consists of large trees with dense overall canopy.

While the proposed project includes measures (Environmental Commitments) to prevent and minimize direct mortality of bats during tree removal, resulting in less than significant impact to these species; there is a potentially indirect impact to these species as a result of potential habitat loss. To ensure the implementation of the proposed environmental commitments are consistent with, and in accordance with, California Department of Fish and Wildlife (CDFW) and County protocol and practice the following condition of approval will be implemented, should the project be approved, in addition to implementation of **Mitigation Measure BR-1**, which includes measures to compensate for loss of available habitat.

The project as proposed, including implementation of proposed environmental commitments as conditions of approval, and implementation of **Mitigating Measure BR-1** will result in less than significant impacts to special-status bat species and their habitat.

**Environmental Commitment - Bat protection condition:** A Qualified Biologist (defined as having demonstrable qualifications and experience with the particular species for which they are surveying) shall conduct a passive bat habitat assessment in order to identify suitable bat habitat trees within the project area(s): the preconstruction survey shall be conducted no earlier than 14 days prior to vegetation removal and ground disturbing activities are to commence. If the habitat assessment determines that trees proposed for removal contain suitable bat habitat, the following shall apply to potential bat habitat trees:

- i. Tree trimming and/or tree removal should only be conducted during seasonal periods of bat activity (August 31 through October 15, when young would be self-sufficiently volant and prior to hibernation, and March 1 to April 15 to avoid hibernating bats and prior to formation of maternity colonies), under supervision of a qualified biologist. Note that these windows may shift with atypical temperatures or rainfall. Trees should be trimmed and/or removed in a two-phased removal system conducted over two consecutive days. The first day (in the afternoon), limbs and branches would be removed by a tree cutter using chainsaws only. Limbs with cavities, crevices and deep bark fissures would be avoided, and only branches or limbs without those features would be removed. On the second day, the entire tree would be removed.
- ii. For removal of bat habitat trees outside the seasonal activities identified above (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 and/or removal to determine absence/presence of special-status bat species. Survey methods, timing, duration, and species shall be provided for review and approval by Napa County prior to conducting pre-construction surveys. A copy of the survey 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. 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 Conservation Division and CDFW. The removal or exclusion plan shall be implemented upon approval of the plan by the County Conservation Division.

**Mitigation Measure BR-1:** To minimize potential indirect impacts to special-status bat species habitat, the owner/permittee shall revise Erosion Control Plan #P19-00194-ECPA prior to approval to incorporate and implement the following measures:

- a. Within vineyard Block 1: Provide 8 Rocket-box bat houses (for locations see Exhibit B-1, Appendix F – Figure 10), and retain snags wherever safe, feasible.
- b. Within vineyard Block 2: Provide 6 Rocket-box bat houses (for locations see Exhibit B-1, Appendix F – Figure 10), and retain snags wherever safe, feasible.
- c. Bat Houses shall be installed of the same year as project implementation, and documentation shall be provided to the county that houses have been installed per this mitigation measure as part of ECPA Winterization Inspection.

**b-c.**

The project site contains oak woodland forest, non-native grassland and seasonal wetlands. Oak woodland forest occurs in valleys and gentle to steep slopes in moderately deep soils from Sonoma and Napa counties south to Santa Barbara County. Overall, 68%, or 29.1 acres, of the vegetation on the site would be preserved with the conversion of 32.6%, or 13.8 acres, into vineyard. Of the 13.8 acres that will be developed for vineyard 88% of that is coast live oak woodland which has less density of oak trees and much more grassland than the other oak woodland types in the project parcel, resulting in fewer trees being removed. Coast live oak woodland is the most common oak woodland type in the County (WRS August 2019 – **Exhibit B-1**). The oak woodlands to be avoided and preserved are the same or greater value for wildlife and plant habitat and also include a small stand/corps of Douglas Fir trees where a white-tailed kite was observed. The nesting habitat for these birds, and other wildlife, will be avoided under the proposed project's Environmental Commitments and conditions of approval.

The grassland habitat on site is highly disturbed and dominated by yellow star thistle. There is a small area of chamise chaparral that will be developed. There are other areas of this shrubland type in the overall area. The loss of 0.5-acres of chamise chaparral will not have an adverse impact to the local flora or fauna of the area.

The survey area contains approximately 0.1 acre of seasonal wetland located in the ephemeral drainage that separates vineyard Block 1 and Block 2 (WRA, August 2019 - **Exhibit B-1**). Wetland plants associated with this type include toad rush, spreading rush, Mediterranean barley and curly dock. A formal delineation of waters of the U.S. and state, including wetlands, was not conducted for the property so that any designation of wetlands is subject to verification by the USACE. However, areas that meet the criteria of waters and/or wetland were mapped based on the presence of wetlands plants and visual evidence of wetland hydrology. The potential seasonal wetland occurs within the non-native grassland vegetation type and the other drainages occur primarily within the coast oak woodland vegetation type. The acreage for this feature is included within the overall vegetation type.

Seasonal wetlands are known to occur from a variety of topographic positions and soil types where surface waters collect and flows are reduced, or subsurface waters approach the soil surface as a rising water table or seep. Indicators of wetland hydrology include flow patterns, sediment deposition, and algal mats (in micro-depressions). The seasonal wetland on site did not support ponding water, but it provided an above-ground moisture that is important to amphibians as they move across a landscape. The land use intensity associated with implementation of the proposed project (i.e. vineyard development and operation) is anticipated to be low with increments of moderate activity. The current project plans include a 50-foot buffer from the seasonal wetland to the vineyard rows and a 35' setback from the vegetated vineyard avenue. The vineyard avenue would be seeded with annual and perennial grasses and forbs and would be maintained with 85% ground cover that would be mowed and not disced. Because the existing seasonal wetland, located between Block 1 and Block 2, provides minimal functional value as wetlands, and due to the fact that the proposed 50-foot buffer and avenue design is expected to function similar to existing conditions, therefore no impacts to potential wetlands are anticipated.

The proposed project has been designed to include minimum stream setbacks from the unnamed blue line tributary located in the eastern end of the project parcel, the definitional stream and associated drainage course between Vineyard Blocks 1 and 2, and the <0.1 acres of identified seasonal wetland. The setbacks from the blue line tributary and definitional stream are in conformance with County Code Section 18.108.025 (General provisions – Intermittent/perennial streams). Therefore, the project has been designed to provide setbacks from aquatic features (i.e. ephemeral streams and wetlands) consistent with code requirements. Furthermore, project approval, if granted, would be subject to the following standard conditions to prevent the potential encroachment into stream and wetland setbacks required pursuant to Section 18.108.025 and Section 18.108.026, further protecting these aquatic resources during project implementation and operation resulting in a less than significant impact.

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

- The location of creek setbacks shall be clearly demarcated in the field with temporary construction fencing, which shall be placed at the outermost edge of required setbacks shown on the project plans. Prior to any earthmoving activities, temporary fencing shall be installed: the precise locations of said fences shall be inspected and approved by the Planning Division prior to any earthmoving and/or development activities. No disturbance, including grading, placement of fill material, storage of equipment, etc. shall occur within the designated areas for the duration of erosion control plan installation and vineyard installation. The protection fencing shall remain in place for the duration of project implementation and until wildlife exclusion fencing is installed as shown on the plans.
- All construction and related traffic will remain on the inside (vineyard block side) of the protective fencing to ensure that the creek, buffer zones, and associated riparian habitat and/or woodland remains undisturbed.
- 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 #P19-00194-ECPA shall be replaced on-site with fifteen-gallon trees at a ratio of 2:1 at locations approved by the planning director. A replacement plan shall be prepared for County review and approval, which includes, at a minimum, the locations where

replacement trees will be planted, success criteria of at least 80% and monitoring activities for the replacement trees. The replacement plan shall be implemented before vineyard planting activities. Any replaced trees shall be monitored for at least three years to ensure an 80% survival rate.

d.

The site/parcel includes existing deer fencing on portions of the parcel; fencing is proposed to be added which will surround vineyard Blocks 1 and 2 generally along vineyard block perimeter, while the remaining portions of the project site will remain unfenced. As a result, no potentially significant impacts to wildlife movement are anticipated. While the proposed vineyard blocks would result in portions of the site having reduced potential for on-site wildlife movement and use, the preservation/avoidance of approximately 28-acres of the subject parcel, as well as the condition of the surrounding lands, would continue to allow for movement through the vicinity. The proposed wildlife exclusion fencing would not interfere substantially with wildlife movement and impacts are expected to be less than significant. The proposed project would be consistent with General Plan Policy CON-18, which encourages the reduction of impacts to habitat conservation and connectivity.

While the proposed fencing would not result in significant impacts to wildlife movement and use, in order to ensure that wildlife exclusion fencing is installed in a manner that is consistent with CDFW recommendations to minimize impacts to wildlife movement, habitat use and availability, and vegetation removal the following condition of approval would be incorporated should the proposed project be approved.

**Fencing – Condition of Approval:**

The owner/permittee shall provide a revised Deer Fencing Plan for #P19-00194-ECPA, to be reviewed and approved by the PBES Director, that shall be incorporated into Erosion Control Plan #P19-00194-ECPA. The revised Deer Fencing Plan shall be submitted within 30 days of approval of #P19-00194-ECPA. New deer fencing (i.e. Wildlife Exclusion Fencing) shall be limited to the periphery of each Vineyard Block 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.
- Any modifications to the location of wildlife exclusion fencing as specified in Erosion Control Plan # P19-00194-ECPA pursuant to the Vineyard Fencing Plan required by this condition shall be strictly prohibited and shall require County review and approval to ensure the modified wildlife exclusion fencing location/plan would not result in potential impacts to wildlife movement.

