

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

INITIAL STUDY CHECKLIST

(Reference Napa County's Procedure for Implementing CEQA, Appendix C)

1. Project Title:

Fulton Ranch Vineyard Agricultural Erosion Control Plan (ECPA) #P23-00326-ECPA

2. Property Owner/Applicant:

Diamond Mountain Investors 1031 LLC and Parkway Plaza Venture

3. County Contact Person, Phone Number and email:

Pam Arifian, Planner III, (707) 259-5934, Pamela.Arifian@countyofnapa.org

4. Project Location and Assessor's Parcel Number (APN):

263 Petrified Forest Rd, Calistoga, CA 94515
Assessor's Parcel Numbers (APNs) 020-430-005, -006, -018, -019, and -027 (Figures 1 & 2)
Sections 2 and 3, Township 8 North, Range 7 West, Mt. Diablo Base
Latitude 38° 34' 20.759" N / Longitude 122° 36' 56.867" W

5. Project Sponsor's Name and Address:

Dirk Fulton, Manager (Diamond Mountain Investors 1031 LLC) and General Partner (Parkway Plaza Venture), 555 First Street, #303, Benicia, CA 94510

6. General Plan Description:

Agriculture, Watershed & Open Space (AWOS)

7. Zoning:

Agricultural Watershed (AW)

8. Description of Project:

The proposed project involves the clearing of vegetation, earthmoving and land contouring, and installation and maintenance of erosion control measures associated with the development of approximately 4.79 gross acres of vineyard (i.e., proposed development area or project area) with approximately 3.66 net planted acres in five (5) proposed vineyard blocks, located on three (3) parcels and totaling 102.78 acres (i.e., project site) of the total five (5) parcel project property, which totals 182.78 acres.

The project would result in the conversion to vineyard of approximately 2.43 acres of black oak woodland, 2.01 acres of Douglas fir forest and 0.1-acre of coast live oak woodland. The project proposes to preserve three (3) acres of California black oak woodland, 10.83 acres of Douglas fir forest and 1.1-acre of coast live oak located on slopes less than 30% and outside of stream setbacks on the three project parcels.

All temporary debris, vegetation, soil and soil amendment stockpiles and storage areas, if needed, will be located within the existing vineyard (Blocks B and D within #P14-00381-ECPA) and proposed vineyard project areas. No long-term stockpiles of rock or soil are anticipated. All proposed vineyard blocks would be accessed via existing gravel and dirt agricultural roads within the property; no new roads are required to access the proposed vineyard development areas.

All irrigation water for the existing and proposed vineyard would be supplied by existing developed groundwater resources. No other new wells or other water sources are planned as part of this project. Irrigation pipelines (approximately 4,500 linear feet) would be located in existing dirt access roads, vineyards and vineyard avenues, and within the proposed development area. The project proposes new wildlife exclusion fencing that would enclose proposed new vineyard blocks.

Erosion Control Measures: Temporary erosion control measures include installation of sediment barriers (e.g., fiber rolls), a winter cover crop to be mulched into the vineyard, and application of straw mulch where seeding occurs. Permanent erosion control measures include water bars, diversion ditches, and a no-till permanent cover crop to achieve 80% minimum densities. Vineyard avenues would be protected with a permanent no-till cover crop with densities maintained at 80% or more. Alternatively, vineyard avenues may be lined with crushed rock to limit their susceptibility to erosion and provide all weather access.

Earthmoving: Earthmoving and grading activities associated with the land contouring and the installation of erosion control measures and subsequent vineyard operations include, but are not limited to, vegetation removal, soil ripping to a depth of up to 24 inches, rock removal and processing, discing, recontouring, incorporation of soil amendments, construction of vineyard access roads to connect development areas, and the development of erosion and runoff control measures.

Other Activities and Features: Other activities and features of the proposed project and subsequent vineyard development and operation include:

- a. Installation of vineyard trellis and drip irrigation systems, and planting rootstock in a six (6)-foot by four (4) foot vinerow spacing pattern for an approximate vine density of up to approximately 1,815 vines per acre.
- b. Installation of single-post culvert inlet trash rack in existing drainage crossings.
- c. Ongoing inspection and maintenance of temporary and permanent erosion and runoff control measures.
- d. Ongoing operation and maintenance of the vineyard, which includes vine management (pruning, fertilization, and pest and disease control), weed control, cover crop mowing, irrigation and trellis system maintenance, and fruit harvesting. The management regime of the no-till cover crop would consist of mowing and late winter or early springtime spot spraying by contact or systemic herbicides; no pre-emergent spraying would be utilized as part of cover crop management.
- e. Repair and maintenance of all culverts and ditches along roads and in and around vineyard areas.

Table 1 lists a general schedule for the construction of the proposed project as identified in #P23-00326-ECPA and Table 2 outlines typical general ongoing vineyard operations. The vineyard would be developed in one phase, with construction occurring for up to six months during the year. The final implementation schedule is pending action on #P23-00326-ECPA.

Table 1 – Implementation Schedule

April 1 – October 1	Remove existing vegetation, complete ripping, grading and discing, planting
October 15 ¹	All winterization complete, including seeding, straw mulching, and straw wattle installation.
October 16 – March 31	Maintain erosion and sediment control devices, inspect after all rain events producing significant runoff, re-seed temporary cover crop as needed to maintain appropriate cover.

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

Table 2 – Typical Annual Operations Schedule

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

Vineyard construction is anticipated to generate about 20 trips per day for anticipated work crews of five to ten employees, including truck trips for equipment and supply delivery. Anticipated

construction equipment would be limited to tracklaying and rubber-tired vehicles and could include bulldozers, tractors, excavators, backhoes, dump trucks, water trucks, ATVs and passenger vehicle and/or light trucks.

Proposed vineyard operations are anticipated to generate at most 250 truck trips annually for anticipated work crews of up to 14 field personnel. Typical operations include, but are not limited to, irrigation and trellis system inspection and repair, pruning, canopy management, harvest, cover crop inspection and management, erosion control measure monitoring and maintenance, and vine/vineyard maintenance. During peak operations, activities such as vineyard pruning, weed and pest control, and harvest are anticipated to generate up to ten round trips per day, for anticipated work crews of up to 14 employees. Anticipated equipment for vineyard operations would be limited to tracklaying and rubber-tired vehicles and could include tractors, backhoes, grape haul trucks, and ATVs and passenger vehicles and/or light trucks.

Implementation of the proposed project would be in accordance with the Fulton Ranch Vineyard Erosion Control Plan (dated October 25, 2023, revised April 29, 2025) prepared by Drew L. Aspegren (Registered Professional Engineer [RPE] No. 31418) of Napa Valley Vineyard Engineering Inc., St. Helena, California (Exhibit A). The proposed project is further described in the application materials including the Supplemental Project Information sheets. All documents are incorporated herein by reference and available for review in the Napa County Department of Planning, Building and Environmental Services (PBES), and at <https://www.countyofnapa.org/2876/Current-Projects-Explorer>.

The Owner has elected to utilize the one-time Section 17 Exemption to the Water Quality and Tree Protection Ordinance (Ordinance No. 1438; adopted April 9, 2019), which states that the provisions of this Ordinance No. 1438 shall not apply to earthmoving activities associated with an agricultural project of five (5) acres or less on slopes less than 30 percent (%). This exemption can be used only once per parcel; however, the project must comply with the Conservation Regulations in effect prior to the effective date of Ordinance No. 1438, and the project is still subject to CEQA.

9. Describe the Environmental Setting and Surrounding Land Uses:

The approximately 182.78-acre project property is located in the Mayacamas Mountain range along the west side of the Napa Valley, at the end of a private paved road approximately 2,500 feet from its intersection with Petrified Forest Road, approximately 1.2 miles west of the City of Calistoga (Figures 1-3). The existing driveway to APN 020-430-006 provides access to all existing and proposed vineyard blocks via a network of dirt and gravel access roads and vineyard avenues.

The Fulton Ranch project property consists of five (5) parcels, including three (3) parcels that are owned by Diamond Mountain Investors 1031 LLC and two (2) parcels that are owned by Parkway Plaza Venture:

- APNs 020-430-006, -005 and -019 (owned by Diamond Mountain Investors 1031 LLC) contain two (2) residences, a guest house, several outbuildings, agricultural outbuildings, approximately 13.05 acres of existing vineyard (planted under #P14-00381-ECPA and #P07-00883-ECPA), a 20,000-gallon winery (Variance #P05-00345-VAR and Use Permit #P05-0436-UP,

approved August 25, 2006), several water tanks, four (4) water storage reservoirs, agricultural gardens, and dirt and gravel access roads. There are approximately 22 acres located on APNs 020-430-005 and -006 that are permanently preserved pursuant to Deed Restriction #2016-0017979, recorded on July 22, 2016, and associated with the vineyard planted under #P14-00381-ECPA.

- APNs 020-430-018 and -027 (owned by Parkway Plaza Venture) contain approximately 1.85 acres of existing vineyard (planted under #P14-0381-ECPA) and one reservoir. There are approximately 18.7 acres located on APN 020-430-018 that is permanently preserved pursuant to Deed Restriction #2016-0017979, recorded on July 22, 2016, and associated with the vineyard planted under #P14-00381-ECPA.

All winery and residential structures are located on APN 020-430-006; the remaining parcels contain vineyards, agricultural roads, reservoirs, wells and infrastructure, and undeveloped land. There is a 21.4-acre preservation area located on APNs 020-430 -005, -006 and -018, pursuant to Deed Restriction #2016-0017979, recorded on July 22, 2016. The Deed Restriction was associated with the vineyard planted under approved #P14-00381-ECPA.

General topography in the vicinity of the project site consists of the hills, peaks, ridgelines and valleys within the northeast-facing slopes to the west of the City of Calistoga and Napa Valley. Elevations within the property range from approximately 1,160 feet above mean sea level along the southeastern edge of the property to 600 feet above mean sea level at the northeastern corner where the land drains to Cyrus Creek. The project area occurs on land with slopes between 12% and 35%, with an overall average slope of 20%, and a total of approximately 0.21 acres (non-contiguous) having slopes over 30%.

The project site is located within the Cyrus Creek Drainage of the Napa River Watershed. Drainage from the project area generally flows northerly and easterly via sheet flow and concentrates in a series of steep, ephemeral drainages flowing north and northeast to tributaries of Cyrus Creek, a blue-line stream that flows east to the Napa River. There are no blue-line streams within the property holding; however, there are several drainages throughout the property. There is a County-definitional stream located north and northwest of Block 27 that has been avoided by the project with the required 85-foot minimum required setbacks, and another County-definitional stream located northwest of Blocks 18 and 19A that has been avoided by the project with the required minimum 125-foot minimum setbacks based on slopes from top-of-bank pursuant to Napa County Conservation Regulations Section 18.108.025. There are also two reaches of an ephemeral stream located east of Blocks 18 and 19A, both of which have been avoided by the project with well over the minimum 35-foot setbacks required for ephemeral streams, despite the Section 17 Exemption that precludes the need to avoid ephemeral or intermittent streams with minimum 35-foot setbacks, which were established as part of Ordinance No. 1438.

Surrounding properties are generally used for agricultural and rural residential purposes north, northwest, west and southwest of the project property, and undeveloped land immediately east, southeast and south of the project property. There are two (2) wineries located within one (1) mile of the project areas, including the on-site The Vineyardist, and Theorem Winery, with a combined annual

production limitation of 40,000 gallons per year. The nearest known schools are Calistoga Elementary School, Calistoga Junior-Senior High School, Palisades High School, located approximately 1.6 miles to the east of the project parcel (Napa County GIS: Schools Layer). The nearest residences are located 1,400 to 1,625 feet to the northwest, north and northeast of Block 27. The incorporated City of Calistoga is located approximately 0.7-mile to the northeast of the property.

All irrigation water will be supplied by an existing well located on APN 020-430-019. No other new wells or other water sources are planned at this time. There are no wells within 500-feet or known springs within 1,500 feet of the project well. Cyrus Creek, a County-designated Significant Stream, is located approximately 940 feet south of the project well. A Tier 1 and Tier 3 Water Availability Analysis was prepared for that well (refer to **Section X, Hydrology and Water Quality**, and **Exhibit D**). The project site is not located within a municipal drinking water supply watershed, nor in any designated groundwater-deficient area.

The vegetation types on the project site include Douglas fir forest (2.01 acres of 61.56 acres on property), California black oak forest (2.43 acres of 24.23 acres on property), coast live oak woodland (0.1-acre of 3.27 acres on property), chamise chaparral (0.04-acre of 13.73 acres on property) and ruderal (0.1-acre). The project parcels containing the proposed vineyard blocks are largely undeveloped, containing a network of dirt access roads, a well (APN 020-430-019) and approximately 2.3 acres of existing reservoir and vineyard planted under #P14-00381-ECPA on APN 020-430-018. The parcels are otherwise densely forested, and there is a recorded deed restriction (Instrument No. 2016-0017979) associated with the existing vineyard (#P14-00381-ECPA) on APN 020-430-018 that permanently preserves approximately 19 acres of black oak and blue oak woodland and Douglas fir forest on that parcel; the proposed Block 18 located on that parcel is well outside of the boundaries of the recorded deed restriction area.

The subject property currently consists of wildlife exclusion fencing around the perimeter of the existing vineyard blocks. The project would connect to existing fence near proposed Block 27 and would enclose the proposed vineyard blocks only.

Soils within the property are mapped as Boomer-Forward-Felta Complex (#111, 5 to 30 percent slopes), Forward silt loam (#140, 12 to 57 percent slopes), classified according to the Soil Survey of Napa County (USDA 1978; Napa County GIS Soils layer). There are no known potentially active faults that have been mapped on the project property; the nearest known faults are located approximately 0.4-mile to the south of the project property and three (3) miles to the northeast of the project property (Napa County GIS: Faults layers).

10. Other Agencies Whose Approval is Required:

The project would require a Less Than 3-Acre Timber Conversion Exemption Permit from CalFire pursuant to Forest Practice Rules. The Application will be filed concurrently with the final processing of this erosion control plan, utilizing this IS/MND for its CEQA compliance in issuing the Exemption Permit. The Timber permit process has its own environmental procedural protections built into the process; and will only proceed once this CEQA process is completed.

A Groundwater Permit application (E26-00127) is being processed concurrently to allow for the improvements to the existing water supply system across multiple contiguous parcels pursuant to Napa County Code Section 13.15, Groundwater Conservation. Any conditions of approval for that permit are included herein.

The project may also require various ministerial approvals by the County, including but not limited to building permits, in addition to meeting CalFire standards. Permits may also be required by the California Department of Fish and Wildlife and or the Regional Water Quality Control Board.

11. Responsible (R) and Trustee (T) Agencies:

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

12. Other Agencies Contacted

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

13. 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 via certified mail to the Mishewal Wappo Tribe of Alexander Valley, Middletown Rancheria, and the Yocha Dehe Wintun Nation on December 12, 2023. On January 23, 2024, the County received a response from Yocha Dehe Wintun Nation that the project site is not within the aboriginal territories of the Tribe, and therefore the invitation for consultation was declined. On May 28, 2024, the County sent Consultation Invitation Closure letters to all three Tribes. On May 28, 2026, the County received a request for more information from Middletown Rancheria, which ultimately deferred consultation to Mishewal Wappo Tribe. The County received telephone correspondence from Mishewal Wappo Tribe on May 28, 2025 requesting consultation, including monitoring of earthmoving activities and cultural sensitivity training for all workers. The request for monitoring and cultural sensitivity training from the Mishewal Wappo Tribe of Alexander Valley has been incorporated into the mitigation for the project in Section XVIII (Tribal Cultural Resources). Having reached agreement with the Mishewal Wappo Tribe, the County sent a final consultation closure notice to the Mishewal Wappo Tribe on December 10, 2025. This is discussed in detail in Section XVIII (Tribal Cultural Resources).

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.

14. 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 #P23-00326-ECPA as listed below, and the environmental background information contained in the permanent file on this project. These documents and information sources are incorporated here 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 <https://www.pbcs.cloud/index.php/s/tijD3CmNwffq6o4>

- Napa Valley Vineyard Engineering, Inc., April 29, 2025 (revised), Fulton Ranch Vineyard 263 Petrified Forest Road Erosion Control Plan (**Exhibit A**)
- Northwest Biosurvey, July 19, 2023, Biological Resource Assessment with Botanical Surveys and Delineation of Waters of the U.S. for the Vineyardist Estate, APNs 20-430-017, -019 & -027 (**Exhibit B-1**)
- Forest Ecosystem Management, July 22, 2024, Northern Spotted Owl Assessment for Fulton Project (**Exhibit B-2**)
- Northwest Biosurvey, April 5, 2024, Woodland Loss Assessment and Mitigation Addendum to Biological Resource Assessment for the Vineyardist Estate, APNs 20-430-017, -019 & -027 (**Exhibit B-3**)
- Tom Origer and Associates, October 13, 2023, Cultural Resources Study of a Portion of the Property at 263 Petrified Forest Road, Calistoga, Napa County, California (Confidential)
- Napa Valley Vineyard Engineering, Inc., October 27, 2023, Fulton Ranch Vineyard USLE Analysis (**Exhibit C**)
- EBA Engineering, February 4, 2025, Water Availability Analysis Report, 263 Petrified Forest Road, Calistoga, California (**Exhibit D**)
- Napa Valley Vineyard Engineering, Inc., April 22, 2024 (Rev 2), Hydrology Analysis, Fulton Ranch Vineyard, 263 Petrified Forest Road (**Exhibit E**)¹
- Application submittal materials and Correspondence (**Exhibit F**)
- Project Revision Statement (**Exhibit G**)

¹ Contact the County directly for full appendices of the Hydrology Analysis.

- Site inspection conducted by Napa County Planning, Building and Environmental Services staff Pamela Arifian and Raulton Hays on December 12, 2023.
- Napa County Geographic Information System (GIS) sensitivity maps/layers.

On the basis of this initial evaluation:

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.

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.

Planner Signature:

A handwritten signature in blue ink, appearing to read 'PA', with a horizontal line extending to the right.

Date: May 7, 2026

Name: Pamela Arifian, Planner III – Napa County, Planning, Building and Environmental Services Department

I. Aesthetics:

Except as provided in Public Resource Code Section 21099, would the project:

a) Have a substantial adverse effect on a scenic vista?

AND/OR

b) Substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings within state scenic highways?

AND/OR

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?

Discussion:

The project site is generally located on the northwestern foot slope west of the City of Calistoga approximately 0.23-miles south of Petrified Forest Road, approximately 0.50 miles east of the Napa-Sonoma County line in the Cyrus Creek drainage, and not visible from major or viewshed roads (i.e., Petrified Forest Road). Blocks 18 and 27 and a portion of Block 19A are located within the scenic corridor buffer around Petrified Forest Road (Napa County GIS: Viewshed roads and Scenic Corridors layers). While the project is within a scenic corridor, the project site is not visible from Petrified Forest Road due to topography and vegetation; further, the surrounding area includes existing vineyard land on the adjacent properties to the northwest and north and woodland. The project site is in the Agricultural Watershed (AW) zoning district which is dominated by vineyards and typifies the visual character of the area (Napa County GIS, Zoning Districts Layer).

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

The surrounding land uses and project site include vineyard land, forest and rural residential; views of the proposed project would be consistent with this existing use and dominate use within the area (i.e.,

vineyard and forest land). Therefore, for the reasons described above, the proposed project would have less than significant impacts on a scenic vista, scenic highway, historic buildings, scenic trees, rock outcrops, and the visual character and quality of the site and surroundings.

Significance Level: Less than significant impact.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Proposed agricultural operations in the project site would require some lighted nighttime activities consistent with the nighttime activity already occurring in the project site and in the surrounding area, which includes vineyard and agricultural uses. Lighting would be in the form of headlights or downward direction lights on equipment being used during nighttime harvest. The proposed project would include harvest activities (typically occurring in September), that could include nighttime activity (typically from 9 p.m. to 10 a.m.) approximately ten days per year. The proposed project would include sulfur applications that could occur between 9 a.m. and 10 a.m., approximately eight times per year. Although some nighttime activity would occur for limited periods, the proposed project would not introduce a new source of substantial light or glare, and the type of nighttime lighting would be consistent with existing project site uses and surrounding land uses. Therefore, the proposed project would result in a less than significant impact.

Significance Level: Less than significant impact.

Mitigation Measures: None are required.

I. Agriculture and Forest Resources²:

Would the project:

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?

Discussion:

² "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.

The project site is mapped as Other Land Farmland and Other Land by the California Department of Conservation (Napa County GIS: FMMP Important Farmland layer;). The proposed project would result in an increase in productive agricultural farmland on the project site. Therefore, the proposed project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use, and there would be no impact.

