A Tradition of Stewardship
A Commitment to Service

Planning, Building & Environmental Services

1195 Third Street, Suite 210
Napa, CA 94559
www.countyofnapa.org

Brian D. Bordona
Director

To: Cyril Chappellet, Chappellet Vineyard LLC., 1581 Sage Canyon Road, St. Helena CA 94574
Applied Civil Engineering, 2160 Jefferson Street. Suite #120, Napa CA 94559
CDFW, Erin Chappell c/o Nicholas Magnuson, 2825 Cordelia Rd. Suite 100, Fairfield CA 94534
Center for Biological Diversity, Frances Tinney, 2100 Franklin St. Suite 375, Oakland, CA 94612
Institute for Conservation Advocacy Research and Education, P.O. Box 4256, Napa CA 94558
City of Napa Utilities Department Water Division, Addison LeBlanc, P.O. Box 660, Napa CA 94559
California State Clearinghouse (via CEQA Submit portal)

From: Donald Barrella

Subject: Response to Comments - Initial Study/Mitigated Negative Declaration
Chappellet Vineyard LLC.,
Agricultural Erosion Control Plan File #P21-00206-ECPA
APNs 032-560-022 and 032-560-033
SCH #2024110524

Date: March 20, 2025

Attached is a copy of the Response to Comments for the subject project. The report contains our responses to comments provided on the November 15, 2024, Initial Study/Mitigated Negative Declaration, which can also be accessed at https://www.countyofnapa.org/2876/Current-Projects-Explorer

The County could approve the Project on or after **Thursday March 20, 2025**.

Should you have any questions, please call Donald Barrella at 707-299-1338 or via e-mail to donald.barrella@countyofnapa.org

Respectfully,

Donald Barrella
Principal Planner

cc: Brian Bordona, Director PBES (via email)
Patrick Ryan, Deputy Director PBES (via email)
Alexei Belov, Managing Engineer (via email)
Dana Morrison, Supervising Planner (via email
Laura Anderson, Deputy County Counsel (via email)

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Brian D. Bordona
Director

TO: Application File #P21-00206-ECPA

FROM: Donald Barrella, Principal Planner

DATE: March 20, 2025

RE: Response to Comments – Chappellet Vineyard LLC.,
Agricultural Erosion Control Plan (ECPA) #P21-00206-ECPA
Assessor's Parcel Numbers 032-560-022 and 032-560-033
SCH #2024110524

INTRODUCTION

This memorandum has been prepared by the County Conservation Division to respond to comments received by the Napa County Department of Planning, Building and Environmental Services (Napa County) on the Proposed Initial Study/Mitigated Negative Declaration (Proposed IS/MND) for the Chappellet Vineyard LLC., Agricultural Erosion Control Plan #P21-00206-ECPA (proposed project). An IS/MND is an informational document prepared by a Lead Agency (Napa County) that provides environmental analysis for public review. The agency decision-maker considers it before taking discretionary actions related to any proposed project that may have a significant effect on the environment. The Proposed IS/MND analyzed the impacts resulting from the proposed project and where applicable, identified mitigation measures to minimize the impacts to less-than-significant levels.

This memorandum for the Chappellet Vineyard LLC., Agricultural Erosion Control Plan #P21-00206-ECPA Proposed IS/MND, presents the name of the persons and organizations commenting on the Proposed IS/MND and responses to the received comments. This memorandum, in combination with the Proposed IS/MND, completes the Final IS/MND.

CEQA PROCESS

In accordance with Section 15073 of the CEQA Guidelines, Napa County submitted the Proposed IS/MND to the State Clearinghouse for a 30-day public review period starting March 7, 2024. In addition, Napa County circulated a Notice of Intent to Adopt the Proposed IS/MND to interested agencies, individuals, and property owners within 1000 feet of the subject property (Attachment 5). The public review period ended on December 17, 2024. During the public review period, Napa County received four comments on the Proposed IS/MND that have been responded to in this memorandum. Table 1 below lists the entities that submitted comments on the Proposed IS/MND. The comment letters are attached as identified in Table 1.

TABLE 1
COMMENTS RECEIVED ON THE PROPOSED IS/MND

Comment Attachment	From	Date Received
1	California Department of Fish and Wildlife (CDFW)	December 13, 2024
2	Center for Biological Diversity (CBD)	December 17, 2024
3	Institute for Conservation Advocacy Research and Education (ICARE)	December 17, 2024
4	City of Napa Utilities Department, Water Division	December 17, 2024

In accordance with CEQA Guidelines Section 15074(b), Napa County considers the Proposed IS/MND together with comments received, both during the public review process and before action on the project, prior to adopting the Proposed IS/MND and rendering a decision on the project. The CEQA Guidelines do not require the preparation of a response to comments for negative declarations; however, this memorandum responds to comments received. Based on review of the comments received no new potentially significant impacts beyond those identified in the Proposed IS/MND would occur, no new or additional mitigation measures, or project revisions, must be added to reduce impacts to a less than significant level, and none of the grounds for recirculation of the Proposed IS/MND as specified in State CEQA Guidelines Section 15073.5 have been identified. All potential impacts identified in the Proposed IS/MND were determined to be less-than-significant or less-than-significant with mitigation incorporated.

In response to the comments received, the applicant revised the project, increasing the setbacks from ephemeral streams to a 50-foot minimum, rather than a 35-foot minimum pursuant to NCC Section 18.108.025. This revision affects the eastern edge of proposed Vineyard Block E and the central portion of proposed Vineyard Block D, reducing the overall acreage by 0.3-acres from 41.8-acres to 41.5-acres and planted acres by 0.3-acres from 33.1-acres to 32.8-acres. This project revision would provide additional vegetation to effectively entrap and filter sediments, and degrade chemicals and nutrients, and further reduce runoff to adjacent ephemeral streams because of the project.

This Response to Comments Memorandum will also be provided to the owner/Permittee as **notice** of potential Local, State and Federal permits or agreements necessary to implement and/or operate this project, or other CEQA requirements including filing fees, as identified within the attached agency comment letter. Furthermore, project approval if granted shall be subject to conditions of approval requiring any and all such permits or agreements be obtained prior to the commencement of vegetation removal and earth-disturbing activities associated with #P21-00206-ECPA, and that the project shall be subject to any conditions and/or specifications of such permits or agreements.

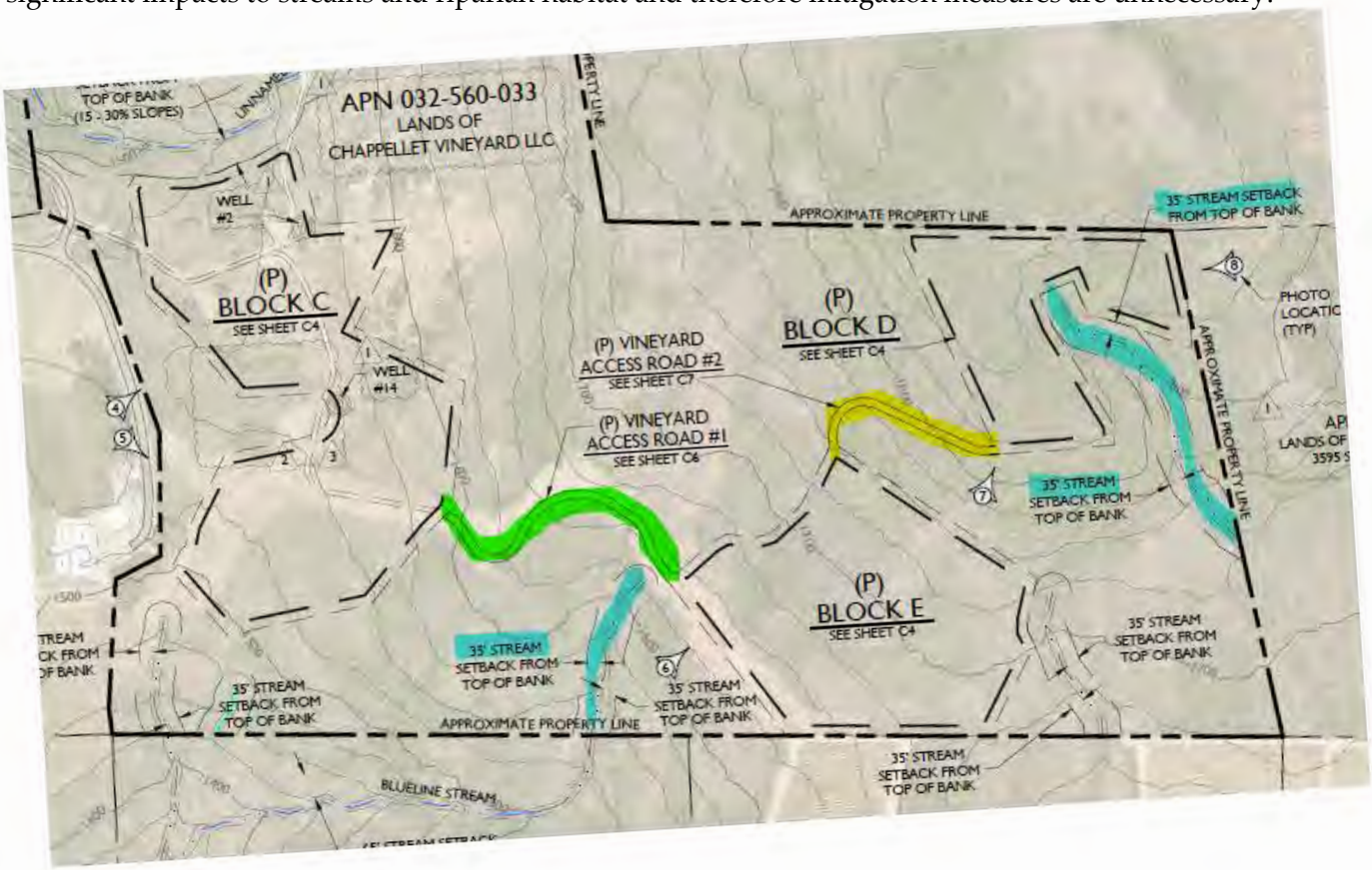
RESPONSE TO COMMENTS

Comment #1 California Department of Fish and Wildlife (CDFW) (Attachment1)

Response to Comment 1.1:
As disclosed in the Project Description (Page 1 Proposed IS/MND) the project includes the construction and maintenance of a new vineyard access roads encompassing approximately 1.1-acres to connect proposed Vineyard Blocks D and E to Block C. It is further disclosed in the Background Section of the Proposed IS/MND (at Page 4) there is an existing emergency access road from the Chappellet properties through to the

Stagecoach Vineyards to the south/southeast that was processed under grading permit #ENG 21-00018 and is part of the existing setting, and that this existing emergency access would also provide access between proposed Vineyard Blocks C and E. While this access is existing, its area has been included in the overall project acreage and description because it is proposed to be utilized for the subject vineyard development project and subsequent operations.

In the image below from the project plans (Applied Civil Engineering Inc., October 31, 2024 - **Exhibit A-1** of the proposed IS/MND) the existing emergency access road that would provide access from Vineyard Block C to Vineyard Block E is highlighted in green, the proposed access road to Vineyard Block D from Vineyard Block E is highlighted in yellow, and stream setbacks are highlighted in blue. As shown below, there are no proposed access roads that would cross intermittent or ephemeral streams. The proposed project has been designed to avoid identified tributaries and any associated riparian habitat, resulting in no potentially significant impacts to streams and riparian habitat and therefore mitigation measures are unnecessary.



CDFW's comments will be provided to the owner/Permittee so that they are aware of the requirement if any future work within streams or tributaries under the jurisdiction of CDFW is contemplated that Lake and Streambed Alteration (LSA) Agreement Notification pursuant to Fish and Game Code section 1600 et. seq. is required for activities affecting lakes or streams and associated riparian habitat, or other provisions of the Fish and Game Code that afford protection to the state's fish and wildlife trust resources.

Response to Comment 1.2:

While the biological survey did not include protocol level surveys targeted to specific special-status bat species, as disclosed on-site trees proposed for removal were assessed for their potential to support roosting bats, with primarily relevant characteristics including the presence of substantial cavities and hollows. The bat habitat assessment (i.e., close inspection of trees scheduled for removal) found arboreal roosting

substrates to be absent (WRA Environmental Consultants, February 2020 - **Exhibit B-1** of the Proposed IS/MND, at Page C-23).

Because bat habitat trees were not identified in the 1.23-acres of oak woodland being removed, no potential impacts would be expected. To address the concerns of CDFW, the bat habitat tree measure recommended by CDFW below will be included as a condition of approval for the project if approved.

Bat Habitat Tree – Conditions of Approval:

- Prior to any tree trimming or removal, a qualified biologist shall conduct a habitat assessment for bats, unless otherwise approved in writing by CDFW. The habitat assessment shall be conducted a minimum of 30 to 90 days prior to tree trimming or removal and shall include a visual inspection of potential roosting features of trees to be removed (e.g., cavities, crevices in wood and bark, exfoliating bark for colonial species, suitable canopy for foliage roosting species). If suitable habitat trees are found, they shall be flagged or otherwise clearly marked, CDFW shall be notified immediately, and tree trimming or removal shall not proceed without approval in writing from CDFW. If the presence of bats is presumed or documented, trees may be removed only: a) using the two-step removal process detailed below during seasonal periods of bat activity, from approximately March 1 through April 15 and September 1 through October 15, or b) after a qualified biologist, under prior written approval of the proposed survey methods by CDFW, conducts night emergence surveys or completes visual examination of roost features that establish absence of roosting bats.
- Two-step tree removal shall be conducted over two consecutive days, as follows: 1) the first day (in the afternoon), under the direct supervision and instruction by a qualified biologist with experience conducting two-step tree removal, limbs and branches shall be removed by a tree cutter using chainsaws only. Limbs with cavities, crevices or deep bark fissures shall be avoided, and 2) the second day the entire tree shall be removed.

Response to Comment 1.3:
As stated in the CEQA Process Section above, this Response to Comments Memorandum and CDFW's comments will be provided to the owner/Permittee and Project Biologist (WRA Environmental Consultants) as **notice** of the CEQA requirements pursuant to Public Resources Code, § 21003(e) to report any special-status species and natural communities detected during project surveys to the CNDDB.

Response to Comment 1.4: The CDFW Environmental Filing Fee for a Mitigated Negative Declaration will be paid upon posting of the CEQA Notice of Determination for this project when acted on by the County.

Comment #2 Center for Biological Diversity (CBD) (Attachment 2)

Response to Comment 2.1:
These general comments concern the CBD's work in Napa County protecting native species and habitat and building a healthy climate-resilient future have been acknowledged and entered into the record.

See *Responses to Comments #2.2 through #2.17* (incorporated herein by reference) for responses to EIR (Environmental Impact Report) preparation, and potential impacts to biological resources, wildfire, water quality, and greenhouse gas emissions.

Also see *Response to Comment #4.1* (incorporated herein by reference) regarding water quality safeguards that reduce increases of sediment and other pollutants to surrounding tributaries and water bodies.

Mitigation Measure BIO-1 would permanently preserve approximately 27-acres of lands/habitat (24.5-acres of special-status plant species habitat and 2.48-acres of developable oak woodland and associated cover canopy) in support of Executive order N82-20.

Response to Comment 2.2:
These general comments relate to the legal standard of review and do not identify potential impacts associated with the project.

Response to Comment 2.3:
See Attachment #1 and *Responses to Comments #1.2 (*incorporated herein by reference). Also see *Response to Comments #2.3 through #2.7, #2.10 and #2.17*, incorporated herein by reference.

As disclosed in **Section IV** (**Biological Resources**) of the Proposed IS/MND, the following project specific studies were utilized in the analysis:

- WRA Environmental Consultants, February 2020, Biological Resources Reconnaissance Survey Report, Chappellet Vineyard LLC, Sage Canyon Road, Napa County, California (APN: 032-010-076, 032-010-094) (**Exhibit B-1** of the Proposed ISMND).
- WRA Environmental Consultants, January 26, 2021, RE: Chappellet Vineyard, Napa County ECP – Response to Napa County Comments on Biological Resources (File #P20-00271-ECPA) (**Exhibit B-2** of the Proposed ISMND)
- Applied Civil Engineering, February 16, 2024, Vegetation Canopy Cover Exhibit, Chappellet Vineyard LLC (**Exhibit B-3** of the Proposed ISMND)
- Applied Civil Engineering Inc, June19, 2024, Vegetation Retention Analysis 1993 and 2016, Chappellet Vineyard LLC (**Exhibit B-4** of the Proposed ISMND**)**

As indicated in the project's biological study (**Exhibit B-1** of the Proposed IS/MND) and in **Section IV** (**Biological Resources**) the conclusions reached in the Proposed IS/MND relied on five (5) separate site and project specific investigations 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.

Prior to conducting the biological surveys, biological information for the project site was obtained from the following sources: U.S. Fish and Wildlife Service (USFWS) list of federally listed special-status species with the potential to occur on and near the study area; California Native Plant Society (CNPS) query of state and federally listed special-status species known to occur in Napa County; California Natural Diversity Data Base (CNDDB) query of state and federally listed special-status species known to occur in the St. Helena, Chiles Valley, Lake Berryessa, Rutherford, Yountville, Capell Valley, Sonoma, Napa, and Mt. George USGS 7.5-minute quadrangles; Soil Survey of Napa County; National Wetlands Inventory (NWI) database of wetlands and surface waters within the project site; and other relevant materials (WRA Environmental Consultants, February 2020).

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), and *The Jepson Manual* (Baldwin, 2012). Wildlife was identified by calls, scat, remains, or direct sight. On-site trees proposed for removal were assessed for their potential to support roosting by special-status bats, with primarily relevant characteristics including the presence of substantial cavities and hollows. Aerial imagery from Google Earth, as well as the BIOS Essential Habitat Connectivity mapper, were reviewed to assess habitats surrounding the study area for potential wildlife movement, wildlife corridors, or movement barriers. Field methodology included identifying corridors for movement including searching for game trails or habitats that would favor the movement of wildlife or potential gene flow. Existing and proposed barriers were examined to determine current movement potential within the study area and whether the proposed project would impact movement (WRA Environmental Consultants, February 2020).

The Proposed IS/MND adequately and appropriately disclosed and assessed potential biological impacts and proposed mitigation measures where potentially significant impacts to biological resources were identified as shown in the Mitigation Monitoring and Reporting Plan (MMRP) included in this response to comment memo as Attachment 7. The cumulative effects to special-status species and their habitat and to oak woodland were also considered and reduced to less than significant with implementation of **Mitigation Measure BIO-1** which would: i) avoid and preserve no less than 24.5-acres of the project site's special-status plant species habitat, ii) avoid and preserve 70 to 80% of the project site's special-status plant populations/individuals and habitat, iii) result in consistency with General Plan Goal CON-3 and Policy CON-13 , and Conservation Regulations (NCC Chapter 18.108), because it would preserve special-status plants and their habitat, iv) result in consistency with Goal CON-2 because it would assist in maintaining the existing level of biodiversity in the County, as well as contribute to minimization of potential cumulative impacts associated with the loss of special-status plant species and associated habitat due to agricultural conversion projects, and maintain wildlife movement and habitat connectivity, and v) permanently preserve a minimum of 2.48-acres of developable oak woodland (that includes a minimum of 2.46-acres of associated developable Vegetation Cover Canopy.