Because wildlife nursery sites were not identified in the project site, there would be no impacts to wildlife nursery sites.

e.

Based on the Habitat Assessment (**Exhibit B-1**) and Tree Survey (**Exhibit B-2**), plant communities or alliances occurring within the project parcel include chamise chaparral (0.5 acres), coast live oak woodland (38 acres), non-native annual grassland (4.0 acre), and 0.4 acres of developed area (**Table 4**). The proposed project would result in the removal of 0.5 acres of chamise chaparral, 9.4 acres of coast live oak woodland, 3.5 acres of non-native grassland, and 0.4 acres of developed vineyard (**Table 4**). In terms of numbers of trees to be removed as part of the proposed project, approximately 660 trees with a 6-inch diameter breast height (dbh) or greater would be removed.

Oak woodland is the most common land cover in the county occurring on approximately 167,000 acres (33% of the County's area). Approximately 733 acres of oak woodland or 0.5% of the total area of oak woodland in the county has been cleared for residential and agricultural purposes between 1993 and 2002 (Napa County Baseline Data Report, Biological Resources Section, pages 4-22 and 4-25, Version 1, November 2005). While oak woodlands may be one of the most common land covers within the County, their past conversion to residential and agricultural uses in conjunction with foreseeable oak woodland conversion to agricultural use is considered a potentially significant impact on a cumulative level (Napa County General Plan, Draft Environmental Impact Report, Volume 1, Section 5.4 Biological Resources, Pacific Municipal Corporation, February 2007).

Napa County General Plan Conservation Element Policy CON-24 requires that oak woodland be maintained and/or improved to the extent feasible to provide for oak woodland and wildlife habitat, slope stabilization and soil protection, and species diversity. General Plan Conservation Element Policy CON-24c specifically provides for the preservation of oak woodland (on an acreage basis) at a 2:1 ratio where feasible, where preservation/avoidance of oak woodland is not feasible replacement of oak woodland at a 2:1 ratio is required.

The project parcel contains 38 acres of oak woodland; therefore, in order to ensure that a 2:1 ratio is maintained of 2 acres of oak woodland preserved for each 1 acre impacted, no more than 12.7 acres may be converted to vineyard. The proposed project will remove approximately 9.4 acres of oak woodland, which is less than the allowable 12.7 acres. Therefore, impacts are considered to be less than significant with respect to the 2:1 preservation ratio. Regarding individual tree removal, given the number of trees to remain with the parcel's 28.6-acres of oak woodlands the direct and indirect removal of up to 660 trees as a result of the project is considered to be less than significant.

Considering the size of the project and amount of oak woodland and associated habitat to remain and be preserved within the subject property and within an adjacent parcel as part of the project, potential direct impacts to oak woodlands are anticipated to be less than significant. However, the Preservation Areas that are proposed as part of the project to meet the intent of Policy CON-24c are not proposed to be permanently preserved. The lack of permanent preservation of the proposed Preservation Areas would be inconsistent with Policy CON-24c and considered a potentially significant to oak woodlands.

Further, there is the potential for significant indirect and cumulative impacts to oak woodlands and associated habitat through edge effects and future loss, in that project land preparation activities (i.e. land ripping) has the potential to negatively affect the root structures of trees and woodland along the boundaries of the development area.

The University of California, Division of Agricultural and Natural Resources (UC-ANR), and the County's *Voluntary Oak Woodland Management Plan* (Napa County, 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 decline<sup>10</sup>. Additionally, there is the potential for significant indirect and cumulative impacts to oak woodlands and associated habitat through future disturbance and/or removal, in that future loss could result in the preservation of on-site oak woodland below the 2:1 ratio provided for under General Plan Policy CON-24.

Therefore, **Mitigation Measure BR-2** will be implemented to reduce potential indirect and cumulative impacts to oak woodlands to a less than significant level. **Mitigation Measure BR-2** will include provisions to permanently preserve the proposed Preservation Areas through easement, deed restriction or other mechanism acceptable to the County and to eliminate grading or ripping in avenues and turnaround areas within the dripline of adjacent trees and woodland. Additionally, with implementation of **Mitigation Measures BR-1** and **BR-2**, and implementation of standard conditions of approval (should the application be approved), the proposed project would have less than significant impacts on special-status plants and wildlife, wildlife movement and result in conformance with policies protecting biological resources in the Napa County General Plan and Conservation Regulations.

**Mitigation Measure BR-2:** The owner/Permittee shall implement the following measures to reduce potential indirect and cumulative impacts to oak woodlands as a result of the project:

- a. The Project's Oak Woodland Preservation Areas (**Exhibit A-3**) shall be identified and designated for preservation in a mitigation easement with an accredited land trust organization such as the Land Trust of Napa County as the grantee, or other means of permanent protection acceptable to Napa County, as approved by the Director of PBES. Areas placed in protection shall be restricted from development and other uses that would potentially degrade the quality of the habitat (including but not limited to conversion to other land uses such as agriculture or urban development, and excessive off-road vehicle use that increases erosion), and should be otherwise restricted by the existing goals and policies of Napa County. The owner/permittee shall record the restriction prior to the commencement of any ground disturbing activities or vegetation removal, or within 12 months of project approval, whichever occurs first: in no case shall earthmoving activities or vegetation removal be initiated until said restriction is recorded. Any request by the owner/permittee for an extension of time to record the restriction shall be considered by the Director of PBES and shall be submitted to Napa County prior to the 12-month deadline and shall provide sufficient justification for the extension.
- b. Prior to any earthmoving activities temporary fencing shall be placed at the edge of the dripline of trees to be retained that are located adjacent to the project site (typically within approximately 50-feet of the project site). The precise locations of said fences shall be inspected and approved by the Planning Division prior to the commencement of any earthmoving activities. No disturbance, including grading, placement of fill material, storage of equipment, etc. shall occur within the designated protection areas for the duration of erosion control plan and vineyard installation.
- c. Where vineyard avenues and turnaround areas encroach into driplines, land preparation (i.e. grading and land ripping) shall be limited to planted areas of the vineyard, and no grading or land ripping shall occur within driplines of oak woodlands and trees to facilitate avenue construction: vineyard avenues may be disked to establish the specified vegetative cover. Prior to the commencement of any vegetation removal and earthmoving activities, the limits of land ripping shall be demarcated in the field, the precise locations of said demarcations shall be inspected and approved by the Planning Division.
- d. The Owner/Permittee shall refrain from severely trimming the trees (typically no more than 1/3<sup>rd</sup> of the canopy) and vegetation to be retained adjacent to the vineyard development/conversion area.
- e. In accordance with County Code Section 18.108.100 (Erosion hazard areas – Vegetation preservation and replacement) trees that are inadvertently removed that are not within the boundary of the project and/or not identified for removal as part of #P19-00194-ECPA shall be replaced on-site with fifteen-gallon trees at a ratio of 2:1 at locations approved by the planning director. A

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<sup>10</sup> The University of California – Division of Agricultural and Natural Resources, Publication 21577, "Vineyards in an Oak Landscape", 1998.

replacement plan shall be prepared for county review and approval, that includes at a minimum, the locations where replacement trees will be planted, success criteria of at least 80%, and monitoring activities for the replacement trees. The replacement plan shall be implemented before vineyard planting activities. Any replaced trees shall be monitored for at least three years to ensure an 80 percent survival rate. Replacement trees shall be installed and documented that they are in good health prior to completion and finalization of the erosion control plan.

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

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.

V.	CULTURAL RESOURCES. Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
	a) Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines §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 CEQA Guidelines §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 dedicated 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: Archeological Resource Service (ARS), November 13, 2018, Cultural Resource Evaluation of Trust Vineyard Partners, and Napa County, California.

ARS conducted an archeological evaluation of the project site which included a review of information on file with the California Historical Resources Information System Northwest Information Center to determine presence or absence of previously recorded historic or prehistoric cultural resources; a review of relevant historic references to determine the potential for historic era archaeological deposits or structure; and a surface reconnaissance survey of the all accessible parts of approximately 42.9-acre parcel, including the approximate 13.8-acre project site to locate any visible signs of potentially significant historic or prehistoric cultural deposits.

a-b. The cultural resource reconnaissance (ARS, November 13, 2018) identified no cultural resources within the project site. Furthermore, project approval, if granted, would be subject to the standard conditions identified below to protect cultural resources that may be discovered accidentally. Additionally, these conditions are also consistent with the project’s proposed Archeological Environmental Commitments the owner/permittee has included in the proposed project.<sup>11</sup>: As discussed in **Section XVII, Tribal Cultural Resources**, notice of the proposed project was sent to Middletown Rancheria, Mishewal Wappo Tribe of Alexander Valley, and Yocha Dehe Wintun Nation on April 18, 2019, and no requests for consultation were received. Therefore, with incorporation of the condition of approval, below, the proposed project would result in less than significant impacts to historic or archaeological resources.

c. The cultural resource reconnaissance did not locate any human remains in the proposed development area and does not anticipate the discovery of human remains due to 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

<sup>11</sup> The complete language of the Environmental Commitments can be found in **Exhibit A-1** under ‘General Notes’ in the ECPA plan set.

human remains would be less than significant.