Significance Level: No impact.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

Discussion:

The project site has an Agriculture, Watershed & Open Space designation and is zoned Agricultural Watershed (Napa County GIS Zoning Layer). Therefore, the establishment of vineyard totaling approximately 4.79 gross acres with approximately 3.66 net planted acres is consistent with project site's land use and zoning designations.

Of the five (5) parcels within the property ownerships, three (3) of these parcels are associated with Williamson Act contracts: on APN 020-430-006, Type "H" Agricultural Preserve Contract (Document Identification No. 2000-0033112, December 19, 2000); on APN 020-430-005, Type "H" Agricultural Preserve Contract (Document Identification No. 2010-0031645, December 22, 2010); and on APN 020-460-018, Type "H" Agricultural Preserve Contract (Document Identification No. 2013-0033983, December 12, 2013). Proposed Block 18 would convert approximately 0.34-acre of woodland to agricultural production (vineyard), and would not result in a conversion of any land within the parcel to non-agricultural use. The remaining project parcels (APNs 020-430-027 & -019) are not associated with Williamson Act contracts (Napa County GIS, Ag Contracts). The proposed project would not convert any land within the project site to non-agricultural use; therefore, implementation of the proposed project would not conflict with the project site's land use designation or a Williamson Act contract. No impact would occur.

Significance Level: No impact.

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)?

AND/OR

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?

Discussion:

“Forest Land” is defined in California Public Resource Code Section 12220(g) as “land that can support 10% native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits.” “Timberland” is defined in California Public Resource Code Section 4526 as “land, other than land owned by the federal government and land designated by the board as experimental forest land, which is available for, and capable of, growing a crop of trees of any commercial species used to produce lumber and other forests products, including Christmas Trees. Commercial species shall be determined by the board on a district basis after consultation with the district committees and others.” The proposed development area is within an area zoned as AW that contains coniferous forest (Napa County GIS Zoning Layer, Napa County GIS Vegetation Layer). 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). The project site is considered timberland according to the California Forest Practice Rules; the applicant is pursuing a Less Than 3-Acre Timber Conversion Permit from CalFire pursuant to Forest Practice Rules. Project approval, if granted, would be subject to the Forest Land Condition of Approval described below. While the proposed project would convert 2.01 acres of timberland, the project would be consistent with agricultural watershed zoning and surrounding land uses. Therefore, with the condition of approval the impacts would be less than significant.

Forest Land – Condition of Approval: Prior to the commencement of vegetation removal and earth-moving activities pursuant to #P23-00326-ECPA, the owner/permittee shall provide documentation to Napa County Conservation Division demonstrating that a Less Than 3-Acre Timber Conversion Permit for the proposed project has been obtain from the California Department of Forestry and Fire Protection (CalFire).

Significance Level: Less than significant impact.

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?

Discussion:

The proposed project would not construct new roads to access the vineyards on the project site; all blocks are accessible via existing access roads and vineyard avenues. Construction of the proposed vineyard would not result in the conversion of existing farmland to non-agricultural use. Although the proposed project would convert 2.01 acres of timberland to non-forestland uses, the applicant is

pursuing a Less Than 3-Acre Timber Conversion Permit from CalFire (see the Forest Land Conditions of Approval above) and the proposed project would be consistent with agricultural watershed zoning and surrounding land uses. Therefore, the impacts would be less than significant.

Significance Level: Less than significant impact.

Mitigation Measure: None are required.

II. Air Quality

The Bay Area Air Quality Management District (BAAQMD) has published CEQA guidance titled BAAQMD CEQA Air Quality Guidelines (referred to as CEQA Guidelines) to assist lead agencies in evaluating air quality and climate impacts from proposed land use projects and plans.³ The CEQA Guidelines are advisory for local and regional governments in the San Francisco Bay Area Air Basin (SFBAAB). They contain nonbinding recommendations for how a lead agency can measure, evaluate, and mitigate air quality and GHG impacts generated from land use construction and operational activities.

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

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 determination: Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan?

AND/OR

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?

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

Discussion:

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

The project site is generally located along the western side of Napa Valley, within the Napa County climatological subregion of the San Francisco Bay Area Air Basin, which is under the jurisdiction of BAAQMD. The topographical and meteorological features of the Napa Valley subregion create the potential for air pollution. In the short term, potential air quality impacts are most likely to result from construction activities. Construction-related emissions, which are temporary in nature, mainly consist of particulate matter (PM) generated from fugitive dust during grading or other earthmoving activities and other criteria pollutants generated through the exhaust from construction equipment, vehicular haul and worker trips, and the burning of any project area vegetation.⁴ In the long term, potential air quality impacts would likely result from ongoing activities associated with the operation and maintenance of the proposed vineyard. Operational-related emissions, which are seasonal in nature, are primarily generated from vehicular trips associated with workers going to and from the site and equipment necessary for ongoing vineyard maintenance. Refer to **Section XVII (Transportation)** for the anticipated number of construction- and operation-related trips.

Ambient air quality standards have been established by state and federal environmental agencies for specific air pollutants most pervasive in urban environments. These pollutants are referred to as criteria air pollutants because the standards established for them were developed to meet specific health and welfare criteria set forth in the enabling legislation. Criteria air pollutants include ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, respirable particulate matter less than 10 microns in diameter (PM₁₀), fine particulate matter less than 2.5 microns (PM_{2.5}), and lead. Air basins (or portions thereof) are categorized as “attainment,” “nonattainment” or “unclassified” for each criteria air pollutant based on whether ambient air quality standards have been achieved. The SFBAAB is currently designated as a nonattainment area designated for the federal 8-hour ozone standard, state 1-hour and 8-hour ozone standards, state annual and 24-hour PM₁₀ standards, federal 24-hour PM_{2.5} standard and the state annual PM_{2.5} standard. Therefore, the criteria air pollutants of concern in the SFBAAB are reactive organic gases (ROG) and oxides of nitrogen (NOx) which are referred to as ozone precursors, as well as PM₁₀ and PM_{2.5}.

Air quality attainment plans are required to be prepared for nonattainment areas both under federal and state law. The most recently adopted air quality plan to address nonattainment issues in the SFBAAB is the 2017 Bay Area Clean Air Plan (Clean Air Plan).⁵ The Clean Air Plan provides a regional strategy to protect public health and the climate by progressing toward attaining all state and federal air quality standards, eliminating health risk disparities from exposure to air pollution among Bay Area communities, transitioning the region to a post-carbon economy needed to achieve greenhouse gas (GHG) reduction targets for 2030 and 2050, and providing a regional climate protection strategy that will put the Bay Area on a pathway to achieve those GHG reduction targets. The Clean Air Plan includes a

⁴ See Section VIII (Greenhouse Gas Emissions) for the greenhouse gas (GHG) emissions disclosure and impact assessment.

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

wide range of control measures designed to decrease emissions of the air pollutants that are most harmful to SFBAAB residents, such as particulate matter, ozone, and toxic air contaminants (TACs); reduce emissions of methane and other “super-GHGs”⁶ that are potent climate pollutants in the near-term; and decrease emissions of carbon dioxide by reducing fossil fuel combustion.⁷

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

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

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

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

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

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

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

The 2022 BAAQMD Guidelines provide thresholds of significance for air quality impacts from both construction and operation. According to BAAQMD, a project would have a significant impact on air quality if emissions from construction or operation would exceed the thresholds of significance shown in **Table 3**.

Table 3: BAAQMD Thresholds of Significance for Construction and Operation

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

^a Includes PM emissions from exhaust only.

Sources: BAAQMD CEQA Guidelines April 2023.

For construction-related emissions of fugitive dust, the BAAQMD recommends that lead agencies take a qualitative approach to determine impact significance; the CEQA Air Quality Guidelines state that a project would be considered to have a less than significant impact with regard to fugitive dust emissions of PM₁₀ and PM_{2.5} if BAAQMD Basic Construction Mitigation Measures are implemented during construction.

In order to assess potential air pollutant emissions from the proposed project, a review of the analysis of emissions associated with vineyard development/construction and operations performed for the CEQA analysis of three vineyard projects in Napa County was completed: Stagecoach North Vineyards⁸ for an approximately 91-acre vineyard development, KJS and Sorrento Vineyard⁹ for an approximately 98-acre vineyard development, and Le Colline Vineyards¹⁰ for an approximately 28-acre vineyard development.

All three vineyard projects involved similar activities associated with land clearing, construction, and installation of vineyards as the proposed project. Construction emissions estimated for each of these projects were divided by the development area for each to derive an estimate of the pounds per acre per day for each criteria air pollutant. Construction emissions included emissions from the use of off-road equipment and construction vehicles.

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

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

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

Table 4 shows the approximate anticipated construction emissions associated with the development of vineyards of the sizes described above. Variations or similarities in construction emissions modeling results between the three projects can be attributed to the modeling platform and version used, and differences in modeling assumptions and inputs such as construction trips, construction equipment and duration of use/operation. Variations in operational emissions between the three projects can be attributed to the modeling platform and version used, and differences in modeling assumptions and inputs such as operational year and number of vehicle trips generated, level of off-road equipment use in operation, and the use of electric equipment and vehicles.

The proposed project would involve clearing of existing vegetation, earthmoving and land contouring, and installation and maintenance of erosion control measures associated with the development of approximately 4.79 gross acres of vineyard. Vineyard construction is anticipated to generate about 20 trips per day for anticipated work crews of five to ten employees, including truck trips for equipment and supply delivery. Anticipated construction equipment would be limited to tracklaying and rubber-tired vehicles and could include bulldozers, tractors, excavators, backhoes, dump trucks, water trucks, ATVs and passenger vehicle and/or light trucks.

Daily construction emissions associated with the proposed project's 4.79 gross acre vineyard development (approximately 3.66 net-planted acres) were estimated using the average pounds per day estimated of the three vineyard projects described above and is shown in Table 4. As shown in Table 4 short-term construction emissions associated with the proposed project would be well below the BAAQMD's daily construction thresholds. Therefore, the project would not negatively affect air quality and is anticipated to result in a less than significant impact during construction.

Proposed vineyard operations are anticipated to generate at most 250 truck trips annually for anticipated work crews of up to 14 field personnel. Typical operations include, but are not limited to, irrigation and trellis system inspection and repair, pruning, canopy management, harvest, cover crop inspection and management, erosion control measure monitoring and maintenance, and vine/vineyard maintenance. During peak operations, activities such as vineyard pruning, weed and pest control, and harvest are anticipated to generate up to ten round trips per day, for anticipated work crews of up to 14 employees. Anticipated equipment for vineyard operations would be limited to tracklaying and rubber-tired vehicles and could include tractors, backhoes, grape haul trucks, and ATVs and passenger vehicles and/or light trucks.

Vineyard operations would be similar to the other three vineyard projects discussed above and the project proposes to develop a vineyard in a smaller area than the projects shown in **Table 5**. Therefore, operational emissions associated with the proposed project would be less than those shown in **Table 6** and well below both the daily and annual thresholds.

Table 4 – Construction Emissions from Vineyard Development

Emissions and Threshold	ROG	NOX	PM₁₀	PM_{2.5}
Stagecoach North vineyard¹ (pounds per acre per day)	0.08	0.75 to 0.78	0.03	0.03
KJS and Sorrento vineyard² (pounds per acre per day)	0.5	0.42	0.02	0.02
Le Colline vineyard³ (pounds per acre per day)	0.24	2.33	0.10	0.09
Average (pounds per acre per day)	0.12	1.18	0.05	0.05
Project Construction Emissions based on Average (pounds per day)	0.57	5.65	0.24	0.24
Construction threshold	54	54	82	54
Significant?	No	No	No	No

1. As identified in Stagecoach North EIR
2. As identified in KJS and Sorrento EIR
3. As identified in Le Colline Vineyard EIR

Sources: Stagecoach North Vineyard EIR 2022; KJS and Sorrento Vineyard EIR 2023; Le Colline Vineyard Initial EIR 2023; BAAQMD CEQA Guidelines April 2023.

Table 5 – Operational Emissions from Vineyard^{4,5}

Emissions and Threshold	ROG	NOX	PM₁₀	PM_{2.5}
Stagecoach North 91-acre vineyard operation¹ (pounds per acre per day)	0.01	0.08 to 0.14	0.01	<0.01
KJS and Sorrento 98-acre vineyard operation² (pounds per acre per day)	<0.01	<0.01	<0.01	<0.01
Le Colline 28.5-acre vineyard operation³ (pounds per acre per day)	<0.01	<0.01	<0.01	<0.01
Average (pounds per acre per day)	<0.01	0.03	<0.01	<0.01
Project Operational Emissions based on Average (pounds per day)	0.05	0.14	0.05	0.05
Operational threshold (pounds per day)	54	54	82	54
Significant?	No	No	No	No

1. As identified in Stagecoach North EIR
2. As identified in KJS and Sorrento EIR
3. As identified in Le Colline Vineyard EIR
4. Includes dust and exhaust emissions
5. Calculation based on 365 days of operation. Project emissions are anticipated to be less than identified as vineyard operations are seasonal in nature.

Sources: Stagecoach North Vineyard EIR 2022; KJS and Sorrento Vineyard EIR 2023; Le Colline Vineyard Initial EIR 2023; BAAQMD CEQA Guidelines April 2023.

Table 6 – Operational Emissions (tons per year) from Vineyard Development and Operation⁴

Emissions and Threshold	ROG	NOX	PM10	PM2.5
Stagecoach North 91-acre vineyard operation¹ (tons per year)	<0.01	0.01 to 0.03	<0.01	<0.01
KJS and Sorrento 98-acre vineyard operation² (tons per year)	<0.01	<0.01	<0.01	<0.01
Le Colline 28.5-acre vineyard operation³ (tons per year)	<0.01	0.01	<0.01	<0.01
Average (tons per year)	<0.01	<0.01	<0.01	<0.01
Project Operational Emissions based on Average (tons per year)	0.05	0.05	0.05	0.05
Operational threshold (tons per year)	10	10	15	10
Significant?	No	No	No	No

1. As identified in Stagecoach North EIR
2. As identified in KJS and Sorrento EIR
3. As identified in Le Colline Vineyard EIR
4. Includes dust and exhaust emissions

Sources: Stagecoach North Vineyard EIR 2022; KJS and Sorrento Vineyard EIR 2023; Le Colline Vineyard Initial EIR 2023; BAAQMD CEQA Guidelines April 2023.

Additionally, project approval, if granted, would be subject to the standard Air Quality Conditions of Approval below, which includes standard air quality and construction best management practices (BMPs) consistent with BAAQMD measures identified in Table 5-2 of the BAAQMD CEQA Guidelines that would further reduce potential air quality impacts associated with construction and ongoing operation of the proposed project.

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

- Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. The BAAQMD's phone number shall also be visible.
- Water all exposed surfaces (e.g., parking areas, staging areas, soil piles, grading areas, and unpaved access roads) two times per day.
- Cover all haul trucks transporting soil, sand, or other loose material offsite.
- Remove all visible mud or dirt tracked onto adjacent public roads by using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved roads shall be limited to 15 mph.
- All trucks and equipment, including their tires, shall be washed off prior to leaving the site.
- Idling times shall be minimized either by shutting off equipment when not in use or reducing the maximum idling time to five minutes (as required by state regulations). Clear signage should be provided for construction workers at all access points.

- 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 FAQ¹¹ or the PERP website.¹²

Installation of the proposed project is expected to generate emissions that are below the thresholds presented in **Table 6**, 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 **Tables 4** and **5** during both installation and operation (see **Section XVII [Transportation]** for anticipated project trips). Implementation of the proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard; less than significant impacts are anticipated.

Significance Level: Less than significant impacts.

c) Expose sensitive receptors to substantial pollutant concentrations?

AND/OR

d) Result in other emissions (such as those leading to odors adversely affecting a substantial number of people)?

Discussion:

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

The approximately 182.78-acre project property is located in the Mayacamas Mountain range along the west side of the Napa Valley, at the end of a private paved road approximately 2,500 feet from its

¹¹ <https://ww2.arb.ca.gov/applications/perp-notification-form>

¹² <https://ww2.arb.ca.gov/our-work/programs/portable-equipment-registration-program-perp>

intersection with Petrified Forest Road, approximately 1.2 miles west of the City of Calistoga (Figures 1-3). The existing driveway provides access to all existing and proposed vineyard blocks via a network of dirt and gravel access roads and vineyard avenues.

Surrounding properties are generally used for agricultural and rural residential purposes north, northwest, west and southwest of the project property, and undeveloped land immediately east, southeast and south of the project property. There are two (2) wineries located within one (1) mile of the project areas, including the on-site The Vineyardist, and Theorem Winery, with a combined annual production limitation of 40,000 gallons per year. The nearest known schools are Calistoga Elementary School, Calistoga Junior-Senior High School, Palisades High School, located approximately 1.6 miles to the east of the project parcel (Napa County GIS: Schools Layer). The nearest residences are located 1,400 to 1,625 feet to the northwest, north and northeast of Block 27. The incorporated City of Calistoga is located approximately 0.7-mile to the northeast of the property.

During installation of the ECP, vineyard planting, and subsequent vineyard operations, TACs and odors would be created through the use of construction, grading, and farm equipment (e.g., tractors, trucks, bulldozers, and an excavator). These sources would be temporary and/or seasonal in nature and would occur approximately 1.6 miles from the closest school and approximately 1,400 feet from the nearest residence, providing dilution of pollutants and odors. For the reasons identified above, the proposed project would not expose sensitive receptors or a substantial number of people to pollutants or objectionable odors. Therefore, these impacts would be less than significant.

Significance Level: Less than significant impact.

Mitigation Measure: None are required.

III. Biological Resources

Would the project:

- a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?**

Discussion:

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

- Northwest Biosurvey, July 19, 2023, Biological Resource Assessment with Botanical Surveys and Delineation of Waters of the U.S. for the Vineyardist Estate, APNs 20-430-017, -019 & -027 (**Exhibit B-1**)
- Forest Ecosystem Management, July 22, 2024, Northern Spotted Owl Assessment for Fulton Project (**Exhibit B-2**)
- Northwest Biosurvey, April 5, 2024, Woodland Loss Assessment and Mitigation Addendum to Biological Resource Assessment for the Vineyardist Estate, APNs 20-430-017, -019 & -027 (**Exhibit B-3**)

Northwest Biosurvey conducted an assessment of biological resources present or potentially present in the project site and the effects of the proposed vineyard development on those species. Site visits for botanical surveys, habitat assessments, wetland delineation and mapping were conducted on April 6, May 31, and July 7, 2023. The surveys focused on the proposed development areas and immediate surrounding habitat and documented: the presence or potential for special-status plant and animal species and their habitats, potential substantial adverse effects on sensitive habitats or communities, potential impacts to federal or state protected wetlands and waters of the U.S., and interference with native wildlife species, wildlife corridors, or native wildlife nursery sites.

Prior to conducting the biological surveys, biological information for the project area and Calistoga quadrangle and the eight quadrangles in the vicinity (St. Helena, Santa Rosa, Rutherford, Mt. St. Helena, Mark West Springs, Kenwood, Detert Reservoir, Aetna Springs) from the following sources: the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDDB) and Northern Spotted Owl View (BIOS), California Native Plant Society Electronic Inventory of Rare and Endangered Plants of California (2023).

The Biological Resource Assessment (Northwest Biosurvey, July 2023 – **Exhibit B-1**) analyzed a proposed project that included an additional vineyard block (referenced as “VB-1”) that was eliminated from the project prior to submittal of the Erosion Control Application package (#P23-00326-ECPA). Following County review and comment, the Woodland Assessment was prepared by the biologist to provide an updated project area and vegetation table (**Exhibit B-2**). A subsequent revision of the proposed project area in the ECP dated April 2025 further reduced the project area to the currently proposed 4.79 gross acres with 3.66 net planted acres. Given the preceding, there may be some slight discrepancies in acreages across the documents.

Field surveys were conducted by qualified biologists familiar with the resources of Napa County and surrounding counties, with the goal of identifying the presence of sensitive biological communities, the potential for biological communities on the site to support special-status plant and wildlife species, and the presence of any other sensitive natural resources protected by local, State, or federal laws and regulations. Botanical assessments followed protocols described in the *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities* (CDFW, 2018), *Botanical Survey Guidelines of the California Native Plant Society* (CNPS, 2001), *The Jepson Manual* (Baldwin, 2012), and other relevant materials. Field surveys were conducted identifying and recording all species in the proposed development area and in the near proximity. The wetland delineation was conducted as prescribed in the Corps of Engineers Wetlands Delineation Manual (1987), the Arid West 2008 Supplement, and the 2008/2010 OHWM Field Guide. Plant taxonomy

and nomenclature is from the Jepson Manual of Higher Plants of California (Baldwin, 2012) and A California Flora and Supplement (Munz 1973) and Flora of the Marshes of California (Mason 1957) (**Exhibit B-1**).