Regarding special-status animals, three of these species have the potential to occur within the project site and project area: white-tailed kite, black-chinned sparrow and foothill yellow-legged frog. **Mitigation Measures BIO-2** and **BIO-3** would reduce potential impacts to these species to a less than significant level. See the MMRP at Attachment 7.

Given the extent of the project site specific evidence disclosed and utilized to establish an adequate baseline and assess potential impacts on biological resources the Proposed IS/MND complies with disclosure requirements, adequately mitigate impacts on special-status plant and animal species and is supported by substantial evidence.

Response to Comment 2.4:
See *Response to Comments #1.2* (incorporated herein by reference) regarding bat species.

Response to Comment 2.5:
The project's biological study which included five (5) separate site specific (or on-site) investigations by qualified biologists, disclosed that western pond turtles are a thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches with aquatic vegetation, that require basking sites such as partially submerged logs, vegetation mats, or open mud banks, and suitable upland habitat (sandy banks or grassy open fields) for egg-laying. Thereby, appropriately and adequately assessing and determining/concluding their absence within the project site and area, which predominately consists of chaparral/shrubland and

disturbed habitat types (approximately 37.4-acres or 92% of the of the total project area of 40.7-acres) and that the only potential habitat would be limited to the on-site ponds.

Also see *Response to Comment #2.3* and CDFW comments and responses (Attachment #1 and *Response to Comments #1.2 through #1.3)* incorporated herein by reference.

Response to Comment 2.6:
While the comment contains many references and citations associated with the mountain lion the comment does not include evidence specific to this project site or project property demonstrating that mountain lions would be present in the area. As indicated in the project's Resources Reconnaissance Survey Report, the special-status wildlife evaluation was based on database searches for the entirety of Napa County (CDFW 2019, Napa County 2005), finding a total of 62 special-status wildlife species documented in Napa County, of which the mountain is not one (Appendix C of **Exhibit B-1).**

Five separate site specific, on-site, investigations were conducted by qualified biologists. This substantial evidence confirms that neither the mountain lion nor its habitat is present in the project area and no evidence has been provided to the contrary.

Also see *Response to Comment #2.3* and CDFW comments and responses (Attachment #1 and *Response to Comments #1.2 through #1.3)*,(incorporated herein by reference).

Response to Comment 2.7:
As disclosed in the **Environmental Setting** Section of the Proposed IS/MND (Page 3), surrounding and adjacent land uses consist generally of undeveloped chaparral and oak woodlands interspersed with vineyards, agricultural processing facilities (e.g., wineries), and rural residences. The Project Biologists reviewed aerial imagery from Google Earth, as well as the BIOS Essential Habitat Connectivity mapper, to assess habitats surrounding the study area for potential wildlife movement, wildlife corridors, or movement barriers, and to account for potential impacts to wildlife movement/migratory corridors, indicating that this assessment was refined based on observations of on-site physical and/or biological conditions (WRA Environmental Consultants, February 2020).

As shown in **Table 5** of the Proposed IS/MND (Vegetation Alliance and Terrestrial Land Cover Types in the Project Site) approximately 190-acres of the various vegetation alliances would be avoided within the project site, accounting for existing vineyard approximately 176-acres of the various vegetation alliances would be available for wildlife movement and use.

While the project will result in portions of the site having reduced potential for on-site wildlife movement, the retention of other on-site areas of contiguous chaparral, grassland, and woodland, with direct connectivity with similar habitats on neighboring properties, will allow for continued local wildlife movement. The primary example is within the eastern parcel of the Study Area, where relatively wide areas of intact native vegetation will remain interstitial to the blocks, allowing for movement from south and west of the parcel to its northeast. A similarly large corridor of grassland and woodland will remain in the western parcel. The project's fencing plan (included in the ECP application) identifies that areas interstitial to vineyard blocks will remain unfenced in the eastern parcel, and that new fencing in the western parcel will not restrict potential movement relative to existing conditions (e.g., considering existing on-site and adjacent fencing). Additionally, the on-site stream courses provide at least some corridor function for seasonal localized movement, and these will be avoided by the project.

The Proposed IS/MND also discloses at page 21 that, '*Given the relatively small size of the project area (relative to the width of the corridor tract) and the lack of apparent development impacts within the more central portion of this tract, agricultural expansion within the project area is in and of itself unlikely to result in any significant impacts to wildlife movement or migration at the landscape linkage scale. At a more local scale, the project site provides connectivity between a patchwork of undeveloped lands (primarily chaparral, grassland, and woodlands), and agricultural (vineyards) and low-density, rural developments. While the proposed project (vineyard) would result in portions of the site having reduced potential for on-site wildlife movement, the retention of other on-site areas of contiguous chaparral, grassland, and woodland, with direct connectivity with similar habitats on neighboring properties, will allow for continued local wildlife* movement (WRA Environmental Consultants, February 2020 - **Exhibit B-1**).

While the comment contains many references and citations associated with wildlife movement and corridors the comment does not include evidence specific to the project site or project property demonstrating that the potential level of impacts to wildlife movement and corridors analyzed as a result of the proposed project would occur beyond what was disclosed.

While the commenter's concerns regarding edge effects is acknowledged, it should be recognized that in June of 2024, in response to County concerns associated with oak woodland removal and avoidance, the owner/applicant revised the ECPA to avoid additional oak woodland to increase consistency with General Plan Conservation Policy 24.c.The avoided oak woodland reduces Vineyard Block A to approximately 6.0 gross acres (from approximately 7.2-acres) avoiding 1.1-acres of Coast Live Oak woodland and associated cover canopy reducing overall oak woodland removal to approximately 1.23-acres from 2.33-acres: tree removal was reduced by approximately 92 trees from 417 trees to approximately 325 trees. At that time the owner/applicant also revised the boundaries of proposed Vineyard Block C to partially offset the avoided acreage in Block A, that increased Vineyard Block C to 13.8 gross acres from 13.2-acres. That revision also resulted in the removal of a special-status plant species: ten (10) Nodding harmonia individuals encompassing approximately 0.04-acres located in the central-western portion of Block C. After considering the potential affects this revision could have on this special-status plant species and the project, in October of 2024 the owner/applicant reverted Vineyard Block C back to its original configuration. Overall, the revisions to the plans reduced land disturbance to approximately 41.8-acres from approximately 42.9-acres, and reduces net planted acreage by 1.1-acres to 33.1-acres from 34.2-acres (**Exhibit A-1** through **Exhibit A-3** and **Table 5** of the Proposed IS/MND)**.**

For these reasons the Proposed IS/MND appropriately and adequately assesses and discloses potential impacts to wildlife movement and found them to be less than significant on both a project and cumulative level. Also see *Response to Comment #2.3* and CDFW comments and responses (Attachment #1 and *Response to Comments #1.2 through #1.3)* (incorporated herein by reference).

Response to Comment 2.8: The owner/permittee revised the project, increasing the setbacks from ephemeral streams to a 50-foot minimum, rather than a 35-foot minimum pursuant to NCC Section 18.108.025. This affected the eastern edge of proposed Vineyard Block E and the central portion of proposed Vineyard Block D, reducing the overall acreage by 0.5-acers from 41.8-acres to 41.3-acres and planted acres by 0.5-acres from 33.1-acres to 32.6-acres.

This project revision/adjustment provides for wider vegetative buffers between the vineyard blocks and adjacent ephemeral streams consistent with the National Resource Conservation Service recommended 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). Thereby, further reducing the less than significant impact to water quality disclosed and assessed in the Proposed IS/MND.

Also see *Response to Comment #2.7*, and the City of Napa Water Division comments and responses (Attachment #4 and *Response to Comments #4.1 and #4.3* (incorporated herein by reference).

With respect to commentor's assertion regarding the history of the failure of mitigation measure like those proposed in the IS/MND, the commenter does not provide any documentation or other evidence to support its assertion. In addition, no mitigation is required for erosion sedimentation or other water quality impacts because these impacts would be less than significant.

Commentor contends that County's reliance on site and project specific studies is paper mitigation, yet it is these site and project specific studies that determined erosional and water quality impacts are less than significant and therefore, do not necessitate the implementation of mitigation measures.

The commentor also cites a reference that vineyard conversions are associated with more severe erosion and runoff than other types of agricultural use (Cossart et al., 2020) (Spatial Patters of Vineyard Landscape Evolution and their Impacts on Erosion Susceptibility: RUSLE Simulation in Mercurey (Burgandy France) Since the Mid-20th Century) to support their claims. In the paper, Cossart et al. apply the RUSLE (Revised Universal Soil Loss Equation) model to assess erosion susceptibility through time in a Burgundy vineyard. This study/paper has no direct relevance to this project, the site, or the project specific analysis that was prepared to assess potential erosion and runoff impacts of the proposed project in Napa County.

Site review and analyses were conducted during the preparation of hydrologic and soil loss modeling for the ECPA, which were then peer-reviewed and found to be technically adequate by Napa County Engineering Division staff (Attachment 6). Summaries of the results of these analyses are presented in **Section VII** (**Geology and Soils**) and **Section X** (**Hydrology and Water Quality***)* of the Proposed IS/MND, and the entire soil loss analysis and hydrologic analysis reports are included as **Exhibit E** and **Exhibit G**, respectively. While the Proposed IS/MND is not an EIR this approach is consistent with CEQA Guidelines Section 15147 (Technical Detail) which allows for technical details in appendices and summarization of the methodology and results in the body of the EIR: '*The information contained in an EIR shall include summarized technical data, maps, plot plans, diagrams, and similar relevant information sufficient to permit full assessment of significant environmental impacts by reviewing agencies and members of the public. Placement of highly technical and specialized analysis and data in the body of an EIR should be avoided through inclusion of supporting information and analyses as appendices to the main body of the EIR.'* CEQA Guidelines Section 15147.

Soil loss calculations were prepared using the Universal Soil Loss Equation (USLE) and the hydrologic analysis utilized the TR-55 model to evaluate and analyze pre- and post-project development conditions, and the potential effects of the proposed project. While computer modeling was used, as is industry standard, the model inputs were based on existing conditions that were ground-truthed by David Steiner (CPESC, CPSWQ) the Project Engineer (Michael Muelrath RPE #67435, Applied Civil Engineering Incorporated) and the Napa County Engineering Division staff. Based on the existing conditions and staff's review, revisions were made to the project modeling for estimating a site's runoff and soil loss conditions including soil types, precipitation data, watershed boundaries, and land use/vegetation. Soil data were obtained from the NRCS's Web Soil Survey for Napa County. Precipitation data were obtained from the National Oceanic and Atmospheric

Administration data. Watershed boundaries were delineated using aerial topographic mapping and then adjusted as needed to account for existing or proposed infrastructure that was designed by Applied Civil Engineering Incorporated. Existing vegetation and land uses were first delineated via recent aerial photography and then adjusted based on subsequent field review and inspection by the plan preparers. Therefore, the existing conditions were fully documented.

The models used in this analysis incorporated data particular to the region in which the project is located and site-specific data, such as vegetative types, rainfall rates for design storms, the delineation of project watersheds, and descriptions project site soils, as well as verification of the various modeling inputs by the County Engineering Division; therefore, site-specific and project-specific modeling inputs that are reflective of pre and post-project conditions ensure the results are specific to the impact analysis for the proposed project and adequate for CEQA purposes.

The following conditions of approval would be incorporated to ensure that erosion and runoff control measures are installed and maintained according to plan specifications.

Erosion and Runoff Control (i.e., Hydromodification) Installation and Operation – Conditions of Approval: The following conditions shall be incorporated by referenced into Erosion Control Plan #P21-00206-ECPA pursuant to NCC Chapter 18.108 (Conservation Regulations):

- Permanent Erosion and Runoff Control Measures: Pursuant to NCC Section 18.108.070(L) installation of runoff and sediment attenuation devices and hydromodification facilities including, but not limited to, rock filled avenues and permanent no-till cover crop (or adequate mulch cover applied annually), shall be installed no later than September 15 during the same year that initial vineyard development occurs. This requirement shall be clearly stated on the final Erosion Control Plan. Additionally, pursuant to NCC Section 18.108.135 "Oversight and Operation" the qualified professional that has prepared this erosion control plan (#P21-00206-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 70% for proposed Block D, 80% for proposed Blocks A and B, and 85% for proposed Blocks C and E. Cover crop may be disked between rows and sprayed under vines or otherwise cultivated after April 1; after three years a permanent, no-till cover shall be established. Should the permanent no-till cover crop need to be replanted/renewed during the life of the vineyard, cover crop renewal efforts shall follow the County "Protocol for Replanting/Renewal of Approved Non-Tilled Vineyard Cover Crops" July 19, 2004, or as amended.

Regarding the storage values required to reduce increases in peak flow resulting in no net increase as compared to existing conditions, the project engineer (Michael Muelrath RPE #67435, Applied Civil Engineering Incorporated) disclosed both the volume of the outsloped vineyard avenues with rock bench and the required volume to reduce anticipated peak flow increases on Pages C3 and C4 of the ECPA (Exhibit A-1 of the Proposed IS/MND) identified as '*Hydromodification Note'*. Those calculations show that the specified outsloped vineyard avenues with rock benches have more than adequate capacity to offset anticipated increases as described and shown below.

The Hydromodification Notes for each outsloped vineyard avenues with rock bench are as follows: Block A minimum keyway retention volume 261 cubic feet, keyway retention volume as designed 1,667 cubic feet; Block B minimum keyway retention volume 305 cubic feet, keyway retention volume as designed 1,333 cubic feet; Block C minimum keyway retention volume 0 cubic feet, keyway retention volume as designed 1,600 cubic feet; Block D east minimum keyway retention volume 318 cubic feet, keyway retention volume as designed 1,667 cubic feet, Block D south minimum keyway retention volume 83 cubic feet, keyway retention volume as designed 1,1867 cubic feet; and Block E minimum keyway retention volume 2,020 cubic feet, keyway retention volume as designed 3,167 cubic feet.

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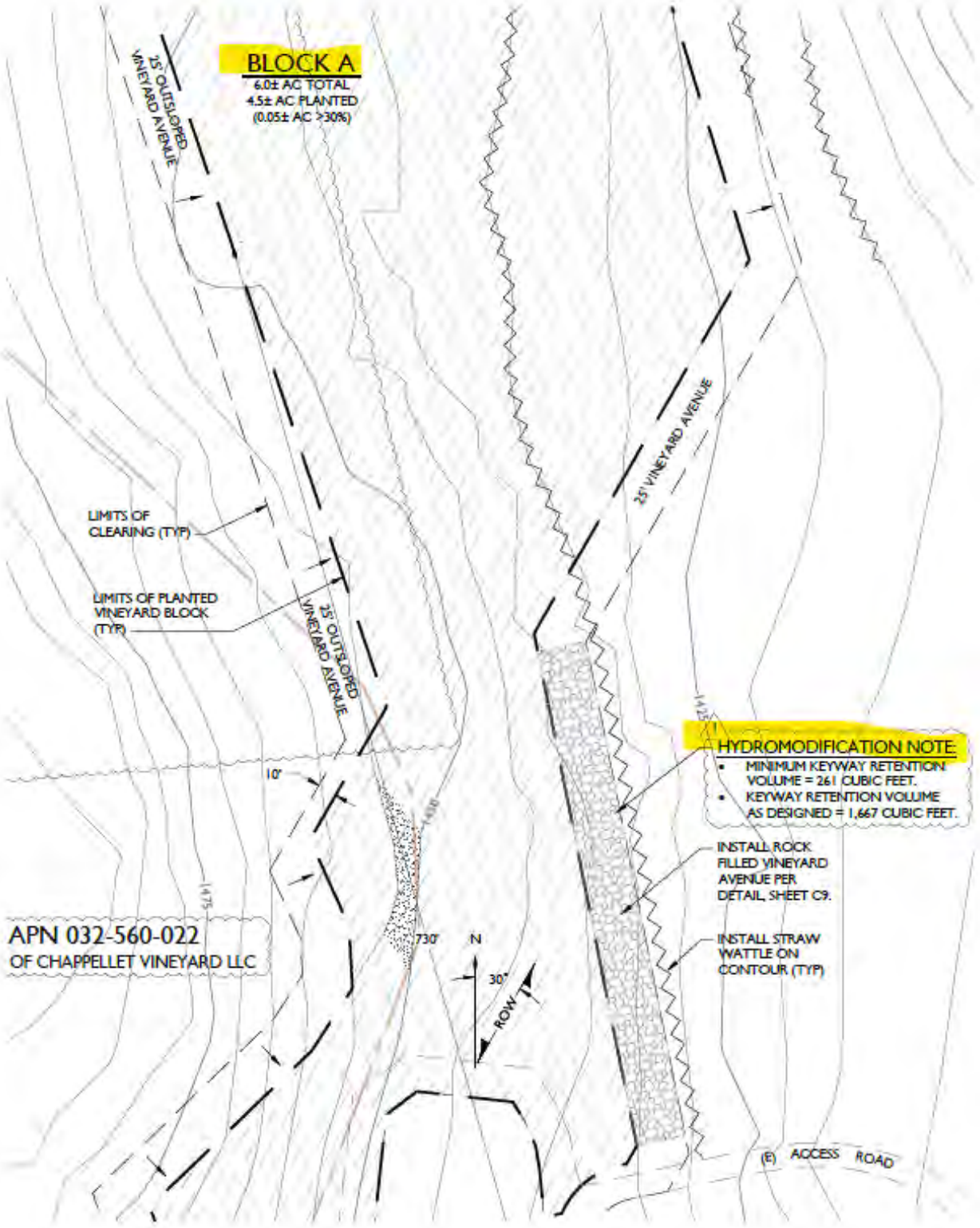
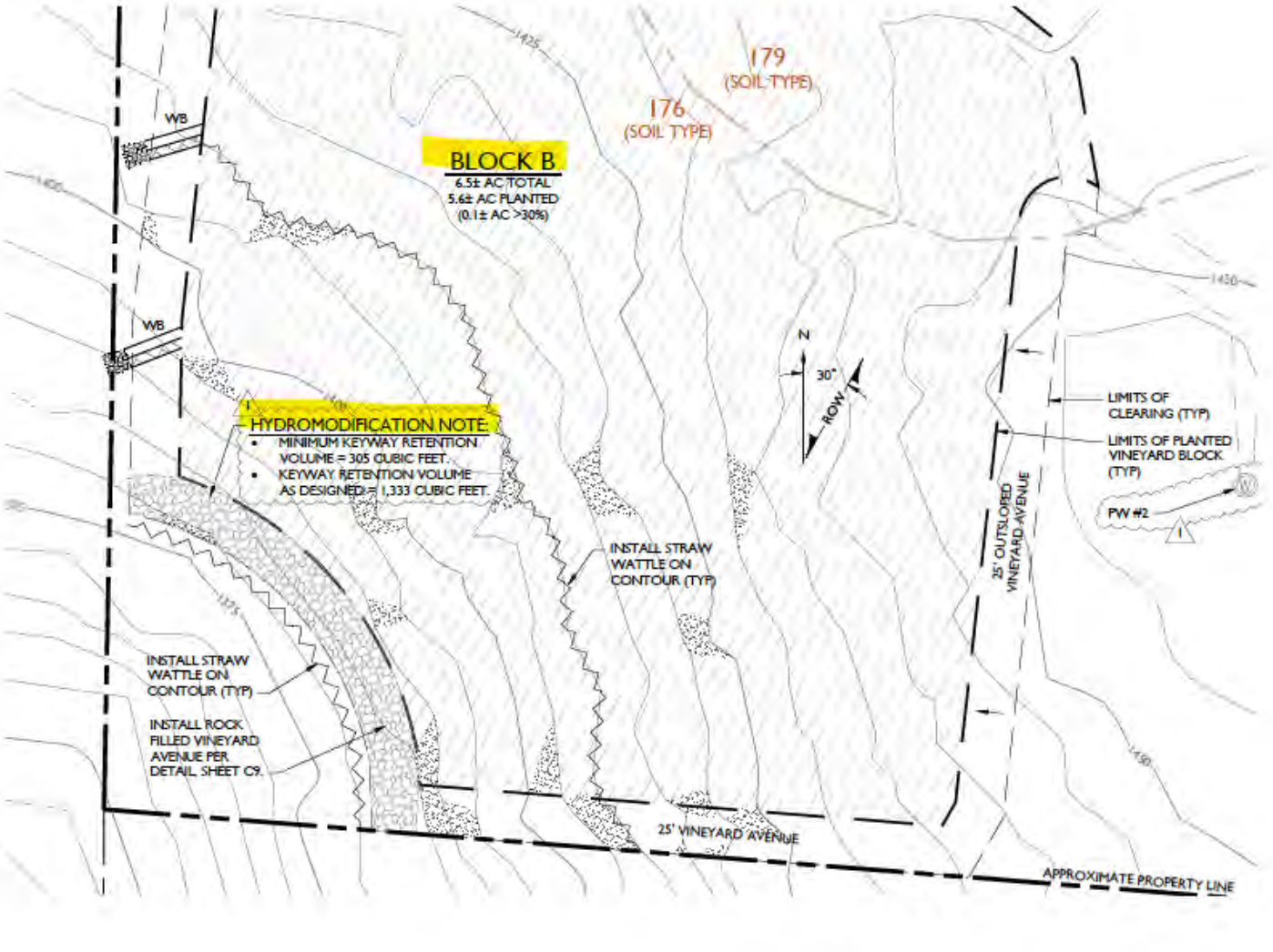