**Cultural Resources – Conditions of Approval (CR-1):** 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 (RPA) and a Yocha Dehe Wintun Nation Tribal Cultural Monitor have had an opportunity to evaluate the significance of the find and suggest appropriate mitigation(s), as determined necessary.
- If human remains are encountered the Napa County Coroner shall be informed to determine if an investigation of the cause of death is required and/or if the remains are of Native American origin. Pursuant to Public Resources Code Section 5097.98, if such remains are of Native American origin the nearest tribal relatives as determined by the State Native American Heritage Commission shall be contacted to obtain recommendations for treating or removal of such remains, including grave goods, with appropriate dignity.
- All persons working onsite shall be bound by contract and instructed in the field to adhere to these provisions and restrictions.

VI.	ENERGY. Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
	a) Result in potentially significant environmental impact due to wasteful, inefficient or unnecessary consumption of energy resources during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Discussion:**

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

**a.**  
During construction of the proposed project, the use of construction equipment, truck trips for hauling materials, and construction workers' commutes to and from the project site would consume fuel. Project construction is anticipated to occur over six months. 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 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 39 percent of total statewide energy consumption in 2014 (U.S. Energy Information Administration 2016). 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 Napa County 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 mandates 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 USEPA 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<sup>13</sup>. The proposed project would comply with these State requirements; see the Air Quality conditions of approval. 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.

VII.	GEOLOGY AND SOILS. Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
	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 checked="" type="checkbox"/>
	ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 creating substantial direct or indirect risks to life or property? Expansive soil is defined as soil having an expansive index greater than 20, as determined in accordance with ASTM (American Society of Testing and Materials) D 4829.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Discussion:**

**a.**  
The project site could experience potentially strong ground shaking and other seismic related hazards based on the number of active faults in the San Francisco Bay region. The proposed project consists of earthmoving activities associated with the installation of erosion control measures for agricultural development but does not include the construction of new residences or other facilities (i.e., enclosed areas where people can

<sup>13</sup> California Code of Regulations (CCR), 2005. Title 13, Chapter 10, 2485, updated through 2014.

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 less than significant impact would occur. Additional information supporting this conclusion is identified below.

- i. No potentially active faults have been mapped on the project site; the nearest active faults are the West Napa fault approximately 1.3 miles southeast of the project site, and an unnamed fault located approximately 1.64 miles southeast. In addition, to the south, there is an identified thrust fault (0.55 miles) and an unnamed non-active fault (0.95 miles) (Napa County GIS: Faults and Earthquake Layers). A small landslide deposit was identified on the far western portion of the parcel located approximately 500 feet west of Block 2. No other landslides and areas of instability have not been identified within the project parcel or immediately adjacent areas (Napa County GIS: Landslide Polygon and Landslide Lines layers). Therefore, impact 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 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. A small landslide deposit was identified on the far western portion of the parcel located approximately 500 feet west of Block 2; the deposit is located well outside the proposed vineyard development areas. No other landslides and areas of instability have not been identified within the project parcel or immediately adjacent areas (Napa County GIS: Landslide Polygon and Landslide Lines layers). Therefore, impact would be less than significant.

**b.**

The project site's soils have been classified according to the Soil Survey of Napa County (USDA, 1978) as Hambright rock-outcrop complex 2 to 30% slopes, Hambright rock-outcrop complex 30 to 50% slopes, and Perkins gravelly loam 5 to 9% slopes (**Exhibits A-1, A-2, and Exhibit B-1**).

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 a variety of drainage systems, including diversion ditches, level spreaders, grassy swales, and rock energy dissipaters, as well as a no-till cover crop with vegetative cover densities of at least 85%. 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 David Steiner (CPESC/CPSWQ) for Applied Civil Engineering (**Exhibit C**), the proposed conversion of approximately 13.8 acres of oak woodland, non-native grassland and chaparral to vineyard and vineyard avenues is anticipated to reduce soil loss, or surface erosion, within the project site as compared to existing conditions (**Table 5**). Under existing conditions, the annual soil loss is anticipated to average 7.75 tons 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 6.29 tons per year, or a reduction of approximately 1.46 acres (19%) as compared to existing conditions.

**Table 5 – USLE Soil Loss Analysis**

Vineyard Block	Pre-project Soil Loss (tons/year)	Post-project Soil Loss (tons/year)	Difference	Percent Change (approximate)
Block 1, West	1.07	0.91	-0.16	-15%
Block 1, East	3.01	1.9	-1.11	-37%
Block 2, North	0.36	0.44	+0.08	+18%
Block 2, Mid-South	0.6	0.73	+0.13	+18%
Block 2, East	1.22	0.95	-0.27	-22%
Block 1, Southwest	1.1	0.93	-0.17	-15%
Block 2 West-North	0.30	0.22	-0.08	-27%
Block 2 West-South	0.39	0.21	-0.18	-46%
<b>Project Site Total</b>	<b>7.75</b>	<b>6.29</b>	<b>1.46</b>	<b>-19%</b>

Source: Applied Civil Engineering, September 2019 (**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 establishment, consist of permanent no-till cover, straw mulching, straw wattles, and other practices as needed.

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 no 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. Therefore, less than significant impacts would result from project implementation, if approved.

**c.**

As discussed above, the project site is not located in an area prone to landslides, ground failure or liquefaction. A small landslide deposit was identified on the far western portion of the parcel located approximately 500 feet west of Block 2; the deposit is located well outside the proposed vineyard development areas. No other landslides and areas of instability have not been identified within the project parcel or immediately adjacent areas (Napa County GIS: Landslide Polygon and Landslide Lines layers). However, the proposed project identifies the soil types in the project site and addresses any potential soil instability. Therefore, impacts from offsite landslides, lateral spreading, subsidence, liquefaction or collapse would be less than significant.

**d.**

The project site's soils have been classified according to the Soil Survey of Napa County (USDA, 1978) as Hambright rock-outcrop complex 2 to 30% slopes, Hambright rock-outcrop complex 30 to 50% slopes, and Perkins gravelly loam 5 to 9% slopes (**Exhibits A-1, A-2 and Exhibit B-1**). In addition, 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 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.**

There are no 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 relatively shallow vineyard), the probability of encountering paleontological resources within the project site is minimal. Furthermore, project approval, if granted, would be subject to the standard conditions described below that would avoid and reduce potential paleontological resource impacts. Therefore, impacts to geologic features and paleontological resources are anticipated to be less than significant.

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

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

VIII.	GREENHOUSE GAS EMISSIONS. Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
	a) Generate a net increase in greenhouse gas emissions in excess of applicable thresholds adopted by the Bay Area Air Quality Management District or the California Air Resources Board which may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	b) Conflict with a county-adopted climate action plan or another 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).<sup>12</sup> 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 or CAP) or other threshold determined on a case-by-case basis by the Lead Agency. If a project is consistent with the State’s long-term climate goals of being carbon neutral by 2045, then a project would have a less-than-significant impact as endorsed by the California Supreme Court in *Center for Biological Diversity v. Department of Fish & Wildlife* (2015) \*62 Cal. 4th 204). There is no proposed construction-related climate impact threshold at this time. 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.

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

Napa County has been working to develop a 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 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

<sup>12</sup> <https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines>, April 2022

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. Further, in the absence of quantitative GHG thresholds from BAAQMD or a qualified CAP for the County, a no net increase threshold is applied for the evaluation of GHG emissions generated by the proposed agricultural project. A no net increase threshold in GHG would ensure that the proposed project would not generate GHGs, either directly or indirectly, that may have a significant impact on the environment or conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHG.

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.

GHGs are the atmospheric gases whose absorption of solar radiation is responsible for the greenhouse effect, including carbon dioxide, methane, ozone, and the fluorocarbons, that contribute to climate change (a widely accepted theory/science explain human effects on the atmosphere). Carbon Dioxide (CO<sub>2</sub>) gas, the principal greenhouse gas (GHG) being emitted by human activities, and whose concentration in the atmosphere is most affected by human activity, also serves as the reference gas to compare other greenhouse gases. Agricultural sources of carbon emissions typically include vegetation removal and clearing, land-use changes, biomass burning, and farm equipment. Management activity emissions ([http://www.climatechange.ca.gov/glossary/letter\\_c.html](http://www.climatechange.ca.gov/glossary/letter_c.html)). Equivalent Carbon Dioxide (CO<sub>2</sub>e) 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 (BAAMD CEQA Air Quality Guidelines, May 2017). In this case, carbon dioxide (CO<sub>2</sub>) is used as the reference atom/compound to obtain atmospheric carbon CO<sub>2</sub> effects of GHG. Carbon stocks are converted to carbon dioxide equivalents (CO<sub>2</sub>e) 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://www.nciasi2.org/COLE/index.html>)

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 project site 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 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<sub>2e</sub> of construction equipment emissions for a 459-acre vineyard development, resulting in approximately 9.4 MT CO<sub>2e</sub> of construction equipment emissions per acre of vineyard development.<sup>13</sup> Using this emission factor it is anticipated that Construction Equipment Emissions associated with the proposed 13.8 gross acres of vineyard development would be approximately 129.7 MT CO<sub>2e</sub> (13.8 acres multiplied by 9.4 MT CO<sub>2e</sub>).

Carbon Stock Emissions: Carbon stock emissions from the project site are emissions resulting from vegetation removal and soil preparation associated with the conversion of approximately 13.8 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 Greenhouse Gas Emissions Checklist and associated carbon stock factors developed as part of the 2012 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 project site, total carbon stocks for the project site are estimated to be approximately 907.5 MT C or approximately 3330.5 MT CO<sub>2e</sub> (**Table 6**).