Northern spotted owl surveys were conducted for this project in 2023 (six surveys) and 2024 (six surveys) and were performed following Protocol for Surveying Proposed Management Activities that May Impact Northern Spotted Owls (USFWS 2012) (**Exhibit B-2**).

The proposed project is located in five blocks on three (3) parcels which total approximately 106.66 acres containing the following vegetation communities: Douglas fir forest (61.56 acres), California black oak forest (24.23 acres), Coast live oak woodland (3.27 acres), chamise chaparral (13.73 acres), wild oat grassland (0.42-acre), vineyard (2.33 acres) and ruderal (1.12 acres).

Table 7 – Vegetation Types in the Proposed Development Area and Project Parcels

Vegetation Types	Total Acres on Project Parcels*	Total Acres within Project Area
Douglas Fir Forest	61.56	2.01
California Black Oak	24.23	2.43
Coast Live Oak	3.27	0.1 ¹
Chamise Chaparral	13.73	0.04
Wild Oat Grassland	0.42	0
Vineyard	2.33	0
Ruderal	1.12	0.1
Total	106.66	4.79

* “Project Parcels” include APNs 020-430-018, -019 & -027

¹ The Woodland Assessment identified a larger project area including removal of 0.4-acre of coast live oak woodland, which was reduced in subsequent revision of the Erosion Control Plan dated April 2025.

Source: Northwest Biosurvey, **Exhibit B-2**.

Special-Status Plants: Based upon a review of the biological resource databases listed in **Exhibit B-1** (Appendix A), 36 special-status plant species have a high potential to occur within the project study area (Calistoga and eight surrounding quadrangles) based on habitat suitability. Of these, general habitat requirements were present on the project parcels for 19 species, and could potentially occur on the project parcels: Napa false-indigo (*Amorpha californica* var. *napensis*), narrow-anthered brodiaea (*Brodiaea leptandra*), Calistoga ceanothus (*Ceanothus divergens*), Jepson’s leptosiphon (*Leptosiphon jepsonii*), green monardella (*Monardella viridis*), Cobb Mountain lupine (*Lupinus sericatus*), Rincon Ridge manzanita (*Arctostaphylos stanfordiana* ssp. *Decumbens*), Brewer’s milk-vetch (*Astragalus breweri*), Clara Hunt’s milk-vetch (*Astragalus claranus*), Rincon Ridge ceanothus (*Ceanothus confusus*), Sonoma ceanothus (*Ceanothus sonomensis*), Brewer’s clarkia (*Clarkia breweri*), St. Helena Fawn lily (*Erythronium helenae*), Purdy’s fritillary (*Fritillaria purdyi*), Nodding harmonia (*Harmonia nutans*), Bristly leptisiphon (*Leptosiphon acicularis*), Broad-lobed leptosiphon

(*Leptosiphon latisectus*), Napa lomatium (*Lomatium repostum*), Napa checkerbloom (*Sidalcea hickmanii ssp.napensis*), Dark-mouthed triteleia (*Triteleia lugens*).

The protocol floristic-level surveys were conducted by two qualified biologists with over 50 years of combined experience. The surveys occurred on April 6, May 31, and July 7, 2023, which corresponds to the period sufficient to observe and identify those special-status plants that have the potential to occur in and within vicinity of the proposed development area. Of the 118 species observed by the project biologists during the floristic surveys, two (2) plants with sensitive regulatory status were found on the property during the surveys: Napa false indigo (CNPS Rank 1B.2) and narrow petaled rein orchid (*Piperia leptopetala*) (CNPS Rank 4.2). Plants ranked 1B are considered by regulatory agencies to qualify as rare under Section 15380(d) of the California Environmental Quality Act (CEQA) and thus require consideration and subsequent mitigation during CEQA review. The CNPS defines Rank 4.2 plants as “Limited distribution (watch list); fairly endangered in California.” Rank 4.3 is a watch list of plants moderately threatened in California but lacking special status. Both plants were found along the eastern edge of the property, well outside of the project area (over 600-feet east of proposed Block 18) (**Exhibit B-1**).

Protecting the continued presence of special-status species, including special-status plants, special-status wildlife, and their habitats is encouraged by Napa County General Plan Goal CON-3.¹³ Additionally, pursuant to Napa County General Plan Policy CON-13,¹⁴ the County shall require that all discretionary agricultural projects consider and address impacts to wildlife habitat and avoid impacts to habitat supporting special-status species to the extent feasible, and where impacts to special-status species and their habitat cannot be avoided, projects shall include effective mitigation measures and management plans to provide protection for habitat supporting special-status species through buffering or other means, and enhance existing habitat values particularly for special-status species through restoration and replanting as part of the project or its mitigation.

The project as proposed would not remove special status plants and/or populations. The populations identified in the Biological Resources Assessment were located over 600-feet from the project area and are unlikely to be impacted by the proposed project. This is consistent with the following Napa County General Plan Conservation Element goals, policies, and Zoning Ordinance: General Plan Goal CON-3 as it protects the continued presence of special-status plant species or its habitat; Policy CON-13 in that impacts to special-status habitat can be avoided while allowing for the development of up to approximately 4.79 gross acres of agriculture on the project property; Policy CON-17 because the removal and disturbance of a sensitive natural plant community that contains special-status plant species is avoided; and, the purpose and intent of the Conservation Regulations (NCC Chapter 18.108) in that it preserves natural habitat or existing vegetation, and does not adversely affect sensitive, rare,

¹³ 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.

¹⁴ 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.

threatened, or endangered plants. Less than significant impacts are anticipated related to project impacts on special status plants.

Special-Status Animals: The basis of the biological resource assessment for special-status wildlife is a comparison of existing habitat conditions within the project boundaries to the geographic range (i.e., Calistoga quadrangle and eight surrounding quadrangles) and habitat requirements of sensitive wildlife, including all sensitive species that occupy habitats similar to those found in the project area or whose known geographic ranges encompass the project area. Based upon a review of the biological resource databases listed in **Exhibit B-1**, 16 special-status animal species have the potential to occur within the broader region (i.e., Calistoga quadrangle). However, of those 16 species identified, only eight (8) species have the potential to occur in the proposed project area and the three parcels where they are located based on site characteristics and lack of appropriate habitat on the project parcels and surrounding area. Those eight (8) species with potential to occur include: sharp-shinned hawk (*Accipiter straitus*), northern spotted owl (*Strix occidentalis caurina*), purple martin (*Progne subis*), pallid bat (*Antrozous pallidus*), fringed myotis (*Myotis thysanodes*), Yuma myotis (*Myotis yumanensis*), western pond turtle (*Emys marmorata*), Foothill yellow-legged frog (*Rana boylei*) (**Exhibit B-1**).

While there are ephemeral streams throughout the project parcels, the lack of perennial water on or near the project parcels limits the presence of fish and amphibian species that require permanent, cool water; as such, the project areas and vicinity do not support suitable habitat for Foothill yellow-legged frog. There are no ponds in the project area; the nearest pond is a lined, off-stream reservoir on APN 020-430-018 within a vineyard block associated with approved #P14-00381-ECPA; this reservoir does not provide quality habitat that would support the western pond turtle. Less than significant impacts are anticipated on these species.

The property includes diverse habitats including hardwood and conifer forests, chaparral, annual grassland and vineyards. Following are descriptions of the remaining six (6) sensitive species that have the potential to occur on the project parcels (**Exhibit B-1**):

Foothill yellow-legged frogs are relatively common along the shaded banks of perennial headwater streams, and they are heavily dependent on the presence of perennial water and are seldom far from pools where they can seek shelter from predation. The larvae require three to four months to mature, making most ephemeral streams unsuitable as breeding sites. Suitably long duration seasonal streams may occur in deep canyons along the eastern edge of the property. Streams in the western half of the property are short duration ephemeral channels and would not support this species. Additionally, none of the vineyard blocks are near a stream and this species, if present, would not be impacted by vineyard development.

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

Hatchlings and juveniles are preyed upon by fish, bullfrogs, garter snakes, wading birds, and mammals. There are no ponds within the survey area, although some of the lower, eastern stream segments may be used seasonally as movement corridors between off-site ponds; all streams are avoided within minimum required setbacks based on NCC Section 18.208.025. Additionally, there is an irrigation reservoir located within an existing vineyard associated with approved #P14-00381-ECPA on APN 020-430-018; this reservoir and vicinity do not provide quality habitat that would support the western pond turtle. Development activities associated with the proposed Block 27 on APN 020-430-027 would occur (if approved) over 75 feet from the reservoir; less than significant impacts are anticipated.

Pallid bat is a relatively common species of low elevations in California and occurs in a wide variety of habitats including grasslands, shrublands, woodlands, and forests; but it is most common in open, dry habitats with rocky areas for roosting. Pallid bats mate from late October to February with maternity colonies forming in early April. Young are born April – July, with most in May and June. Young have been observed flying in July and August. The species is sensitive to disturbance of roosting sites. This species is included in the CNDDDB as occurring north of Calistoga. Suitable nesting structures for this species may occur in the oak woodlands but there is a lack of nearby water that the bats need for feeding. A bat habitat survey was conducted within the proposed vineyard blocks. The proposed vineyard blocks lack older decadent or fire damaged trees that would provide suitable habitat for these bats.

Yuma myotis does not have special status in California. Yuma myotis is a small-sized bat with relatively large feet. Its preferred habitat is open conifer forests and riparian woodlands with nearby water, although it may occur in arid areas if permanent water is present. Day and night roosts are commonly found in caves, mines, under bridges, buildings, and sometimes trees. Its diet includes aquatic emergent insects such as mayflies, midges, caddis flies, along with small beetles, flies, and small moths; these are often gleaned from the surfaces of ponds and other bodies of water. Yuma myotis mate in the fall and births last from late May to mid-June with a peak in early June. Females bear a single young in a year. Threats to this species are from closures of mines and disturbance of maternity roosts in buildings, as well as pest control activities. The property lacks appropriate habitat for Yuma myotis due to the dense woodlands and lack of water.

Fringed myotis bat is included in CNDDDB maps but has no state or federal status. Locally this bat is found at low elevations and is associated with open redwood forests. Maternity colonies are large, with up to 300 individuals, and are located in caves, mines, and buildings. Males roost separately from the maternity colonies near water. This species has a small potential to be present in Douglas fir forests on the property, but the vineyard blocks themselves do not provide good habitat for this species.

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

competition with Cooper's Hawks. This hawk prefers riparian habitats and requires north-facing slopes with plucking perches. The project area provides excellent potential habitat for this species.

Purple martin is a passerine (perching) bird that prefers open, old growth, multilayered woodlands and forests with nearby water or riparian areas. It is a California Species of Special Concern while nesting. These birds may nest as pairs in old woodpecker cavities or in colonies in large hollow snags. Moderately suitable habitat for purple martins occurs on the property. Previous surveys conducted on this property for this species by the project biologist were negative; however, the species may be present in the extensive Douglas fir and California black oak forests.

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

The biological surveys identified moderate quality habitat for the following wildlife species with sensitive status: sharp-shinned hawk, northern spotted owl, purple martin and pallid bat. A bat and nesting bird habitat survey was conducted to evaluate the mature trees as potential habitat for bats and nesting birds. The biologist determined that the project area and vicinity were unlikely to support roosting bats, since the trees within and adjacent to the proposed vineyard blocks are relatively small and lack hollows or peeling bark (**Exhibit B-1**).

Removal of trees and development activities within the project areas could result in direct and indirect impacts on nesting birds and roosting bats. Temporary and intermittent increases in noise levels during construction may cause nest abandonment and death of young or loss of reproductive potential at active bird nests located near project activities. While the project area may not provide suitable habitat for roosting bats, the possibility remains that bats could be roosting in trees within or adjacent to the project area that could be impacted directly or indirectly. These are considered potentially significant impacts.

Implementation of **Mitigation Measure BIO-1** would ensure a bat habitat assessment is performed prior to tree removal to identify potential bat habitat trees within the project area and surrounding area, and to ensure a phased trimming and removal of trees to allow bats to relocate. Implementation

of **Mitigation Measure BIO-2** would ensure that a preconstruction nesting bird survey is performed and that any nesting birds and raptors within or adjacent to the project area be avoided by appropriate setbacks in consultation with CDFW, pursuant to Fish and Game Code Section 3500 et seq. and the federal Migratory Birds Treaty Act. Implementation of **Mitigation Measures BIO-1** and **BIO-2** would reduce potentially significant direct and indirect impacts on bats, and special-status and protected bird species, including raptors and migratory birds (e.g., purple martin), to a less than significant level.

According to the Northern Spotted Owl Assessment prepared for the proposed project (Forest Ecosystem Management, 2024, **Exhibit B-2**), the proposed project area occurs within ¼ mile of suitable NSO habitat, and there is one (1) known northern spotted owl territory within 1.3 miles of the proposed project. The 1.3-mile assessment area was created by USFWS for a Take Avoidance of NSO in the California interior, which is characterized as being hotter and drier than coastal redwood zone. The NSO Assessment identified that the proposed Blocks 18, 19A, 19B, and 19C would remove low quality NSO foraging habitat due to their location on the ridge top subjecting it to hotter and drier conditions. Block 27 contains limited or nonexistent NSO roosting, nesting or foraging habitat. Block 19C would be located within 0.3-mile of an historic NSO activity center.

NSO surveys were conducted per USFWS protocol in 2023 (six surveys) and 2024 (six surveys) from four stations providing coverage for the project. The last known detection of NSO within the identified activity center was in 2012. The NSO surveys conducted for this project did not detect any NSOs (**Exhibit B-2**).

The project would remove less than 5 acres of low-quality NSO habitat that is located within ¼-mile of suitable NSO nesting/roosting habitat, and would avoid the moderate habitat for this species provided by the steeply sloped, deeply shaded Douglas fir forest located on the project parcels. While direct impacts are not anticipated due to low quality habitat in the project area, indirect impacts may result from noise and vibration of project development activities. Implementation of **Mitigation Measure BIO-3** would require prior to project initiation that qualified project biologist(s) follow appropriate protocol surveys and 0.25-mile radius buffers from nests if necessary, with written approval by CDFW. With implementation of **Mitigation Measure BIO-3**, the project would result in less than significant impacts related to northern spotted owl.

With implementation of **Mitigation Measures BIO-1 through BIO-3**, potential impacts related to special status plant and wildlife species would be less than significant. Furthermore, the project proposes to preserve three (3) acres of California black oak woodland, 10.83 acres of Douglas fir forest and 1.1-acre of coast live oak located on slopes less than 30% and outside of stream setbacks; the permanent preservation of these areas would reduce potentially significant impacts related to direct or indirect impacts to NSO, purple martin, sharp-shinned hawk, as the preservation areas are contiguous with the steeply sloped, deeply shaded Douglas fir forest habitat that provide habitat for these species, as well as the Coast live oak woodland that is located near Block 19C.

Significance Level: Less than significant with mitigation incorporated.

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?

AND/OR

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?

Discussion:

The Napa County Baseline Data Report lists the Douglas fir forest/redwood forest biotic communities as sensitive (Douglas fir – Ponderosa pine Alliance and Coast Redwood Alliance as identified in Manual of California Vegetation). The biologist identified extensive tracts of old growth Douglas fir forest with islands of redwood forest within the steep, deeply shaded canyons of the project parcels, which are host to the two (2) special status plants identified during floristic surveys (Napa false indigo and narrow petaled rein orchid). The plants and sensitive biotic community are located outside of the proposed development area; less than significant impacts would result (**Exhibit B-1**).

One project parcel (specifically, APN 020-430-019) contains chamise chaparral in the south-facing slopes at the southern end of the parcel. Chamise chaparral is known to support special-status plants within areas of Napa County. This community on the parcel consists of a nearly homogenous canopy cover (approximately 90% cover) of chamise (*Adenostoma fasciculatum var. fasciculatum*). It includes scattered common and white-leaf common manzanita (*Arctostaphylos manzanita ssp. manzanita*, *A. manzanita ssp. glaucescens*), poison oak (*Toxicodendron diversilobum*), and scattered interior live oak shrub (*Quercus wislizeni var. frutescens*). The ground cover consists of Sonoma creeping sage (*Salvia sonomensis*) with other forbs such as wavy-leaf soap plant (*Chlorogalum pomeridianum*), Diogenes lantern (*Calochortus amabilis*), and xeric grasses such as desert fescue (*Vulpia microstachys var. microstachys*). The community includes exposed bands of barren rock outcrop and small islands of California black oak and coast live oak woodland. The biologist did not find any special status plants during protocol-level floristic surveys; as such, it does not appear that this community supports sensitive species, and is therefore not considered to be sensitive in this case. The project proposes to convert to vineyard approximately 0.04-acre of this habitat; less than significant impacts would result.

Oak woodland is considered sensitive in Napa County; see item (e), below, for discussion on oak woodland.

The project parcels do not contain any indicators of State or federally protected wetlands. There are no blue-line streams within the property holding; however, there are several drainages throughout the

property flowing north and northeast to tributaries of a blue-line stream (Cyrus Creek) that flows east to the Napa River.

There is a County-definitional stream located north and northwest of Block 27 that has been avoided by the project with the required 85-foot minimum required setbacks, and another County-definitional stream located northwest of Blocks 18 and 19A that has been avoided by the project with the required minimum 125-foot minimum setbacks based on slopes from top-of-bank pursuant to Napa County Conservation Regulations Section 18.108.025. Cyrus Creek is located over 1,100 feet from the project area. There are also two reaches of an ephemeral stream located east of Blocks 18 and 19A, both of which have been avoided by the project with well over the minimum 35-foot setbacks required for ephemeral streams, despite the Section 17 Exemption that precludes the need to avoid ephemeral/intermittent streams with minimum 35-foot setbacks, which were established as part of Ordinance No. 1438.

The project biologist prepared a Delineation of Waters of the U.S. conducted as prescribed by Corps of Engineers (Appendix C of **Exhibit B-1**). The Delineation identified possible Waters of the U.S. within the property consisting of several small ephemeral drainages. The total area of all delineated waters is 0.38-acre. All Waters of the U.S. occurring within the survey area are defined as “other waters” pursuant to Corps of Engineers; there are no federal jurisdictional wetlands in the survey area.

The Delineation identified one (1) stream north of proposed Block 27 on APN 020-430-027 (identified above as a County-definitional stream) that had the potential to be impacted by a possible access road to a proposed vineyard block to the north of the stream. It should be noted that the project proposed and analyzed in the Delineation was an earlier iteration of the proposed erosion control plan that originally included an additional vineyard block on APN 020-430-027, which has since been removed from the proposed project. As currently proposed and analyzed herein, the project would not result in a potential impact related to a possible access road across that County-definitional stream.

There is a lined, off-stream irrigation pond located within an existing vineyard block associated with approved #P14-00381-ECPA on APN 020-430-018. At its closest point, the pond is located over 80 feet away from proposed development activities associated with #P23-00326-ECPA.

The proposed project has also been designed to reduce existing soil loss (sedimentation) and hydrologic/runoff characteristics (i.e., result in no net increase in soils loss or runoff as compared to existing conditions); therefore, the proposed project would result in less than significant impacts related to streams. Implementation of the Stream Protection Condition of Approval, as detailed below, would ensure that streams are avoided and protected from development activities with temporary construction fencing for the duration of development activities.

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

- The location of stream setbacks shall be clearly demarcated in the field with temporary construction fencing, which shall be placed at the outermost edge of required setbacks

shown on the project plans. Prior to any earthmoving activities, temporary fencing shall be installed: the precise locations of said fences shall be inspected and approved by the Planning Division prior to any earthmoving and/or development activities. No disturbance, including grading, placement of fill material, storage of equipment, etc. shall occur within the designated areas for the duration of erosion control plan installation and vineyard installation. The protection fencing shall remain in place for the duration of project implementation.

- All construction and related traffic will remain outside of the protective fencing to the maximum extent practicable to ensure that the stream, buffer zones, and associated woodland habitat remains undisturbed.
- For project activities (i.e., irrigation pipe infrastructure or trash rackS) within bed and bank of drainages, the owners/permittees shall obtain any and all other required Local, State and Federal permits necessary prior to commencement of vegetation removal and earth-disturbing activities.

Significance Level: Less than significant impact.

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?

Discussion:

Wildlife corridors are natural areas interspersed with developed areas that are important for animal movement, increasing genetic variation in plant and animal populations, the reduction of population fluctuations, and the retention of predators of agricultural pests and for movement of wildlife and plant populations. Wildlife corridors have been demonstrated to not only increase the range of vertebrates including avifauna between patches of habitat, but also facilitate two key plant-animal interactions: pollination and seed dispersal. Corridors also preserve watershed connectivity. Corridor users can be grouped into two types: passage species and corridor dwellers. The data from various studies indicate that corridors should be at least 100 feet wide to provide adequate movement for passage species and corridor dwellers in the landscape.