BLOCK A
6.0± AC TOTAL
4.5± AC PLANTED
(0.05± AC >30%)
25' OUTSLOPED VINEYARD AVENUE
25' VINEYARD AVENUE
LIMITS OF CLEARING (TYP)
LIMITS OF PLANTED VINEYARD BLOCK (TYP)
25' OUTSLOPED VINEYARD AVENUE
10'
HYDROMODIFICATION NOTE:
• MINIMUM KEYWAY RETENTION VOLUME = 261 CUBIC FEET.
• KEYWAY RETENTION VOLUME AS DESIGNED = 1,667 CUBIC FEET.
INSTALL ROCK FILLED VINEYARD AVENUE PER DETAIL, SHEET C9.
INSTALL STRAW WATTLE ON CONTOUR (TYP)
APN 032-560-022
OF CHAPPELLET VINEYARD LLC
730'
N
30'
ROW
(E) ACCESS ROAD



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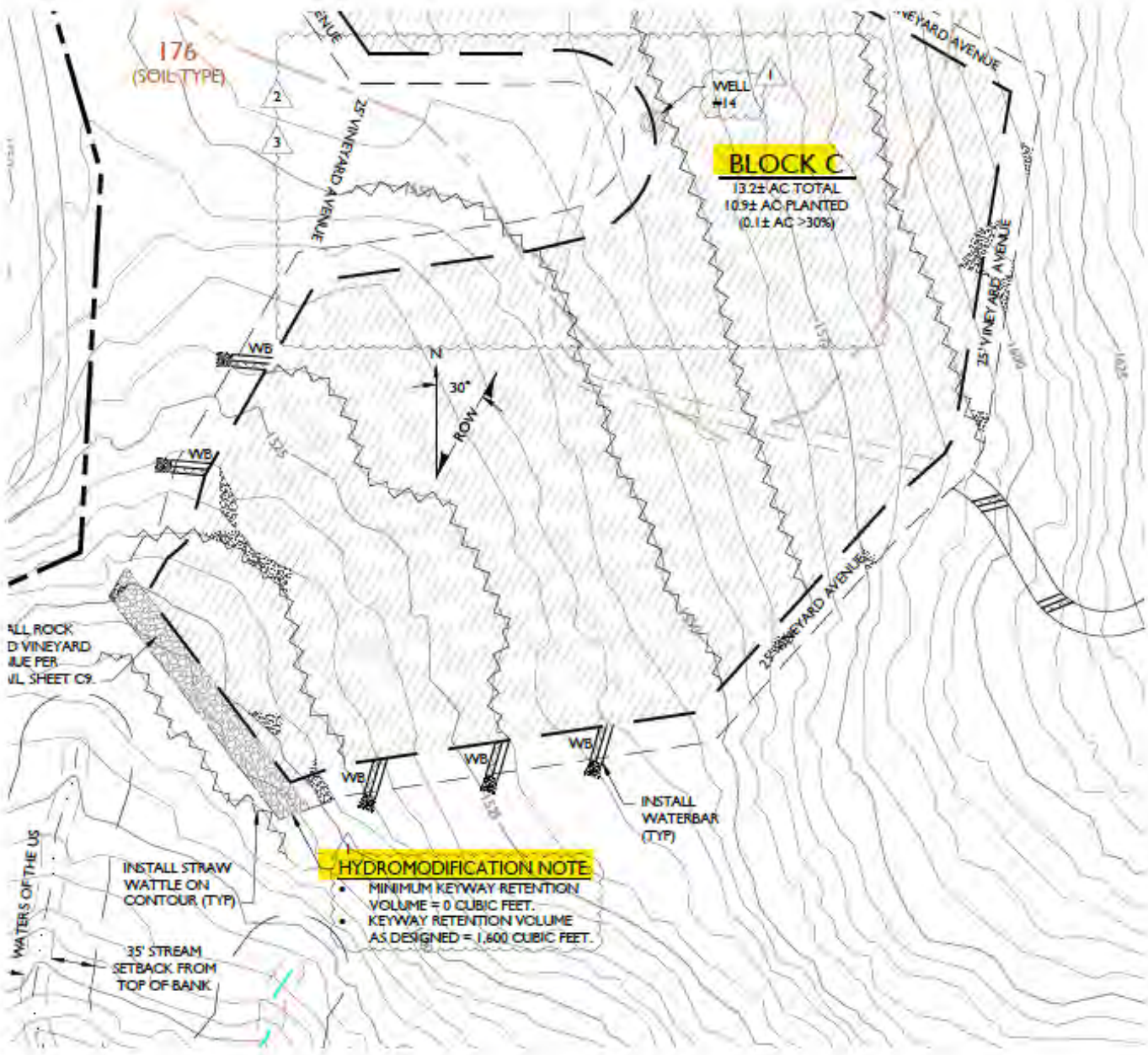

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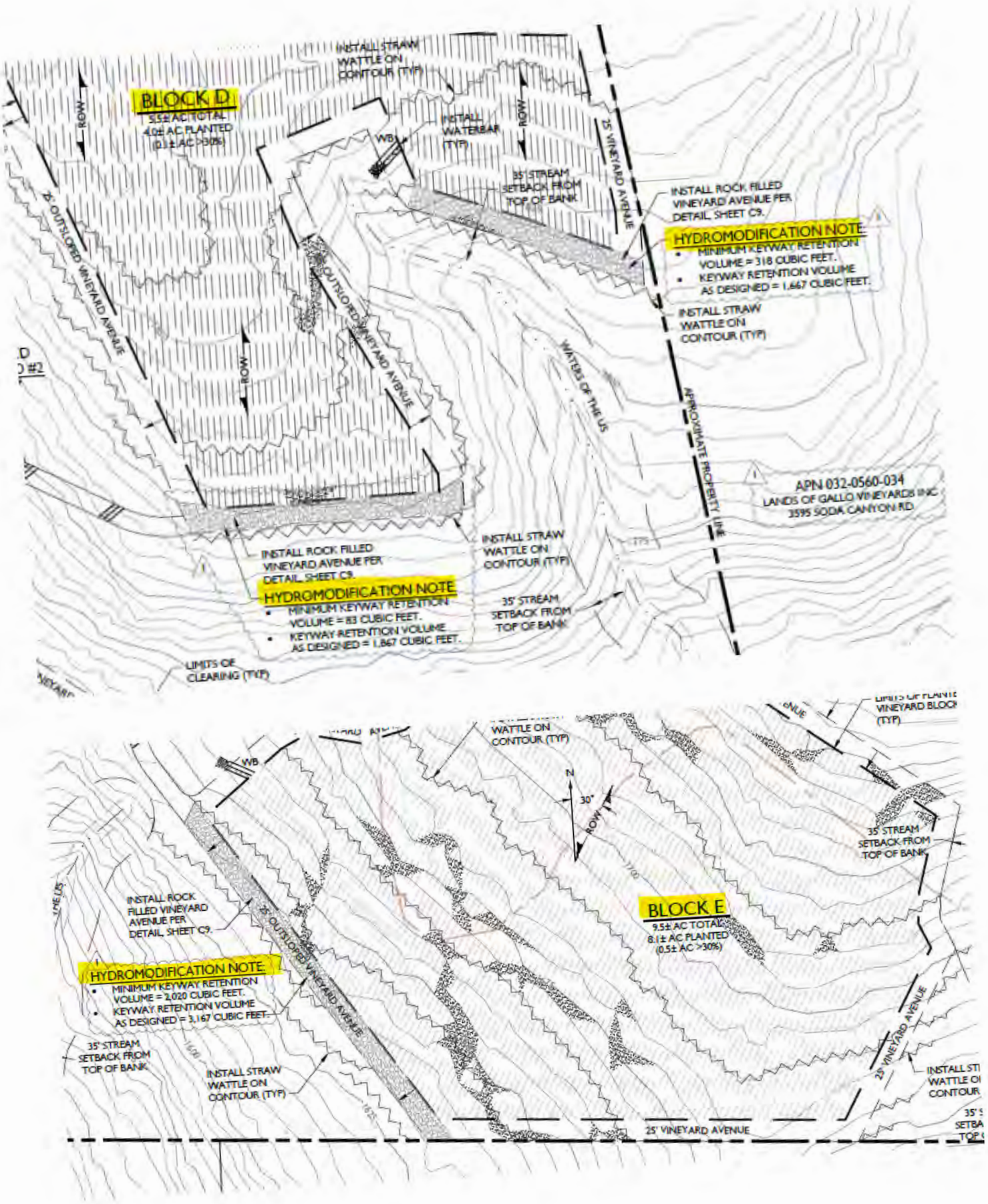
BLOCK D
55± AC TOTAL
40± AC PLANTED
(0.1± AC >30%)
INSTALL STRAW WATTLE ON CONTOUR (TYP)
INSTALL WATERBAR (TYP)
WB
ROW
25' OUTSLOPED VINEYARD AVENUE
35' STREAM SETBACK FROM TOP OF BANK
INSTALL ROCK FILLED VINEYARD AVENUE PER DETAIL, SHEET C9.
HYDROMODIFICATION NOTE:
• MINIMUM KEYWAY RETENTION VOLUME = 318 CUBIC FEET.
• KEYWAY RETENTION VOLUME AS DESIGNED = 1,667 CUBIC FEET.
INSTALL STRAW WATTLE ON CONTOUR (TYP)
WATERS OF THE US
APPROXIMATE PROPERTY LINE
APN 032-0560-034
LANDS OF GALLO VINEYARDS INC.
3595 SODA CANYON RD.
INSTALL ROCK FILLED VINEYARD AVENUE PER DETAIL, SHEET C9.
HYDROMODIFICATION NOTE:
• MINIMUM KEYWAY RETENTION VOLUME = 83 CUBIC FEET.
• KEYWAY RETENTION VOLUME AS DESIGNED = 1,867 CUBIC FEET.
INSTALL STRAW WATTLE ON CONTOUR (TYP)
35' STREAM SETBACK FROM TOP OF BANK
LIMITS OF CLEARING (TYP)
WATTLE ON CONTOUR (TYP)
WB
N
30°
ROW
35' STREAM SETBACK FROM TOP OF BANK
INSTALL ROCK FILLED VINEYARD AVENUE PER DETAIL, SHEET C9.
HYDROMODIFICATION NOTE:
• MINIMUM KEYWAY RETENTION VOLUME = 2,020 CUBIC FEET.
• KEYWAY RETENTION VOLUME AS DESIGNED = 3,167 CUBIC FEET.
BLOCK E
9.5± AC TOTAL
8.1± AC PLANTED
(0.5± AC >30%)
25' OUTSLOPED VINEYARD AVENUE
35' STREAM SETBACK FROM TOP OF BANK
INSTALL STRAW WATTLE ON CONTOUR (TYP)
25' VINEYARD AVENUE

For all of these reasons the County has appropriately disclosed and determined pursuant to CEQA that the proposed project as designed would have a less than significant impact on soil loss, erosion, runoff, sedimentation, and water quality. Furthermore, the commenter has not identified the specific measures that are alleged to be ineffective or failed on other projects.

Also see *Response to Comments #2.1, #2.2, #2.9 and #2.10* and the City of Napa Water Division comments and responses (Attachment #4 and *Response to Comments #4.1 and #4.3),* (incorporated herein by reference).

Additionally, in July 2018 the San Francisco Bay Regional Water Board ("Water Board") adopted a water quality control permit (or General Permit) for vineyard properties in the Napa River and Sonoma Creek watersheds (Order #R2-2017-0033). The General Permit regulates parcels (including contiguous parcels under common ownership) developed with five or more acres of vineyard located in either of these watersheds. The Napa River and Sonoma Creek TMDLs adopted by the Water Board have established performance standards for sediment discharge and storm runoff to protect and restore water quality. The General Permit would require actions to control pollutant discharges including sediment and storm runoff from vineyards and unpaved roads, which are located throughout vineyard properties, and pesticides and nutrients from vineyards. The General Permit would require vineyard owners or operators of parcels that meet the enrollment criteria to do the following: develop and certify a "farm plan[1]"; implement the farm plan to achieve discharge performance standards; submit an annual report regarding plan implementation and attainment of performance standards; and participate in group or individual water quality monitoring programs.

In the General Permit, the Water Board identified four significant sediment sources that are associated with vineyard properties: i) vineyard soil erosion; ii) offsite erosion caused by vineyard storm runoff increases; iii) road-related sediment delivery; and iv) channel incision. Napa County ECPA requirements and standards primarily address and control two of these sources, vineyard soil erosion and vineyard storm runoff. The General Permit will fill gaps in local regulation so that all four sediment sources are effectively controlled to reduce fine sediment deposition in stream channels that provide habitat for native fish species in these watersheds. Additional details on the Vineyard Properties General Permit can be obtained from the Regional Water Board[2].

This order will further reduce past, current and future cumulative impacts associated with vineyard operations and water quality in the Napa Valley Watershed.

Response to Comment 2.9:
See *Response to Comments #2.3 through #2.8, #2.10* and the City of Napa Water Division comments and responses (Attachment #4 and *Response to Comments #4.1 and #4.3)*(incorporated herein by reference).

The comment utilizes a reference/citation to a study that adverse respiratory symptoms increase in children that lived up to 1 kilometer (±0.62 miles) away from where sulfur spraying had occurred (Raanan et al., 2017). This reference is not specific to vineyards but is the first report of the association between agricultural use of elemental sulfur and both respiratory symptoms and lung function in children living in and agricultural community, the Salinas Valley California (Raanan et al., 2017). As indicated in **Section III** (**Air Quality**) of the

[1] A farm plan documents a vineyard property's natural features, developed areas, and BMPs. Under the General Permit, a "certified" farm plan would mean that upon its full implementation of the plan, that the vineyard property is expected to achieve the performance standards for discharge. The Water Board's Executive Officer would approve third-party programs or certify a farm plan.
[2] https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/agriculture/vineyard/

Proposed IS/MND the closest schools are located over 6.5 miles (±10.5-miles) to the west/northwest of the project site within the City of St. Helena (Napa County GIS, Schools Layer).

While the Proposed IS/MND does not specifically list the quantities of fertilizers, pesticides and herbicides that will be used, the types, frequency and general application methods are disclosed in **Section IX** (**Hazards and Hazardous Materials**) at page 33, paragraph 3, of the Proposed IS/MND as follows: *Fertilizers (i.e., nitrogen, magnesium, boron, and zinc) would be distributed through the drip system/foliar up to three times a year. Mildewcides (i.e., Sonata, paraffinic oil, wetable sulfur, and sulfur dust) would be applied up to six times a year. Pre-emergent herbicides (i.e., Weed Slayer or equivalent) would be sprayed for weed management up to two times a year.* The listing of agricultural chemicals utilized for ongoing operations does not include 1,3-dichloropropene (1,3-D), paraquat dichloride, simazine or imidacloprid.

As disclosed within the Supplemental Project Information forms on file at the Planning Department, which are also available on the County's Current Project Explorer[3] include application amounts and total anticipated use: also see the listing of agricultural chemicals provided by the applicant/permittee below.

Itemized Fertilizer and Pesticide Information

	Application Method (broadcast, spray, drip system, etc)	Application Amount (per acre)	Number of Applications per Year	Annual Amount Used (per acre)	Total Annual Amount Used Overall
1. Fertilizers					
Nitrogen	Drip	2-5 #	1-3	2-15 #	68-513 #
Magnesium	Drip	2 qt	1-3	2-6 qt	68-205 qt
Boron	Foliar	2 qt	1	2 qt	68.4 qt
Zinc	Foliar	2 qt	1	2 qt	68.4 qt
2. Mildewcides					
Sonata	Spray	4 qt	4-6	16-24 qt	547-821 qt
Parafinic Oil	Spray	6 qt	2	12 qt	410.4 qt
Wetable Sulfure	Spray	2-4 #	2-3	4-12 #	137-410 #
Sulfur Dust	Spray	10-12 #	2-3	20-36 #	684-1231 #
3. Herbicides					
Weed Slayer or eq.	Spray	6-10 gal	2	12-20 gal	410-684 gal
4. Rodenticides					
None					
5. Other Chemicals					
None					

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[3] Current Projects Explorer | Napa County, CA (countyofnapa.org): https://pbes.cloud/index.php/s/mzQ7Pc9PzrJ4eag

Current vineyard operations are covered by Hazardous Materials Business Plan (HMBP) DHD[4] Permit #3839 (CERS ID #10170729: DHD Establishment #4303), and winery operations at 1687 Sage Canyon Road are covered by HMBP DHD Permit #4422 (CERS ID #10170731: DHD Establishment #4302) with the Napa County Division of Environmental Health. The division began countywide implementation of this program in 1989, which requires businesses to have an HMBP if they store hazardous materials at levels exceeding the minimum reportable quantities (a total weight of 500 pounds for solids, a total volume of 55 gallons for liquids, and 200 cubic feet for compressed gases). The HMBP consists of owner/operator information, an inventory of chemicals, and an emergency response plan and maps. The HMBP is reviewed by the Napa County Division of Environmental Health and kept on file with the Napa County Division of Environmental Health and the California Environmental Reporting System (CERS).