**Table 6 – Estimated Development Area Carbon Stocks/Storage**

Vegetation Type/Carbon Storage	Project Acreage	Carbon Storage/Stock per Acre (MT C/acre) <sup>1</sup>	Total Carbon Storage (MT)	Total Carbon Storage in MT CO <sub>2e</sub>
Developed/Grasslands	3.9	1.4	5.46	20.04
Oak Woodland	9.4	95.1	893.9	3280.8
Chaparral/Shrubland	0.5	16.2	8.1	29.73
<b>Total</b>			<b>907.5</b>	<b>3,330.5</b>

Sources: Napa County Draft Climate Action Plan, March 2012; Napa County Conservation Division, July 2022

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 20-25% while others have suggested 50%.<sup>14</sup> Using 50% as a more conservative estimate, the proposed project could result in one-time project site construction emissions from vegetation removal and soil preparation (i.e., grading and soil ripping) of approximately 3124.7 MT CO<sub>2e</sub> (**Table 7**).

**Table 7 – Estimated Project Carbon Emissions Due to Vegetation Removal**

Vegetation Type/Carbon Storage	Project Acreage	Carbon Loss/Emission per Acre (MT C/acre) <sup>1</sup>	Total Carbon Loss/Emission (MT)	Total Carbon Loss/Emission in MT CO <sub>2e</sub>
Developed/Grasslands	3.9	0.8	3.12	11.5
Oak Woodland	9.4	89.6	842.24	3,091.02
Chaparral/Shrubland	0.5	12.1	6.05	22.2
<b>Total</b>			<b>851.4</b>	<b>3,124.7</b>

Sources: Napa County Draft Climate Action Plan, March 2012; Napa County Conservation Division, July 2022

<sup>13</sup> 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.

<sup>14</sup> 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<sub>2e</sub> of operational emissions for a 560-acre vineyard, resulting in approximately 0.67 MT CO<sub>2e</sub> of operational emissions per acre of vineyard per year. Using this emission factor, it is anticipated that Operational Equipment Emissions associated with the proposed 13.8-acre agricultural development would be approximately 9.2 MT CO<sub>2e</sub> (13.8 multiplied by 0.67 MT CO<sub>2e</sub>).

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 0.45 CO<sub>2</sub> acre per year, while grasslands, shrublands and developed areas are essentially zero. The developed land use is not identified by the 2012 Draft CAP and is considered similar to grasslands (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 0.79 MT C per year or 2.9 MT CO<sub>2e</sub> per year<sup>15</sup>.

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 CO<sub>2</sub> loss from vineyard soils. Carbon sequestration loss would be further offset by the proposed vineyard, which would likely act as a sink for atmospheric CO<sub>2</sub>, 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 3254.4MT CO<sub>2e</sub> and annual ongoing emissions associated with vineyard operations (including loss of sequestration) estimated to be approximately 12.1 MT CO<sub>2e</sub> per year (**Table 8**).

**Table 8 – Estimated Overall Project-Related GHG Emissions**

Construction Emissions in Metric Tons of CO <sub>2e</sub>		Annual Ongoing Emissions in Metric Tons of CO <sub>2e</sub>	
Source	Quantity	Source	Quantity
Vehicles and Equipment	129.7	Vehicles and Equipment	9.2
Vegetation and Soil	3,124.7	Loss of Sequestration	2.9
<b>Total</b>	<b>3,254.4</b>	<b>Total</b>	<b>12.1</b>

Source: Napa County Conservation Division, April 2022

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 1,393.39 MT CO<sub>2e</sub> 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 (CCR), 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 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 0.0011% 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 85%, vegetated vineyard avenues, 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

<sup>15</sup> 13.8 acres of grassland times 0.057 MT C = 0.79 MT C

General Plan EIR.

As described above, total annual GHG emissions from ongoing operations are anticipated to be approximately 12.1 MT CO<sub>2e</sub> 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).

To offset potential GHG sequestration loss as a result project woodland removal, projects should permanently preserve at a minimum equal amounts of developable woodland (i.e. located outside of stream setbacks and on land with slopes less than 30%) as removed (i.e. a 1:1 ratio).. There is approximately 14-acres of developable oak woodland within the Subject/Project Parcel, as proposed the project would remove approximately 9-acres of developable oak woodland located within the Subject/Project Parcel. The proposed 33.1-acre Preservation Area consists of approximately 9.4-acres of oak woodland located on developable land, approximately 10.6-acres located outside of stream setbacks and on slopes 30-50%, and approximately 13.1-acres located either within stream setbacks or on slopes greater than 50%. As such, there is approximately 14-acres of developable oak woodland within the Project Parcel.

Given that the project would remove approximately 9-acres of developable oak woodland and permanently preserve 9.4-acres of developable oak woodland, in addition to another 23.7-acres of oak woodland, it is anticipated that potential GHG impacts associated with loss of carbon sequestration as a result of the project would be adequately offset, in that it would meet the 1:1 preservation ratio.

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 up to approximately up to 20 one-way worker trips, and two one-way truck trips per day (resulting in up to 44 round trips per day) for approximately three days per year. Other typical vineyard operations (as outlined above) are anticipated to generate up to 10 one-way 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 with mitigation incorporated would result in the permanent preservation of at least equal amounts of the carbon-sequestering woodland that it would removes, and that the operational vehicle miles traveled fall well below the established threshold of 110 daily trips, the project as mitigated would be consistent with the State’s long-term climate goals of being carbon neutral by 2045; therefore, a less than significant impact is anticipated.

IX.	HAZARDS AND HAZARDOUS MATERIALS. Would the project	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
	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 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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

excessive noise for people residing or working in the project area?

- f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?
- g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wild-land fires?

**Discussion:**

**a-b.**

Installation of the proposed ECP 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 proposed vineyard is provided within Supplemental Project Information forms on file at the Planning Department and **Table 9**.

**Table 9 – Itemized Fertilizer and Pesticide Information**

Constituent Type	Application Method	Application Amount	Number of Applications per Year	Annual Amount Used	Total Amount Used Overall
<b>Fertilizer</b>					
Sobek	Drip	8 gallons	4	32 gallons	358.4 gallons
<b>Mildewcides</b>					
Sulfur DF or eq.	Spray	3 pounds	2	6 pounds	67.2 pounds
Ralley or eq.	Spray	4 ounces	1	4 ounces	44.8 ounces
Stylet Oil or eq.	Spray	0.5 oz.	2	1 ounce	11.2 ounces
<b>Herbicides</b>					
Roundup or eq.	Spray	1 quart	2	2 quarts	22.4 quarts
Cayuse or eq.	Spray	1 pint	2	2 pints	22.4 pints

Source: Trust Vineyard Partners, April 19, 2019, Supplemental Project Information

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

There will no chemical storage facility on-site. Any chemicals for the vineyard development and maintenance will be stored in an existing locked barn located on 7353 St. Helena Highway (APN 027-500-032: Lands of Phillips TR Etal). Chemical mixing would also occur on this parcel. An overhead fill station will be located at the northeast end of proposed Vineyard Block 2, along the existing access road and outside of the required stream setbacks. The existing equipment storage area located at eastern corner of the subject parcel will remain, however this area shall not be used for new vineyard staging or mixing; as noted earlier these activities will occur on a neighboring parcel. Fertilizers would be applied as necessary to the vineyard, based on the different soil types on site, and to ensure the specified percent vegetative cover crop is achieved. No pre-emergent herbicides would be strip sprayed in the vine rows for weed management. All temporary debris, vegetation, soil and soil amendment stockpiles, storage or staging areas, if needed, will be located within the proposed vineyard project area. No long term-term stockpile will be kept within the vineyard development area. All rock will be disposed of within the proposed vineyard footprint by either being used in the new downslope vineyard avenue areas to create a level bench or being buried.

The unnamed tributary, southeast of the project parcel, meets the Napa County definition of a stream and the identified unnamed tributary has the appropriate setbacks (65 feet) consistent with Napa County Conservation Regulation 18.108.025. The drainage ditch running between vineyard Blocks 1 and 2 will also maintain at 25' buffer, while the identified seasonal wetland will maintain a 35' setback to the vineyard avenues and 50' to the vineyard planting area.

The risk of potentially hazardous materials reaching or affecting adjacent water courses or other aquatic resources is significantly reduced because: i) the proposed project would maintain buffers greater than 35 feet from the extrapolated stream; ii) project staging and storage areas would be a minimum of 50 feet from aquatic resources; 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 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.

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

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

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

**c.**  
The closest school (Yountville Elementary) is located approximately 1.8 miles to the southeast 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). Therefore, no impact would occur.

**e.**  
The closest public airport to the project site is the Napa County Airport and Angwin Airport, each located approximately 11.5 miles south and north (respectively) 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.**  
There would be negligible numbers of workers visiting the project site on a temporary basis for ECP and vineyard installation and on a seasonal basis for subsequent vineyard operations, resulting in no permanent substantial increase in the number of people working or residing at 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 no impact would occur.

**g.**  
No structures are proposed as part of the project. The project site is located in an area identified as having moderate severity (CALFIRE 2007 - <https://egis.fire.ca.gov/FHSZ/>). 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 impacts would be less than significant.

X.	HYDROLOGY AND WATER QUALITY. Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
a)	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	<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 which would:
- i) result in substantial erosion or siltation on- or off-site?
  - ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?
  - iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?
  - iv) impede or redirect flood flows?
- d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?
- e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

**Discussion:**

The County requires all discretionary permit applications (such as use permits and ECPAs) to complete necessary water analyses<sup>16</sup> 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.