Construction activities could result in temporary barriers to wildlife movement, but these are not expected to be significant because they are temporary and because of the limited scale of the project. The project area does not occur within any of the wildlife corridors identified as a CalWild Linkage shown in Map 4-2 of the Napa County BDR. It is important to note, however, that these linkage maps pertain to large-scale regional movement of wildlife (typically within valleys). Figure 3 in **Exhibit B-1** shows the most likely diurnal movement (daily movement between sources of food, cover, and water) corridors through the region. These are mapped as green zones along the principal stream courses. The actual width of usable corridors would continually change based on the density of vegetation,

steepness of adjacent slopes or presence of unsuitable habitat such as fenced vineyards and residential areas.

The principal wildlife movement corridors follow northeast to-southwest trending stream courses that provide localized diurnal movement and shelter habitat and access to adjacent habitats (often woodlands and forest) for cover, browse, or hunting for common wildlife species, and that extend down east slopes toward the Napa Valley. As shown in Figure 3 of **Exhibit B-1**, proposed and existing vineyard blocks have been laid out in a manner that preserves these corridors (**Exhibit B-1**), and, as proposed, provides setbacks from streams that meet or exceed the minimum required setbacks pursuant to NCC Section 18.108.025.

The three project parcels included contain extensive tracts of continuous Douglas fir and California black oak forest with continuity to lands to the east. The steep, south-facing slopes on the southern end of the property supports extensive chamise chaparral that provide excellent core habitat. Within the three parcels included in this project, edge habitat is limited to an east-west interface between Douglas fir forest and Coast live oak woodland and chamise chaparral along the southern edge of the property. The Douglas fir forest and California black oak forest share too much basic structure and species makeup between them to provide notable edge between these communities. The project proposes to remove 0.1-acre of the coast live oak habitat and 0.04-acre of chamise chaparral habitat, and proposes to preserve 1.1 acres of coast live oak woodland along this edge habitat, allowing for continued wildlife movement at the localized scale. Given the relatively small size of the proposed development area (relative to the area of the greater corridor tract), the amount of existing habitat that is permanently preserved on APN 020-430-018 and as avoided and proposed with this project (and as mitigated by **Mitigation Measure BIO-4**, below), the amount of land and habitat that is “undevelopable” (i.e., on land with slopes over 30% and outside of stream setbacks, the proposed project is not anticipated to result in any potentially significant impacts to wildlife movement or migration”(**Exhibit B-1**).

Though the proposed project would incrementally reduce a small amount of habitat in the project area, resulting in changes in avifauna and rodent utilization in the area, the proposed project would not lead to significant impacts to habitat fragmentation in the region, significant species exclusion, or a significant change in species composition in the region. Construction activities could result in temporary barriers to wildlife movement, but these are not expected to be significant, as they are temporary and limited in scale. Further, as proposed and mitigated per **Mitigation Measure BIO-4**, the project would permanently preserve approximately 14.93 acres of Douglas fir, Black oak, Coast live oak habitats, that include habitat for wildlife.

As proposed, the project would include installation of wildlife exclusion fencing around the perimeter of the proposed blocks and connect to existing fencing with existing vineyard (Block 27). The proposed six-foot-high fencing would consist of 6-inch by 6-inch wire and two smooth strands of wire on the top. To ensure that the wildlife exclusion fencing is installed per plan, the following condition of approval would be applied.

Condition of Approval - Fencing:

- a. Any new fencing shall use a design that has 6-inch square gaps at the base (instead of the typical 3-inch by 6-inch rectangular openings) to allow small mammals to move through the fence.
- b. Exit gates shall be installed at the corners of deer fencing to allow trapped wildlife to escape.
- c. Any modifications to the location of wildlife exclusion fencing as specified in Erosion Control Plan #P23-00326-ECPA required by this measure shall be strictly prohibited and would require County review and approval to ensure the modified wildlife exclusion fencing location/plan would not result in potential impacts to wildlife movement.

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

Significance Level: Less than significant impacts.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Discussion:

The project property is located along the eastern slopes of Mayacamas Mountain Range separating the Napa Valley to the east from the Valley of the Moon and Santa Rosa Plain to the west (see **Figure 1**). The property is located within a broad swath of formerly continuous forest and woodland occupying the steep, shaded, east-facing slopes along a steep southeast to northwest trending ridge separating the north and east forks of Cyrus Creek along the western edge of the Napa Valley. Shaded slopes in this region generally support Douglas fir forest and California black oak forest with enclaves of coast redwood in the most shaded canyons. The exposed west and south-facing slopes typically support coast live oak and blue oak woodland and various chaparral communities. Sources of summer and fall water tend to be limited to a few perennial stream segments in the bottoms of steep canyons or to agricultural ponds.

The proposed project is located in five blocks on three (3) parcels which total approximately 106.66 acres containing the following vegetation communities: Douglas fir forest (61.56 acres), California black oak forest (24.23 acres), Coast live oak woodland (3.27 acres), chamise chaparral (13.73 acres), wild oat grassland (0.42-acre), vineyard (2.33 acres) and ruderal (1.12 acres). The following describes the woodland vegetation types (**Exhibit B-1**):

Douglas Fir Forest (61.56 acres): This is a mature forest of dominant Douglas firs (*Pseudotsuga menziesii* var. *menziesii*) but with a co-dominant lower canopy of California black oak (*Quercus kelloggii*). The canopy cover is 90+ percent. Within this forest are scattered California bays (*Umbellularia californica*) and California buckeyes (*Aesculus californica*), generally as a much shorter lower canopy. The shrub layer is generally lacking; however, there is widely scattered toyon (*Heteromeles arbutifolia*). The ground cover is dominated by California fescue (*Festuca*

californica) with scattered woodland forbs including mountain sweet cicely (*Osmorhiza berteroi*), Pacific sanicle (*Sanicula crassicaulis*), tripvine (*Symphoricarpos mollis*), poison oak (*Toxicodendron diversilobum*), California tule pea (*Lathyrus jepsonii* var. *californicus*), sub arctic lady fern (*Athyrium filix-femina* var. *cyclosum*), and baby blue eyes (*Nemophila menziesii* var. *atomaria*). These are over a rocky substrate and a dense cover of duff and leaf litter. Within steep and deeply shaded canyon bottoms to the east, the dominant cover of mature Douglas fir contains islands of coast redwood (*Sequoia sempervirens*). In addition to California black oak the sub-canopy in these shaded canyons includes tanoak (*Notholithocarpus densiflorus* var. *densiflorus*), coast live oak (*Quercus agrifolia* var. *agrifolia*), California bay, Pacific madrone (*Arbutus menziesii*), and big-leaf maple (*Acer macrophyllum*). The shrub layer consists primarily of seedlings of the upper and lower story trees but includes scattered Napa false indigo (*Amorpha californica* var. *napensis*), California blackberry (*Rubus ursinus*), and ocean spray (*Holodiscus discolor*). The ground cover is primarily duff and leaf litter but includes western sword fern (*Polystichum munitum*), California tule pea, and California fescue. The project proposes the conversion to vineyard of approximately 2.01 acres of Douglas fir forest, and proposes to preserve 10.83 acres of Douglas fir forest.

California Black Oak Woodland: This mature woodland is dominated by moderate-sized California black oaks that form a nearly homogenous stand that has 80-100% canopy closure. It includes a lower sparse canopy of small buckeyes. The community shares a majority of its species pallet with the Douglas fir forest and differs from it primarily in whether California black oak or Douglas fir dominates. This community essentially continues through the Douglas fir forest as a sub-canopy. The shrub layer is the same as that of the Douglas fir forest.

The ground cover often consists of a dense and continuous stand of California fescue. Other forbs include California tule pea, western buttercup (*Ranunculus occidentalis*), baby blue eyes, goosegrass (*Galium aparine*), and royal larkspur (*Delphinium variegatum* ssp. *variegatum*). The project proposes the conversion to vineyard of approximately 2.43 acres of black oak woodland and proposes to preserve three (3) acres of black oak woodland.

Coast Live Oak Woodland: This community occurs on the southeast ridgetop where it occupies the transition zone between the shaded Douglas Fir forest on the north-facing slope, and the Chamise Chaparral community on the south-facing slopes. It consists of coast live oaks, sub-dominant Pacific madrones and tan oaks. There is a disbursed shrub layer of common manzanita, interior live oak shrub (*Quercus wislizeni* var. *wislizeni*), bush monkeyflower (*Mimulus aurantiacus* ssp. *aurantiacus*), coyote brush (*Baccharis pilularis*), Sonoma creeping sage (*Salvia sonomensis*), and toyon. The ground cover is primarily leaf litter but it includes tripvine, California tule pea, and California fescue. This species pallet represents a mix of xeric chaparral species and more mesic Douglas fir species. The project proposes the conversion to vineyard of approximately 0.1-acre of coast live oak woodland and proposes to preserve 1.1 acres of coast live oak woodland.

The parcels are densely forested, and there is a recorded deed restriction (Instrument No. 2016-0017979) associated with the #P14-00381-ECPA on APN 020-430-018 that permanently preserves approximately 19 acres of black oak and blue oak woodland and Douglas fir forest on that parcel; the

proposed Block 18 located on that parcel is well outside of the boundaries of the recorded deed restriction area, and proposes to preserve Douglas fir forest and black oak forest that is contiguous with this preserved area.

Consistency with General Plan

Oak woodland is the most common land cover in the County occurring on approximately 167,000 acres (33% of the County's area). Approximately 733 acres of oak woodland or 0.5% of the total area of oak woodland in the County has been cleared for residential and agricultural purposes between 1993 and 2002 (Napa County Baseline 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 both a project-specific level and a cumulative level (Napa County General Plan, Draft Environmental Impact Report, Volume 1, Section 4.5 Biological Resources, Pacific Municipal Corporation, February 2007). Napa County General Plan Conservation Element Policy CON-24 requires that oak woodland be maintained to the extent feasible to provide oak woodland and wildlife habitat, slope stabilization, soil protection and species diversity. Policy CON-24(c) requires that, when avoidance of oak woodland is infeasible, a project replace or preserve like habitat at a 2:1 ratio by acreage. "Like habitat" is considered in this case to mean each oak woodland type on slopes less than 30% and outside of stream setbacks.

As previously noted, the project proposes to convert to vineyard approximately 2.43 acres of the approximate total of 24.23 acres of California black oak forest (10% of total on the project parcels) and 0.1-acre of the total 3.27 acres of coast live oak woodland (3% of total on project parcels). For the proposed project to comply with Policy CON-24 and preserve two (2) acres of oak woodland for every one (1) acre impacted, a minimum of 4.86 acres of California Black oak forest and 0.2-acre coast live oak woodland should be preserved on land with slopes less than 30% and outside of stream setbacks on the project parcel.

The project proposes to preserve three (3) acres of California black oak woodland (1.2:1 preservation to removal ratio), 10.83 acres of Douglas fir forest (5.4:1 preservation to removal ratio) and 1.1-acre of coast live oak (11:1 preservation to removal ratio) located on slopes less than 30% and outside of stream setbacks (Sheet 3 of Exhibit A). The oak woodland preservation areas are located on all three of the project parcels on slopes with less than 30% slope and outside of stream setbacks, and, are contiguous with other areas previously designated for preservation and/or areas with slopes over 30% and within stream setbacks, resulting in a beneficial impact of larger swaths of preserved habitat.

As detailed in the Woodland Assessment, the Douglas fir forest on the parcels contains a continuous understory of California black oak, which is effectively a continuous understory of the adjacent California black oak forest. Since plant communities are named and categorized based on species dominance, two adjacent communities (in this case Douglas fir forest and California black oak forest) may contain the same palate of species yet be categorized differently due to changes in species dominance. As is often the case in the North Coast Range, the Douglas fir forest supports an understory of California black oak while the California black oak forest contains scattered Douglas fir.

While these changes in species dominance do result in differences in community ecology, the communities support many of the same wildlife species of both plants and wildlife (**Exhibit B-3**).

Given that i) the biologist identified the Douglas fir and Black oak forest communities to be similar with continuous understory, and ii) the proposed preservation area includes all of the Douglas fir forest and the remaining Black oak forest located on developable land on APN 020-430-027 (i.e., on land with less than 30% slopes and outside of stream setbacks), and iii) the preservation areas result in a combined preservation of 4.1 acres of oak woodland and an additional 10.83 acres of Douglas fir forest that supports black oak forest as a codominant subcanopy and similar habitat characteristics as the black oak forest proposed for removal, and iv) that the preservation areas on that parcel are adjacent to “undevelopable” land (i.e., within stream setbacks and with slopes over 30%) resulting in contiguous habitat that would remain habitat, the County determines that the project, as proposed, is consistent with the intent of General Plan Policy CON-24(C).

However, while the project proposes to retain the 14.93-acre tree preservation areas, there is no mechanism proposed for permanently preserving the retained coast live oak woodland, which could result in future development encroaching into the preserved woodland. This is considered a potentially significant impact. To ensure that the retained oak woodland is permanently preserved, Mitigation Measure BIO-4 would require that a Tree Preservation Area totaling a minimum of three (3) acres of California black oak forest, 10.83 acres of Douglas fir forest and 1.1 acres of coast live oak woodland located on slopes less than 30% and outside of stream setbacks, as depicted in Vegetation Preservation Map of the Erosion Control Plan (Sheet 3, **Exhibit A**), be permanently protected from development in the form of a deed restriction, mitigation easement or other means of permanent protection acceptable to the County. With implementation of **Mitigation Measure BIO-4**, potential impacts related to consistency with General Plan Policy CON-24 would be less than significant.

Consistency with Conservation Regulations

As previously stated, the Owner has elected to utilize the one-time Section 17 Exemption to the Water Quality and Tree Protection Ordinance (Ordinance No. 1438; adopted April 9, 2019), which states that the provisions of this Ordinance No. 1438 shall not apply to earthmoving activities associated with an agricultural project of five acres or less on slopes less than thirty percent. This exemption can be used only once per parcel; however, the project must comply with the Conservation Regulations in effect prior to the effective date of Ordinance No. 1438. As such, NCC Section 18.108.020 related to removal and preservation/replacement of vegetation canopy cover in the Agricultural Watershed zoning district does not apply. As proposed and mitigated by **Mitigation Measure BIO-4**, the project would permanently preserve 14.93 acres of vegetation canopy cover, which results in a preservation to removal ratio of approximately 3.3:1.

With implementation of **Mitigation Measures BIO-1 through BIO-4**, and the identified stream protection and fencing conditions of approval, the proposed project would have less than significant impacts on special-status plants and wildlife, wildlife movement and result in conformance with policies protecting biological resources in the Napa County General Plan and Conservation Regulations. Further, as discussed in **Section VII (Geology and Soils)** and **Section X (Hydrology and Water Quality)**, under existing conditions, the annual soil loss is anticipated to total 15.7 tons per year across the proposed development area based on soil types, slope lengths, and gradients. Under

proposed project conditions, annual soil loss is anticipated to total 9.76 tons per year, or a reduction of approximately 38% as compared to existing conditions. Therefore, the findings can be made that highest biological and water quality protections have been incorporated into the project, as proposed, with incorporation of **Mitigation Measures BIO-1 through BIO-4** and standard conditions of approval, consistent with applicable Napa County General Plan Policies and NCC Chapter 18.108, resulting in less than significant impacts.

Significance Level: Less than significant impacts with mitigation incorporated.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Discussion:

There are no Habitat Conservation Plans, Natural Community Conservation Plans, or other similar plans applicable to the project site. Therefore, no impact would occur.

Significance Level: No impact.

Mitigation Measures:

Mitigation Measure BIO-1: The owners/permittees shall revise Erosion Control Plan #P23-00326-ECPA prior to approval to include the following measures to minimize impacts associated with the potential loss and disturbance of bat species:

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

authorized by the County Planning Division and implemented prior to commencement of the ECPA.

Mitigation Measure BIO-2: The owners/permittees shall revise Erosion Control Plan #P23-00326-ECPA prior to approval to include the following measures to minimize impacts associated with the potential loss and disturbance of special-status and nesting birds (including purple martin) and raptors consistent with and pursuant to California Fish and Game Code Sections 3503 and 3503.5:

- a. For earth-disturbing activities occurring between February 1 and August 31 (which coincides with the grading season of April 1 through October 15 – NCC Section 18.108.027(C), and bird breeding and nesting seasons), a qualified biologist (defined as knowledgeable and experienced in the biology and natural history of local avian resources with the potential to occur at the project site, and specifically familiar with the vocalizations of purple martin) shall conduct preconstruction surveys for nesting birds within all suitable habitat (including snags and cavity trees) on the development area, and where there is potential for impacts adjacent to the development area (typically within 500 feet of project activities). The preconstruction survey shall be conducted no earlier than 7 days prior to when vegetation removal and ground disturbing activities are to commence. Should ground disturbance commence later than 7 days from the survey date, surveys shall be repeated. A copy of the survey shall be provided to the Napa County Conservation Division and the California Department of Fish and Wildlife (CDFW) prior to commencement of work.
- b. After commencement of work if there is a period of no work activity of 7 days or longer during the bird breeding season, surveys shall be repeated to ensure birds have not established nests during inactivity.
- c. In the event that nesting birds are found, the owner/permittee shall identify appropriate avoidance methods and exclusion buffers in consultation with CDFW, the County Conservation Division and the U.S. Fish and Wildlife Service (USFWS) prior to initiation of project activities. Exclusion buffers may vary in size, depending on habitat characteristics, project activities/disturbance levels, and species as determined by a qualified biologist in consultation with County Conservation Division and the USFWS and/or CDFW. The buffer distances shall be specified to protect the bird's normal behavior to prevent nesting failure and abandonment and comply with Fish and Game Code Section 3500 et seq. and the federal Migratory Bird Treaty Act. The qualified biologist shall have authority to order the cessation of all nearby Project activities if the nesting birds exhibit abnormal behavior which may cause reproductive failure (nest abandonment and loss of eggs and/or young) until an appropriate buffer is established. The qualified biologist shall monitor the behavior of the birds (adults and young, when present) at the nest site to ensure that they are not disturbed by Project work. Nest monitoring shall continue during project development until the young have fully fledged, as determined by the qualified biologist, unless otherwise approved in writing by CDFW.
- d. Exclusion buffers shall be fenced with temporary construction fencing (or the like), the installation of which shall be verified by Napa County prior to the commencement of any

earthmoving and/or development activities. Exclusion buffers shall remain in effect until the young have fledged or nest(s) are otherwise determined inactive by a qualified biologist as approved in writing by CDFW.

- e. Alternative methods aimed at flushing out nesting birds prior to preconstruction surveys, whether physical (i.e., removing or disturbing nests by physically disturbing trees with construction equipment), audible (i.e., utilizing sirens or bird cannons), or chemical (i.e., spraying nesting birds or their habitats) shall be prohibited.

Mitigation Measure BIO-3: For project activities that occur between March 15 and July 31 and within 0.25 miles of potential NSO nesting habitat: Prior to initiation of development activities associated with #P23-00326-ECPA, the owners/permittees shall demonstrate that surveys were conducted by a qualified biologist and approved in writing by CDFW following the U.S. Fish and Wildlife Service (USFWS) Protocol for Surveying Proposed Management Activities That May Impact Northern Spotted Owls (dated (revised) January 9, 2012). Surveys shall be conducted in accordance with Section 9 of the survey protocol, Surveys for Disturbance-Only Projects.

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

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

Mitigation Measure BIO-4: The owners/permittees shall revise Erosion Control Plan #P23-00326-ECPA prior to approval to minimize potential impacts to oak woodland consistency with General Plan Policy CON-24, as follows:

- a. A Preservation Area, totaling a minimum of approximately three (3) acres of California black oak forest, 10.83 acres of Douglas fir forest and 1.1 acres of coast live oak woodland located on slopes less than 30% and outside of stream setbacks, as depicted in Vegetation Preservation Map of the Erosion Control Plan (dated October 25, 2023 as revised April 10, 2025; Sheet 3) shall be designated as such in a deed restriction or mitigation easement or other means of permanent protection. Land placed in protection shall be restricted from development and other uses that would degrade the quality of the habitat (including but not limited to conversion to other land uses such as agriculture or urban development and excessive off-road vehicle use that increases erosion) and should be otherwise restricted by the existing goals and policies of Napa County. The owner/permittee shall record the deed restriction or mitigation easement prior to construction or within 90 days of project approval, whichever comes first. The area to be preserved shall be of like kind and quality to the woodland being impacted as a result of the proposed project, as follows: areas to be

preserved shall take into account the type of vegetation being removed, and species diversity and species that are limited within the project property and Napa County; the acreage included in the preservation area should be selected in a manner that minimizes fragmentation of oak woodland within the project property; and the preservation area should not include portions of the property already subject to development restrictions (i.e., within creek setbacks or on slopes over 30%). The area to be preserved shall be determined by a qualified biologist with knowledge of the habitat and species and shall obtain final approval from Napa County.