Impacts related to hazardous materials (including fuels, pesticides, and fertilizers) are discussed in **Section IX** (**Hazards and Hazardous Materials**) of the Proposed IS/MND, and while the analysis determined these impacts to be less than significant, the proposed project, as adjusted by the permittee, includes buffers of at least 50 feet from aquatic resources. 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). Therefore, the increased buffers further reduce the already less than significant impacts associated with use of hazardous materials on water quality.

Therefore, the risk of potentially hazardous materials reaching or affecting adjacent water courses or other aquatic resources is significantly reduced because: i) there are no wetlands located within 50 feet of the development area; ii) the proposed project as adjusted would provide minimum setbacks buffers of 50 feet from ephemeral streams in conformance with code provisions; and iii) only federal and/or California approved chemicals would be applied to the vineyard in strict compliance with applicable state and federal law. Project approval, if granted, would also be subject to the following standard conditions of approval that would further avoid and/or reduce potential less than significant impacts associated with routine transport and use of hazardous materials during project implementation and ongoing vineyard operations and maintenance.

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

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

[4] Digital Health Department (DHD) is the software that the Napa County Division of Environmental Health uses to administer the HMBP Program.

- 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.

Response to Comment 2.10:
Contrary to the commentor's assertions, adequately analyzed cumulative impacts to wildlife movement and habitat connectivity. Also see *Response to Comments #2.3 through #2.9* and the City of Napa Water Division comments and responses (Attachment #4 and *Response to Comments #4.1 and #4.3)* incorporated herein by reference.

The project site is located predominately in the in the Lake Hennessey and Rector Reservoir watersheds, which both flow into Napa River and San Pablo Bay. The Lake Hennessey Drainage area contains approximately 5,165-acres. In 1993, vineyard acreage within this drainage was approximately 318-acres, or 6.2% of the drainage. Since 1993 approximately 149-acres of additional vineyard (or 2.9% of the drainage) have been developed to vineyard, resulting in approximately 9% of the drainage (or approximately 467-acres) containing vineyard. The Rector Reservoir Drainage area contains approximately 6,972-acres. In 1993, vineyard acreage within this drainage was approximately 335-acres, or 4.8% of the drainage. Since 1993 approximately 1,218-acres of additional vineyard (or 17.5% of the drainage) have been developed to vineyard, resulting in approximately 22.3% of the drainage (or approximately 1,553-acres) containing vineyard.

It is estimated, based on evaluation of the County's GIS layer identifying Potentially Productive Soils within the Lake Hennessey Drainage, that there are approximately 1,027-acres (19.9% of the drainage) having the potential to be developed to vineyard. This, in conjunction with existing and approved vineyard development (approximately 467-acres), results in a total potential build out of approximately 1,494-acres or approximately 28.9% of the drainage. It is estimated, based on evaluation of the County's GIS layer identifying Potentially Productive Soils within the Rector Reservoir Drainage, that there are approximately 2,270-acres (32.6% of the drainage) having the potential to be developed to vineyard. This, in conjunction with existing and approved vineyard development (approximately 1,553-acres), results in a total potential build out of approximately 3,823-acres or approximately 54.8% 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., Lake Hennessey and Rector Reservoir watersheds) over the last 28 years (1993-2021) were used to project an estimation of vineyard development for the next three to five years. Over the past 28 years within the Lake Hennessey Drainage, approximately 17-acres of agriculture were developed per year (467 divided by 28). Combined with Napa County policies and other site selection factors that limit the amount of land that can be converted to vineyard, the development of approximately 51 to 85-acres over the next three to five years within the Lake Hennessey Drainage are considered reasonable estimates. Over the past 28 years within the Rector Reservoir Drainage, approximately 55-acres of agriculture were developed per year (1,553 divided by 28). Combined with Napa County policies and other site selection factors that limit the

amount of land that can be converted to vineyard, the development of approximately 165 to 275-acres over the next three to five years within the Rector Reservoir Drainage are considered reasonable estimates. NCC Chapter 18.108 includes policies that require setbacks of 35 to 150 feet from watercourses (depending on slopes), and General Plan Conservation Policy CON-24c that requires the retention of oak woodland at a 2:1 ratio, which limits the amount of potential vineyard acreage that could be converted within the watershed. It has been the County's experience with ECP projects that there are generally site-specific issues, such as oak woodland preservation, wetlands, other water features, special-status plant and animal species, or cultural resources that further reduce areas that can be developed to other land uses. Additionally, the vineyard acreage projections for the next three to five years do not consider environmental factors that influence vineyard site selection, such as sun exposure, soil type, water availability, slopes greater than 30%, or economic factors such as land availability, cost of development or investment returns.

It is further disclosed in **Section XXI (Mandatory Findings of Significance)** with respect to Air Quality and GHG, that the proposed project 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 3** (Emissions from Vineyard Development and Operation) criteria pollutant emissions associated with development and operations are anticipated to be well below identified thresholds and therefore are not expected to result in project or cumulatively significant impacts. Additionally, the proposed project would be subject to standard air quality conditions of approval (should the proposed project be approved) that requires implementation of Air Quality BMPs to further reduce potential less than significant air quality effects of the proposed project and ongoing operation. Conversion of existing vegetation and disturbance of soil would result in releases of carbon dioxide, one of the gasses that contribute to climate change (**Tables 7** and **8**). As discussed in **Section VIII (Greenhouse Gas Emissions)**, the proposed project is not anticipated to result in substantial or significant GHG emissions and includes the installation of grapevines and a permanent no-till cover crop, which may off-set (in part) potential impacts related to reductions in carbon sequestration. Potential contributions to air quality impacts associated with the proposed project, including GHG emissions and loss of sequestration, would be considered less than cumulatively significant through project design (i.e., scope and scale) and implementation of standard conditions of approval. Furthermore, implementation of **Mitigation Measure BIO-1** would further offset potential emissions of the project.

Regarding biological resources, the project-specific Biological Resources Reconnaissance Surveys evaluated potential habitat loss and disturbance to plant and wildlife species as a result of the proposed project. The reconnaissance surveys included database records searches to identify the presence or potential presence of special-status species within the project site. The database records searches included the CNDDB, CNPS, and USFWS databases. As discussed in **Section IV** (**Biological Resources**), two special-status plant species (holly-leaved ceanothus and green monardella) were identified in the development area. With implementation of **Mitigation Measure BIO-1**, the project would permanently preserve 24.5-acres of the project site's special-status plant species habitat and 2.48-acres oak woodland and associated cover canopy, , and 70%-80% of the project site's special-status plant populations/individuals, which would provide the opportunity for these species to maintain viable populations both on the parcel and, more broadly, in the region, reducing potentially significant impacts to special-status plant species and their habitat to a less-than-significant level. Implementation of this mitigation measure would also effectively offset the loss of special-status plants and habitat located within the mitigated project and protect sensitive habitat.

With respect to soil loss, runoff and sedimentation, it was disclosed that 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. And that 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.

In general, the geographic areas affected in the cumulative context depends on the nature of the resource and impact being analyzed (CEQA Guidelines § 15130[b][2]). No fixed standards apply, and the agency has discretion to apply its expertise in selecting an appropriate assessment area (City of Long Beach v. Los Angeles Unified Sch. Dist, (2009) 176 CA4th 889). Furthermore, the cumulative analysis utilized available data which related to those projects requiring County approval. No dataset is readily available to assess all cumulatively considerable projects in the region and CEQA does not require a lead agency to seek out new data that is not readily available.

Also see *Response to Comments #2.1 through #2.17* (incorporated herein by refence).

Response to Comment 2.11:
As disclosed and assessed in **Section VII (Greenhouse Gas Emissions)**,the project would not have a significant Greenhouse Gas (GHG) impacts because implementation of **Mitigation Measure BIO-1,** would result in the permanent preservation of a minimum of 2.48-acres of oak woodland that includes a minimum of 2.46-acres of associated vegetation cover canopy all of which will be located on developable land (i.e., outside of stream setbacks and on land with slopes less than 30%), and would also permanently preserve a minimum of 24.5-acres of the parcels shrubland/chaparral habitat. Concluding the loss in carbon sequestration from the proposed woodland/tree removal is offset after incorporation of **Mitigation Measure BIO-1**, by permanently protecting from development two times the amount of lost carbon sequestration due to woodland conversion in addition to a significant amount of the subject parcel's shrubland/chaparral habitat, in accordance with CEQA Guidelines Section 15126.2 and Public Resources Code Section 21002.

For the purposes of this assessment the carbon stock and sequestration factors identified within the 2012 Draft CAP are utilized to calculate and disclose potential GHG emissions associated with agricultural "construction" and development and with "ongoing" agricultural maintenance and operation. The 2012 Draft CAP carbon stock and sequestration factors are utilized in this assessment because they are specific to and develop for Napa County. As such the County considers that the anticipated potential emissions resulting from the proposed project that are disclosed in the Proposed IS/MND reasonably reflect existing and proposed conditions; and therefore, are considered appropriate and adequate for project impact assessment.

The County acknowledges that given the emerging nature of this subject, other data sources are also available, which provide a wide range of carbon storage and sequestration values, however the comment does not provide any alternative carbon storage factors for grasslands. Furthermore, this comment primarily contains commentary that does not provide new or additional evidence demonstrating the potential level of GHG

impacts analyzed as a result of the proposed project would occur beyond what is disclosed in the Proposed IS/MND, or that the project as mitigated and conditioned may have a potentially significant GHG impact.

Also see *Responses to Comments #2.12 through #2.14* (incorporated herein by reference).

Response to Comment 2.12: The comment generally discusses the climate crisis and the potential effects of GHG in both in a larger context and for California. It does not provide substantial evidence germane to this project, its setting or assert that the potential GHG emissions associated with this project would be a significant impact requiring mitigation.

Further, the comment states '*the DEIR's failure to fully mitigate or consider alternatives to reduce the Project's significant climate change effects is all the more alarming*.': as indicated throughout these responses the environmental document prepared is an Initial Study/Mitigated Negative Declaration. The comments have been noted and entered into the record: also see *Responses to Comments #2.11, #2.13 and #2.14* (incorporated herein by reference).

Response to Comment 2.13:
The comment alludes to shrublands and grasslands often being excluded from carbon calculations and neglected as important carbon sinks. As disclosed in **Tables 8 and 9** (**Estimated Development Area Carbon Stocks/Storage** and **Estimated Development Area Carbon Stocks/Storage and Estimated Project Carbon Emissions Due to Vegetation Removal**, respectively - below) in **Section VII (Greenhouse Gas Emissions)** of the Proposed IS/MND these carbon calculations are in fact included in the disclosures and analysis (emphasis added).

Table 8 – Estimated Development Area Carbon Stocks/Storage

Vegetation Type/Carbon Storage	Development Area Acreage	Carbon Storage/Stock per Acre (MT C/acre)	Total Carbon Storage (MT)	Total Carbon Storage in MT CO2e
Oak Woodlands[1]	1.23	95.1	116.97	429.28
Grasslands	2.48	1.4	3.47	12.73
Shrublands[2]	30.41	16.2	492.64	1,807.99
Croplands/Vineyards	0.70	3.8	2.66	9.76
Disturbed/Graded	6.95	1.2	8,34	30.61
Total			**624.08**	**2,290.37**

1 Includes Coast Live Oak – CA Bay Woodland and Coast Live Oak – Blue Oak Forest.
2 Includes Common Manzanita Chaparral, Leather Oak – Chamise Chaparral, Chamise Chaparral, Coast Live Oak – CA Bay Scrub, and Leather Oak Chaparral
Sources: Napa County Draft Climate Action Plan, March 2012; Napa County Conservation Division, October 2024.

Table 9 – Estimated Project Carbon Emissions Due to Vegetation Removal

Vegetation Type/Carbon Storage	Development Area Acreage	Carbon Loss/Emission per Acre (MT C/acre)[1]	Total Carbon Loss/Emission (MT)	Total Carbon Loss/Emission in MT CO2e
Oak Woodlands[1]	1.23	89.6	110.21	404.47
Grasslands	2.48	0.8	1.98	7.27
Shrublands[2]	30.41	12.1	367.96	1,350.41
Croplands/Vineyard	0.70	3.5	2.45	8.99
Disturbed/Graded	6.95	1.2	8.34	30.61
Total			**490.94**	**1,801.75**

1 Includes Coast Live Oak – CA Bay Woodland and Coast Live Oak – Blue Oak Forest.
2 Includes Common Manzanita Chaparral, Leather Oak – Chamise Chaparral, Chamise Chaparral, Coast Live Oak – CA Bay Scrub, and Leather Oak Chaparral
Sources: Napa County Draft Climate Action Plan, March 2012; Napa County Conservation Division October 2024.

Furthermore, while the comment states that current science shows that shrublands have a carbon sequestration value of 22.5-34.1 MT CO2e/acre (as opposed to 16.2 CO2e/acre in the Proposed IS/MND) the value relied on by the County come from a report that is specific to Napa County and its unique environmental conditions.

The carbon sequestration analysis uses factors consistent with the Napa County Draft Climate Action Plan (Napa County 2012). While the Draft Climate Action Plan has not been adopted, the data sources used in its analysis are peer-reviewed and published and are considered credible and scientifically valid. The Draft Climate Action Plan cites the published data sources used. These sources have also been utilized the Proposed IS/MND. The carbon storage factor attributed to the various vegetation types in the Proposed IS/MND is based on published data. However, the County acknowledges that given the emerging nature of this subject, other data sources are also available, which provide a wide range of carbon storage and sequestration values.

As detailed in the Proposed IS/MND and *Response to Comments #2.11, #2.12 and #2.14* (incorporated herein by reference).

Therefore, the proposed IS/MND and appropriately and adequately disclosed and assessed potential GHG impacts consistent with CEQA.

Additionally, as indicated in Response to Comment #2.1, **Mitigation Measure BIO-1** would permanently preserve approximately 27-acres of habitat (24.5-acres of special-status plant species habitat and 2.48-acres of developable oak woodland and associated cover canopy) in support of Executive order N82-20.

Response to Comment 2.14:
See *Responses to Comments #2.11 through #2.13* (incorporated herein by reference).

The comment cites a reference (Hudiburg 2011) indicating that this research shows that forest store an average of 178 MT CO2e/acre; however, this letter is specific to regional carbon dioxide implications of forest bioenergy production. Therefore, it does not provide substantial evidence specific to the site or project or raises a fair argument that the project may have a significant GHG effect on the environment or that would occur beyond what is disclosed and assessed in the Proposed IS/MND.

Further, the commentor does not provide any evidence or other documentation of their information request in the comment footnote (also see Response to Comment #2.15 (incorporated herein by reference).

Response to Comment 2.15:
The comment, in a footnote, asserts that information the County relied on to assess potential impacts of a project is not reasonably available and is onerously difficult to obtain. Information cited is available on the County's document retrieval system (https://www.countyofnapa.org/2474/PBES-Public-Records-Search) and/or from the project manager (Donald Barrella, Principal Planner) whose contact information is on the first page of the Initial Study. Also see Response to Comment #2.14 (incorporated herein by reference).

In order to assess potential air quality and GHG emissions, a review of the emissions analysis associated with vineyard development/construction and operations performed for three certified Environmental Impact

Reports (EIR) in Napa County was completed: Suscol Mountain Vineyards[5] for an approximately 560-acre vineyard development, Walt Ranch Vineyard[6] for an approximately 507-acre vineyard development, and Circle-S Ranch Vineyards[7] for an approximately 400-acre vineyard development[8].

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

The Proposed IS/MND also discloses that **Table 4B (Emissions from Vineyard Development and Operation)** shows the approximate anticipated construction emissions associated with the development of vineyards of the sizes described above, and acknowledges that variations or similarities in emissions modeling results between the three projects can be attributed to the modeling platform and version used, and differences in modeling assumptions and inputs such as quantities and types of vegetation to be removed, construction trips, construction equipment and duration of use/operation, and operational equipment operation and trips. Utilizing that data, which is specific to vineyard projects in Napa County, to develop a formula to anticipate potential criterial pollutant emissions of the proposed project, that has been summarized in Section IV is an appropriate method to disclose potential air quality impacts, which has been determined by the County to reasonably reflect existing and proposed conditions; and therefore, are consider appropriate and adequate for project impact assessment. It should also be noted that the projects listed above, which are much larger than the proposed project did not exceed identified thresholds; therefore, concluding that this project had a less than significant air quality impact base on this evidence was appropriate.

Table 4B – Emissions from Vineyard Development and Operation

Emissions and Thresholds	Criteria Pollutants – Constituents			
	ROG	NO_x	$PM_{2.5}$	PM_{10}
	Construction Emissions			
Pounds per day: 150-acre vineyard development[1]	8.43 to 11.39	34.39 to 52.16	3.93 to 4.47	13.93 to14.53
Pounds per day: 150+ acre vineyard development[2]	9.43 to11.03	43.85 to 53.16	3.91 to 4.62	12.87 to 17.22
Pounds per day: 127-acre vineyard development[3, 4]	4.6	42.3	5.21[4]	24.21[4]
Construction threshold	54	54	54	82
	Operational Emissions			
Pounds per day: 400-acre vineyard operation[1]	7.78	2.85	0.80	4.22
Pounds per day: 560-acre vineyard operation[2]	6.58	1.84	0.75	3.91
Pounds per day: 507-acre vineyard operation[3]	4.3	22.3	1.4	2.3
Operational threshold (lbs/day)	54	54	54	82
Tons per year (Metric)[1,5]	0.78	0.35	0.11	0.58
Operational threshold (tons per year)	10	10	10	15

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

[6] #P11-00205-ECPA, AES March 2016, SCH #2008052075 certified August 1, 2016

[7] #P06-01508-ECPA, AES April 2011, SCH #2007062069 certified December 22, 2011

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

The comments do not provide any new or additional evidence, study, citation or other information to support that this determination is inadequate or that the potential level of impacts analyzed as a result of the proposed project would occur beyond what is disclosed in the Proposed IS/MND.

Also see *Response to Comment #2.8* regarding the summarization of information within an environmental review document (incorporated herein by reference).