On June 7, 2022, the Napa County Board of Supervisors provided interim procedures to implement provisions of the Napa County Groundwater Sustainability Plan (GSP) for issuance of new, altered or replacement well permits and discretionary projects that would increase groundwater use. The direction limits a parcel’s groundwater allocation to 0.3- acre feet per acre per year, or no net increase in groundwater use if that threshold is exceeded already for parcels located in the Groundwater Sustainability Agency (GSA) Subbasin. For parcels not located in the GSA Subbasin (i.e., generally located in the hillsides), a parcel-specific Water Availability Analysis would suffice to assess potential impacts on groundwater supplies. The project wells are located in the GSA Subbasin (**Exhibits E-1 and E-2**)

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

To assess the potential impacts of groundwater pumping on hydrologically connected navigable waterways and those non-navigable tributaries connected to navigable waters, the County’s WAA guidance requires applicants to perform a Tier 3 or equivalent analysis for new or replacement wells, or discretionary projects that would rely on groundwater from existing or proposed wells that are located within 1,500 feet of designated “Significant Streams”<sup>17</sup>

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

<sup>16</sup> The County’s Water Availability Guidelines (adopted May 2015).

<sup>17</sup> Refer to Figure 1: Significant Streams for Tier 3, located at [www.countyofnapa.org/3074/Groundwater-Sustainability](http://www.countyofnapa.org/3074/Groundwater-Sustainability). The “Significant\_Streams” and “Significant\_Streams\_1500ft\_buffer” GIS layers are published as publicly available open data through the County’s ArcGIS Online Account

that adversely impact a navigable waterway and that Counties are obligated to consider the doctrine, irrespective of the enactment of the Sustainable Groundwater Management Act (SGMA).

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

The project site is located in the Yount Mill Creek Drainage/sub-watershed. The Napa River is designated as 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 Clean Water Act. 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"<sup>18</sup>; 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 Board<sup>19</sup>.

One identified but unnamed blue line stream is located southeast of the subject parcel, which is likely jurisdictional under Section 404/401 of the CWA and Section 1602 of the CFGC. The proposed project has been setback from these features per NCC 18.108.025 (General Provisions – Intermittent/Perennial Streams) (discussed further in **Section IV [Biological Resources]**).

**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 #P19-00194-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 this impact would

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<sup>18</sup> 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.

<sup>19</sup> [https://www.waterboards.ca.gov/sanfranciscobay/water\\_issues/programs/agriculture/vineyard/](https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/agriculture/vineyard/)

be less than significant.

**b.**

A Tier 1 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 (Applied Civil Engineering, September 2019 - **Exhibit E-1**). 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. A WAA that includes a Tier 2 analysis (Well and Spring Interference Criterion) is not necessary for this project because there are no known non-project wells located within 500 feet of the project wells. A Tier 3 WAA was also prepared for the project (Richard C. Slate & Associates, October 2023 - **Exhibit E-2**) because the project wells are located within 1,500 of significant streams.

There is no well located or proposed on the Subject Property. The proposed vineyard would be irrigated using ground water supplied by three existing wells located on two adjacent properties, i.e. the Water Source Properties (**Exhibits E-1 and E-2**) that are under ownership in common with the ownership of the project applicant/owner: APN 027-381-015 and APN 027-500-032 (Lands of Phillips R Bruce Trustee ETAL)<sup>20</sup>. Groundwater from the three existing wells is currently used to irrigate approximately 70 acres of existing vineyard and to supply water to three residences and two pools located on APNs 027-500-032, 027-381-015, and 027-490-007 (referred to as the Study Area for the WAA). The project proposes 11.2 acres of new vineyard. The existing water use for the WAA Study Area is approximately 34 acre-feet per year (AF/yr) (2.45 AF/yr for residential uses and 31.5 AF/yr vineyard irrigation -70 acres x .45 AF/yr per acre). The proposed approximately 11.2 net planted vineyard acres is anticipated to utilize approximately 5.04 AF/yr, resulting in an overall increase in groundwater demand for the WAA Study Area from 34 AF/yr to 39 AF/yr for existing and proposed uses..

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. Because the project wells are located within the Napa Valley Floor and within the GSA Subbasin, the Tier 1 WAA evaluated the screening criteria (or allocation) is 0.3 AF/yr or no net increase if the allocation is already exceeded.

Based on the Project Tier 1 WAA there is approximately 141-acres of the Study Area that are within the GSA Subbasin resulting in a water use allocation of 42.3 AF/yr. As noted above these allocations are considered conservative because they may underestimate potential water recharge and availability, that is not included in the Project Tier 1 WAA Study Areas. As such, the potential groundwater recharge rate for the Tier 1 WAA is consistent with both the County’s current WAA Guidance document and the BOS’s June 2022 interim procedures limiting groundwater use within the GSA Subbasin to 0.3 AF/acre per parcel or no net increase. As proposed the project plus existing uses would utilize 39 AF/yr which is below the allocation of 42.3 AF/yr.

A Tier 3 WAA (or equivalent analysis) is the County’s adopted method for complying with its duties under the Public Trust Doctrine. As indicated above a Tier 3 is necessary because the project wells are within 1,500 feet of Hopper Creek and Yount Mill Creek, which are significant streams. The Project Wells proximity to these Significant Streams is shown in **Table 10**.

**Table 10 – Project Well Distance to Significant Streams**

Project Well	Approximate Distance To Hopper Creek	Approximate Distance To Yount Mill Creek
Well #1	498 feet	>1,500 feet
Well #2	>1,500 feet	179 feet
Well #3	1,071 feet	1,158 feet

Source: Richard C. Slate & Associates, October 2023 - **Exhibit E-2**

As disclosed herein and further detailed in the Projects Tier 3 WAA (Richard C. Slate & Associates, October 2023 - **Exhibit E-2**) the project wells comply with the WAA Guidance document because groundwater pumping from the project wells (Well #1, Well #2, and Well #3) at the subject property will not affect surface water flows, when present, in the reaches of Hopper Creek and Yount Mill Creek within 1,500 feet of these wells.

This lack of hydrologic connection is demonstrated by several factors, including:

- The intermittent flow character of Hopper Creek and Yount Mill Creek, near the subject property is demonstrated both by the work presented in the Groundwater Sustainability Plan (LSCE, 2022), RCS field observations, and by our independent review of “dry”

<sup>20</sup> The applicant also has access to approximately 4 AF of additional water that is collected in vineyard subsurface drainage systems (i.e. drantile system) located on APNs 027- 500-033, 027-381-002 & 027-381-003 (Lands of Beckstoffer). While this source is available it is not proposed and it is not utilized in this Initial Study as a water source for the project.

conditions via available Google Maps “Street View” imagery of these creeks. Neither creek is perennial, and both typically only have flow in the winter and spring months of the year.

- Review of driller’s descriptions of earth materials on available WCRs for onsite wells and wells proximal to the subject property illustrate that a low permeability sedimentary layer exists in the shallow subsurface beneath the subject property, separating deeper groundwater accessible to the onsite wells from the intermittent flows in both Hopper Creek and Yount Mill Creek. The known perforated intervals in the project wells are deeper than the low permeability materials layer and are likely separated from surface water flows that might be intermittently present in nearby portions of these creeks. In addition, for the project well without an available WCR (Well #1), the shallowest possible perforations in the well are below the cement seal and below the top of the low permeability layer, based on available data.
- Water levels measured in the existing onsite wells when they were constructed, and water level data collected more recently from a recent RCS field visit, are significantly deeper (37 feet or more) than the bed elevations of both Hopper Creek and Yount Mill Creek (see Figures 3A and 3B). The significant differences in elevations between groundwater levels beneath the subject property and the beds of Hopper Creek and Yount Mill Creek suggests that, in the vicinity of the subject property, a hydraulic connection does not exist between the project wells and surface water that might be intermittently present in the creeks.
- Modeling work described on Figure 6-123b of the Napa Valley Subbasin Groundwater Sustainability Plan (LSCE, 2022) suggests that only limited portions of Hopper Creek near the subject property are intermittently hydraulically connected to underlying groundwater. Furthermore, any connection that might exist would likely only extend into the shallowest surficial sediments beneath the subject property. No portion of Yount Mill Creek in the vicinity of the subject property is shown on Figure 6-123b of the local Groundwater Sustainability Plan to be hydraulically connected to groundwater.

Considering: i) anticipated annual water use of the proposed project and existing uses of approximately 39 AF/year is below the anticipated annual groundwater allocation of approximately 42.3 AF/yr within the GSA Subbasin; ii) there is no evidence to date indicating that there are groundwater problems or declining well production in the this area of the County; iii) that the project wells are hydrologically disconnected from designated significant streams in the area as not to harm a Public Trust resource, and iv) incorporation of the standard water use condition below to monitor water use as a result of vineyard establishment and ongoing vineyard operations and maintenance , the proposed project is anticipated to result in less than significant impacts to groundwater supplies, groundwater recharge, and local groundwater aquifer levels. The County has satisfied its duty to consider impacts to trust resources and no further analysis is required.

**Groundwater Management, Wells – Conditions of Approval:** This condition is implemented by the PBES Department:

The owner/permittee shall be required (at the permittee’s expense) to record well monitoring data (specifically, static water level no less than quarterly, and the volume of water no less than monthly) for the Project Wells. Such data shall be provided to the County upon request or 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 PBES 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 PBES determines that the well could be useful in supporting the program.