- b. Prior to any earthmoving activities temporary fencing shall be placed at the edge of the dripline of trees to be retained that are located adjacent to the development area (typically within approximately 50-feet of the proposed development area). The precise locations of said fences shall be inspected and approved by the Planning Division prior to the commencement of any earthmoving activities. No disturbance, including grading, placement of fill material, storage of equipment, etc. shall occur within the designated protection areas for the duration of erosion control plan and vineyard installation.
- c. The owner/permittee shall refrain from severely trimming the trees (typically no more than 1/3rd of the canopy) and vegetation to be retained adjacent to the proposed development area.
- d. In accordance with County Code Section 18.108.100 (Erosion hazard areas – Vegetation preservation and replacement) trees that are inadvertently removed that are not within the boundary of the project and/or not identified for removal as part of #P23-00326-ECPA shall be replaced on-site with fifteen-gallon trees at a ratio of 2:1 at locations approved by the planning director. A replacement plan shall be prepared for county review and approval that includes at a minimum, the locations where replacement trees will be planted, success criteria of at least 80%, and monitoring activities for the replacement trees. The replacement plan shall be implemented before vineyard planting activities. Any replaced trees shall be monitored for at least three years to ensure an 80% survival rate. Replacement trees shall be installed and documented that they are in good health prior to completion and finalization of the erosion control plan.

IV. Cultural Resources

Would the project:

- a) Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines §15064.5?**

AND/OR

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines §15064.5?

Discussion:

See **Section XVIII (Tribal Cultural Resources)** for disclosures and the impact assessment pursuant to Public Resources Code 21080.3.1 (Assembly Bill 52 - Gatto).

The following report was used in this analysis and is incorporated herein by reference, in addition to Napa County GIS archeological sensitive areas and archeological sites layers: Tom Origer & Associates, October 13, 2023, Cultural Resources Study of a Portion of the Property at 263 Petrified Forest Road, Calistoga, Napa County, California.

Tom Origer & Associates conducted a cultural resources evaluation within the project area, which included a check of information on file with at the Northwest Information Center, Sonoma State University, Rohnert Park to check relevant historic references to determine the potential for historic era archaeological deposits or structures. Sources of information included but were not limited to the current listings of properties on the National Register of Historic Places, California Historical Landmarks, California Register of Historical Resources, and California Points of Historical Interest as listed in the OHP's Historic Property Directory (2012). A request was sent to the State of California's Native American Heritage Commission (NAHC) to obtain information from the Sacred Lands Files to determine presence or absence of previously recorded historic or prehistoric cultural resources, and letters were sent to seven tribes for consultation. Origer & Associates also conducted a surface reconnaissance survey of all accessible parts of the proposed development area to locate any visible signs of potentially significant historic or prehistoric cultural deposits.

The cultural resources study (Origer & Associates, 2023) did not identify any significant or potentially significant cultural resources in the proposed development area, and determined that there is a very low probability of containing buried archaeological site indicators and soils. There is the possibility that buried archaeological deposits could be present and accidental discovery could occur. The proposed project would be subject to the standard conditions of approval identified below to protect cultural resources that may be discovered accidentally.

Significance Level: Less than significant impact.

c) Disturb any human remains, including those interred outside of dedicated cemeteries?

Discussion:

The cultural resources study did not locate any human remains in the proposed development area and does not anticipate the discovery of human remains due to implementation of the proposed project.

Therefore, impacts on human remains are anticipated to be less than significant. Furthermore, the following conditions of approval would be incorporated should the proposed project be approved, which would ensure that potential impacts on human remains would be less than significant.

Cultural Resources – Conditions of Approval: Discovery of cultural, historical or archaeological resources, or human remains during construction, grading, or other earth moving activities:

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

Significance Level: Less than significant.

Mitigation Measure: None are required.

V. Energy

Would the project:

a) Result in potentially significant environmental impact due to wasteful, inefficient or unnecessary consumption of energy resources during project construction or operation?

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.

During construction of the proposed project, the use of construction equipment, truck trips for hauling materials, and construction workers' commutes to and from the project site would consume fuel. Project construction is anticipated to occur over six months in one phase. Construction activities and

corresponding fuel energy consumption would be temporary and localized. In addition, there are no unusual project characteristics that would cause the use of construction equipment or haul vehicles that would be less energy efficient when compared with other similar agricultural construction sites within Napa County.

Once construction is complete, equipment and energy use would be slightly higher than existing levels and the proposed project would not include any unusual maintenance activities that would cause a significant difference in energy efficiency compared to the surrounding developed land uses. Thus, the proposed project would not result in wasteful, inefficient, or unnecessary energy use. This impact would be less than significant.

Significance Level: Less than significant impacts.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Discussion:

The transportation sector is a major end-user of energy in California, accounting for approximately 28% of total statewide energy consumption in 2019 (U.S. Energy Information Administration 2020). In addition, energy is consumed in connection with construction and maintenance of transportation infrastructure, such as streets, highways, freeways, rail lines, and airport runways. California's 30 million vehicles consumed more than 13 billion gallons of gasoline and more than 3 billion gallons of diesel each year (CEC 2024). In Napa County, farm equipment (not including irrigation pumps) accounted for approximately 60% of agricultural emissions in 2014, with the percentage anticipated to increase through 2050 (Napa County Revised Draft Climate Action Plan, July 2018).

With respect to transportation energy, existing energy standards are promulgated through the regulation of fuel refineries and products such as the Low Carbon Fuel Standard (LCFS), which mandated a 10% reduction in the non-biogenic carbon content of vehicle fuels by 2020. Additionally, there are other regulatory programs with emissions and fuel efficiency standards established by United States Environmental Protection Agency and the California ARB such as Pavley II/LEV III from California's Advanced Clean Cars Program and the Heavy-Duty (Tractor-Trailer) GHG Regulation. Further, construction sites would need to comply with State requirements designed to minimize idling and associated emissions, which also minimizes use of fuel. Specifically, idling of commercial vehicles and off road equipment would be limited to five minutes in accordance with the Commercial Motor Vehicle Idling Regulation and the Off-Road Regulation.¹³ The proposed project would comply with these State requirements and the Air Quality conditions of approval presented in Section III (Air Quality). Napa County has not implemented an energy action plan. Therefore, the proposed project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency or impede progress towards achieving goals and targets, and impacts would be less than significant.

Significance Level: Less than significant impacts

Mitigation Measure: None are required.

VI. Geology and Soils

Would the project:

a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

- i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.**

Discussion:

The project site could experience potentially strong ground shaking and other seismic related hazards based on the number of active faults in the San Francisco Bay region. The proposed project consists of earthmoving activities associated with the installation of erosion control measures for agricultural development but does not include the construction of new residences or other facilities (i.e., enclosed areas where people can congregate) that would be subject to seismic forces. Additionally, the proposed project would not result in a substantial increase in the number of people to the site. Therefore, the proposed project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving fault rupture, ground shaking, liquefaction, and landslides and impacts would be less than significant. Additional information supporting this conclusion is identified below.

The project site is not located on an active fault or within an “Earthquake Fault Hazard Rupture Zone” designated by the Alquist-Priolo Earthquake Zoning Act. The closest active fault is located approximately 0.3-mile south of the project site (Napa County GIS Fault 62500 Layer). Given the agricultural nature of the proposed project, it would not directly or indirectly cause potential substantial adverse effects involving fault rupture and impacts would be less than significant.

Significance Level: Less than significant impact.

- ii. Strong seismic ground shaking?**

Discussion:

Although the project site is located in an area that may be subject to moderate to strong seismic ground shaking potential during an earthquake (California Geological Survey, 2016), the proposed project does not include construction of any new residences or enclosed areas where people would congregate. Therefore, this impact would be less than significant.

Significance Level: Less than significant impact.

iii. Seismic-related ground failure, including liquefaction?

Discussion:

The project site is not in an area subject to high liquefaction potential. The Napa County General Plan identifies the project site as having low liquefaction potential (Napa County General Plan-Safety Element, 2023). Further, as noted above, the proposed project would not result in a substantial increase in the number of people or add structures onsite. Therefore, this impact would be less than significant.

Significance Level: Less than significant impact.

iv. Landslides?

Discussion:

There are no landslides located in the vicinity of the project site; furthermore, the proposed development area is not located in an area with a mapped landslide deposit (Napa County GIS). Given the agricultural nature of the proposed project and the proposed erosion control measures, the proposed project would not directly or indirectly cause potential substantial adverse effects involving landslide potential; a less than significant impact would occur (also see Question c below for additional discussion regarding slope stability and landslides).

Significance Level: Less than significant impact.

b) Result in substantial soil erosion or the loss of topsoil?

Discussion:

Soils in the proposed development area have been classified according to the Soil Survey of Napa County (USDA 1978) as Boomer-Forward felt complex (#111) and Forward silt loam (#140).

Installation and implementation of the proposed project would involve vegetation removal and earthmoving activities within the proposed development area. Pursuant to NCC Section 18.108.070(L) (Erosion Hazard Areas), earth-disturbing activities (other than installation of winterization measures) cannot be performed between October 16 and March 31. These activities would take place during the dry season when rainstorms are less likely, resulting in negligible erosion and sedimentation during project installation.

Soil loss calculations were prepared using the USLE to evaluate potential effects of erosion as a result of the proposed project. The USLE model evaluates the environmental conditions and physical forces that lead to the detachment and potential movement of soil particles through surface erosion. The USLE model does not describe travel distances of soil particles once dislodged. Potential soil loss and

sedimentation associated with the proposed agricultural development and operations would primarily be controlled through cover crops with a minimum vegetative cover density 80% (no till; spot-spray) as specified in the ECP. The cover crop provides the ability to trap eroded soils onsite, thereby reducing soil loss and sedimentation potential. Permanent measures also include cross-slope diversions, storm drainpipe, water bars, rolling dips, rock rip-rap energy dissipators at the outlet of all water bars.

Based on USLE modeling calculations prepared by Napa Valley Vineyard Engineering, Inc (Drew Aspegren, RPE No. 31418) (**Exhibit C**), the proposed conversion of approximately 3.83 net acres of vegetation to vineyard (N.B. the project was subsequently reduced to 3.66 net acres) is not anticipated to increase soil loss, or surface erosion, within the project site as compared to existing conditions (**Table 8**). Under existing conditions, the annual soil loss is anticipated to total 15.7 tons per acre across the proposed development area based on soil types, slope lengths, and gradients. Under proposed project conditions, annual soil loss is anticipated to total 9.76 tons per acre, or a reduction of approximately 38% as compared to existing conditions.

Table 8 – USLE Soil Loss Analysis

<u>Vineyard Transect ID</u>	<u>Pre-project Soil Loss (tons/ac)</u>	<u>Post-project Soil Loss (tons/ac)</u>	<u>Difference</u>	<u>Percent Change (approximate)</u>
Block 18	3.43	2.61	-0.82	-24%
Block 19A	4.32	1.83	-2.49	-58%
Block 19B	0.88	0.87	-0.01	-1%
Block 19C	2.78	2.19	0.59	-21%
Block 27	4.29	2.26	-2.03	-47%
Total	15.7	9.76	-5.94	-38%

Source: Napa Valley Vineyard Engineering, Inc., December 2023, USLE Analysis – **Exhibit C**

Other proposed erosion control features that are anticipated to further reduce potential soil loss as a result of the proposed project, including soil loss experienced during vineyard and cover crop development and establishment, consist of installation of straw mulching, erosion control blankets, sediment barriers and other practices as needed.

Should the proposed project be approved, the following conditions of approval would be incorporated to ensure that erosion control measures are installed according to plan specifications.

Erosion and Runoff Control (i.e., Hydromodification) Installation and Operation – Conditions of Approval: The following conditions shall be incorporated by reference into Erosion Control Plan #P23-00326-ECPA pursuant to NCC Chapter 18.108 (Conservation Regulations):

- Permanent Erosion and Runoff Control Measures: Pursuant to NCC Section 18.108.070(L) installation of runoff and sediment attenuation devices and hydromodification facilities including, but not limited to, water bars, diversion ditches and permanent no-till cover crop (or

adequate mulch cover applied annually), shall be installed no later than October 15 during the same year that initial vineyard development occurs. This requirement shall be clearly stated on the final Erosion Control Plan. Additionally, pursuant to NCC Section 18.108.135 “Oversight and Operation” the qualified professional that has prepared this erosion control plan (#P23-00326-ECPA) shall oversee its implementation throughout the duration of the proposed project, and that installation of erosion control measures, sediment retention devices, and hydromodification facilities specified for the vineyard have been installed and are functioning correctly. Prior to the first winter rains after construction begins, and each year thereafter until the proposed project has received a final inspection from the county or its agent and been found complete, the qualified professional shall inspect the site and certify in writing to the planning director, through an inspection report or formal letter of completion verifying that all of the erosion control measures, sediment retention devices, and hydromodification facilities required at that stage of development have been installed in conformance with the plan and related specifications, and are functioning correctly.

- **Cover Crop Management/Practice:** The permanent vineyard cover crop shall not be tilled (i.e., shall be managed as a no-till cover crop) for the life of the vineyard and the owner/permittee shall maintain a plant residue density of a permanent cover crop to achieve minimum densities of 80%. Cover crop may be disced between rows and sprayed under vines or otherwise cultivated after April 1; after three years a permanent, no-till cover shall be established. Should the permanent no-till cover crop need to be replanted/renewed during the life of the vineyard, cover crop renewal efforts shall follow the County “Protocol for Replanting/Renewal of Approved Non-Tilled Vineyard Cover Crops” July 19, 2004, or as amended.

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

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

development sediment erosion conditions (i.e., soil loss) be less than or equal to pre-development conditions.

Significance Level: Less than significant impact.

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?

Discussion:

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

Significance Level: No impact.

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.

Discussion:

Soils in the proposed development area exhibit a low-to-moderate (Forward silt loam #140) and moderate-to-high (Boomer-Forward-Felt complex #111) shrink-swell potential (USDA, 1978). However, no structures are proposed as part of the project and expansive soils pose little risk to vineyards and related agricultural improvements. Therefore, there would be no impacts associated with expansive soils.

Significance Level: No impact.

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?

Discussion:

The proposed project involves the development of a vineyard. No septic tanks or alternative wastewater disposal systems are needed or proposed for the proposed project. Therefore, no impact would occur with regard to soils supporting septic tanks or alternative wastewater disposal systems.

Significance Level: No impact.

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

Discussion:

The proposed project would not destroy any unique geologic features on the project site. Due to the nature of the soils in the project site and the nature of the proposed project (which would involve a relatively shallow vineyard), the probability of encountering paleontological resources within the project site is minimal. Furthermore, project approval, if granted, would be subject to the standard conditions described below that would avoid and reduce potential paleontological resource impacts. Therefore, impacts to geologic features and paleontological resources are anticipated to be less than significant.

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

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

Significance Level: Less than significant impact.

Mitigation Measure: None are required.

VIII. Greenhouse Gas Emissions:

Would the project:

- 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?**

AND/OR

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?

Discussion:

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

GHGs are the atmospheric gases whose absorption of solar radiation is responsible for the greenhouse effect, including CO₂, methane, nitrous oxide, and fluorocarbons, which contribute to climate change. CO₂ is the principal GHG emitted by human activities, and its concentration in the atmosphere is most affected by human activity. It also serves as the reference gas to which to compare other GHGs.

Agricultural sources of carbon emissions include forest clearing, land-use changes, biomass burning, farm equipment and management activity emissions. GHG emissions are reported as carbon dioxide equivalent (CO_{2e}) which is a metric used to compare the emissions from various GHGs on the basis of their global warming potential (GWP), by converting amounts of other gases with different GWPs to an equivalent amount of carbon dioxide with a GWP of one. CO₂ is used as the reference gas to calculate atmospheric carbon effects of GHGs. Carbon stocks and sequestration are converted to CO_{2e} by multiplying the carbon total by 44/12 (or 3.67), which is the ratio of the atomic mass of a carbon dioxide molecule to the atomic mass of a carbon atom (<http://ncasi2.org/COLE/faq.html>).¹⁵

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).¹⁶ The updated thresholds to evaluate GHG and climate impacts from land use projects are qualitative and geared toward building and transportation projects. Per the BAAQMD, all other projects should be analyzed against either an adopted local Greenhouse Gas Reduction Strategy (i.e., Climate Action Plan (CAP)) or other threshold determined on a case-by-case basis by the Lead Agency. If a project is consistent with the State's long-term climate goals of being carbon neutral by 2045, then a project would have a less-than-significant impact as endorsed by the California Supreme Court in *Center for Biological Diversity v. Department of Fish & Wildlife* (2015) 62 Cal. 4th 204). There is no proposed construction-related climate impact threshold at this time. 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,

¹⁵ "Carbon stock" refers to the total amount of carbon stored in the existing plant material including trunks, stems, branches, leaves, fruits, roots, dead plant material, downed trees, understory, and soil organic material. Carbon stock is expressed in units of metric tons of carbon per acre. When land is cleared, some percentage of the carbon stored is released back to the atmosphere as CO₂. Land clearing or the loss of carbon stock is thus a type of GHG emission (County of Napa, March 2012, Napa County Draft Climate Action Plan).

¹⁶ <https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines>, April 2022

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

In the absence of quantitative GHG thresholds from BAAQMD or a qualified CAP for the County, construction GHG emissions from the project are evaluated against the 1,100 metric tons (MT) per year and operational GHG emissions are evaluated against the 10,000 MT per year threshold from the neighboring Sacramento Metropolitan Air Quality Management District (SMAQMD). While air quality emission thresholds are difficult to apply to across air districts due to the regional nature of air quality impacts, GHG emission impacts are global in nature. Therefore, the use of neighboring air district thresholds is an adequate evaluation given the absence of GHG thresholds from BAAQMD or a qualified CAP for the County.

“Carbon stock” refers to the total amount of carbon stored in the existing plant material including trunks, stems, branches, leaves, fruits, roots, dead plant material, downed trees, understory, and soil organic material. Carbon stock is expressed in units of metric tons of carbon per acre. When land is cleared, some percentage of the carbon stored is released back to the atmosphere as CO₂.

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

“Carbon sequestration” refers to the ongoing process by which plants, such as vines, trees, and grasses absorb CO₂ from the atmosphere through photosynthesis, converting it into carbon that is stored in their biomass (roots, stems, leaves) and soil. This process helps remove CO₂ from the atmosphere over time. Any changes in land use or vegetation that reduce carbon sequestration—such as removing natural vegetation or converting land for other uses—lead to ongoing reductions in this CO₂-capturing benefit, potentially increasing the amount of CO₂ that remains in the atmosphere annually. A decrease in carbon sequestration is considered an increase in CO₂ emissions.

Overall increases in GHG emissions in Napa County were assessed in the EIR prepared for the Napa County General Plan Update certified in June 2008. GHG emissions were found to be significant and unavoidable in that document, despite the adoption of mitigation measures incorporating specific policies and action items into the General Plan.

The County requires project applicants to consider methods to reduce GHG emissions consistent with Napa County General Conservation Element Plan Policy CON-65e. Pursuant to State CEQA Guidelines Section 15183, this assessment focuses on impacts that are “peculiar to the project,” rather than the cumulative impacts previously assessed, because this Initial Study assesses a project that is consistent with an adopted General Plan for which an EIR was prepared.

Because BAAQMD does not include significance thresholds for operational emissions of non-building projects, the operational emissions analysis below is for disclosure purposes only. Operational emissions are compared to the SMAQMD annual GHG threshold to provide context for the magnitude, or lack thereof, of operational emissions global impacts.

Emissions from change in vegetation associated with the proposed project include: i) the carbon stocks that are lost or released when site vegetation is removed or burned, including any woody debris and downed wood; ii) underground carbon stocks, or soil carbon, released when soil is ripped in preparation for vineyard development and planting (referred to as Carbon Stock Emissions); iii) ongoing carbon sequestration that is gained or lost by altering vegetation or conserving specific vegetation types (referred to as Carbon Sequestration Emissions).