Response to Comment 2.16:
While the comments on potential wildfire risks provides extensive commentary and citations on California's fire history, recent wildfire causes and damage, that wildfires disproportionately affect low-income and minority communities, and the potential economic risks of additional vineyard development in high fire-prone areas, it does not provide substantial evidence germane to this project, its setting or significance determinations that raise a fair argument that the potential wildfire risks of wildfires associated with this project would be a significant impact requiring mitigation, or that would occur beyond what is disclosed and assessed in the Proposed IS/MND

The comment states that '*Human-caused wildfires at the urban wildland interface that burn through developments are becoming more common with housing and human infrastructure extending into fire-prone habitats, and homes and structures can add fuel to fires and increase spread (Knapp et al., 2021)*. Other references cited also speak to almost all contemporary wildfires in California being caused by humans in the wildland urban interface (Balch et al., 2017; Radeloff et al., 2018; Syphard et al., 2007; Syphard & Keeley, 2020). As disclosed in the **Setting and Background Sections** of the Proposed IS/MND the project site is located approximately 5 miles northeast of the Town of Yountville and approximately 7.5 miles southeast of the City of St. Helena. The project is not at the urban wildland interface and does not extend homes and associated infrastructure into a fire prone habitat; therefore, the proposed project would not increase the exposure of people or structures to wildland fires or many of the detrimental effects noted in the comment.

The comments also state that '*The proposed Project will bring more people and increased human activity into fire-prone landscapes and increase ignition risk*'. As disclosed in the in the **Project Description** Section of the Proposed IS/MND, that the project would add to existing vineyard on the subject parcels and in the immediate vicinity. It is also disclosed that vineyard construction is anticipated to generate between 7 and 30 round trips per day for anticipated work crews of between 10 and 30 employees, and vineyard operations are anticipated to generate between 8 to 12 round trips per day for anticipated work crews of between 1 and 10 employees for typical operations and during peak operations, activities such as vineyard pruning, weed and pest control, and harvest are anticipated to generate between 10 to 30 round trips. It is further disclosed in Sections **XIV (Population and Housing) XV (Public Services) and XIX (Utilities and Service Systems**) that 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 project would not significantly increase the number of people working or residing at the site resulting in a less than significant impact as a result of wildfire.

As disclosed in **Section XX (Wildfire)** of the Proposed ISMND, 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, and most importantly, operation and maintenance activities would be similar to activities already occurring on the project site with the existing vineyard, as well as other surrounding vineyards. As further disclosed in **Section XIV (Hazard and Hazardous Materials**) the risk of

fire in vineyards is low due to limited amount of fuel, combustibles, and ignition sources that are present. Vineyards are irrigated and cover crops are typically mowed in May and August, thereby reducing the fuel loads within the vineyard. The removal of vegetation and the management of vineyard results in an overall reduction of fuel loads within the project site as compared with existing conditions. Therefore, the proposed project would not increase the exposure of people or structures to wildland fires and the impact would be less than significant.

As disclose in the **Background Section** of the Proposed IS/MND the owner/permittee has installed an emergency access road from the Chappellet properties through to Stagecoach (Gallo) Vineyards to the southeast was processed (under grading permit #ENG 21-00018). This emergency access has been created in collaboration with neighboring property owners to create a path of access and egress for neighbors and first responders between Soda Canyon Road and Sage Canyon Road during emergency situations. This type of improvement demonstrates the proactive nature of the subject ownership and surrounding owners to improve emergency access and egress in the area.

While the project site is within a high fire area that historically has experienced wildfires, the proposed project would not significantly exacerbate or otherwise significantly increase wildfire risk or expose large numbers of people or residential infrastructure to increased wildfire risks, or that would significantly increase the potential for wildlife ignition above existing operations in the immediate area. Therefore, the County has appropriately determined based on the project, its setting, and evidence in the record (including comments received) that potential wildfire impacts as a result of the project would be less than significant.

The comment does not provide any evidence or other documentation that counters the County's determination that risks of fire in vineyards is low because of the limited amount of fuel, combustibles, and ignition sources present in vineyards, and that vineyards are irrigated and cover crops are typically mowed in May and August, thereby reducing the fuel loads within the vineyard, and that the removal of vegetation and the management of vineyard results in an overall reduction of fuel loads within the project site as compared with existing conditions. Furthermore, the Proposed IS/MND does not disclose, or otherwise claim, that the vineyard project would result in increased fire safety by creating fire breaks or that the vineyard would substantially reduce fire spread

Regarding the potential risk of recent wildfire damage on the economic gains of grape and wine production, the comment has been acknowledged, and no further response is necessary, because the comment does not make any specific comments on the adequacy of the Proposed IS/MND. Also see *Responses to Comments #2.1 through #2.17* (incorporated herein by reference).

Response to Comment 2.17:
See *Responses to Comments #2.1 through #2.16,* incorporated herein by refence. The County is aware of its duty to maintain the admirative record for the project. Additionally, the Center for Biological Diversity will be noticed of future events associated with this application.

Comment #3 Institute for Conservation Advocacy Research and Education (ICARE) (Attachment 3)

Response to Comment 3.1:
These comments have been entered into the record. These comments neither provide new or additional evidence demonstrating the potential level of impacts analyzed as a result of the proposed project would

occur beyond what is disclosed in the Proposed IS/MND, nor do they make any specific comments on the adequacy of the Proposed IS/MND.

Also see *Response to Comment #2.1 through and #2.17* (incorporated herein by reference): no further response necessary

Response to Comment 3.2:
See *Response to Comment #2.8 through #2.10* (incorporated herein by reference) regarding erosion and sedimentation. Regarding the cover crop as stated in the **Project Description** of the Proposed IS/MND the project would maintain an 80% cover.

Further, these comments do not provide evidence that the project may have a significant effect on the environment, or that demonstrate the potential level of impacts associated with erosion and sedimentation as a result of the proposed project would occur beyond what is disclosed, assessed and mitigated for in the Proposed IS/MND. Also see *Response to Comment #2.1 through #2.17 and #3.1* incorporated herein by reference)

Response to Comment 3.3:
See *Response to Comments #2.3 through* #2.10 (incorporated herein by reference) regarding special-status species and sediment. Also see *Response to Comment #3.1.*

Response to Comment 3.4:
See *Response to Comment #2.11 thought #2.14* (incorporated herein by reference) regarding climate emergency. Also see *Response to Comment #3.1.*

Response to Comment 3.5:
See *Response to Comment #2.8 through #2.10 and* (incorporated herein by reference) regarding public water supply. Regarding vineyard management practices it is not indicated to be an organic vineyard: no further response necessary.

Also see *Response to Comment #4.1 through #4.3* from the city of napa water division (incorporated herein by reference) and *Response to Comment #3.1.*

Response to Comment 3.6:
See *Response to Comment #2.1 through #2.17* (incorporated herein by reference). Regarding Water Rights as disclosed in the Proposed IS/MND the property does have water rights; however, the proposed vineyard will be irrigated with groundwater.

Response to Comment 3.7:
See *Response to Comment #2.1 through #2.17* (incorporated herein by reference) regarding the preparation of an EIR. Also see *Response to Comment #3.1.*

Comment #4 City of Napa Utilities Department, Water Division (Attachment 4)

Response to Comment 4.1:
The county appreciates that the Napa Water Division has determined that the Proposed IS/MND is sufficient to address the City's requirements that in part safeguard against increases (by no more than one percent

individually or ten percent cumulatively) of sediment and other pollutants (i.e. nitrogen, phosphate, and sulfate) into the City's Lake Hennessey Reservoir.

Response to Comment 4.2:
For reference the previous communication received associated with this application is included in Attachment 4. It is the County's understanding that the owner is contemplating access improvements not related to this project or subject parcels that prompted this comment. These responses to comments and any future actions on the subject application (#P21-00206-ECPA) would not affect the ability of the City of Napa to request access for an additional water quality sampling point on the parcels identified in the subject comment letter.

Because the comment is not related to this project no further response is necessary.

Response to Comment 4.3:
Comment noted, no further response necessary.

List of Attachments:
Attachment 1 – California Department of Fish and Wildlife letter dated December 12, 2024
Attachment 2 – Center for Biological Diversity letter dated December 17, 2024
Attachment 3 - Institute for Conservation Advocacy Research and Education letter dated December 16, 2024
Attachment 4 – City of Napa Utilities Department, Water Division letter dated December 16, 2024, and dated December 28, 2020 (for P20-00271-ECPA.
Attachment 5 – Notification Completion Packet
Attachment 6 – Determination of Technical Adequacy, project hydrologic and soil loss modeling, Napa County Engineering Division,
Attachment 7 – Mitigation Monitoring and Reporting Program (MMRP)

Attachment 1

State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Bay Delta Region
2825 Cordelia Road, Suite 100
Fairfield, CA 94534
(707) 428-2002
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director

December 12, 2024

Donald Barrella, Planner III
Napa County
1195 Third Street
Napa, CA 94559
Donald.Barrella@countyofnapa.org

Subject: Chappellet Vineyard, Agricultural Erosion Control Plan Application #P21-00206-ECPA, SCH No. 2024110524, Napa County

Dear Mr. Barrella,

The California Department of Fish and Wildlife (CDFW) received an Initial Study/Mitigated Negative Declaration (IS/MND) from Napa County (County) for the Chappellet Vineyard, Agricultural Erosion Control Plan Application #P21-00206-ECPA (Project) pursuant the California Environmental Quality Act (CEQA) and CEQA Guidelines.

CDFW is submitting comments on the IS/MND to inform the County, as the Lead Agency, of potentially significant impacts to biological resources associated with the Project.

CDFW ROLE

CDFW is a **Trustee Agency** with responsibility under CEQA pursuant to CEQA Guidelines section 15386 for commenting on projects that could impact fish, plant, and wildlife resources. CDFW is also considered a **Responsible Agency** if a project would require discretionary approval, such as permits issued under the California Endangered Species Act (CESA), the Lake and Streambed Alteration (LSA) Agreement, or other provisions of the Fish and Game Code that afford protection to the state's fish and wildlife trust resources.

REGULATORY REQUIREMENTS

Lake and Streambed Alteration

An LSA Notification, pursuant to Fish and Game Code section 1600 et. seq. is required for Project activities affecting lakes or streams and associated riparian habitat. Notification is required for any activity that will substantially divert or obstruct the natural flow; change or use material from the bed, channel, or bank including associated riparian or wetland resources; or deposit or dispose of material where it may pass into a river, lake or stream. **It is unclear if the Project would impact streams, and if so an**

LSA Notification would likely be required as further described below. Work within ephemeral streams, washes, watercourses with a subsurface flow, and floodplains are subject to LSA notification requirements. CDFW, as a Responsible Agency under CEQA, would consider the CEQA document for the Project and may issue an LSA Agreement. CDFW may not execute the final LSA Agreement until it has complied with CEQA as a Responsible Agency.

PROJECT DESCRIPTION SUMMARY

Proponent: Cyril Chappellet, Chappellet Vineyard LLC

Objective: The Project includes the clearing of native vegetation, earthmoving and land contouring, and installation and maintenance of erosion control measures associated with the development of approximately 40.7 gross acres of vineyard (approximately 33.1 net planted acres) in five proposed vineyard blocks, and the construction and maintenance of vineyard access roads encompassing approximately 1.1-acres resulting in an approximate 41.8-acre development area (i.e. Project area), located on an approximate 238-acre holding. A minimum of 19.92-acres of holly-leaved ceanothus (*Ceanothus purpureus*) and its habitat, 0.2-acre green monardella (*Monardella viridis*) species and its habitat, 2.22-acres of common manzanita (*Arctostaphylos manzanita*) chaparral vegetation alliance, and 2.16-acres of leather oak (*Quercus durat*) - chamise (*Adenostoma fasciculatum*) chaparral sensitive vegetation alliance shall be identified on the property holding for permanent preservation, resulting in an overall special-status plant and plant habitat preservation area of no less that 24.5-acres. A minimum of 2.48 acres of developable oak woodland (i.e., on land with slopes less than 30 percent and located outside of aquatic resource setbacks) will be identified within the holding and permanently preserved. Special-status plants removed as part of the Project will be replaced on-site at a ratio of 3:1.

Location: The Project is located on Assessor's Parcel Numbers 032-560-022 and 032-560-033; at approximately 38.47109°N, -122.33669°W, and 38.46726 °N, -122.3256°W, respectively; 1.8 miles southeast of the intersection of Sage Canyon Road (State Route 128) and a private driveway, Napa County.

COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations below to assist the County in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources. Based on the Project's avoidance of significant impacts on biological resources with implementation of mitigation measures, including those CDFW recommends below and included in **Attachment 1** Draft Mitigation Monitoring and Reporting Program, CDFW concludes that an MND is appropriate for the Project.

I. Environmental Setting Related Impact Shortcomings

Would the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by CDFW or U.S. Fish and Wildlife Service (USFWS)?

COMMENT 1: Stream Alteration

Issue: Page 21 of the IS/MND indicates that there is one intermittent stream and seven ephemeral streams in the Project area, and that "The proposed project has been designed to avoid these tributaries and any associated riparian habitat…" However, the IS/MND does not discuss how the access roads will interact with streams. Page 2 of Exhibit A-3 states that "Access is via existing access roads. No new access roads other than as detailed on the ECP are proposed." However, Page 48 of IS/MND states that "The proposed project includes the construction of two short vineyard access roads to connect Vineyard Blocks D and E to Vineyard Block C, but construction would not result in design features that would result in hazardous conditions due to a geometric design feature or incompatible use." It is unclear if new access roads would be constructed across streams.

Specific impacts and why they may occur and be significant: Construction activities such as the building of access roads and crossings can result in substantial impacts to streams. Impacts include inputs of deleterious materials, removal of riparian vegetation, obstructions and diversions, equipment staging and operation; disturbance to riparian corridors, special-status and common wildlife and their habitats; and nesting birds. Project impacts to sensitive stream and associated riparian habitat would be potentially significant.

Recommendation: To reduce impacts to streams to less-than-significant and comply with Fish and Game Code section 1600 et seq., CDFW recommends that the MND incorporate the following mitigation measure.

MM BIO-4: Impacts to Stream and Riparian Areas. Prior to the commencement of Project activities, a qualified biologist shall conduct a thorough assessment of potential impacts to streams and riparian habitat including, but not limited to, a field assessment and mapping of all streams on or adjacent to the Project area, and an evaluation of impacts such as the placement, construction, or operation of access roads and potential stream crossings. If impacts to the bed, bank, channel, or riparian area of a stream cannot be avoided, the Project shall notify CDFW for Project impacts to the stream. More information for the notification process is available at https://wildlife.ca.gov/Conservation/Environmental-Review/LSA. The Project shall comply with all measures of the Streambed Alteration Agreement (SAA), if issued, and shall not commence activities with potential to impact the

1.1

stream until the SAA process has been completed. Permanent impacts to stream habitat shall be mitigated by restoring stream habitat at a 3:1 mitigation to impact ratio on-site or as close to the Project area as possible, and in the same watershed, unless otherwise approved in writing by CDFW. All temporary impacts to stream habitat shall be restored. Restoration shall include a qualified biologist preparing and implementing a restoration plan that includes success criteria, a minimum of five years of monitoring and maintenance, and achieving success criteria.

1.1 cont.

Please be advised that an SAA, if issued for the Project, would likely include the recommended mitigation measures in this letter, as applicable, and may include additional measures to protect fish and wildlife resources.

Would the Project 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 CDFW or USFWS?

COMMENT 2: Roosting Bats

Issue: The IS/MND does not adequately evaluate impacts to special-status bats including pallid bat (*Antrozous pallidus*) that may be using trees and structures within the Project area for roosting, nor does it require bat surveys or habitat assessments prior to commencement of Project activities. According to page 13 of the *Biological Resources Reconnaissance Survey Report* dated February 2020, "On-site trees proposed for removal were assessed for their potential to support roosting by special-status bats; primary relevant characteristics include the presence of large/substantial cavities and hollows. Otherwise, targeted assessments and protocol-level surveys were deemed inapplicable or infeasible at the time of the site visits, due to inappropriate timing between such a survey and Project initiation." However, inconvenient or incompatible timing of site visits needed to perform bat surveys or habitat assessments is not a valid reason to forgo them.

1.2

Specific impacts and why they may occur and be significant: Pallid bat is a California Species of Special Concern (SSC) and shown to occur within five miles of the Project site according to Figure A-6 of the *Biological Resources Reconnaissance Survey Report* and the California Natural Diversity Database (for more information on SSC see: https://wildlife.ca.gov/Conservation/SSC). If impacts to special-status bats are not identified and avoided, Project activities could result in substantial adverse effect on special-status bat species through population reduction and habitat removal.

Recommended Mitigation Measure: To reduce impacts to special-status bats such as pallid bat to less-than-significant, CDFW recommends that the MND incorporate the following mitigation measure.

MM BIO-5 Bat Tree Habitat Assessment and Surveys. Prior to any tree trimming or removal, a qualified biologist shall conduct a habitat assessment for bats, unless otherwise approved in writing by CDFW. The habitat assessment shall be conducted a minimum of 30 to 90 days prior to tree trimming or removal and shall include a visual inspection of potential roosting features of trees to be removed (e.g., cavities, crevices in wood and bark, exfoliating bark for colonial species, suitable canopy for foliage roosting species). If suitable habitat trees are found, they shall be flagged or otherwise clearly marked, CDFW shall be notified immediately, and tree trimming or removal shall not proceed without approval in writing from CDFW. If the presence of bats is presumed or documented, trees may be removed only: a) using the two-step removal process detailed below during seasonal periods of bat activity, from approximately March 1 through April 15 and September 1 through October 15, or b) after a qualified biologist, under prior written approval of the proposed survey methods by CDFW, conducts night emergence surveys or completes visual examination of roost features that establish absence of roosting bats. Two-step tree removal shall be conducted over two consecutive days, as follows: 1) the first day (in the afternoon), under the direct supervision and instruction by a qualified biologist with experience conducting two-step tree removal, limbs and branches shall be removed by a tree cutter using chainsaws only. Limbs with cavities, crevices or deep bark fissures shall be avoided, and 2) the second day the entire tree shall be removed.

1.2 cont.

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations. (Pub. Resources Code, § 21003, subd. (e)). Accordingly, please report any special-status species and natural communities detected during Project surveys to CNDDB. The CNDDB field survey form can be filled out and submitted online at the following link: https://wildlife.ca.gov/Data/CNDDB/Submitting-Data. The types of information reported to CNDDB can be found at the following link: https://www.wildlife.ca.gov/Data/CNDDB/Plants-and-Animals

1.3

ENVIRONMENTAL DOCUMENT FILING FEES

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of environmental document filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of

1.4

environmental review by CDFW. Payment of the environmental document filing fee is required in order for the underlying project approval to be operative, vested, and final. (See Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089.)

1.4 cont.

CONCLUSION

CDFW appreciates the opportunity to comment on the IS/MND to assist the County in identifying and mitigating Project impacts on biological resources.

Questions regarding this letter or further coordination should be directed to Nicholas Magnuson, Environmental Scientist, at (707) 815-4166 or Nicholas.Magnuson@wildlife.ca.gov, or Melanie Day, Senior Environmental Scientist (Supervisory), at (707) 210-4415 or Melanie.Day@wildlife.ca.gov.

Sincerely,

DocuSigned by:
Erin Chappell
B77F9A6211EF486...