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

**Groundwater Management, Water Transfer – Conditions of Approval:**

- i. The planned transfer of groundwater from APN 027-381-015 and APN 027-500-032 (Lands of Phillips R Bruce Trustee ETAL) to store water in an existing pond on APN 027-500-016 (Lands of Willam Kelham Trustee), to ultimately irrigate the vineyard on the project parcel (APN 027-490-006: Lands of Trust Vineyard Partners), shall be documented and memorialized through the recordation of an “Agreement for Grant of Easement and Water Right”. The Agreement shall be on a form approved by the County and shall be recorded by the owner/permittee prior to commencement of any activities authorized by #P19-00194-ECPA.
- ii. The planned transfer of groundwater from an existing pond on APN 027-500-016 (Lands of William Kelham Trustee) to irrigate the vineyard on the project parcel (APN 027-490-006: Lands of Trust Vineyard Partners), shall be documented and

memorialized through the recordation of an “Agreement for Grant of Easement and Water Right” as described in Appendix E of the Water Availability Analysis Guidance Document (Napa County, 2015). The Agreement shall be on a form approved by the County and shall be recorded by the owner/permittee prior to commencement of any activities authorized by #P19-00194-ECPA.

**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 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 a no-till cover crop with vegetative cover density of 85% 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 **Exhibits A, C and D** for details related to the following discussion.

Proposed erosion control and project features that have the potential to alter natural drainage patterns include straw wattles and water bars. Straw wattles would be placed on contour at various locations around the perimeter of the vineyard blocks and within vineyard avenues to slow and maintain surface/sheet flow. Straw wattles are spaced according to the USLE to maintain soil losses below the tolerable levels for the soil types found on the site and to ensure (in conjunction with the cover crop and other runoff control features) that no net increase in erosion sediment conditions occurs beyond pre-development conditions as a result of the project. The design and location of straw wattles and water bars would have a negligible effect on existing drainage patterns in that they would not alter the existing topographic contours of the site.

Proposed diversion ditches, and drainage catchments have a greater potential to alter drainage patterns, in that they are designed to capture sheet flow before reaching erosive velocities and divert it to other locations (including a rock apron) within the project area. While this erosion control measure would have the potential to divert water to other locations within the project area, their limited use and that they do not divert water into different drainage areas or drainage courses, this feature is not anticipated to substantially alter the overall drainage patterns within the project site or the surrounding area.

A Hydrologic Analysis for the project was prepared by David Steiner for Applied Civil Engineering (Hydrologic Analysis - **Exhibit D**). The Analysis identified one large watershed (comprising a 300-acre drainage of the blue line stream located just east of the subject parcel) which, due to its size, might mask the hydrologic impacts of the small vineyard development project. As such, the larger watershed was broken down into discrete, deliberately drawn, drainage basins to isolate the project’s components in their more immediate hydrologic context. The Analysis utilized the TR-55 hydrologic analysis method. The Analysis concluded that there would be a very minor reduction in runoff for all watersheds. Pre- and post-project runoff calculations for each watershed as summarized in **Table 11**<sup>21</sup>.

**Table 11 – Hydrologic Modeling Calculations (TR-55) Results: Runoff Rates**

	Peak Discharge Flow (cfs) by 24-hour Storm Event Frequency Return Interval (cubic feet/second)					
	2-year	5-year	10-year	25-year	50-year	100-year
<b>Subwatershed AB</b>						
Pre-project conditions	1.61	2.39	3.03	3.89	4.54	5.19
Post-project conditions	1.61	2.37	2.99	3.83	4.45	5.08
<b>Change</b>	0	-0.02	-0.04	0.06	-0.09	0.11
<b>Subwatershed C</b>						
Pre-project conditions	10.53	15.55	19.66	25.17	29.31	33.43
Post-project conditions	10.53	15.39	19.36	24.67	28.66	32.64
<b>Change</b>	0	-0.16	-0.30	-0.50	-0.65	-0.79

Source: David Steiner (CPESC, CPSWQ) for Applied Civil Engineering, March 2019 (revised September 2019, Hydrology **Exhibit D**)

General Plan Conservation Element Policy CON-50c states that peak runoff following development cannot be greater than predevelopment conditions. As demonstrated above, the proposed project would not increase runoff flow rates, and, therefore, is consistent with Policy CON-50c. 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, 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.

<sup>21</sup> In December 7 2020, the County Engineering Division determined the project’s modeling technical adequate.

As discussed above, no 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 project has been completed and stable for three years to ensure that the implemented erosion control plan is functioning properly<sup>22</sup>.

d.

The project site is not located within a Federal Emergency Management Agency (FEMA) 100-year flood zone, in a dam or levee failure inundation area, or in an area subject to seiche or tsunami (Napa County GIS FEMA flood zone and dam levee inundation areas layers; Napa County General Plan - Safety Element. pg. 10-20). Therefore, no impact would occur.

e.

The proposed project would not have an adverse impact on water quality because the ECPA has been designed to keep polluted runoff and sediment from leaving the project area and 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 ECPA adjacent to drainage courses 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 have an effect on water resources. Because the project as designed is not expected to increase runoff rates or times of concentration in relation to existing conditions (as discussed in response 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 area. As such, the proposed project is anticipated to reduce soil loss and sedimentation, have no 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, in addition to the Erosion and Runoff Control (i.e., Hydromodification) Installation and Operation conditions of approval identified in **Section VII (Geology and Soils)**, which would further reduce and avoid potential impacts to water quality as a result of the 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, water courses, 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 (should the proposed project be approved), would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan; resulting in no impact.

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<sup>22</sup> Compliance with Section 18.108.135 is achieved by including their provisions as conditions of approval for a project, if granted.

XI.	LAND USE AND PLANNING. Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
	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-b.**

The proposed site is in a rural area of Napa County and the nearest established community, Yountville, is approximately 1.6 miles southeast of the project site. Therefore, the proposed vineyard and subsequent vineyard operations would not physically divide an established community and no impact would occur.

Surrounding land uses consist predominantly of undeveloped land and scattered rural residential, and vineyards. Surrounding parcels are zoned Agricultural Watershed (AW) and Agricultural Preserve (AP) and designated Agriculture, Watershed and Open Space (AWOS) and Agricultural Preserve (AP) 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 project as proposed 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 19% and maintain runoff conditions, if not slightly reduced, as compared to existing conditions.
- The proposed project is consistent with Policies CON 48 and CON 50c, which require pre-development sediment erosion conditions and runoff characteristics following development not be greater than predevelopment conditions. As discussed in **Section VII (Geology and Soils)** and **Section X (Hydrology and Water Quality)** the project as proposed would reduce soil loss, sedimentation, and maintain runoff characteristics as compared to existing conditions.
- The proposed project 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 resource Habitat Assessment and Tree Survey were prepared for the proposed project. The project as proposed would avoid potential direct, indirect, and cumulative impacts to special-status plant species and associated habitat occurring on the project site. With implementation of the Project's Environmental Commitments, **Mitigation Measures BR-1**, and standard conditions of approval, potential impacts to special-status bat and bird 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 while allowing for 13.8 gross (11.2 net acres) of additional agriculture to be developed and operated on the project site.
- With implementation of **Mitigation Measure BR-1**, the Project's Environmental Commitments, and conditions of approval, the proposed project is consistent with Goals CON-2 and CON-3, which require the continued enhancement of existing levels of biodiversity and protection of special-status species and habitat, and the County Conservation Regulations through preservation of natural habitats and existing vegetation. With these measures and conditions, the proposed project would maintain levels of biodiversity and would avoid impacts to special-status plant and animal species.
- The project would be consistent with General Plan Policy CON-24(c), which requires the preservation of like habitat at a 2:1 ratio through the permanent preservation of 33.1-acres of oak woodland that consists of approximately 28.6-acres of the subject parcel's remaining oak woodland, and approximately 4.5-acres of oak woodland on an adjacent parcel, through deed restriction or conservation easement, and would require that trees inadvertently removed would be replaced with fifteen-gallon trees on-site at a 2:1 ratio, in accordance with County Code Section 18.108.100 (Erosion hazard areas – Vegetation preservation and replacement).
- As proposed, the project is consistent with CON-16, which requires discretionary projects prepare an evaluation of biological resources. A Habitat Assessment was prepared for the proposed project (**Exhibit B-1**).

- The proposed project is consistent with Policy CON-30 and NCC Section 18.108.026, which encourages the avoidance of wetlands, as the project avoids and maintains appropriate buffers for the identified seasonal wetland between vineyard Blocks 1 and 2 (**Section X Hydrology and Water Quality**).
- The proposed project as proposed is consistent with Policy CON-18, which encourages the reduction of impacts to habitat conservation and connectivity.
- The project as proposed 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 in part due to the proposed 33.1-acre Oak Woodland Preservation Area, 9.4-acres of which are on developable lands to offset the removal of approximately 9-acres of developable oak woodland.
- The project as proposed 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 project as proposed is consistent with General Plan land use designation of Agricultural, Watershed and Open Space (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 goal.

XII.	MINERAL RESOURCES. Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
	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.**

Historically, the two most valuable mineral commodities in Napa County in economic terms have been mercury and mineral water. More recently, building stone and aggregate have become economically valuable. Mines and Mineral Deposits mapping included in the Napa County Baseline Data Report (Mines and Mineral Deposits, BDR Figure 2-2) indicates that there are no known mineral resources nor any locally important mineral resource recovery sites located on the project site. Proposed site improvements and development of vineyard on the parcel would not physically preclude future mining activities from occurring. No impacts would occur.