Construction Emissions:

Construction emissions associated with vineyard development projects include emissions from fuel used in construction equipment and vehicle trips used to develop and prepare the development area and plant vineyard. As discussed in Section III (Air Quality), three recent County Certified CEQA documents assessed and analyzed potential air quality and GHG emissions associated with vineyard development. Within those documents, potential GHG emissions associated with construction

equipment were calculated and disclosed. An estimation of potential construction equipment emissions per acre of vineyard development was derived using the highest emissions results of the three projects. The KJS and Sorrento EIR anticipated approximately 1,880 metric tons (MT) CO₂e of construction equipment emissions for a 97.7-acre vineyard development, resulting in approximately 19.2 MT CO₂e of construction equipment emissions per acre of vineyard development. Using this emission factor it is anticipated that construction equipment emissions associated with the proposed 4.79 gross acres of vineyard would be approximately 92 MT CO₂e (4.79 acres multiplied by 19.2 MT CO₂e). Construction emissions are seasonal in nature and would only occur during the dry season (April-October) of any given year. While BAAQMD has no quantitative GHG threshold for comparison, the project's construction equipment emissions are well below the SMAQMD GHG emission threshold of 1,100 MT and therefore are less than significant.

Operational Emissions:

Emissions associated with the operation of the vineyard capture ongoing emissions from the use of equipment and vehicles to maintain and farm the vineyard, including vehicles (such as haul trucks, pick-up trucks) and worker vehicle trips. The three vineyard development project analyses referenced above also assessed ongoing vineyard operation emissions associated with vehicles and equipment. Estimated potential operational emissions per acre of vineyard development were derived using the highest emissions results of the three projects; the Stagecoach North Vineyard EIR estimated approximately 322 MT CO₂e of operational emissions per year for a 116-acre vineyard, resulting in approximately 2.77 MT CO₂e of operational emissions per acre of vineyard per year. Using this emission rate, it is anticipated that operational equipment emissions associated with the proposed 4.79-acre agricultural development would be approximately 13.3 MT CO₂e per year (4.79 multiplied by 2.77 MT CO₂e). Operational emissions are also seasonal in nature, mostly occurring during the harvest season. While the BAAQMD's qualitative operational thresholds do not apply to projects such as the proposed project which do not generate emissions from building energy and transportation, the project's operational emissions can be considered less than significant when compared to SMAQMD's operational threshold of 1,000 MT per year.

Emissions from Change in Vegetation:

Converting existing land uses into vineyard can impact both carbon stock and sequestration from vegetation and soil. The project would convert to vineyard approximately 2.43 acres of California black oak forest, 2.01 acres of Douglas fir forest and 1.1 acres of coast live oak woodland. Following implementation of **Mitigation Measure BIO-4**, approximately three (3) acres of California black oak forest, 10.83 acres of Douglas fir forest, and 1.1 acres of coast live oak woodland located on slopes less than 30% and outside of stream setbacks would be permanently preserved in a deed restriction or similar instrument. Therefore, the proposed project would permanently preserve greater than 1:1 acres of canopy on slopes less than 30% and outside of stream setbacks. The proposed preservation area includes large contiguous areas that can be more beneficial to wildlife compared to smaller patches of preservation areas, and also connects to streams and their setbacks, further increasing protection, use and availability of those areas by local wildlife (**Exhibits B-3 and B-4**). By preserving a minimum of 14.93 acres of vegetation, the project would result in a minimum preservation to removal ratio of 3.3:1, which more than compensates for the emissions resulting from the removal associated with the project, consistent with the State's long-term climate goals of being carbon neutral by 2045. Therefore, the impact would be less than significant.

Significance Level: Less than significant impact.

Mitigation Measures: None are required.

IX. Hazards and Hazardous Materials

Would the project:

- a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?**

AND/OR

- 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?**

Discussion:

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

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

Chemical storage would occur offsite; mixing would be located within existing location in the existing vineyard, or in a location over 100 feet from a stream. Cleaning and washing of chemical application equipment would occur near existing Blocks C and E on APN 020-430-006, and over 100-feet from a stream. Fertilizers (i.e., nitrogen, phosphorus, magnesium sulfate, calcium) would be applied via drip up to two times per year. Mildewcides (i.e., wettable sulfur, Serenade, Sonata) would be sprayed up to four times per year; herbicides would not be used.

The National Resource Conservation Service recommends a minimum 50-foot-wide vegetated buffer from aquatic resources (such as streams, ephemeral drainages, and wetlands) because under most

conditions it is generally an adequate buffer width to provide enough vegetation to effectively entrap and filter chemicals, nutrients, and sediment thereby, facilitating degradation within buffer soils and vegetation (USDA, 2000).

There are several drainages throughout the property, including a County-definitional stream located north and northwest of Block 27 that has been avoided by the project with the required 85-foot minimum required setbacks, and another County-definitional stream located northwest of Blocks 18 and 19A that has been avoided by the project with the required minimum 125-foot minimum setbacks based on slopes from top-of-bank pursuant to Napa County Conservation Regulations Section 18.108.025. There are also two reaches of an ephemeral stream located east of Blocks 18 and 19A, both of which have been avoided by the project with well over the minimum 35-foot setbacks required for ephemeral streams, despite the Section 17 Exemption that precludes the need to avoid ephemeral/intermittent streams with minimum 35-foot setbacks, which were established as part of Ordinance No. 1438. Therefore, no waterways have the potential to be significantly impacted by the proposed project.

The risk of potentially hazardous materials reaching or affecting adjacent water courses or other aquatic resources is significantly reduced because: i) there are no streams or wetlands located within 50 feet of the proposed development area; and ii) only federal and/or California approved chemicals would be applied to the vineyard in strict compliance with applicable state and federal law. Project approval, if granted, would also be subject to the following standard conditions of approval that would further avoid and/or reduce potential impacts associated with routine transport and use of hazardous materials during project implementation and ongoing vineyard operations and maintenance. Impacts related to routine use, transportation, and application of hazardous materials described above are anticipated to be less than significant. The following conditions of approval would be implemented to reduce potential accidental release of hazardous materials, if the project is approved:

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

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

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

Significance Level: Less than significant impact.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Discussion:

The nearest known schools are Calistoga Elementary School, Calistoga Junior-Senior High School, Palisades High School, located approximately 1.6 miles to the east of the project parcel (Napa County GIS: Schools Layer). There are no schools within 0.25-mile of the project site. Therefore, no impact would occur.

Significance Level: No impact.

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?

Discussion:

The project site is not on any of the lists of hazardous waste sites enumerated under Government Code Section 65962.5 (Envirostor, 2026; GeoTracker, 2026). Therefore, no impact would occur.

Significance Level: No impact.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

Discussion:

The project site is neither located within an area covered by an airport land use plan, nor is it within 2 miles of a public, public-use, or private airport (Napa County Airport Land-use Compatibility Plan, 1991). The closest public airport to the project site is Angwin-Parret Airfield located approximately 9 miles to the east. Therefore, no impact would occur.

Significance Level: No impact.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Discussion:

During construction, there would be negligible numbers of workers (up to 10 employees) visiting the project site on a temporary basis to implement the project and install vineyards. Up to 14 employees would also visit the site on a seasonal basis for subsequent vineyard operations; it is anticipated that these employees would be from the same workforce for the existing vineyard on the parcel. No road closures would be required to implement the project, and there would not be a permanent substantial increase in the number of people working or residing at or near the project site. Therefore, the proposed project would not impair implementation of or physically interfere with any adopted emergency response plan or emergency evacuation plan, and the impact would be less than significant.

Significance Level: Less than significant impact.

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wild-land fires?

Discussion:

During construction, there would be negligible numbers of workers (up to 10 employees) visiting the project site on a temporary basis to implement the project and install vineyards. Up to 14 employees would also visit the site on a seasonal basis for subsequent vineyard operations; it is anticipated that these employees would be from the same workforce for the existing vineyard on the parcel. No road closures would be required to implement the project, and there would not be a permanent substantial increase in the number of people working or residing at or near the project site. Therefore, the proposed project would not impair implementation of or physically interfere with any adopted emergency response plan or emergency evacuation plan, and the impact would be less than significant.

Significance Level: Less than significant impact.

Mitigation Measures: None are required.

X. Hydrology and Water Quality

The County requires all discretionary permit applications (such as use permits and ECPAs) to complete necessary water analyses in order to document that sufficient water supplies are available for the proposed project and to implement water saving measures to prepare for periods of limited water supply and to conserve limited groundwater resources.

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

To assess potential impacts resulting from project well(s) interference with neighboring wells within 500 feet and/or springs within 1,500 feet, the County's WAA guidance¹⁷ 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."¹⁸

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

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

The project site is located within the Cyrus Creek Drainage of the Napa River Watershed. The project property does not contain any blue-line streams. There are several ephemeral drainages located on the property, into which runoff concentrates; these ephemeral drainage courses are tributary to Cyrus

¹⁷ The County's Water Availability Guidelines (adopted May 2015)

¹⁸ Refer to Figure 1: Significant Streams for Tier 3, located at www.countyofnapa.org/3074/Groundwater-Sustainability. The "Significant_Streams" and "Significant_Streams_1500ft_buffer" GIS layers are published as publicly-available open data through the County's ArcGIS Online Account.

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

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

Would the project:

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

Discussion:

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

The proposed project has been designed with site-specific temporary and permanent erosion control measures and features to prevent sediment, runoff, and pollutants from leaving the project site. Agricultural Erosion Control Plan #P23-00326-ECPA includes BMPs that are consistent with NCC Section 18.108.080(c), as well as with Regional Water Board guidance from the Stormwater Best Management Practice Handbooks for Construction and for New Development and Redevelopment, and the Erosion and Sediment Control Field Manual. Therefore, the proposed project is not anticipated to violate any water quality standards or otherwise substantially degrade surface or groundwater quality, and impacts would be less than significant.

Level of Significance: Less than significant impact.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Discussion:

Tier 1 Water Availability Analysis: A Tier 1 WAA was prepared to determine if the proposed increase in groundwater demand as a result of the proposed project would result in a significant impact to groundwater supplies (EBA Engineering, 2025 - **Exhibit D**). The Tier 1 WAA estimates the onsite groundwater recharge and both existing and proposed groundwater use to disclose and assess potential impacts on groundwater in accordance with the WAA Guidance Document adopted by the County on May 12, 2015.

There are three (3) wells on the project property, including two (2) wells (Well #1 and Well #2) located in the existing vineyards on APNs 020-430-005 and -006 and one (1) well (Well #3) located on APN 020-430-019. All domestic, winery and existing vineyard irrigation demand is supplied by Wells #1 and #2; the project would be irrigated with groundwater from Well #3, located on project parcel APN 020-430-019. As described in the Tier 1 WAA, onsite water demands for existing uses on the project parcels totals 0.93 AFY associated with approximately 1.85 acres of existing vineyards located on APN 020-430-018. However, that existing vineyard is part of approved #P14-00381-ECPA (approved March 28, 2016), which is irrigated by water from wells located on APNs 020-430-005 and -006. As such, this existing water demand is not considered to be baseline water demand for the project parcels. Well #3 is currently not in use, with an existing water demand on the three project parcels and on Well #3 of 0 AFY. As proposed, the project (at 3.66 net acres) would result in an increase in estimated water use by 1.83 AFY on the three project parcels.

Long-term average groundwater recharge can be estimated as the percentage of rainfall that falls on the project aquifer recharge area that percolates into the underlying aquifer. The percentage of rain that has the potential to infiltrate varies depending on factors such as rates of evaporation and transpiration, soil type and geology that exists at the site, and average annual rainfall. The total volume of precipitation that falls within the area of the project site was calculated by multiplying the average annual precipitation rate (36.06 inches per year) by the total acreage of the three (3) project parcels (102.78 acres), resulting in a total annual precipitation volume of approximately 308.85 AFY.

After factoring in runoff, evapotranspiration and canopy interception, the total estimated volume of water available for groundwater recharge on the project parcels is approximately 81.4 AFY, which far exceeds the estimated proposed groundwater demand of approximately 1.83 AFY for the project.

Based on the calculated average recharge, the proposed increase in groundwater demand resulting from the proposed project would be equivalent to approximately 2% of the recharge within the project parcels during a 10-year averaged period (WY2012-2021). Given the surplus of groundwater resources in terms of estimated average annual groundwater recharge, the 1.83 AF/y increase in groundwater use associated with the proposed project is highly unlikely to result in reductions in groundwater levels or depletion of groundwater resources over time. Less than significant impacts would result.

As the portions of the project, which spans across three separate, contiguous parcels, would be served by a well located on one of these parcels (APN 020-430-019), and as improvements would be made to the existing water supply system to accommodate the proposed project, a Napa County Groundwater Permit application (#E36-00127) is being processed concurrently, and the following Conditions of Approval would be applied to the project, if approved, to ensure that the proposed project has a reliable water source:

Groundwater Easement – Condition of Approval: The planned transfer of groundwater from APN 020-430-019 to APN 020-430-018 and 020-430-027, as depicted in #P23-00326-ECPA) shall be documented and memorialized through recordation of an “Agreement for Grant of Easement and Water Right” as described in Appendix E of the Water Availability Analysis Guidance Document (Napa County, 2015). The Agreement shall be in a form approved by the County and shall be recorded by the owner/permittee prior to commencement of any activities authorized by #P23-00326-ECPA.

Groundwater Permit – Conditions of Approval: The Owner/Permittee shall comply with all conditions and requirements of the Groundwater Permit #E26-00127, if approved.

Tier 2: According to the County’s WAA Guidelines (Napa County, 2015), if a project well is located within 500 feet of neighboring well(s), or within 1,500 feet of a spring used for water supply, a Tier 2 WAA (Well and Spring Interference) is required. According to the WAA prepared for this proposed project, the existing groundwater well that would provide water for the proposed vineyard (Well #3) is located greater than 500 feet to an existing nearby well(s) and is located greater than 1,500 feet from a nearby spring; as such, the conditions requiring a Tier 2 WAA are not met.

Tier 3: A Tier 3 review is the County’s adopted method for complying with its duties under the Public Trust Doctrine. Cyrus Creek is a County-identified Significant Stream of concern for groundwater-surface interaction and is located to the south/southeast of the project area. The project well (Well #3) is located approximately 940 feet to the west of Cyrus Creek.

The Tier 3 analysis indicated that project irrigation well (Well 3), will not contribute to streamflow depletion in Cyrus Creek.

Considering: i) anticipated annual water use of the proposed project of approximately 1.83 AFY is below the anticipated annual groundwater recharge rate of approximately 81.4 AFY; ii) there is no evidence to date indicating that there are groundwater problems or declining well production in the this area of the County; and iii) incorporation of the standard groundwater management conditions of approval below to reduce potential impacts associated with groundwater use, the proposed project (if approved) would result in less than significant impacts to groundwater supplies, groundwater recharge, and local groundwater aquifer levels.

Groundwater Management, Wells – Condition of Approval: The owners/permittees shall be required (at the permittee’s expense) to record well monitoring data (specifically, static water level no less than quarterly, and the volume of water no less than monthly) for the project wells.

Such data shall be provided to the County. If data indicates the need for additional monitoring, and if the owner/permittee is unable to secure monitoring access to neighboring wells, onsite monitoring wells may need to be established to gauge potential impacts on the groundwater resource utilized for the project. Water usage shall be minimized by use of best available control technology and best water management conservation practices.

In order to support the County's groundwater monitoring program, well monitoring data as discussed above shall be provided to the County. The project well shall be made available for inclusion in the groundwater monitoring network if the Director of PBES determines that the well could be useful in supporting the program.

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

Significance Level:

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?

AND/OR

ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

AND/OR

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?

AND/OR

iv. impede or redirect flood flows?

Discussion:

Earthmoving activities have the potential to alter the natural pattern of surface runoff, which could lead to areas of concentrated runoff and/or increased erosion. The conversion of existing vegetation to vineyard would alter the composition of the existing land cover and infiltration rates, which could affect erosion and runoff. The proposed project does not propose any alteration to a stream, river, or drainage course, or include the creation of impervious surfaces that would concentrate runoff. The project site is not located in an area of a planned stormwater drainage system, nor is it not directly served by a stormwater drainage system.

Erosion control measures and plan features that are not anticipated to affect drainage patterns but would assist in minimizing the potential for increased erosion and water runoff include establishment of a no-till cover crop with vegetative cover density minimum densities of 80%, and the application of straw mulch cover on all disturbed areas as needed to achieve the required coverage. These features would slow and filter surface runoff water, thereby minimizing sediment, nutrients, and chemicals from leaving the project site and entering nearby aquatic resources. Refer to **Exhibit E** for details related to the following discussion.

Proposed erosion control and project features that have the potential to alter natural drainage patterns include sediment barriers, water bars, rolling dips, cross-slope diversions, straw mulch and a permanent vineyard cover crop. These proposed erosion control measures are not anticipated to significantly alter the existing topography or drainage patterns of the project site, or direct surface flows into other watersheds (as further described below). As discussed in **Section VII (Geology and Soils)**, erosion control features would maintain soil losses below the tolerable levels for the soil types found on the project site and ensure (in conjunction with the cover crop) that no net increase in erosion sediment conditions occurs as a result of the proposed project, and that the proposed project is anticipated to decrease soil loss as compared to existing conditions.

A Hydrology Analysis for the proposed project was prepared by Drew Aspegren (RPE No. 31418) (Napa Valley Vineyard Engineering, April 2024 – **Exhibit E**). The Hydrology Analysis used HydroCad, Urban Hydrology for Small Watersheds modeling to compare the pre- and post-development peak stormwater runoff rates from the proposed development area for the 2-year, 5-year, 10-year, 25-year, 50-year, and 100-year, 24-hour design storms. The development area (i.e., five (5) vineyard blocks) is within ten (10) watershed basins which total approximately 34.34 acres. Of the ten (10) watersheds basins analyzed, there was no change (0%) in peak discharge flows in any of the modeled storm events in five (5) watersheds (Watersheds C, E, H, I, J). The models showed changes in peak discharge flows in the post-project condition in the remaining five (5) watersheds (Watersheds A, B, D, F, and G); the changed flows are detailed in **Table 9**, below. The Hydrology Analysis concluded that the project would not increase peak flow or runoff, rather, following implementation of the project as proposed

and conditioned herein, the project would result in a reduction of 7.31 cubic feet per second (cfs), or approximately 4% from pre-project conditions. (**Exhibits A and E**).

Table 9: Peak Discharge Flows by 24-Hour Storm Event Frequency Return Interval (cubic feet / second; cfs) for Watersheds A, B, D, F, and G

<u>Watershed</u>	<u>2-year (cfs)</u>	<u>5-year (cfs)</u>	<u>10-year (cfs)</u>	<u>25-year (cfs)</u>	<u>50-year (cfs)</u>	<u>100-year (cfs)</u>
A – Pre-project	1.98	3.09	4.02	5.41	6.46	7.56
A – Post-project	1.95	3.03	3.92	5.26	6.27	7.33
A - Change (cfs)	-0.03	-0.06	-0.1	-0.15	-0.19	-0.23
A -Change (%)	-1.5%	-1.9%	-2.5%	-2.8%	-2.9%	-3%
B – Pre-project	0.72	1.13	1.48	2.01	2.4	2.82
B – Post-project	0.72	1.13	1.46	1.97	2.35	2.75
B - Change (cfs)	0	0	-0.02	-0.04	-0.05	-0.07
B -Change (%)	0%	0%	-1.3%	-2%	-2.1%	-2.5%
D – Pre-project	0.49	0.76	0.99	1.32	1.57	1.83
D – Post-project	0.48	0.74	0.96	1.28	1.53	1.78
D - Change (cfs)	-0.01	-0.02	-0.03	-0.04	-0.04	-0.05
D -Change (%)	-2%	-2.6%	-3%	-3%	-3%	-2.7%
F – Pre-project	2.26	3.81	5.14	7.18	8.84	10.4
F – Post-project	2.08	3.51	4.73	6.61	8.04	9.57
F - Change (cfs)	-0.18	-0.30	-0.41	-0.57	-0.8	-0.83
F - Change (%)	-8%	-7.9%	-8%	-7.9%	-9%	-8%
G – Pre-project	2.26	3.81	5.14	7.18	8.84	10.4
G – Post-project	2.08	3.51	4.73	6.61	8.04	9.57
G - Change (cfs)	-0.18	-0.30	-0.41	-0.57	-0.8	-0.83
G -Change (%)	-8%	-7.9%	-8%	-7.9%	-9%	-8%
TOTAL Change (cfs)	-0.4	-0.68	-0.97	-1.37	-1.88	-2.01
TOTAL Change (%)	-4%	-3%	-4%	-4%	-4%	-4%

Source: Napa Valley Vineyard Engineering, Inc., 2024. **Exhibit E**

Following implementation of the specifications of the Erosion Control Plan, including planting and maintenance of the cover crops and the appropriate design and installation of the erosion control measures (as described above, and in Exhibit A), the proposed project would not result in an increase in peak flow or runoff compared to pre-project conditions, consistent with General Plan Policy CON-50c. Furthermore, as discussed in Section VII (Geology and Soils), a reduction in soil loss and sedimentation is anticipated under post-project conditions. In addition, pursuant to NCC Section 18.108.135 (Oversight and Operation), projects requiring an erosion control plan would be inspected by the County after the first major storm event of each winter until the proposed project has been completed and stable for three years to ensure that the implemented erosion control plan is functioning properly. 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.