Erin Chappell
Regional Manager
Bay Delta Region

Attachment 1: Draft Mitigation Monitoring and Reporting Program

ec: Office of Planning and Research, State Clearinghouse No. 2024110524

ATTACHMENT 1

Draft Mitigation Monitoring and Reporting Program (MMRP)

CDFW provides the following language to be incorporated into the MMRP for the Project.

Biological Resources (BIO)			
Mitigation Measure (MM)	**Description**	**Timing**	**Responsible Party**
MM BIO-4	Impacts to Stream and Riparian Areas. Prior to the commencement of Project activities, a qualified biologist shall conduct a thorough assessment of potential impacts to streams and riparian habitat including, but not limited to, a field assessment and mapping of all streams on or adjacent to the Project area, and an evaluation of impacts such as the placement, construction, or operation of access roads and potential stream crossings. If impacts to the bed, bank, channel, or riparian area of a stream cannot be avoided, the Project shall notify CDFW for Project impacts to the stream. More information for the notification process is available at https://wildlife.ca.gov/Conservation/Environmental-Review/LSA. The Project shall comply with all measures of the Streambed Alteration Agreement (SAA), if issued, and shall not commence activities with potential to impact the stream until the SAA process has been completed. Permanent impacts to stream habitat shall be mitigated by restoring stream habitat at a 3:1 mitigation to impact ratio on-site or as close to the Project area as possible, and in the same watershed, unless otherwise approved in writing by CDFW. All temporary impacts to stream habitat shall be restored. Restoration shall include a qualified biologist preparing and implementing a restoration plan that includes success criteria, a minimum of five years of monitoring and maintenance, and achieving success criteria.	Prior to Ground Disturbance and During Construction	Project Applicant
MM BIO-5	Bat Tree Habitat Assessment and Surveys. Prior to any tree trimming or removal, a qualified biologist shall conduct a habitat assessment for bats, unless otherwise approved in writing by CDFW. The habitat assessment shall be conducted a minimum of 30 to 90 days prior to tree trimming or removal and shall include a visual inspection of potential roosting features of trees to be removed (e.g., cavities, crevices in wood and bark, exfoliating bark for colonial species, suitable canopy for	Prior to Ground Disturbance	Project Applicant

	foliage roosting species). If suitable habitat trees are found, they shall be flagged or otherwise clearly marked, CDFW shall be notified immediately, and tree trimming or removal shall not proceed without approval in writing from CDFW. If the presence of bats is presumed or documented, trees may be removed only: a) using the two-step removal process detailed below during seasonal periods of bat activity, from approximately March 1 through April 15 and September 1 through October 15, or b) after a qualified biologist, under prior written approval of the proposed survey methods by CDFW, conducts night emergence surveys or completes visual examination of roost features that establish absence of roosting bats. Two-step tree removal shall be conducted over two consecutive days, as follows: 1) the first day (in the afternoon), under the direct supervision and instruction by a qualified biologist with experience conducting two-step tree removal, limbs and branches shall be removed by a tree cutter using chainsaws only. Limbs with cavities, crevices or deep bark fissures shall be avoided, and 2) the second day the entire tree shall be removed.		

Attachment 2

CENTER for BIOLOGICAL DIVERSITY Because life is good.

December 17, 2024

Sent via email

Donald Barrella, Planner
Napa County Department of Planning, Building and Environmental Services
1195 Third Street, Suite 210
Napa, CA 94559
Donald.Barrella@countyofnapa.org

Re: Comments on Chappellet Vineyard Conversion #P21-00206-ECPA (State Clearinghouse No. 2024110524)

Dear Mr. Barrella:

These comments are submitted on behalf of the Center for Biological Diversity (the "Center") regarding the Chappellet Vineyard Conversion # P21-00206-ECPA (the "Project"). The Center has reviewed the Initial Study/Mitigated Negative Declaration ("MND") closely and is concerned that the MND fails to properly disclose, analyze and mitigate potentially significant environmental impacts to biological resources, erosion, water quality, greenhouse gas, air quality, and wildfire, among other effects. Because the Project may have a significant environmental impact, the Center urges the County to prepare an Environmental Impact Report ("EIR") to fully analyze and mitigate the Project's impacts to Napa County's water, air, and habitats.

The Center is a non-profit, public interest environmental organization dedicated to the protection of native species and their habitats through science, policy, and environmental law. The Center has over 1.7 million members and online activists throughout California and the United States. The Center has worked for many years to protect imperiled plants and wildlife, open space, air and water quality, and overall quality of life for people in Napa County.

Life on Earth is experiencing a sixth mass extinction driven primarily by habitat loss and fragmentation, and climate change is an increasing threat. Combating the extinction and climate crises requires bold action to ensure we protect remaining biodiversity and open space. This not only helps wildlife, but it is essential to building a healthy, climate-resilient future for all Californians. Native landscapes help us regulate our climate, purify our air and water, pollinate our crops, and create healthy soil. Thoughtful land use planning that protects native biodiversity and increases access to nature will help ensure all County residents experience the physical and mental health benefits of nature while bringing the state closer to its commitment to conserve more than 30 percent of its lands and coastal waters by 2030 under executive order N-82-20.

2.1

I. The County Must Prepare an Environmental Impact Report.

CEQA was enacted for the state to "take all action necessary to protect, rehabilitate, and enhance the environmental quality of the state" and to "[e]nsure that the long-term protection of the environment . . . shall be the guiding criterion in public decisions." (Pub. Res. Code § 21001.) The CEQA Guidelines state that "CEQA was intended to be interpreted in such a manner as to afford the fullest possible protection to the environment within the reasonable scope of the statutory language," and that "[t]he purpose of CEQA is . . . to compel government at all levels to make decisions with environmental consequences in mind." (CEQA Guidelines § 15003.) CEQA is an information document and, as such, "requires full environmental disclosure." (*Communities for a Better Environment v. City of Richmond* (2010) 184 Cal.App.4th 70, 89.)

Only when "there is no substantial evidence in light of the whole record before the public agency that the project . . . may have a significant effect on the environment" may an agency prepare a negative declaration or mitigated negative declaration instead of an EIR. (Pub. Res. Code § 21064.5; see also id. §§ 21064, 21080(c).) A mitigated negative declaration, in particular, is prepared "when the initial study has identified potentially significant effects on the environment, but . . . revisions in the project plans or proposals . . . would avoid the effects or mitigate the effects to a point where clearly no significant effect on the environment would occur" and there is no substantial evidence the project may have a significant effect on the environment. (*Id.* § 20164.5.) If there is substantial evidence that a project may have a significant effect on the environment, an agency must prepare an EIR. (*Id.* § 21080(d).) 2.2

If an agency is presented with so much as "a fair argument that a project may have a significant effect on the environment, the lead agency shall prepare an EIR even though it may also be presented with other substantial evidence that the project will not have a significant effect." (CEQA Guidelines § 15064(f)(1); see also *No Oil, Inc. v. Los Angeles* (1974) 13 Cal.3d 68, 75.)

The CEQA Guidelines provide guidance for determining if a project's effects are significant. Such a determination "calls for careful judgment on the part of the public agency involved, based to the extent possible on scientific and factual data" and a "consider[ation of] the views held by members of the public in all areas affected." (*Id.* § 15064(b)-(c).) The lead agency must consider both direct and indirect physical changes in the environment caused by the project. (*Id.* § 15064(d).)

CEQA also requires consideration of cumulative impacts. An EIR is required "if the cumulative impact may be significant and the project's incremental effect, though individually limited, is cumulatively considerable . . . when viewed in connection with the effects of past projects, the effects of other current project, and the effects of probable future projects." (*Id.* § 15064(h)(1).) Cumulatively considerable environmental effects require a mandatory finding of significance. (*Id.* § 15065(a)(3).)

CEQA also has a substantive mandate and requires effective mitigation. "[P]ublic agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects." (Pub. Res. Code § 21002.) CEQA requires mitigation measures to be "fully enforceable through permit conditions, agreements, or other measures." (See *id.* §21081.6(b); CEQA Guidelines § 15126.4(a)(2).) "Formulation of mitigation measures should not be deferred until some future time." (CEQA Guidelines § 15126.4(a)(1)(B).)

2.2 cont.

The Project's impacts on biological resources, erosion, water quality, greenhouse gas, air quality, wildfire are readily apparent given the information in the MND. Any one of these factors alone is sufficient to warrant preparation of an EIR.

II. The MND Lacks an Adequate Analysis of and Mitigation for the Project's Impacts to Biological Resources.

Napa County is a biodiversity hotspot both within California and globally. It is located within the California Floristic Province, one of five Mediterranean biomes around the world known for high levels of plant diversity and endemism (Cowling et al., 1996; Rundel et al., 2016). Due to its dynamic topography, which ranges in elevation from 0 to 4,200 feet above mean sea level, and its varying microclimates, Napa County boasts a unique and diverse assemblage of habitats that host numerous plants and wildlife (Napa County, 2005). Despite covering only 0.5% of California's area, Napa County supports more than one third (>1100) of California's native plant species and 150 special-status plant and wildlife species, including the federally-threatened California red-legged frog, the endangered Ridgway's rail, and the threatened steelhead trout, Central California Coast DPS (Napa County, 2005; Thorne et al., 2004). These ecosystems are the backbone of Napa's idyllic scenery, and they provide important ecosystem services vital to the County's prosperity and way of life, such as water quality protection and erosion control. However, development and agricultural expansion into important habitats threaten these biological communities. CEQA requires the lead agency to disclose, analyze and mitigate all impacts on special-status species, including species listed under the Federal Endangered Species Act and California Endangered Species Act. The MND fails to comply with this requirement.

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The MND fails to adequately describe and analyze the Project's impacts to special-status species and sensitive habitats in and near the Project area. The MND erroneously concludes that the Project will have less than significant impacts to biological resources, without providing substantial evidence to support these claims. The MND fails to mitigate the Project's significant impacts to special-status species and habitats as well as local and regional wildlife connectivity. Given these shortcomings, we urge the County fully analyze and disclose the Project's significant environmental impacts in a full EIR.

A. The MND's Fails to Adequately Analyze and Mitigate Impacts to Special-Status Species.

Under CEQA, an environmental review document must evaluate the potential environmental impacts of the project as compared to the existing environmental conditions (the

"baseline"), so that the Project's impacts can be meaningfully analyzed and compared to alternatives. (CEQA Guidelines § 15125(a); *see County of Amador v. El Dorado County Water Agency* (1999) 76 Cal.App.4th 931, 952; *Neighbors for Smart Rail v. LA County Metropolitan Transit Authority* (2013) 57 Cal.4th 310, 315.) The MND fails to provide adequate surveys for numerous special-status species, and therefore fails to establish an accurate baseline. 2.3 cont.

a. Pallid Bat and Fringed Myotis

The MND's wildlife surveys are inadequate to establish a reliable baseline of existing environmental conditions present at the Project site. For example, the MND's survey of pallid bats and fringed myotis is inadequate. The MND acknowledges that for both of these species, "There are CNDDB occurrences in the greater vicinity (CDFW 2019a), and the Study Area contains oak woodland," which is suitable habitat (Exhibit B-1 C-21, C-23). Yet, only "On-site trees proposed for removal were assessed for their potential to support roosting by special-status bats" (Exhibit B-1 p.13), excluding the remaining habitat in the Project site or Additional Area, which may also contain suitable roosting habitat. The MND concludes that the potential to occur in the Study Area is "unlikely" despite the fact that surveys only assessed a very small number of trees. Additionally, the MND fails to assess whether the Project area is used for foraging and other non-roosting purposes by any bats, despite the presence of suitable foraging habitat. The bat surveys as conducted are therefore insufficient to determine whether Pallid bats may be impacted by the Project. 2.4

b. Western Pond Turtle

The MND's assessment of western pond turtle is vague and insufficient. The MND states that western pond turtle is "unlikely. Potential habitat is restricted to on-site pond/reservoir." This is incorrect. Western pond turtles use a wide variety of aquatic and terrestrial habitats, including perennial and ephemeral waters, as well as standing water and streams (Bondi, 2009; Holland, 1994; M. R. Jennings & Hayes, 1994). The numerous intermittent and ephemeral streams as well as the on-site pond/reservoir could provide suitable habitat for western pond turtle. Potential western pond turtle habitat extends to the numerous upland habitat as well, including the grassland, oak woodland, and oak forest in the Project. Yet, the MND does not provide any attempt to determine whether western pond turtle are present in the Project site or Additional Area. Given the diversity of suitable habitat present in the Project site, this is unacceptable. The MND fails to adequately assess and mitigate impacts to this species, and must be revised include adequate protocol surveys and mitigation measures for impacts to this species if it is encountered during Project construction and operation. 2.5

c. Mountain Lion, a Specially-Protected Mammal

The MND fails to adequately describe, assess, and mitigate impacts to mountain lions (*Puma concolor*). Despite being a special-status species known to occur in and near the area, the MND understates the importance of the Project area to local mountain lions and their long-term survival, omitting them from the MND entirely. 2.6

Ample scientific evidence indicates that mountain lion populations are struggling to survive and that human activity and land use that inhibits habitat connectivity has adverse impacts on mountain lions. Continued habitat loss and fragmentation has led to 10 genetically isolated populations within California. There are six identified mountain lion populations in the ESU, and several are facing an "extinction vortex" due to high levels of inbreeding, low genetic diversity, and high human-caused mortality rates from car strikes on roads, depredation kills, rodenticide poisoning, poaching, disease, and increased human-caused wildfires (Benson et al., 2016, 2019; Ernest et al., 2003, 2014; Gustafson et al., 2018, 2021; Riley et al., 2014; Vickers et al., 2015). The primary driver of this extinction vortex is lack of connectivity (Yap & Rose, 2019).

There is plenty of evidence documenting the effects of human activity specifically on mountain lions. One study found that mountain lions are so fearful of humans and noise generated by humans that they will abandon the carcass of a deer and forgo the feeding opportunity just to avoid humans (Smith et al., 2017). The study concluded that even "non-consumptive forms of human disturbance may alter the ecological role of large carnivores by affecting the link between these top predators and their prey" (Smith et al., 2017). In addition, mountain lions have been found to respond fearfully upon hearing human vocalizations, avoiding the area and moving more cautiously when hearing humans (Smith et al., 2017; Suraci et al., 2019). Other studies have demonstrated that mountain lion behavior is negatively affected when exposed to other evidence of human presence, such as lighting or vehicles/traffic (Smith et al., 2015; Wang et al., 2017; Wilmers et al., 2013). Therefore, both physical and behavioral barriers drive genetic isolation, and continued land use that further fragments mountain lion habitat without adequately minimizing impacts to functional connectivity will harm puma populations in the area. The Project will result in decreased connectivity, especially given its importance as "critical habitat linkage between tracts of natural habitat to the north and south" (MND p.14). The MND fails to consider how the Project will significantly impact how mountain lions navigate the landscape by creating new human-made barriers and decreasing opportunities for them to move freely between heterogeneous habitats.

Mountain lions are a key indicator species of wildlife connectivity and healthy ecosystems. As the last remaining wide-ranging top predator in the region, the ability to move through large swaths of interconnected habitat is vital for genetic connectivity and their long-term survival. In addition, impacts to mountain lions in the region could have severe ecological consequences; loss of the ecosystem engineer could have ripple effects on other plant and animal species, potentially leading to a decrease in biodiversity and diminished overall ecosystem function. Many scavengers, including California condors, kit foxes, raptors, and numerous insects, would lose a reliable food source (Barry et al., 2019; Ruth & Elbroch, 2014). Fish, birds, amphibians, reptiles, rare native plants, and butterflies would potentially diminish if this apex predator were lost (Ripple et al., 2014; Ripple & Beschta, 2006, 2008). In fact, a recent literature review found that mountain lions are important ecosystem engineers and have been documented to have ecological interactions with at least 485 plant and animal species (LaBarge et al., 2022). The MND must adequately disclose, assess, and mitigate the Project's impacts to mountain lions in and near the Project area to ensure their long-term survival as well as the long-term health of the area's biodiversity and ecosystems.

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B. The MND Fails to Adequately Analyze and Mitigate the Project's Impacts to Wildlife Movement and Habitat Connectivity.

Habitat connectivity is vital for wildlife movement and biodiversity conservation. Limiting movement and dispersal with barriers (e.g., development, roads, or fenced-off croplands) can affect animals' behavior, movement patterns, reproductive success, and physiological state, which can lead to significant impacts on individual wildlife, populations, communities, and landscapes (Ceia-Hasse et al., 2018; Cushman, 2006; Haddad et al., 2015; Trombulak & Frissell, 2000; Van Der Ree et al., 2011). Individuals can die off, populations can become isolated, sensitive species can become locally extinct, and important ecological processes like plant pollination and nutrient cycling can be lost. In addition, connectivity between high quality habitat areas in heterogeneous landscapes is important to allow for range shifts and species migrations as climate changes (Cushman et al., 2013; Heller & Zavaleta, 2009). Lack of wildlife connectivity results in decreased biodiversity and degraded ecosystems. Connectivity among and between natural waterways and upland riparian habitat is essential for native fish species like the steelhead and trout too. The shade and erosion control from riparian vegetation provide cool and clear streams that are ideal for spawning and rearing (Lohse et al., 2008; Moyle et al., 2011). Encroachment and over-aggressive removal and degradation of riparian areas have been identified as major drivers of declines in California's freshwater and anadromous fish(Grantham et al., 2012; Lohse et al., 2008; Moyle et al., 2011; Opperman et al., 2005; Pess et al., 2002). Many other species, including mountain lions and bobcats, often use riparian areas and natural ridgelines as migration corridors or foraging habitat (Dickson et al., 2005; Hilty & Merenlender, 2004; M. Jennings & Lewison, 2013).

In addition to providing habitat connectivity, buffer zones around the County's aquatic habitats are essential to protect the County's high diversity of plants, fish, aquatic invertebrates, birds, amphibians, and reptiles. The streams (perennial and intermittent), wetlands (including vernal pools), and reservoirs throughout the County support numerous special-status flora and fauna, including steelhead trout, western pond turtles, and California red-legged frogs. Species that rely on these aquatic habitats also rely on the adjacent upland habitats (*e.g.*, riparian areas along streams, grassland habitat adjacent to wetlands). In fact, 60% of amphibian species, 16% of reptiles, 34% of birds and 12% of mammals in the Pacific Coast ecoregion (which includes Napa County) depend on riparian-stream systems for survival (Kelsey & West, 1998). Additionally, fish rely on healthy upland areas to influence suitable spawning habitat (Lohse et al., 2008), and agricultural encroachment on these habitats has been identified as a major driver of declines in freshwater and anadromous fish (Lohse et al., 2008; Moyle et al., 2011). Intermittent and ephemeral rivers and streams are often underestimated habitats despite their importance. Recent scientific literature states that "[i]n many intermittent streams, remnant pools persist after flow ceases and provide refuge for aquatic organisms" (Bogan et al., 2019). As stated by Bogan et al. (2019), "Remnant pools in intermittent streams should be a focus of conservation efforts in regions with a Mediterranean climate, especially during extreme droughts."