XIII.	NOISE. Would the project result in:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
	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 a 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 agricultural, planted with vineyards, or developed with rural residences. The two closest residences are located approximately 165 feet east and 270 feet southeast of proposed Block 2. There are two other residences located within 600 feet of the proposed vineyard development: a residence located approximately 250 feet northeast of proposed Block 1 and a residence located approximately 350 feet southwest of proposed Block 2. These residences are under the ownership or in common ownership with the project applicant. The nearest residences to the project site that are not under the ownership or common ownership of the applicants are over 2,000 feet away to the northeast. The closest residential area (Yountville) is approximately 1.6 miles southeast of the project. Additionally, adjacent properties in the immediate area contain vineyard.

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 bulldozer, excavator, dump truck, trencher, backhoe, and small trucks. **Table 12** characterizes typical equipment noise levels at a reference distance of 50 feet. As identified in **Table 12**, equipment used for vineyard development could produce a maximum of 89 (A-weighted decibels) dBA at a distance of 50 feet.

**Table 12 – 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 13** 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 13 – Estimated Distance to dBA Contours from Construction Activities <sup>1</sup>**

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

<sup>1</sup> Based on a source noise level of 90 dBA

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

Based on distances to existing residences that are not under the ownership or common ownership of the applicant's, noise associated with project construction would be approximately 50 dBA at these nearest existing offsite residences: the nearest residences to the project site that are not under the ownership or common ownership of the applicants are over 2,000 feet to the northeast.

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 14** 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 14 – Estimated Distance to dBA Contours from Farming Activities <sup>1</sup>**

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

<sup>1</sup>Based on a source noise level of 84 dBA

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

Based on distances to existing residences that are not under the ownership of common ownership of the applicant's, it is anticipated that noise due to operation and maintenance agricultural activities would be 50 dBA at these 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). 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. Additionally, the proposed project includes Noise Minimization Environmental Commitments to further reduce potential noise impacts associated with project development. For the reasons outlined above, noise impacts associated with the project would be less than significant.

**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.

XIV. POPULATION AND HOUSING. Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
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 of the proposed project would generate a minimal number of employees to the project site on a temporary basis, and ongoing vineyard operation and maintenance would generate a minimal number of employees to the project site on an ongoing basis. It is anticipated that these employees 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.

XV.	PUBLIC SERVICES. Would the project result in:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
	a) 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 employees 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.

XVI.	RECREATION. Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
	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.

XVII.	TRANSPORTATION. Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
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 section 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) that the County expects development projects to achieve a 15% reduction in project-generated VMT to avoid triggering a significant environmental impact. Specifically, the policy directs project applicants to identify feasible measures that would reduce their project’s VMT and to estimate the amount of VMT reduction that could be expected from each measure. The policy states “projects for which the specified VMT reduction measures would not reduce unmitigated VMT by 15% or more shall be considered to have a significant environmental impact.” That policy is followed by an action item (CIR-7.1) directing the County to update its CEQA procedures to develop screening criteria for projects that “would not be considered to have a significant impact to VMT” and that could therefore be exempted from VMT reduction requirements.

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

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

more net new daily vehicle trips.

The TIS Guidelines also include VMT analysis requirements for projects based on trip generation, which includes a screening approach that provides a structure to determine what level of VMT analysis may be required for a given project. For a new project that would generate less than 110 net new daily vehicle and truck trips, not only is the project not required to prepare a TIS, 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 contains 0.4 acres of fallow vineyard, an existing access road and utilities. The project site is accessed from a private driveway that connects with Highway 29 approximately 0.6 miles east. Trucks and other equipment would use County roads or State highways for very short periods during construction and subsequent vineyard operation.

The proposed project is expected to generate up to approximately 30 trips per day during construction depending on the construction activity (land preparation, erosion control measure installation, and vineyard installation/planting). Typical construction equipment anticipated for project implementation includes a medium excavator, bulldozer, haul trucks, loader, and farm tractors with trailers. After vineyard installation operational trips that include but are not limited to pruning typically occurring between March and April, weed control occurring between May and July and harvest occurring in September and October, are anticipated to generate up to 10-20 trips. Vehicular equipment for ongoing vineyard maintenance is anticipated to include, tractors, truck and equipment trailers, and passenger cars and/or light trucks. Construction traffic would be intermittent during non-peak hours, generally arriving between 6 a.m. and 7 a.m. and departing between 2 p.m. and 3 p.m. Traffic associated with routine vineyard operation and maintenance, including harvest, would also be intermittent during the non-peak hours, generally arriving around 6 a.m. and departing around 3 p.m.

Because the proposed project would be expected to generate up to approximately 30 daily trips during construction and 10-20 daily trips for ongoing operations and maintenance, is 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 project proposes to utilize the existing site access road for project development. This road is located at southeastern portion of the parcel and connects to an existing private drive that intersects with Highway 29 approximately 0.6 miles east (**Figures 1-3**). The proposed project does not include roadway improvements and/or modifications to said existing driveway 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 property and other Agricultural Watershed and Agricultural Preserve zoned properties as well as agricultural uses in the area. Therefore, the potential for the creation, substantial increase in hazards or hazards due to a geometric design feature and 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.

**e.**  
The project's largest demand for parking during either construction or operations is anticipated to be approximately 15 to 20 vehicles. Current county ordinances do not require formal parking for agricultural projects. Project parking would occur within the project area and/ vineyard avenues and access roads, which would satisfy parking demands of project installation and subsequent operation. Therefore, no parking impacts are anticipated.

**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:

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k); or	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

**Discussion:**

Notice of the proposed project was sent to Middletown Rancheria, Mishewal Wappo Tribe of Alexander Valley, and Yocha Dehe Wintun Nation on April 18, 2019. None of the tribes requested consultation within the 30-day notification period, and because no response to the consultation invitation was received, the consultation timeframe elapsed. Official Closure letters were mailed out on June 3, 2019.

**a-b.**  
As discussed in **Section V (Cultural Resources)**, the proposed project's Cultural Resource Reconnaissance did not identify any historical or archaeological resources within the project area, although the probability of encountering cultural resources was determined to be high. As noted above, the Middletown Rancheria determined that incorporation of the County's standard Cultural Resources Condition of Approval (identified in **Section V (Cultural Resources)**) would provide adequate protection for and avoidance of potential impacts on Tribal Cultural Resources. Therefore, the proposed project would result in less than significant impacts to Tribal Cultural Resources, including those that may be eligible for the CHRIS or local register, or cultural resources as defined in Public Resources Code Section 5024.1(c).

XIX.	UTILITIES AND SERVICE SYSTEMS. Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
	a) Require or result in the relocation or construction of a 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 wastewater 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 employees to the property on a temporary basis during construction and planting, and ongoing vineyard operation and maintenance would generate a minimal number of employees to the property on an ongoing basis. It is anticipated that these employees 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 three existing groundwater wells would provide irrigation water to the vineyard.

Irrigation pipelines would be located within vineyards and vineyard avenues, and/or within proposed clearing limits. The proposed project would include the installation of onsite storm water drainage features such as straw wattles, a permanent no-till vineyard cover crop, drainage ditches, rolling dips, rock-filled avenue and rock apron at outfalls, which have been designed to meet project-related storm water drainage needs. The effect of the proposed storm water drainage system 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 approximately 13.8 gross acres of vineyard (approximately 11.2 net acres) would be supplied by groundwater supplied by existing wells. It is anticipated that after full development over three years, water use for the 11.2-net acres of proposed vineyard, in addition to existing vineyard and residential use, is estimated to be approximately 39. acre-feet of water per year, which is below the anticipated annual groundwater allocation of approximately of 42.3 AF/yr within the GSA Subbasin. Therefore, the proposed project, in conjunction with existing uses, is anticipated to have less than significant impact on water supplies. Also see **Section X (Hydrology and Water Quality)** for additional disclosures and analysis.

**c.**

Given the small number of employees that the 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 primarily in creating the new downslope vineyard avenues to create a level bench or being buried back into the vineyard. Rock not used immediately would be stockpiled for future use inside the proposed clearing limits. Solid waste generated during construction activities (e.g., broken pipe, fittings, trellis, end posts, etc.) would be negligible. 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.

XX.	WILDFIRE. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
	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 Very High Hazard Severity Zone and is within a Federal Responsibility Area (CALFIRE, 2007, Napa County GIS Fire Hazard Layer). The project site is gently to steeply sloped on generally eastern-facing slopes and elevations range from approximately 230 to 635 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. Also see **Section XVII (Transportation)** 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 due to the short duration of construction (approximately six months). Operation and maintenance activities would be similar to activities already occurring on abutting properties. The proposed project does not include any infrastructure that would exacerbate fire risk. 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, the proposed project includes temporary and permanent erosion control measures which would reduce the impact of stormwater runoff or drainage changes being discharged on or offsite and there would be a decrease in peak flow in the development area (see **Section X [Hydrology and Water Quality]**). There are no existing or proposed on-site residences or structures. 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.

XXI.	MANDATORY FINDINGS OF SIGNIFICANCE	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
a)	Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b)	Does the project have 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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c)	Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Discussion:**

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

**a.**

As discussed in this Initial Study, implementation of #P19-00194-ECPA, with the incorporation of identified conditions of approval (should the proposed project be approved), would not have the potential to significantly degrade the quality of the environment.

Implementation of conditions of approval and mitigation measures would avoid potential direct and indirect impacts to special-status birds and bats, and their habitat. Existing deer fence cuts through the parcel, this is proposed to be removed, with new fencing to be placed around the proposed 13.8 vineyard development area. Given the small size of the project site 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. The retention of blocks of oak woodland (28.6 acres) within the northern and western portions of the property and the 65’ setback to the identified stream, located just outside the subject parcel, provide direct connectivity to other woodland and riparian areas allowing movement corridors of similar habitats on neighboring properties would allow for continued local wildlife movement. 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 of conditions of approval, the proposed vineyard development project would have a less than significant potential to degrade the quality of the environment.