Significance Level: Less than significant impact.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

Discussion:

The project site is not located within a Federal Emergency Management Agency (FEMA) 100-year flood zone, in a dam or levee failure inundation area, or in an area subject to seiche or tsunami (Napa County GIS FEMA flood zone and dam levee inundation areas layers; Napa County General Plan-Safety Element, 2023). Therefore, no impact would occur.

Significance Level: No impact.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Discussion:

The proposed project would not have an adverse impact on water quality because the ECPA has been designed to keep polluted runoff and sediment from leaving the project site. As discussed in **Section IX (Hazards and Hazardous Materials)**, the project proposes the use of potentially hazardous materials during implementation activities (i.e., oil, gasoline, and transmission fluids associated with construction equipment) and the application of chemicals (i.e., fertilizers) for ongoing vineyard maintenance. Only federal and/or California approved chemicals would be applied to the vineyard in strict compliance with applicable state and federal law. As discussed in **Sections IV (Biological Resources)** and **IX (Hazards and Hazardous Materials)**, buffers provided in the ECP to area watercourses would facilitate increased water infiltration so that chemicals and potentially hazardous materials associated with project implementation and operation can be trapped and degraded in buffer vegetation and soils to protect water quality. The limited application of agricultural chemicals generally occurring during the non-rainy season would also minimize the amounts of chemicals that could impact on or offsite water resources. Because the proposed project as designed is not expected to increase overall runoff rates or decrease times of concentration in relation to existing conditions (as discussed in Question c above), the proposed cover crop and buffers would be able to effectively trap and filter sediments, thereby minimizing their entry into nearby water resources.

As discussed above and in **Section VII (Geology and Soils)**, the proposed project has been designed with site-specific temporary and permanent erosion and runoff control measures and features to prevent sediment, runoff, and pollutants from leaving the project site. As such, the proposed project is anticipated to reduce soil loss and sedimentation by approximately 5.94 tons per year (38% reduction) compared to existing condition, have no negative effect on runoff rates, and maintain project site

drainage characteristics as compared to existing conditions. The ECPA includes BMPs that are consistent with NCC Section 18.108.080(c), as well as with Regional Water Board guidance from the Storm Water Best Management Practice Handbooks for Construction and for New Development and Redevelopment, and the Erosion and Sediment Control Field Manual.

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

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

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

Significance Level: No impact.

Mitigation Measures: None are required.

XI. Land Use and Planning

Would the project:

a) Physically divide an established community?

Discussion:

The project site is located at the end of a private paved road approximately 2,500 feet from its intersection with Petrified Forest Road, approximately 1.2 miles west of the City of Calistoga, which is the nearest established community. Existing development on the parcels include one primary and one secondary residence and a guest house, outbuildings, a 20,000-gallon producing winery, water storage tanks, three (3) wells and a network of access roads, approximately 14.9 acres of existing vineyard. Surrounding areas contain agricultural and rural residential areas. Therefore, the proposed vineyard

and subsequent vineyard operations are consistent with surrounding land uses and would not physically divide an established community and no impact would occur.

Significance Level:

b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Discussion:

The project site is zoned as Agricultural Watershed and is designated under the Napa County General Plan as Agriculture, Watershed and Open Space. Surrounding parcels are also zoned Agricultural Watershed in the Napa County General Plan Land Use Element. Vineyards and associated improvements are permitted uses under these designations.

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

- The proposed project is consistent with NCC Section 18.108.010, which requires that soil loss and runoff as a result of a project be minimized to protect water quality. As discussed in **Sections VII (Geology and Soils) and X (Hydrology and Water Quality)**, the proposed project is anticipated to decrease soil loss and potential sedimentation by approximately 5.94 tons per year (reduction of approximately 38% as compared to existing conditions) and maintain runoff conditions as compared to existing conditions.
- The proposed project is consistent with Policies CON-48 and CON-50c, which require pre-development sediment erosion conditions and runoff characteristics following development not be greater than predevelopment conditions. As discussed in **Section VII (Geology and Soils)** and **Section X (Hydrology and Water Quality)** the project as proposed would reduce soil loss, sedimentation, and reduce runoff characteristics as compared to existing conditions.
- The proposed project with implementation of **Mitigation Measures BIO-1 through BIO-4** is consistent with Policies CON-13, CON-16 and CON-17 which require discretionary projects consider and avoid impacts to fisheries, wildlife habitat, and special-status species through evaluation of biological resources, as well as the preservation and protection of native grasslands, sensitive biotic communities, and habitats of limited distribution and no net loss of sensitive biotic communities. A Biological Resources Survey Report, NSO Assessment and Woodland Loss Assessment were prepared for the proposed project (**Exhibits B-1, B-2 and B-3**). The project as proposed would minimize potential direct, indirect, and cumulative impacts to special-status species and associated habitat occurring in the project site with implementation of **Mitigation Measures BIO-1 through BIO-4**. Furthermore, implementation

of these measures would not affect the feasibility of the proposed project in that impacts to special-status species and their habitat can be minimized.

- With implementation of **Mitigation Measures BIO-1 through BIO-4**, the proposed project is consistent with Goals CON-2 and CON-3, which require the continued enhancement of existing levels of biodiversity and protection of special-status species and habitat, and the County Conservation Regulations through preservation of natural habitats and existing vegetation. With these measures and conditions, the proposed project would maintain levels of biodiversity and would avoid impacts to special-status plant and animal species.
- The proposed project is consistent with Policy CON-18, which encourages the reduction of impacts to habitat conservation and connectivity. Wildlife movement would not be impaired.
- The project site does not contain wetlands within its boundaries and the proposed project is consistent with Policy CON-30, which encourages the avoidance of wetlands.
- The proposed project is consistent with Policies CON-48 and CON-50c, which require pre-development sediment erosion conditions and runoff characteristics following development to be no greater than pre-project conditions. As discussed in **Section VII (Geology and Soils)** and **Section X (Hydrology and Water Quality)**, with incorporation of the Permanent Erosion and Runoff Control Measures condition of approval, the proposed project would reduce soil loss and sedimentation and would not increase runoff.
- The proposed project is consistent with Policy CON-65b. Following implementation of **Mitigation Measure BIO-4**, the proposed project's construction and operational GHG emissions are anticipated to be less than significant, as disclosed in **Section VIII (Greenhouse Gas Emissions)**.
- The proposed project is consistent with Policy AG/LU-1, which states that agricultural and related activities are the primary land uses in Napa County, as the proposed project is vineyard development and would increase agriculture uses in the County.
- The proposed project is consistent with the General Plan land use designation of AWOS and is therefore consistent with Policy AG/LU-20.

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

Significance Level: Less than significant impact.

Mitigation Measures: None are required.

XII. Mineral Resources

Would the project:

- a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?**

AND

- b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?**

Discussion:

The project site is not in an area with a known mineral resource of value to the region or state or within a known mineral resource recovery area (Napa County Baseline Date Report, Figure 2-2, 2-3 and Map 2-1, 2005; Napa County General Plan Map, December 2008; Special Report 205, Update of Mineral Land Classification, Aggregate Materials in the North San Francisco Bay Production-Consumption Region, Sonoma, Napa, Marin and Southwestern Solano Counties, California Geological Survey, 2013). The nearest known mineral resources area in Napa County is the Napa Quarry, located over 27 miles southeast of the project site. Proposed development of vineyard on the project site would not physically preclude future mining activities from occurring. Therefore, no impact would occur.

Significance Level: No impact.

Mitigation Measures: None are required.

XIII. Noise

Would the project result in:

- 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?**

AND/OR

b) Generation of excessive groundborne vibration or groundborne noise levels?

Discussion:

The project property is located at the end of a private paved road approximately 2,500 feet from its intersection with Petrified Forest Road, approximately 1.2 miles west of the City of Calistoga. Surrounding properties are generally used for agricultural and rural residential purposes north, northwest, west and southwest of the project property, and undeveloped land immediately east, southeast and south of the project property. The nearest residences are located 1,400 to 1,625 feet to the northwest, north and northeast of Block 27. The incorporated City of Calistoga is located approximately 0.7-mile to the northeast of the property.

Activities associated with installation of the proposed project, including earthmoving, and subsequent vineyard operations, could generate noise levels above existing conditions. Several types of equipment would be necessary for implementation and operation of the proposed project, including bulldozers, tractors, excavators, backhoes, dump trucks, water trucks, and ATVs and passenger vehicles and/or light trucks. Table 9 characterizes typical equipment noise levels at a reference distance of 50 feet. As identified in Table 9, equipment used for vineyard development could produce a maximum of 89 (A-weighted decibels) dBA at a distance of 50 feet.

Discussion:

Table 10 – Construction Equipment Noise Emission Levels

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

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

Table 11 characterizes the typical reduction in construction equipment noise levels as the distance increases from the source, based on a source noise level of 90 dBA.

Table 11 – Estimated Distance to dBA Contours from Construction Activities¹

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

¹ Based on a source noise level of 90 dBA

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

Based on distances to existing residences, noise associated with project construction would be between approximately 50 and 55 dBA at the nearest existing offsite residences.

Noise related to farming activities and equipment typically ranges from 75 dBA to 95 dBA, with an average of approximately 84 dBA (Toth 1979 and Napa County Baseline Date Report, chapter 6, 2005). These noise levels should be reasonably representative of noise levels from wheeled and tracked farm equipment. Noise sources associated with ongoing vineyard operation and maintenance include a variety of vehicles and equipment, such as track and rubber wheel farming tractors and equipment, which would occur on a temporary and seasonal basis. Table 12 characterizes the typical reduction of farming activity noise levels as the distance increases from the source using a noise source level of 84 dBA.

Table 12 – Estimated Distance to dBA Contours from Farming Activities¹

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

¹ Based on a source noise level of 84 dBA.

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

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

Napa County considers construction noise levels up to 75 dBA during daytime hours (7 a.m. to 7 p.m.) and 60 dBA during nighttime hours (7 p.m. to 7 a.m.) as compatible with residential uses (NCC Section 8.16.080), and ongoing (or established use) noise levels of approximately 55 dBA as compatible with residential uses (NCC Section 8.16.070).

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.

Significance Level: Less than significant impact.

- 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?**

Discussion:

The project site is neither located within an area covered by an airport land use plan, nor is it within 2 miles of a public, public-use, or private airport (Napa County Airport Land-use Compatibility Plan, 1991). The closest airfield, Angwin-Parret Airfield, is located over nine (9) miles to the east. Therefore, no impact would occur in that regard.

Significance Level: No impact.

Mitigation Measures: None are required.

XIV. Population and Housing

Would the project:

- a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?**

Discussion:

The proposed project involves earthmoving activities and the installation and maintenance of erosion control measures in connection with the development and cultivation of vineyard. It does not involve the construction of new homes, businesses, or infrastructure (e.g., water, sewer or utility lines) that would directly or indirectly induce substantial unplanned population growth. Construction and installation activities associated with the proposed project would generate a minimal number of workers to the project site on a temporary basis, and ongoing vineyard operation and maintenance would generate a minimal number of workers to the project site on an ongoing basis. It is anticipated that these workers would come from the existing labor pool in the region. Therefore, the proposed project would not induce unplanned population growth in the project vicinity or greater region, either directly or indirectly. No impact would occur.

Significance Level: No impact.

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

Discussion:

The proposed project would not displace any existing housing or people, and it does not involve the construction of new homes. The closest residence is located approximately 1,400 feet from the proposed project. No impact would occur.

Significance Level: No impact.

Mitigation Measures: None are required.

XV. Public Services:

Would the project result in:

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?

AND/OR

ii. Police protection?

AND/OR

iii. Schools?

AND/OR

iv. Parks?

AND/OR

v. Other public facilities?

Discussion:

The proposed project does not include the construction of residential or commercial structures, as discussed in **Section XIV (Population and Housing)**, resulting in no substantial population growth in the area. It is anticipated that these temporary workers would come from the existing labor pool in the local region and would not result in an increase in population over existing conditions. As a result, there would be no need to construct any new government facilities. Therefore, there would be no change in the demand for the listed services and amenities. No impact would occur.

Significance Level: No impact.

Mitigation Measures: None are required.

XVI. Recreation

Would the project:

- a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?**

AND/OR

- b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?**

Discussion:

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.

Significance Level:

Mitigation Measures: None are required.

XVII. Transportation

Would the project:

- a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?**

AND/OR

- b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?**

Discussion:

As part of the statewide implementation of Senate Bill (SB) 743, the Governor's Office of Planning and Research (OPR) settled upon automobile vehicle miles of travel (VMT) as the preferred metric for assessing passenger vehicle-related impacts under CEQA and issued revised CEQA Guidelines in

December 2018, along with a Technical Advisory on Evaluating Transportation Impacts in CEQA to assist practitioners in implementing the CEQA Guidelines revisions.

The County's General Plan Circulation Element contains a policy statement (Policy CIR-7) indicating that the County expects development projects to achieve a 15% reduction in project-generated VMT to avoid triggering a significant environmental impact. Specifically, the policy directs project applicants to identify feasible measures that would reduce their project's VMT and to estimate the amount of VMT reduction that could be expected from each measure. The policy states "projects for which the specified VMT reduction measures would not reduce unmitigated VMT by 15 or more percent shall be considered to have a significant environmental impact." That policy is followed by an action item (CIR-7.1) directing the County to update its CEQA procedures to develop screening criteria for projects that "would not be considered to have a significant impact to VMT" and that could therefore be exempted from VMT reduction requirements.

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

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

The TIS Guidelines also include VMT analysis requirements for projects based on trip generation, which includes a screening approach that provides a structure to determine what level of VMT analysis may be required for a given project. For a new project that would generate less than 110 net new daily vehicle and truck trips, not only is the project not required to prepare a TIS, but it is also presumed to have a less-than-significant impact for VMT. However, applicants are encouraged to describe the measures they are taking and/or plan to take that would reduce the project's trip generation and/or VMT. Projects that generate more than 110 net new passenger vehicle trips must conduct a VMT analysis and identify feasible strategies to reduce the project's vehicular travel; if the feasible strategies would not reduce the project's VMT by at least 15%, the conclusion would be that the project would cause a significant environmental impact.

The approximately 182.78-acre project property is located in the Mayacamas Mountain range along the west side of the Napa Valley, at the end of a private paved road approximately 2,500 feet from its intersection with Petrified Forest Road, approximately 1.2 miles west of the City of Calistoga (Figures

1-3). The existing driveway provides access to all existing and proposed vineyard blocks via a network of dirt and gravel access roads and vineyard avenues. Existing development on the parcels include one primary and one secondary residence and a guest house, outbuildings, a 20,000 gallon producing winery, water storage tanks and access roads, approximately 14.9 acres of existing vineyard. Vineyard construction is anticipated to generate about 20 trips per day for anticipated work crews of five to ten employees, including truck trips for equipment and supply delivery. Anticipated construction equipment would be limited to tracklaying and rubber-tired vehicles and could include bulldozers, tractors, excavators, backhoes, dump trucks, water trucks, ATVs and passenger vehicle and/or light trucks.

Proposed vineyard operations are anticipated to generate at most 250 truck trips annually for anticipated work crews of up to 14 field personnel. Typical operations include, but are not limited to, irrigation and trellis system inspection and repair, pruning, canopy management, harvest, cover crop inspection and management, erosion control measure monitoring and maintenance, and vine/vineyard maintenance. During peak operations, activities such as vineyard pruning, weed and pest control, and harvest are anticipated to generate up to ten round trips per day, for anticipated work crews of up to 14 employees. Anticipated equipment for vineyard operations would be limited to tracklaying and rubber-tired vehicles and could include tractors, backhoes, grape haul trucks, and ATVs and passenger vehicles and/or light trucks.

Because the proposed project would be expected to generate up to approximately 20 daily round trips during construction and up to ten daily round trips for ongoing operations and maintenance, below the 110-trip threshold in the Office of Planning and Research guidelines and the County's TIS Guidelines and VMT screening criteria, the project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b). Impacts would be less than significant. Further, operational trips are not anticipated to increase because of the project due to the existing vineyard on the property.

Significance Level: Less than significant impact.

c) Substantially increase hazards due to a geometric design feature, (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Discussion:

The proposed project would use the existing private road network for project development. The proposed project does not include roadway improvements and/or modifications to the existing road or include any other design feature that would result in hazardous conditions due to a geometric design feature or incompatible uses. The installation of the vineyard is consistent with the allowed use of the project site and other Agricultural Watershed zoned properties as well as agricultural uses in the area. Therefore, the potential for the creation of or substantial increase in hazards due to a geometric design feature or incompatible uses would be a less than significant impact.

Significance Level: Less than significant impact.

d) Result in inadequate emergency access?

Discussion:

The existing roads would continue to provide adequate emergency access to the project site, resulting in no impact. Refer to **Section IX (Hazards and Hazardous Materials)**, for additional discussion related to emergency access.

Significance Level: No impact.

e) Conflict with General Plan Policy CIR-14, which requires new uses to meet their anticipated parking demand, but to avoid providing excess parking which could stimulate unnecessary vehicle trips or activity exceeding the site's capacity?

Discussion:

The proposed project would generate its largest demand for parking (approximately ten vehicles) during harvest, which would occur over five days. Current county ordinances do not require formal parking for agricultural projects. Parking within the proposed staging area and/or along proposed vineyard avenues would satisfy parking demands of project installation and subsequent vineyard operations. Therefore, no parking impacts are anticipated.

Significance Level: No impact.

Mitigation Measures: None are required.

XVIII. Tribal Cultural Resources

Would the project cause a substantial change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k); or**

AND/OR

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

Discussion:

Notice of the proposed project was sent via certified mail to the Mishewal Wappo Tribe of Alexander Valley, Middletown Rancheria, and the Yocha Dehe Wintun Nation on December 12, 2023. On January 23, 2024, the County received a response from Yocha Dehe Wintun Nation that the project site is not within the aboriginal territories of the Tribe, and therefore the invitation for consultation was declined. On May 28, 2024, the County sent Consultation Invitation Closure letters to all three Tribes. On May 28, 2026, the County received a request for more information from Middletown Rancheria, which ultimately deferred consultation to Mishewal Wappo Tribe. The County received telephone correspondence from Mishewal Wappo Tribe on May 28, 2025 requesting consultation, including monitoring of earthmoving activities and cultural sensitivity training for all workers. The request for monitoring and cultural sensitivity training from the Mishewal Wappo Tribe of Alexander Valley has been incorporated into the mitigation for the project in Section XVIII (Tribal Cultural Resources). Having reached agreement with the Mishewal Wappo Tribe, the County sent a final consultation closure notice to the Mishewal Wappo Tribe on December 10, 2025.

Due to the possibility of unearthing tribal cultural resources which include, but is not limited to, Native American human remains, funerary objects, items or artifacts, sites, features, places, landscapes or objects with cultural values to the Mishewal Wappo Tribe of Alexander Valley (“Tribe”), implementation of the project as proposed would result in potentially significant impacts on Tribal Cultural Resources. Implementation of Mitigation Measure TCR-1 would ensure that the project proponent enters into agreement with the Tribe to provide cultural sensitivity training, to have a Tribal Cultural Advisor on site to monitor all earthmoving activities, and to stop work if resources are found. Implementation of **Mitigation Measure TCR-1** would reduce potential impacts on tribal cultural resources to a less than significant level.

Significance Level:

Mitigation Measures:

Mitigation Measure TCR-1:

- a. Prior to the commencement of vegetation removal and earthmoving activities pursuant to #P23-00326-ECPA, the owners/permittees shall provide documentation to Napa County that they have engaged with the Mishewal Wappo Tribe of Alexander Valley (“Tribe”) to

provide cultural monitors (as necessary) and that cultural sensitivity training has been provided to site workers.

- b. Should the Owner/Permittee be unsuccessful in engaging with the Tribe, the Owner/Permittee shall provide, for review and approval by Napa County, a Cultural Monitoring Plan prepared by a professional archaeologist certified by the Registry of Professional Archeologists (RPA). The Cultural Monitoring Plan shall outline monitoring requirements including, but not limited to, cultural sensitivity training for site workers, find procedures, and monitoring document and reporting procedures.