The MND acknowledges that numerous ephemeral and intermittent streams occur throughout the Project area. While these aquatic resources are avoided by the Project design (MND p.21), the proposed vineyard blocks are extremely close to these water features. The

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MND notes that the "National Resource Conservation Service [sic] recommends a minimum 50-foot-wide vegetated buffer from aquatic resources (such as streams, ephemeral drainages, and wetlands)" (MND p.33). However, the MND nonetheless implements only 35-foot buffers around ephemeral streams (MND p. 34). Such small buffers are not sufficient to support aquatic and riparian biodiversity. A literature review found that recommended buffers for wildlife often far exceeded 325 feet, well beyond the largest buffers implemented in practice (Fischer & Lindenmayer, 2000; Robins, 2002), and vastly larger than the 35-foot buffer for ephemeral streams described in the MND (p.34). For example, Kilgo et al. (1998) recommend more than 1,600 feet of riparian buffer to sustain bird diversity. In addition, amphibians have been found to migrate over 1,000 feet between aquatic and terrestrial habitats through multiple life stages (Cushman, 2006; Fellers & Kleeman, 2007; Semlitsch & Bodie, 2003; Trenham & Shaffer, 2005). Other sensitive species that may occur in and around the Project site, such as western pond turtles, have been found to migrate over 1,300 feet and 10,000 feet respectively from breeding ponds and streams (Semlitsch & Bodie, 2003; Trenham, 1998).

The MND claims that project design maintains wildlife connectivity but fails to account for the edge effects produced by the proposed layout of vineyard blocks and associated human use and activities. As shown in the MND, the layout of the vineyard blocks includes numerous disconnected blocks on the property, which creates unnecessary habitat fragmentation and edge effects. In fact, the disjointed arrangement of vineyard blocks creates breaks and edge effects in otherwise viable habitat. Edge effects of development in and adjacent to critical linkage areas, like the proposed Project, can impact key, wide-ranging predators, such as mountain lions and bobcats (Crooks, 2002; Delaney et al., 2010; Lee et al., 2012; Riley et al., 2006; Smith et al., 2015, 2017; Vickers et al., 2015; Wang et al., 2017), as well as smaller species with smaller home ranges, such as song birds, bats and other small mammals, and herpetofauna (Benítez-López et al., 2010; Bunkley & Barber, 2015; Cushman, 2006; Delaney et al., 2010; Gray, 2017; Kociolek et al., 2011; McClure et al., 2013; Slabbekoorn & Ripmeester, 2008; Ware et al., 2015). Negative edge effects from human activity have been found to be biologically significant up to 300 meters (~1000 feet) away from anthropogenic features in terrestrial systems (Environmental Law Institute, 2003).

Effective, functional corridors are continuous (not fragmented by roads or other anthropogenic features like vineyards), wide enough to overcome edge effects, dominated by native vegetation, and have equal or higher habitat quality than core habitat patches (Bennett et al., 1994; Brooker et al., 1999; Hilty & Merenlender, 2004). Edge effects of development and habitat degradation from the proposed Project would only result in low quality habitat in and around the Project area that would not be able to support the area's biodiversity or facilitate wildlife movement. The MND does not specify the distances between vineyard blocks, but in numerous cases these distances appear to be less than 200 feet (Exhibit B-1, Figure A-2). Such small areas between vineyard blocks are not large enough to provide effective wildlife corridors. The proposed Project could significantly impact wildlife connectivity.

Notably, the Project site is in an important area for regional connectivity. As stated in the MND, the Project site is located within an "Essential Connectivity Area" per the California Essential Connectivity Project (MND p.21). The Project site is designated by California Department of Fish and Wildlife's Areas of Conservation Emphasis as an "irreplaceable and

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essential corridor," and the surrounding area is all classified as either "irreplaceable and essential corridors" or "conservation planning linkages," both of which indicate high conservation importance.[1] The MND claims that despite the importance of the area for regional connectivity, impacts would be less than significant and that the Project "will allow for continued local wildlife movement… Given the relatively small size of the project area (relative to the width of the corridor tract) and the lack of apparent development impacts within the more central portion of this tract, agricultural expansion within the project area is in and of itself unlikely to result in any significant impacts to wildlife movement or migration at the landscape linkage scale." (MND p.21). However, this claim does not take into account the impacts of edge effects, nor the cumulative impacts of fragmentation.

In areas with high value for wildlife connectivity, any one Project may not disrupt the entire corridor; however, small project can still impede connectivity as described above, and as small projects continue add up, direct effects and edge effects will be compounded. Wildlife movement can be impeded in a manner of "death by a thousand cuts." The MND notes that 25% of the Rector drainage and 10% of the Lake Hennessey drainage are composed of already existing or approved vineyard development, and future vineyard development could occur on an additional 32.6% and 20% of each drainage, respectively (MND p.52). This means significant areas of open space are being lost in an important connectivity area, and any additional vineyard development, no matter how small, contributes to the reduction in wildlife connectivity in the region.

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The proposed Project will result in habitat loss and edge effects due to increased human presence and activities that will further degrade a critical connectivity area. The MND fails to adequately disclose, assess, and mitigate the Project's impacts to wildlife connectivity and therefore fails to comply with CEQA.

III. The MND Does Not Adequately Disclose or Mitigate the Project's Erosion or Water Quality Impacts

The MND's unsupported conclusion that erosion and water quality impacts will be less than significant with mitigation is disconcerting, given that there is ample evidence in Napa County that the types of mitigation measures proposed to be included in the Project have been ineffective or have gone unenforced and unimplemented for other similar projects in Napa. Land use mismanagement and lack of environmental oversight have led to degraded waterways from agricultural runoff, changes in flow, and increased erosion, sedimentation, and water temperatures (Higgins 2006; Higgins 2010). These impacts are evident in the Napa River's muddy waters and the loss of native fishes that once thrived in these waters, such as Coho salmon (which have been extirpated) and steelhead trout (Higgins 2006). The Napa River remains on the U.S. Environmental Protection Agency's 303(d) list of impaired waters[2] due to excessive sediment and nutrient pollution from historical and current land use practices, including vineyard conversions, grazing, and urbanization. Given the extensive and well-

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[1] California Department of Fish & Wildlife Areas of Conservation Emphasis: Connectivity. https://apps.wildlife.ca.gov/ace/

[2] U.S. Environmental Protection Agency, How's My Waterway? Napa River, non-tidal. Accessed at: https://mywaterway.epa.gov/waterbody-report/CA_SWRCB/CAR2065002020160701061256/2022

documented history of the failure of mitigation measures like those proposed in the MND (combined with the County's sporadic enforcement of these measures), the County can no longer rely on "paper mitigation" to claim that soil erosion, runoff, and sediment impacts to water quality will be less than significant for vineyard conversion projects like the Project.

A. The MND Fails to Sufficiently Analyze Impacts to Erosion, Runoff, and Sedimentation.

The MND's water quality impacts analysis fails to establish an accurate baseline of existing environmental conditions at the Project site. The MND fails to provide sufficient observational data on baseline soil characteristics, erosion conditions, and runoff dynamics, and is overly reliant on abstract modeling.

The MND fails to adequately characterize existing erosion or runoff conditions at the Project site. The MND provides a brief description of the soil types in the Project site, but does not describe existing conditions based on field data gathered from the Project site at all. Instead, the MND describes soil loss calculations that were prepared using the Universal Soil Loss Equation, a modelling approach that estimates current and future soil conditions (Exhibit A-2 p.6). USLE results "predict that net soil loss rates will decrease slightly relative to existing conditions" (Exhibit A-2 p.6). Note that Exhibit E, the soil loss analysis itself, provides no explanation of the methodology used for the study, and provides no plain language summary of the results of the analysis, making it extremely difficult for members of the public to understand and evaluate the analysis that was performed.

Similarly, the conclusions around runoff, including the information provided in Exhibit, are difficult to interpret. The MND states that "there would be a small peak flow increases in Watersheds 1, 2, 4, 5, 6 and 7 as originally proposed; however, no net increase in runoff volumes or time of concentrations are expected as compared to pre-project conditions with the installation and maintenance of proposed outsloped vineyard avenues with rock benches (Table 12)." Table 12 then references Exhibit G. However, Exhibit G does not define or explain the mechanism by which "outsloped vineyard avenues" and "rock benches" would impact flows. The summary of Exhibit G (p. 4) states that "The accompanying addendum describes and analyzes the effect of additional, proposed project infrastructure designed to eliminate these increases." However, the referenced addendum (Exhibit G pp. 5-7) only outlines "storage volume required to mitigated predicted peak flow increases." It is entirely unclear how the results of this analysis regarding storage volume relate to the "proposed project infrastructure," which itself is not even defined in Exhibit G. Thus the entire analysis regarding flow impacts is entirely non-transparent, and does not provide sufficient evidence to support the claim that the Project would result in "no net increase in runoff."

Further, similar to the case of the soil loss analysis, it appears that the hydrological analysis (Exhibit G) is also based entirely on modelling. Neither of these analyses (erosion or hydrology)—nor their ultimate conclusions—are based on actual data collected at the Project site. While modeling is an extremely valuable tool, without ground-truthed data, modeling results may not be entirely accurate for any given site. Modeling of *hypothetical* existing sediment and erosion conditions is no substitute for an *actual* determination and description of

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existing environmental conditions on the project site, which would include, at a minimum, field measurements, water quality samples, rain gauge monitoring, and other data. Recent studies show that the accuracy of soil erosion modeling is highly dependent on calibration to site-specific conditions that must be determined with observational data (Batista et al., 2019; Efthimiou, 2018). Because the MND's assertions that there will be no impact to water quality, erosion, or runoff are highly reliant on the findings of the soil analysis and hydrological study, these studies should be informed by extensive and detailed site-specific baseline data derived from observational study. Otherwise, the studies' conclusions could be highly inaccurate and therefore fail to constitute substantial evidence to support the MND analysis.

Additionally, the MND's heavy reliance on the appended soil erosion and hydrology studies (Exhibits E, F) obfuscates the method of analysis and makes the impact conclusions difficult to understand. The MND must include this critical information upfront, in the document, rather than burying it in appendices. (See *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 442 [stating that "information scattered here and there in EIR appendices, or a report 'buried in an appendix,' is not a substitute for a good faith reasoned analysis." (brackets, ellipses, and some internal quotation marks removed)].)

These shortcomings are especially problematic here because the MND uses its hypothetical baseline to support one of the MND's most startling and implausible conclusions: that converting existing natural coyote brush scrub, chaparral, woodland and grassland on steep slopes above natural streams to agricultural use will actually *lessen* erosion and sedimentation, with no impacts to runoff (MND p.41). Abundant evidence shows that natural vegetation cover plays a critical role in regulating water flow, maintaining water quality, promoting groundwater recharge, and maintaining overall watershed health. Conversion of grasslands and forests to vineyards has been shown to impede groundwater recharge rates in Northern California (Grismer & Asato, 2012). Further, vineyard conversions are associated with more severe erosion and runoff than other types of agricultural use (Cossart et al., 2020).

The MND must be revised to describe an accurate baseline for the Project's water quality impacts that reflects a detailed and evidence-based evaluation of current sedimentation and erosion conditions on the project site. Until the MND provides such an analysis to use as a baseline for evaluating impacts, it cannot properly analyze—nor provide adequate mitigation for—the Project's erosion, sedimentation, and runoff impacts. In this case, the lack of an accurate baseline rooted in observational data and site-specific detail precludes an adequate analysis of the Project's impacts.

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B. The MND Fails to Sufficiently Analyze the Impacts of Pesticide and Nutrient Pollution on Water Quality.

The MND does not adequately analyze or mitigate the harmful effects of pesticides, herbicides, or fertilizers on wildlife, habitat, and water quality. Over 25 million pounds of pesticides were used on wine grapes in 2021 in California (California Department of Pesticide Regulation, 2021a). The most widely used pesticide on wine grapes in the state is sulfur. Researchers at the Center for Environmental Research and Children's Health at the University of California, Berkeley, found that use of asthma medication and adverse respiratory symptoms

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increased in children that lived up to 1 kilometer away from where sulfur spraying had occurred (Raanan et al., 2017). Other widely used pesticides on wine grapes in California include 1,3-dichloropropene (1,3-D), paraquat dichloride, simazine and imidacloprid (California Department of Pesticide Regulation, 2021b). Both 1,3-D and imidacloprid are classified by the U.S. Environmental Protection Agency ("U.S. EPA") as "very highly toxic" to aquatic invertebrates (U.S. Environmental Protection Agency, 1998, 2022), and 1,3-D is listed by the California Office of Environmental Health Hazard Assessment ("California OEHHA") under California's Proposition 65 as causing cancer in humans.[3] A collaborative study done by National Institutes of Health and the Parkinson's Institute and Clinical Center in Sunnyvale, CA found that use of paraquat is positively associated with the development of Parkinson's disease in people (Tanner et al., 2011). Simazine is listed by California OEHHA under California's Proposition 65 as causing developmental toxicity and female reproductive toxicity in humans.[4]

The MND fails to provide any information whatsoever about the types and quantities of fertilizers, pesticides, and herbicides that will be used in the proposed vineyard Project in violation of CEQA's requirement of "full environmental disclosure." (*Communities for a Better Environment v. City of Richmond* (2010) 184 Cal.App.4th 70, 89.). Instead, the MND states that "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." (MND p.33) Accordingly, the MND does not place any limits on the type or amount of pesticides, herbicides, or fertilizers that may be used on the project site, or disclose what chemicals are permitted or forbidden from being used. The MND has no basis for reaching its conclusion that these impacts would be mitigated to less than significant levels. (*Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova*, (2007) 40 Cal. 4th 412, 427.) Further, omitting this information and analysis from the MND obscures the Project's plans regarding fertilizers, pesticides, and herbicides and denies the public their rightful opportunity to assess the project's impacts to water quality.

The MND also fails to provide any evidence that the usage of chemicals on the project site would have less than significant impacts on water quality (including fertilizers, herbicides, and pesticides for ongoing vineyard maintenance; MND p.8, p.33). Instead, the MND suggests that compliance with federal and/or California laws and regulations around chemical use will be sufficient mitigation to prevent said chemicals from having any impacts to water quality. Complying with pertinent regulations on pesticide use does not dispel CEQA's requirement to provide analysis of the impacts of pesticide use. *Californians for Alternatives to Toxics v. Department of Food & Agriculture* (2005) 136 Cal.App.4th 1, 16. Additionally, meeting regulatory standards "may not be applied in a way that would foreclose the consideration of other substantial evidence showing that there might be a significant environmental effect from a

2.9 cont.

3 California OEHHA. Chemicals. 1,3-Dichloropropene. Available at: https://oehha.ca.gov/chemicals/13-dichloropropene.

4 California OEHHA. Proposition 65. Atrazine, Propazine, Simazine and their Chlorometabolites DACT, DEA and DIA Listed Effective July 15, 2016 as Reproductive Toxicants. Available at: https://oehha.ca.gov/proposition-65/crnr/atrazine-propazine-simazine-and-theirchlorometabolites-dact-dea-and-dia-0.

project." *Protect the Historic Amador Waterways v. Amador Water Agencies* (2004) 116 Cal.App.4th 1099, 1108.

Further, the MND asserts that erosion control measures and stream setbacks will reduce the likelihood and amount of pesticides and nutrient pollution that reach streams or wetlands in or near the Project site but fails to provide evidence for this claim. Rather than providing estimates of pesticide and fertilizer use and potential impacts on water quality, the MND merely states that applying 35-foot buffers will minimize impacts, presumably compared to a baseline without compliance with pollution control regulations (MND p.34). However, planning to minimize pollution and runoff does not obviate the need to predict or quantify the amounts and impacts of fertilizers and pesticides that will be used and that will inevitably affect water quality. Even if levels of contaminants will likely remain below regulatory thresholds, the MND should provide estimates that allow the public to assess the project's contributions to water quality trends and cumulative impacts. Moreover, though the project's nutrient and pesticide use may be small relative to Lake Hennessey or the Napa River, the smaller streams closer to the project could be intensely impacted by smaller amounts of pesticide and nutrient inputs. Studies show that small and intermittent waterways are particularly vulnerable to eutrophication from nutrient inflows. Some chemical pollutants have also been shown to persist longer in intermittent streambeds compared to perennial streams (Chiu et al., 2017).

2.9 cont.

The County must fully describe, analyze, and mitigate the impacts of fertilizers, pesticides, herbicides, and other chemicals to water quality as well as wildlife in and around the Project site, including downstream areas of the Napa River watershed.

C. The MND Fails to Adequately Analyze and Mitigate the Project's Cumulative Impacts to the Watershed

The MND provides no analysis or discussion of cumulative impacts to the Napa River watershed. Cumulative impacts from smaller projects add up and have a significant impact on watershed health. (*Laupheimer v. Cal.* (1988) 200 Cal.App.3d 440, 462-68.) Studies have shown that land use patterns at the watershed scale are correlated with water quality, carbon sequestration, and the level of species abundance and biodiversity (Grantham et al., 2012; Lohse et al., 2008; Opperman et al., 2005; Padilla et al., 2010; Pess et al., 2002). For example, higher levels of vineyard/agricultural conversion and exurban development within watersheds have been associated with increased fine sediment inputs to streams (Lohse et al., 2008; Opperman et al., 2005), reduced diversity of aquatic macroinvertebrates (Lawrence et al., 2011), reduced abundance and diversity of native fishes (Lohse et al., 2008; Pess et al., 2002), and reduced carbon sequestration (Padilla et al., 2010). These studies indicate that land use planning and policies need to consider impacts at the watershed scale to implement effective mitigation that actually safeguard important natural resources like special-status species, water quality, and erosion control.

2.10

IV. The MND's Analysis of and Mitigation for the Project's Greenhouse Gas Emissions Is Inadequate

2.11

The MND's analysis of the proposed Project's GHG emissions (MND at 28-32) is inadequate. The Project would result in potentially significant GHG emissions during construction and operation of the Project, but the MND dedicates only a handful of pages to its conclusory analysis. The conclusion that GHG impacts will be less than significant is not supported by substantial evidence. The MND under-counts the carbon storage that will be lost as from the clearing of predominantly shrubland habitat on the Project site, while failing to offer support for the carbon storage and sequestration values attributed to vineyards.

2.11 cont.

The MND's approach violates CEQA's requirement that an environmental document fully analyze and attempt to mitigate all potentially significant direct and indirect impacts of a project. (CEQA Guidelines § 15126.2; Pub. Res. Code § 21002.)

A. The Climate Crisis Is a Catastrophic and Pressing Threat to California.

A strong, international scientific consensus has established that human-caused climate change is causing widespread harms to human society and natural systems, and that climate change threats are becoming increasingly dangerous. The Intergovernmental Panel on Climate Change (IPCC), the leading international scientific body for the assessment of climate change, concluded in its 2023 Sixth Assessment Report that: "[u]nsustainable and unequal energy and land use as well as more than a century of burning fossil fuels have unequivocally caused global warming, with global surface temperature reaching 1.1°C above 1850-1900 in 2011-2020." (IPCC, 2023). The increase in global surface temperature has resulted in sea level rise, increased frequency of extreme weather events, and has resulted in "irreversible losses" at the species and ecosystem levels. (IPCC, 2023). These findings were echoed in the United States' own 2023 Fifth National Climate Assessment, prepared by scientific experts and reviewed by the National Academy of Sciences and multiple federal agencies. The 2023 Assessment concluded that "[t]he global warming observed over the industrial era is unequivocally caused by greenhouse gas emissions from human activities–primarily burning fossil fuels" and long-term responses include "sea level rise, ice sheet losses, and associated disruptions to human health, social systems, and ecosystems." (US Global Change Research Program, 2023).