**b.**

The project site is located within the Yount Mill Creek Drainage. The Yount Mill Creek Drainage contains approximately 2,230 acres. Since 1993 approximately 88 acres of additional vineyard (or 4% of the drainage) have been developed to vineyard. This project proposed to remove 9.4 acres of oak woodland and approximately 1.5 acres of shrubland, grassland and fallow vineyard. However, the project proposes to preserve 28.6 acres of oak woodland on the property (75%), as such watershed development change would be minimal. The total conversion area of the watershed developed to vineyard results in approximately 0.006% of the drainage (or approximately 13.8 acres) containing vineyard.

It is estimated, based on evaluation of the County's GIS layer identifying Potentially Productive Soils (PPS) within the Yount Mill Creek Drainage, that there are approximately 417 acres (19% of the drainage) having the potential to be developed to vineyard, this in conjunction with existing and approved vineyard development (approximately 990 acres) results in a total potential build out of approximately 1,407 acres or approximately 63% of the drainage. The PPS layer includes lands with characteristics that have been found to be suitable for potential future vineyard development; however this total does not take into consideration other site-specific limitations such as water courses requiring setbacks, wetlands, other water features, rare or special-status plants and animal species, or cultural resources, nor does the layer take into account other factors influencing vineyard development, such as sun exposure, soil type, water availability, or economic factors.

While it is not possible to quantify precisely the acreage and location of additional vineyard development that may be proposed by property owners in these drainages in the future, it is possible to make a conservative estimate based on previous trends. To estimate the amount reasonably foreseeable vineyard that may be developed over time, the acreage of vineyard development including approved vineyard projects in the cumulative environment (i.e., Tulucay Creek Drainage) over the last 26 years (1993-2020) were used to project an estimation of vineyard development for the next three to five years. Over the past 26 years within the Tulucay Creek Drainage, approximately 12 acres of agriculture were developed per year (329 divided by 27). 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 36 to 60 acres over the next three to five years within the Tulucay 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 (#P19-00194-ECPA) includes the removal of vegetation and installation of vineyard and erosion control measures concurrent with other projects in the air basin that would generate emissions of criteria pollutants, including suspended particulate matter (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 gases that contribute to climate change (**Tables 5 and 6**). As discussed in **Section VIII (Greenhouse Gas Emissions)**, the proposed project is not anticipated to result in substantial or significant GHG emissions and includes a 33.1-acre Preservation Area and the installation of grapevines and a permanent no-till cover crop, which off-set 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:***

A project specific Biological Resources Assessment with Botanical Survey was 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 survey included a records search to identify the presence or potential presence of special-status species within the project area. The records search included the USFWS, CNDDDB, and CNPS databases. As discussed in **Section IV (Biological Resources)**, no special-status plant species were identified in the project site.

While there is an existing seasonal wetland identified between Blocks 1 and 2 it did not contain special-status plants, and the project as designed avoids this wetland. Impacts on special status species would be less than significant through the implementation of the Project's Environmental Commitments, **Mitigation Measures BR-1** and **BR-2**, and as conditioned. By project design, no impacts to waters of the U.S. would occur. Therefore, the proposed project would not contribute to a cumulatively significant impact to special-status plants and animals or habitats, or to oak woodlands.

#### ***Cultural and Tribal Resources – Sections V and XVIII:***

No cultural resources were identified in the project site. 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 as compared to existing conditions (**Table 5**). 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, and by drainage ditches, rock apron, and grassy swale, which would capture sediment and slow runoff, thereby reducing soil loss potential. Because the proposed project would reduce soil loss as compared to existing conditions the proposed project is not anticipated to contribute cumulatively to sediment production within the Yount Mill Creek Drainage; therefore, impacts associated with soil loss and associated sedimentation are not considered cumulatively significant.

Because geologic impacts associated with future agricultural projects would receive the same scrutiny under CEQA, the County's General Plan Goals and Policies, in particular General Plan Conservation Element Policy CON-48 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.

#### ***Hydrology and Water Quality - Section X:***

The proposed vineyard would be irrigated using ground water supplied by three wells and subsurface drainage systems located on nearby properties (**Exhibits E-1, E-2, Exhibit F**). Groundwater is currently used to irrigate approximately 70 acres of vineyard and to supply water to three residences and two pools located on APNs 027-500-032, 027-381-015, and 027-490-007 (referred to as the Study Area for WAA). The project proposes 11.2 acres of new vineyard with no other changes to the subject parcel or water study area. The approximate existing water use for the WAA Study Area is 34 AF/yr (2.45 residential and 31.5 vineyard irrigation). The proposed vineyard that includes approximately 11.2 net planted acres is anticipated to utilize approximately 5.04 AF/yr, resulting in an overall increase in groundwater use of 39 AF/yr. (2.45 residential and 36.54 vineyard irrigation) of groundwater annually. The project wells are located within the Napa Valley Floor and the GSA Subbasin; therefore the acceptable water use screening criterion (or allocation) is 0.3 AF/yr. Based on the Project Tier 1 WAA there is 141-acres of the Study Area that are within the GSA Subbasin resulting in a water use allocation of 42.3 AF/yr. As proposed the project plus existing uses would utilize 39 AF/yr which is below the 42.3 AF/yr allocation. Therefore, potential impacts associated with groundwater use is anticipated to result in less than significant impacts to groundwater supplies, groundwater recharge, local groundwater aquifer levels, and well interference or drawdown effects on nearby wells.

A Tier 3 WAA has also been prepared (Richard C. Slate & Associates, October 2023 - **Exhibit E-2**) and the project wells comply with the WAA Guidance document because groundwater pumping from the project wells (Well #1, Well #2, and Well #3) at the subject property will not affect surface water flow in the reaches of Hopper Creek and Yount Mill Creek that are within 1,500 feet of these wells. Considering: i) that the project wells are hydrologically disconnected from designated significant streams in the area as not to harm a Public Trust resource, and the County has satisfied its duty to consider impacts to trust resources and no further analysis is required.

As discussed in **Section X.c (Hydrology and Water Quality)** a Hydrologic Analysis utilizing the TR-55 Runoff Model has been prepared by David Steiner (CPESC, CPSWQ) for Applied Civil Engineering, March 2019 (revised September 2019). The project does not include the creation of concentrated flows, or materially alter site drainage patterns, or materially alter site slopes no change in runoff volumes or time of concentrations are expected as compared to pre-project conditions, therefore no significant impacts due to changes in hydrology are expected.

The project is consistent with General Plan Conservation Element Policy CON-50c that 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 be designed so that peak runoff following development is not greater than predevelopment conditions, it is reasonable 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 identified mitigation measures and conditions of approval in this Initial Study, achieves compliance with applicable NCC requirements and General Plan Goals and Policies (also see **Section VIII [Greenhouse Gas Emissions]**).

#### **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, Hazards and Hazardous Materials, 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 does not conflict with any current zoning for agricultural or forestry use, nor does the proposed project conflict with the any applicable land use plan, policies, or regulation as mitigated and conditioned. 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, the proposed project would not adversely impact current or future public services or require the need for utilities and service systems. 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 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 this proposed project that may be individually limited, but cumulatively considerable, would be less than significant.

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], XVI [Recreation] XVII [Transportation], XIX [Utilities and Service Systems], and XX [Wildfire]**). The proposed project, the use of the property, and reasonably foreseeable projects would be activities at a level of intensity considered normal and reasonable for a property within 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 (2021 Aerial)
- Figure 3 Project Area

**LIST OF TABLES:**

- Table 1 Implementation Schedule
- Table 2 Annual Operations Schedule
- Table 3 Emissions from Vineyard Development and Operation
- Table 4 Vegetation Community and Acreage Removed and Preserved as a Percentage of the Total Acreage
- Table 5 USLE Soil Loss Analysis
- Table 6 Estimated Development Area Carbon Stocks/Storage
- Table 7 Estimated Project Carbon Emissions Due to Vegetation Removal
- Table 8 Estimated Overall Project-Related GHG Emissions
- Table 9 Itemized Fertilizer and Pesticide Information
- Table 10 Project Well Distance to Significant Streams
- Table 11 Hydrologic Modeling Calculations (TR-55) Results: Runoff Rates
- Table 12 Construction Equipment Noise Emission Levels
- Table 13 Estimated Distance to dBA Contours from Construction Activities
- Table 14 Estimated Distance to dBA Contours from Farming Activities

**LIST OF EXHIBITS:**

- Exhibit A-1 Agricultural Erosion Control Plan
- Exhibit A-2 Erosion Control Plan Narrative
- Exhibit A-3 Oak Woodland Preservation Exhibit
- Exhibit B-1 Habitat Assessment
- Exhibit B-2 Arborist Survey/Inventory Proposed Vineyard
- Exhibit B-3 Vineyard Planning Exhibit with Vegetation Communities
- Exhibit B-4 Oak Woodland Preservation Plan and Mitigation Memo
- Exhibit C USLE Soil Loss Analysis
- Exhibit D Hydrologic Analysis
- Exhibit E-1 Tier 1 Water Availability Analysis
- Exhibit E-2 Tier 3 Water Availability Analysis
- Exhibit F Water System, Roadway and Utility Easements, Usage and Maintenance Agreement, and Agreements to Supply Water Resources
- Exhibit G Project Revision Statement