XIX. Utilities and Services Systems

Would the project:

- 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?**

Discussion:

The proposed project would generate a minimal number of workers to the project site on a temporary basis during construction, and ongoing vineyard operation and maintenance would generate a minimal number of workers to the project site on an ongoing basis. It is anticipated that these workers would come from the existing labor pool in the region and would not generate an increase in the population relative to the existing conditions. Therefore, the proposed project would not create a need to construct new or modified utilities and service systems. Further, implementation of the proposed project would not result in the construction or expansion of a water or wastewater treatment facility; the proposed project would not generate wastewater, and groundwater would provide irrigation water to the vineyard (see the Groundwater Management, Wells conditions of approval in Section X [Hydrology and Water Quality]). Irrigation pipelines would be located in existing roads, vineyards and vineyard avenues, and/or within the proposed development area.

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

Significance Level: Less than significant impact.

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Discussion:

Typically, the annual irrigation season ranges from late May to September. The WAA prepared by EBA Engineering (**Exhibit D**) concluded that after full development, total long-term groundwater demand for the project property with the 3.66 new net acres of vineyard would be 1.83 AFY from one existing groundwater well. Based on the 10-year average annual rainfall of 36.06 inches for the project area, the annual recharge rate for the project site's recharge area was calculated to be 81.4 AFY. The project groundwater recharge area's estimated groundwater demand 1.83 AFY with the proposed project represents approximately 2% of the average annual groundwater recharge for the project parcels. Therefore, the proposed project would be consistent with this regulation and would have a less than significant impact on water supplies. Water availability and water use are discussed in greater detail in **Section X (Hydrology and Water Quality)**.

Significance Level: Less than significant impact.

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?

Discussion:

The proposed project would generate no wastewater that would require treatment, resulting in no impact on wastewater treatment providers.

Significance Level: No impact.

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?

AND/OR

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Discussion:

Rock removed during vineyard development would be used within the proposed development area and for the proposed erosion control features. Solid waste generated during construction activities (e.g., trash, discarded building materials, debris, etc.) would be negligible and would be cleared daily, or as necessary. Implementation of the proposed project would include pruning and harvesting activities which would generate waste material (cane). This material would generally be disposed of onsite by spreading it back into the vineyard, burning it in accordance with BAAQMD regulations, or a combination of the two. Therefore, the proposed project would not generate a volume of waste that would need to be disposed of at a landfill that would exceed the permitted capacity of applicable landfills serving the project area. Furthermore, all waste would be disposed of in accordance with federal, state, and local statutes and regulations. Therefore, no impact would occur.

Significance Level: No impact.

Mitigation Measures: None are required.

XX. Wildfire

a) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

b) Substantially impair an adopted emergency response plan or emergency evacuation plan?

Discussion:

The project site is located in a State Responsibility Area (SRA) that is designated as High Fire Hazard Severity Zone (CalFire, Fire Hazard Severity Zone 2022; Napa County GIS Fire Hazard Severity Layer). The topography of the project site is characterized by moderate to steep slopes, with slopes in the proposed development area ranging from 12% to 35%.

Project construction and operation would not require any road closures and would not substantially increase traffic in the area compared to current conditions. Existing roads would continue to provide adequate emergency access to the project site. Therefore, the proposed project would not impact an adopted emergency response plan or emergency evacuation plan; no impact would occur. Refer to **Section IX (Hazards and Hazardous Materials)** for additional discussion related to emergency access.

Significance Level: No impact.

- c) 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?**

AND/OR

- d) 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?**

Discussion:

Project construction would require the use of vehicles and heavy equipment for grading and other activities, and these vehicles and equipment could spark and ignite flammable vegetation. During construction, the risk of igniting a fire would be low because vegetation would be cleared prior to developing the vineyard, and the risk would be temporary during project construction. The proposed project does not include any infrastructure that would exacerbate fire risk. Although the project site is in an area that historically has experienced wildfires, the proposed project would not exacerbate wildfire risk, and this impact would be less than significant.

Significance Level: Less than significant impact.

- e) 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?**

Discussion:

Although the proposed project would alter land cover, temporary and permanent erosion control measures would be implemented for the proposed project which would reduce the impact of stormwater runoff or drainage changes being discharged on or offsite and there would not be an increase in peak flow in the development area (see **Section X [Hydrology and Water Quality]**). Therefore, there are no structures or people that would be exposed to downslope or downstream flooding or landslides and the impact would be less than significant.

Significance Level: Less than significant.

Mitigation Measures: None are required.

XXI. Mandatory Findings of Significance

- 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?**

Discussion:

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

As discussed in this Initial Study, implementation of #P23-00326-ECPA, with the incorporation of identified mitigation measures and conditions of approval (should the proposed project be approved), would not have the potential to significantly degrade the quality of the environment. Habitat for special-status birds and raptors (including sharp-shinned hawk, purple martin and northern spotted owl), bat species, Foothill yellow-legged frog, Western pond turtle have been identified in the project area. With implementation of **Mitigation Measures BIO-1 through BIO-3**, potential impacts related to special status wildlife species would be less than significant.

The project proposes to convert to vineyard approximately 2.43 acres of the approximate total of 24.23 acres of California black oak forest (10% of total on the project parcels) and 0.1-acre of the total 3.27 acres of coast live oak woodland (3% of total on project parcels). For the proposed project to comply with Policy CON-24 and preserve 2 acres of oak woodland for every 1 acre impacted, a minimum of 4.86 acres of California Black oak forest and 0.2-acre coast live oak woodland should be preserved on land with slopes less than 30% and outside of stream setbacks on the project parcel.

The project proposes to preserve three (3) acres of California black oak woodland (1.2:1 preservation to removal ratio), 10.83 acres of Douglas fir forest (5.4:1 preservation to removal ratio) and 1.1-acre of coast live oak (11:1 preservation to removal ratio) located on slopes less than 30% and outside of stream setbacks (Sheet 3 of **Exhibit A**). The oak woodland preservation areas are located on all three of the project parcels on slopes with less than 30% slope and outside of stream setbacks, and are contiguous with other areas previously designated for preservation and/or areas with slopes over 30% and within stream setbacks, resulting in a beneficial impact of larger swaths of preserved habitat. Given that i) the biologist identified the Douglas fir and Black oak forest communities to be similar with continuous understory, and ii) the proposed preservation area includes all of the Douglas fir forest and the remaining Black oak forest located on developable land on APN 020-430-027 (i.e., on land with less than 30% slopes and outside of stream setbacks), and iii) the preservation areas result in

a combined preservation of 4.1 acres of oak woodland and an additional 10.83 acres of Douglas fir forest that supports black oak forest as a codominant subcanopy and similar habitat characteristics as the black oak forest proposed for removal, and iv) that the preservation areas on that parcel are adjacent to “undevelopable” land (i.e., within stream setbacks and with slopes over 30%) resulting in contiguous habitat that would remain habitat, the County determines that the project, as proposed, is consistent with the intent of General Plan Policy CON-24(C).

New wildlife exclusion fencing is proposed around the new vineyard blocks, As such, the project as conditioned would not introduce any new movement barriers to wildlife and impacts to wildlife movement are expected to be less than significant.

To reduce impacts on water quality within streams, the proposed project has been designed to avoid nearby ephemeral drainages with minimum 35-foot setbacks in accordance with NCC 18.108.025. Implementation of standard condition of approval regarding stream protection would ensure that impacts remain less than significant.

By ensuring permanent preservation of a minimum of approximately 14.93 acres of vegetation canopy cover, implementation of **Mitigation Measure BIO-4** would result in the project being consistent with the State’s goal of no net increase in carbon sequestration loss by 2045, and less than significant on the quality of the environment as related to greenhouse gas emissions.

With the incorporation of **Mitigation Measure TCR-1** and standard conditions of approval to protect cultural resources that may be discovered accidentally, less than significant impacts to cultural and tribal cultural resources are expected (**Section V [Cultural Resources] and XVIII [Tribal Cultural Resources]**).

Therefore, with the incorporation of **Mitigation Measures BIO-1 through BIO-4 and TCR-1** and conditions of approval, the proposed project would have a less than significant potential to degrade the quality of the environment.

Significance Level: Less than significant impact.

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)?

Discussion:

The project site is located within the Cyrus Creek Drainage of the Napa River Watershed. The Cyrus Creek drainage area contains approximately 1,956 acres. In 1993, vineyard acreage within this drainage was approximately 180 acres, or 9% of the drainage. Since 1993, approximately 54 acres of

additional vineyard (or 3% of the drainage) have been developed to vineyard, resulting in approximately 12% of the drainage (or approximately 234 acres) containing vineyard.

It is estimated, based on evaluation of the County's GIS layer identifying Potentially Productive Soils within the Cyrus Creek drainage, that there are approximately 458 acres (23% of the drainage) having the potential to be developed to vineyard. This, in conjunction with existing and approved vineyard development (approximately 234 acres), results in a total potential build out of approximately 692 acres or approximately 35% of the drainage.

The Potentially Productive Soils layer includes lands with characteristics that have been found to be suitable for potential future vineyard development; however, this total does not take into consideration other site-specific limitations such as water courses requiring setbacks, wetlands, other water features, rare or special-status plants and animal species, or cultural resources, nor does the layer take into account other factors influencing vineyard development, such as sun exposure, soil type, water availability, or economic factors.

While it is not possible to precisely quantify the acreage and location of additional vineyard development that may be proposed by property owners in these drainages in the future, it is possible to make a conservative estimate based on previous trends. To estimate the amount reasonably foreseeable vineyard that may be developed over time, the acreage of vineyard development including approved vineyard projects in the cumulative environment (i.e., Cyrus Creek drainage) over the last 32 years (1993-2025) were used to project an estimation of vineyard development for the next three to five years.

Over the past 32 years within the Cyrus Creek drainage, approximately 1.7 acres of vineyard was developed per year (234 divided by 32). Combined with Napa County policies and other site selection factors that limit the amount of land that can be converted to vineyard, the development over the next three to five years of approximately 5 to 8 acres within the Cyrus Creek drainage is considered a reasonable estimate.

NCC Chapter 18.108 includes policies that require setbacks of 35 to 150 feet from watercourses (depending on slopes), and that require preservation of vegetation canopy cover, and General Plan Conservation Policy CON-24(C) that requires the retention of oak woodland at a 2:1 ratio, which limits the amount of potential vineyard acreage that could be converted within the watershed. It has been the County's experience with ECP projects that there are generally site-specific issues, such as oak woodland preservation, wetlands, other water features, special-status plant and animal species, or cultural resources that further reduce areas that can be developed to other land uses. Additionally, the vineyard acreage projections for the next three to five years do not consider environmental factors that influence vineyard site selection, such as sun exposure, soil type, water availability, slopes greater than 30%, or economic factors such as land availability, cost of development or investment returns.

Significance Level: Less than significant impact.

c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?

Discussion:

Air Quality and GHG – Sections III and VIII:

The proposed project (#P23-00326-ECPA) includes the removal of vegetation and installation of vineyard and erosion control measures concurrent with other projects in the San Francisco Bay Area Air Basin that would generate emissions of criteria pollutants, including suspended PM and equipment exhaust emissions. As discussed in **Section III (Air Quality)** and shown in **Table 5 (Emissions from Vineyard Development and Operation)** criteria pollutant emissions associated with development and operations are anticipated to be well below identified thresholds, and therefore are not expected to result in project or cumulatively significant impacts. Additionally, the proposed project would be subject to standard air quality conditions of approval (should the proposed project be approved) that requires implementation of Air Quality BMPs to further reduce potential less-than-significant air quality effects of the proposed project and ongoing operation. While BAAQMD has no quantitative GHG threshold for comparison, the project's construction and operational equipment emissions are well below the SMAQMD GHG emission threshold of 1,100 MT CO₂e and can be considered less than significant.

As proposed and as mitigated by **Mitigation Measure BIO-4**, the ECP prepared for the proposed project identified an approximate 14.93-acre proposed preservation area on the project parcels located on slopes less than 30% and outside of stream setbacks. Therefore, the proposed project would permanently preserve greater than 1:1 acres of canopy on slopes less than 30% and outside of stream setbacks. By preserving a minimum of 14.93 acres of vegetation, the project would result in a minimum preservation to removal ratio of 3.3:1, which more than compensates for the emissions resulting from the removal associated with the project, consistent with the State's long-term climate goals of being carbon neutral by 2045, and with the County's no net increase threshold for carbon sequestration and carbon stock for evaluation of GHG emissions impacts.

Potential contributions to air quality impacts associated with the proposed project, including GHG emissions and loss of sequestration, would be considered less than cumulatively significant through project design (i.e., scope and scale) and implementation of mitigation measures and standard conditions of approval.

Biological Resources – Section IV:

Project-specific biological resources reconnaissance surveys (Northwest Biosurvey, July 19, 2023 – **Exhibits B-1, B-2 and B-3**) were performed for the proposed project to evaluate potential habitat loss and disturbance to plant and wildlife species because of the proposed project. The surveys included database records searches to identify the presence or potential presence of special-status species within the project site. The database records searches included the USFWS, CNDDDB and CNPS databases. As discussed in **Section IV (Biological Resources)**, while there are two (2) special-status plants located on one of the project parcels, they are located well outside of the project development area c, as well as potential habitat and/or foraging for eight (8) special status wildlife species. The project as mitigated by **Mitigation Measure BIO-1, BIO-2 and BIO-3**, potential direct, indirect and

cumulative impacts on roosting bats, nesting birds and NSO. Following implementation of **Mitigation Measure BIO-4**, the project would result in permanent preservation of a minimum of 14.93 acres of Douglas fir forest, black oak forest, and coast live oak woodland that is of like quality to what is being converted to vineyard. Following incorporation and implementation of **Mitigation Measures BIO-1 through BIO-4**, the potential direct, indirect and cumulative impacts related to these species would be less than significant.

Streams within the project property are outside of the proposed development area and would be avoided with minimum required setbacks pursuant to NCC Section 18.108.025; as such, streams would not be affected by the proposed project.

As proposed and as conditioned, wildlife exclusion fencing would be limited to enclose the vineyard blocks exclusively, resulting in less than significant impacts related to wildlife access and movement. Further, following implementation of **Mitigation Measure BIO-4**, a minimum of 14.93 acres of the developable land on property would be permanently preserved, which would support ongoing wildlife access and movement through the property. As such, the project as mitigated would not introduce any new movement barriers to wildlife and impacts to wildlife movement are expected to be less than significant.

Cultural and Tribal Cultural Resources – Sections V and XVIII:

The Cultural Resources Studies (Tom Origer & Associates, 2023) did not identify any significant or potentially significant cultural resources in the proposed development area. No impacts are expected to occur during vineyard development. With the incorporation of **Mitigation Measure TCR-1** and standard conditions of approval for cultural and paleontological resources project-specific and cumulative impacts related to cultural and tribal cultural resources are considered less than significant (see **Section V [Cultural Resources]** and **Section XVII [Tribal Cultural Resources]**).

Geology and Soils – Section VII:

Soil loss and associated sedimentation resulting from implementation of the proposed project is anticipated to be reduced by approximately 38% or 5.94 tons per year compared to existing conditions (Table 7). The reasons for this reduction are due to the increased vegetative cover conditions within the proposed vineyard development areas and the installation of erosion control features which reduce soil loss potential. Because the proposed project would reduce soil loss as compared to existing conditions and would implement erosion and runoff control conditions of approval, the proposed project is not anticipated to contribute cumulatively to sediment production within the Cyrus Creek drainage. Therefore, impacts associated with soil loss and associated sedimentation are not considered cumulatively significant.

Because geologic impacts associated with future agricultural projects would receive the same scrutiny under CEQA and the County's General Plan Goals and Policies (in particular General Plan Conservation Element Policy CON-48, which requires development projects to result in no net increase in sediment erosion conditions and soil loss as compared to existing conditions), it is not unreasonable to anticipate that those projects would also have a less than significant project-specific and cumulative impact on erosion and associated sedimentation.

Because geologic impacts associated with future agricultural projects would receive the same scrutiny under CEQA and the County's General Plan Goals and Policies (in particular General Plan Conservation Element Policy CON-48, which requires development projects to result in no net increase in sediment erosion conditions and soil loss as compared to existing conditions), it is not unreasonable to anticipate that those projects would also have a less than significant project-specific and cumulative impact on erosion and associated sedimentation.

Hazards and Hazardous Materials – Section IX:

The proposed project would implement the identified hazardous materials conditions of approval. Impacts associated with the use, storage, and transport of hazardous materials and accidental release of hazardous materials would be less than significant and no cumulative impacts would occur.

Hydrology and Water Quality – Section X:

Water use calculations provided in the Tier 1, Tier 2 and Tier 3 WAA prepared by EBA Engineering (February 2025 – **Exhibit D**) indicate that the proposed development consisting of approximately 3.66 net acres of planted vineyard would result in approximately 1.83 AF/yr of groundwater use. The total calculated water recharge for the project parcels is 81.4 AFY. Given the surplus of groundwater resources in terms of estimated average annual groundwater recharge, the 1.83 AFY increase in groundwater use is unlikely to result in reductions in groundwater levels or depletion of groundwater resources over time.

As the water source is in some cases on a separate parcel to the vineyard blocks, in order to ensure that the project maintains a reliable water source, a Groundwater Easement condition of approval would be applied that would obligate the owner/permittee to record an Agreement for Grant of Easement and Water Right between the parcels, in the event that one or more parcels are under separate ownership. The proposed project would result in less than significant impacts to groundwater supplies, groundwater recharge, and local groundwater aquifer levels.

As discussed in **Section X (Hydrology and Water Quality)** a Hydrology Analysis was prepared by Drew Aspegren (RPE No. 31418) (Napa Valley Vineyard Engineering, Inc., 2024 – **Exhibit E**) Following implementation of the erosion control specifications of the ECPA (as described above, and in Exhibit A), the proposed project would result in no increase in peak flow or runoff compared to pre-project conditions; therefore, no significant impacts due to changes in hydrology are expected. Not increasing runoff rates is consistent with General Plan Conservation Element Policy CON-50c, which requires that peak runoff following development is not greater than predevelopment conditions. Additionally, as discussed in Section VII (Geology and Soils) the proposed project is anticipated to decrease soil loss as compared to existing conditions. Therefore, the proposed project would have a less than significant impact with respect to alterations of existing drainage patterns of the site or area that would result in increased runoff, considerable on or off-site erosion, siltation or flooding.

Furthermore, because hydrologic impacts associated with future agricultural projects would receive the same scrutiny under CEQA and County General Plan Policy CON-50(c), which requires development projects to be designed so that peak runoff following development is not greater than

predevelopment conditions, it is not unreasonable to anticipate that those projects would also have a less than significant project specific and cumulative impact on hydrologic conditions.

Land Use and Planning – Section XI:

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

Proposed Project Impacts Found to be Less Than Significant:

In addition to the impact categories identified above, the following discussion summarizes those impacts considered to be less than significant with development of the proposed project: Aesthetics, Agriculture and Forestry Resources, Energy, Mineral Resources, Noise, Population and Housing, Public Services, Recreation, Transportation, Utilities and Service Systems, and Wildfire. Periodic use of lighting at the site would not create a substantial source of light and lighting would be in the form of heat lights or downward directional lights on equipment being used during nighttime harvest. The potential contribution to aesthetic impacts associated with the proposed project is considered to be less than cumulatively considerable. The proposed project would not result in wasteful, inefficient, or unnecessary energy use, or conflict with or obstruct a state or local plan for renewable energy or energy efficiency or impede progress towards achieving goals and targets. There are no known mineral resource areas within the proposed project site or immediate vicinity. This project would generate noise levels that are considered normal and reasonable for agricultural activities and consistent with the County’s “Right to Farm” Ordinance. The potential contribution to noise or vibration impacts is considered less than cumulatively considerable. Traffic related to construction and farm worker trips would not increase by a discernible amount and the relatively low and off-peak vehicle trips associated with the proposed project are considered less than cumulative considerable. The proposed project does not include the construction of structures that would result in population growth or displacement of people and would not adversely impact current or future public services. For these reasons, impacts associated with the proposed project that may be individually limited, but cumulatively considerable, would be less than significant.

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

Significance Level: Less than significant impact.

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Table 8	USLE Soil Loss Analysis
Table 9	Peak Discharge Flows by 24-Hour Storm Event Frequency Return Interval
Table 10	Construction Equipment Noise Emission Levels
Table 11	Estimated Distance to dBA Contours from Construction Activities
Table 12	Estimated Distance to dBA Contours from Farming Activities

LIST OF EXHIBITS:

Exhibit A-1	Erosion Control Plan
Exhibit B-1	Biological Resource Assessment
Exhibit B-2	Northern Spotted Owl Assessment
Exhibit B-3	Woodland Loss Assessment and Mitigation Addendum
Exhibit C	Soil Loss Analysis
Exhibit D	Water Availability Analysis
Exhibit E	Hydrology Analysis
Exhibit F	Application Submittal Materials
Exhibit G	Project Revision Statement