2.12

In its 2020 update, the National Academy of Sciences and the Royal Society concluded that climate change is largely a result of human activity, as "natural causes alone are inadequate to explain the recent observed changes in climate." (National Academy of Sciences & Royal Society, 2020). The additional carbon input from human activities has significantly disturbed the natural carbon cycle, resulting in an imbalance in the system that fosters global climate stability. (National Academy of Sciences & Royal Society, 2020). Based on observed and expected harms from climate change, in 2009 the U.S. Environmental Protection Agency found that greenhouse gas pollution endangers the health and welfare of current and future generations. (74 Fed. Reg. 66496 (Dec. 15, 2009) [U.S. EPA, Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act; Final Rule].) In 2021, EPA again recognized the critical nature of the climate crisis, stating that: "[t]he changing climate is affecting people's health and livelihoods and damaging infrastructure, ecosystems, and social systems in communities in every region of the nation." (US Environmental Protection Agency, 2021).

These authoritative climate assessments decisively recognize the dominant role of greenhouse gases in driving climate change. In its 2023 Assessment Report, IPCC stated that "the extent to which current and future generations will experience a hotter and different world depends on choices now and in the near term." (IPCC, 2023). In order to prevent global warming from reaching an irreversible point, policies must be implemented to reach net zero CO2 emissions and achieve significant reductions in other greenhouse gases. (IPCC, 2023).

The impacts of climate change will be felt by humans and wildlife. Climate change is increasing stress on species and ecosystems—causing species-level changes in morphology, behavior, phenology, and geographic range shifts, and ecosystem-level changes such as the increasing frequency of extreme weather events, widespread changes in productivity, species interactions, and vulnerability to biological invasions (Weiskopf et al., 2020). Climate-change-related local extinctions are already widespread and have occurred in hundreds of species. (Wiens, 2016). Catastrophic levels of species extinctions are projected during this century if climate change continues unabated (Maclean & Wilson, 2011; Thomas et al., 2004; Urban, 2015). Conservation actions aimed at protecting biodiversity can slow the progression of climate change–the ecosystem services provided by biodiverse ecosystems are an integral part in the balanced functioning of our climate system (Shin et al., 2022).

Therefore, immediate and aggressive greenhouse gas emissions reductions are necessary to keep warming well below 2°C above pre-industrial levels. The IPCC Sixth Assessment Report and other expert assessments have established global carbon budgets, or the total amount of carbon that can be burned while maintaining some probability of staying below a given temperature target. According to the IPCC, "[t]he best estimates of the remaining carbon budgets from the beginning of 2020 are 500 GtCO2 for a 50% likelihood of limiting global warming to 1.5°C and 1150 GtCO2 for a 67% likelihood of limiting warming to 2°C." (IPCC, 2023). Additionally, "[i]f the annual CO2 emissions between 2020-2030 stayed, on average, at the same level as 2019, the resulting cumulative emissions would almost exhaust the remaining carbon budget for 1.5°C (50%), and deplete more than a third of the remaining carbon budget for 2°C (67%)." (IPCC, 2023). As of 2023, climate policies by the world's countries would lead to an estimated 2.7°C of warming, and possibly up to 3.4°C of warming, well above the level needed to avoid the worst dangers of climate change (Climate Action Tracker, 2023).

The United States has contributed more to climate change than any other country. The U.S. is the world's biggest cumulative emitter of greenhouse gas pollution, responsible for 24 percent of cumulative global CO2 emissions from 1850 to 2022, and the U.S. is currently the world's second highest emitter on an annual and per capita basis (Friedlingstein et al., 2023; Friedrich et al., 2023). U.S. climate policy is wholly inadequate to meet the international climate target to hold global average temperature rise to well below 2°C above pre-industrial levels to avoid the worst dangers of climate change. Current U.S. climate policy has been ranked as "insufficient" by an international team of climate policy experts and climate scientists which concluded: "[w]ithout additional, drastic emission reductions measures, the US will still be far from meeting its domestic climate target, let alone get its emissions onto a 1.5°C trajectory." (Climate Action Tracker, 2023). In its 2018 Special Report on Global Warming of 1.5°C, the IPCC—the leading international scientific body for the assessment of climate change—described the devastating harms that would occur at 2°C warming. The report highlights the necessity of

2.12 cont.

limiting warming to 1.5°C to avoid catastrophic impacts to people and life on Earth (IPCC, 2018). The report also provides overwhelming evidence that climate hazards are more urgent and more severe than previously thought, and that aggressive reductions in emissions within the next decade are essential to avoid the most devastating climate change harms.

In California, climate change will transform our climate, resulting in such impacts as increased temperatures and wildfires, and a reduction in snowpack and precipitation levels and water availability (Turco et al., 2023). In response to inadequate action on the national level, California has taken steps through legislation and regulation to fight climate change and reduce statewide GHG emissions. Enforcement and compliance with these steps are essential to help stabilize the climate and avoid catastrophic impacts to our environment. California has a mandate under AB 1279, the California Climate Crisis Act, to achieve net zero GHG emissions by no later than 2045, and achieve and maintain net negative GHG emissions thereafter, and to ensure that by 2045, statewide GHG emissions are reduced to 85% the level in 1990. (AB 1279 2022.) In 2019, Governor Newsom issued an executive order to leverage state investments to further California's climate goals (Executive Order N-19-19 (2019).) Newsom has continued to issue climate-related executive orders, such as a 2020 order requiring that, by 2035, all passenger vehicles will be zero-emission, in addition to other motor vehicle emission goals. (Executive Order N-79-20 (2020).) Through these bills and orders, California has laid a path that may allow the state to achieve tangible climate solutions, but there is still work to be done.

Although some sources of GHG emissions may seem insignificant, climate change is a problem with cumulative impacts and effects. (*Ctr. for Biological Diversity v. Nat'l Highway Traffic Safety Admin*., (9th Cir. 2008) 538 F.3d 1172, 1217 ("the impact of greenhouse gas emissions on climate change is precisely the kind of cumulative impacts analysis" that agencies must conduct).) One source or one small project may not appear to have a significant effect on climate change, but the combined impacts of many sources can drastically damage California's climate as a whole. Therefore, project-specific GHG emission disclosure, analysis and mitigation is vital to California meeting its climate goals and maintaining our climate.

Given the increasingly urgent need for drastic action to reduce GHG emissions, the DEIR's failure to fully mitigate or consider alternatives to reduce the Project's significant climate change effects is all the more alarming.

2.12 cont.

A. The MND Ignores the Carbon Storage and Sequestration Value of Shrubland Habitat.

Shrublands and grasslands in California's Mediterranean and desert ecosystems are undervalued despite being significant carbon sinks (Bohlman et al., 2018; Janzen, 2004; Wohlfahrt et al., 2008). With much of the stored carbon located in their roots and soils, there is potential for long-term storage that could be resilient to changing environmental conditions (Aranjuelo et al., 2011; Booker et al., 2013; Dass et al., 2018; Evans et al., 2014; Finlay, 2008; Orwin et al., 2011; Paruelo et al., 2010). These habitats have evolved with warm, dry, water- and nutrient-limited environments, which may make them more adaptable and resilient to climate change compared to tropical and temperate forests (Luo et al., 2007; Leela E. Rao et al., 2011; Thomey et al., 2014; Vicente-Serrano et al., 2013). Yet shrublands and grasslands are often

2.13

excluded from carbon calculations and neglected as important carbon sinks and biodiversity hotspots. Scientists point to nature as an effective and efficient tool to help limit warming by keeping carbon from being released and removing carbon from the atmosphere (Fargione et al., 2018; Yang et al., 2019). Efforts to sequester carbon have largely been focused on protecting and planting more trees because forests store the largest percentage of carbon compared to other terrestrial ecosystems (Ahlström et al., 2015). However, limiting warming to 1.5ºC will require more ambitious actions.

Climate change is already affecting the ability of forests and trees to store carbon. Higher temperatures and increased drought are killing trees (C. D. Allen et al., 2010, 2015; Anderegg et al., 2015; Diffenbaugh et al., 2015; Sullivan et al., 2020), and increased atmospheric carbon is leading to shorter carbon residence time with trees growing faster and dying more quickly (Büntgen et al., 2019). Elevated atmospheric carbon is also leading to reduced carbon sequestration in forest soils, likely due to increased microbial respiration (Heath et al., 2005). This perpetuates a dangerous feedback loop with more carbon in the atmosphere driving hotter and drier conditions that lead to more carbon release. Although there is some leeway for tropical forests to offset some impacts of climate change, their carbon storage capability could rapidly deteriorate if global surface temperatures increase by more than 2ºC of pre-industrial levels (Sullivan et al., 2020). Thus, other measures that reduce emissions and store carbon are needed to supplement the capacity of trees and forests and increase our chances of limiting warming to 1.5ºC above pre-industrial levels (IPCC, 2018).

2.13 cont.

Shrubland can supplement the carbon sequestration of trees and forests, some of which may be more reliable carbon sinks in the face of climate change. Shrublands and grasslands in arid and semi-arid regions have been found to store significant amounts of carbon while being more resilient to drought and increased atmospheric carbon (Aranjuelo et al., 2011; Dass et al., 2018; Evans et al., 2014; Luo et al., 2007; Vicente-Serrano et al., 2013). Notably, these habitats support high levels of biodiversity and endemism, and they cover vast areas of California (Figure 1). Collectively, they could play a significant role in the carbon cycle and aid in combatting climate change while bringing the state closer to its commitment to conserve more than 30 percent of its lands and coastal waters by 2030 under executive order N-82-20.

Researchers found that mixed chaparral and chamise chaparral in California stored an estimated 34.1 and 22.5 metric tons of carbon per acre, respectively. They were found to have an average carbon sequestration rate of 0.45 to 1.7 metric tons of carbon per acre, per year, and the amount of carbon stored and sequestered increased with the age of the shrubs. Although the data vary by age of the shrubs and fluctuate based on varying environmental conditions, these statistics indicate the untapped potential of shrublands for carbon storage and sequestration in the fight against climate change (Yap et al., 2023)

B. The MND's GHG Analysis Undercounts Emissions.

2.14

The Project calculates the amount of stored carbon based on values that grossly misrepresent the carbon storage potential of habitats in the Project's development footprint. This Project will remove 30 acres of shrublands. Current science shows that shrublands have a carbon sequestration value of 22.5-34.1 MT CO2e/acre. (Yap 2023.) However, the MND uses a value of

16.2 CO2e/acre for carbon sequestration in scrubland. (MND at 30.) Further, research in Northern California and Oregon shows that forests store an average of 178 MT CO2e/acre in their biomass. (Hudiburg 2011.) The IS/MND uses 95.1 MT CO2e/acre for oak woodlands. (MND at 30.) The IS/MND does not justify the carbon sequestration values it uses, leaving open the possibility that the real amount of carbon emitted by the Project might be higher by orders of magnitude.

The MND fails to use the best available science when determining the carbon storage lost during construction. Instead, the MND's value is taken from the 2012 Napa County Draft Climate Action Plan ("Draft CAP"). But the Draft CAP is not a credible source, as that document is outdated, and more importantly, was never finalized nor adopted, and bears no authority in the County's approach to cataloging GHG emissions.[5] The County must circulate an EIR that incorporates the most recent scientific information about carbon storage and sequestration potential for different land cover types. Without that information, the County has not properly disclosed and analyzed the scope of carbon storage loss that will occur during project construction and operation.

The MND overestimates the carbon sequestration value of the habitat that will remain on the Project site. It claims the 24.5 acres of shrubland to be permanently preserved in a conservation easement will sequester enough carbon to offset the loss from the removed vegetation, and the net carbon emissions will be no higher than zero. (MND at 32.) However, it is not clear that the 24.5 acre easement will be on developable land. Because the site is steeply sloped, it's likely that much of the land was already safe from development. Courts have upheld conservation easements as mitigation only when a project that developed a certain amount of land mitigated that impact by preventing comparable development on a proportionate amount of land. (E.g., *Masonite Corp. v County of Mendocino* (2013) 218 CA4th 230.) Using conservation easements in this way can be effective mitigation because, "[a]lthough the developed []land is not replaced, an equivalent area of comparable []land is permanently protected from a similar fate... For every acre of []land permanently lost to residential development another acre of []land is permanently protected from residential development." (*Building Industry Assn. of Central California v. County of Stanislaus* (2010) 190 Cal.App.4th 582, 592.) But in this case, the land to be protected might never have been at risk of the "similar fate" of vineyard development. Protections that are not additive cannot offset the impacts of a project, and do not establish a less than significant impact.

2.14 cont.

V. The MND Does Not Adequately Analyze the Project's Air Quality Impacts.

The entirely of the MND's air quality analysis consists of comparing the Project to three previously approved vineyards in Napa County—Circle-S, Suscol Mountain, and Walt Ranch—and concluding that because the Project will be smaller than those projects, it will have lower

2.15

[5] Further, although the MND's climate analysis rests entirely on the Draft CAP, the MND does not contain a full citation to the Draft CAP, does not link to the document, and does not include it in an appendix. The document does not seem to be available online. The County has not provided it on request, at the time of writing. Without access to the foundational document underlying the GHG analysis, the public and decisionmakers have no way to understand and independently evaluate the environmental consequences of the Project.

emissions and thus an insignificant impact on air quality. (MND at 12.) This is not an adequate analysis under CEQA.

Beyond simply labeling an effect significant or insignificant, the environmental review must "reasonably describe the nature and magnitude of the adverse effect." (See *Berkeley Keep Jets Over the Bay Com. v. Board of Port Cmrs.* (2001) 91 Cal.App.4th 1344, ['The EIR's approach of simply labeling the effect "significant" without accompanying analysis of the project's impact on the health of the Airport's employees and nearby residents is inadequate to meet the environmental assessment requirements of CEQA.']; *Galante Vineyards v. Monterey Peninsula Water Management Dist*. (1997) 60 Cal.App.4th 1109, 1123.)

Here, the County makes no attempt to describe what the air quality impacts will be—instead, it only predicts they will be below a certain threshold. That gives the public no information with which to understand the specific impacts of *this* project. Under CEQA, a lead agency must provide information regarding the project's significant environmental impacts that is sufficient to allow decision-makers and the public to understand the environmental consequences of the project. (*Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502, 520; *Laurel Heights Improvement Ass'n v Regents of Univ. of Cal.* (1988) 47 Cal.3d 376, 404; See CEQA Guidelines § 15151.) The document must include enough detail to enable the public "to understand and to consider meaningfully the issues raised by the proposed project." (*Id.* at 516 (citation omitted).) Simply reporting the emissions of three other, unrelated projects does not meet that standard.

Further, the County has not supported its bare conclusion of no significant impact with substantial evidence. The County does not describe specific characteristics of the vineyards it selected for comparison, or which of those characteristics this Project shares. It does not disclose where those projects are, what degree of grading or rock blasting was necessary to construct them, what vegetation was on those sites and how much was removed, or anything else relevant to those projects' specific emissions. [6] The County's analysis assumes that all vineyard projects will have a relatively consistent level of emissions per acre, and thus that emissions can be estimated based on nothing more than acreage. But the County's own data does not support that. The MND says that the Suscol Mountain vineyard would be 560 acres and emit 1.84 pounds of NOx per day. In contrast, that the Walt Ranch project was going to be 507 acres and was projected to emit 22.3 pounds of NOx per day. (MND at 12.) Walt Ranch was slightly smaller than Suscol and was projected emit ten times more NOx. Of course this is due to the particular characteristics of the vineyards, but the public is given no way to know what these particular characteristics might be, or which project might be more similar to this Project. The County claims that, due to its size, this Project will necessarily have a less-than-significant impact on air quality. But the information presented shows that air pollution emissions vary greatly from one

2.15 cont.

[6] Further, the EIRs that would contain the details of the other vineyards necessary to enable an accurate comparison are not reasonably available to the public. The EIRs are not attached to the MND, were not submitted to the State Clearinghouse, and are not available online. A number of courts have noted as a general principle that readers should not be forced to sift through appendixes to detect the agency's environmental analysis. (*Cleveland Nat'l Forest Found. v San Diego Ass'n of Gov'ts* (2017) 3 C5th 497, 516; *Banning Ranch Conservancy v City of Newport Beach* (2017) 2 C5th 918, 941; *Vineyard Area Citizens for Responsible Growth v City of Rancho Cordova* (2007) 40 C4th 412, 442; *San Joaquin Raptor Rescue Ctr. v County of Merced* (2007) 149 CA4th 645, 659.) The agency in this case has gone further—the details are not even available in an appendix.

vineyard to another, and emissions cannot be projected based on nothing more than acreage. Because the record reveals sufficient information and inferences to indicate a fair argument that significant environmental impacts may exist, the County must prepare an EIR. (*Nelson v. Cnty. of Kern* (2010) 190 Cal. App. 4th 252, 283.)

2.15 cont.

VI. The MND Fails to Adequately Analyze and Mitigate the Project's Wildfire Impacts.

Aside from acknowledging that the Project area is located an area designated as a very high fire hazard severity zone (MND at 34), the MND fails to provide the site's fire history or any analysis of the Project's impacts to wildfire risk. Wildfires due to lightning strikes and Indigenous cultural burning have occurred on California's landscapes for millennia. They're a natural and necessary process for many of California's ecosystems. But some of the recent fires have been exceptionally harmful to communities. In the past 200 years since European colonization, forced relocation and cultural genocide of Native Tribes, fire suppression and poor land management combined with poor land-use planning that places more people in fire-prone landscapes have shifted historical fire regimes throughout the heterogeneous ecosystems of the state. In addition, hotter, drier and more extreme weather conditions due to climate change make the landscape more conducive to wildfire ignitions and spread. Yet the MND fails to adequately consider how disrupted fire regimes and climate change worsening wildfire conditions will affect the Project's impacts to wildfire risk.

Almost all (95-97%) contemporary wildfires in California have been unintentionally caused by people, including powerlines, car sparks, arson, etc. (Balch et al., 2017; Keeley & Syphard, 2019). Recent wildfires have been exceptionally harmful to people. Between 2015 and 2020 almost 200 people in the state were killed in wildfires, more than 50,000 structures burned, hundreds of thousands of people had to evacuate their homes and endure power outages, and millions were exposed to unhealthy levels of smoke and air pollution. Human-caused wildfires at the urban wildland interface that burn through developments are becoming more common with housing and human infrastructure extending into fire-prone habitats, and homes and structures can add fuel to fires and increase spread (Knapp et al., 2021). This is increasing the frequency and toxicity of emissions near communities in and downwind of the fires. Buildings and structures often contain plastic materials, metals, and various stored chemicals that release toxic chemicals when burned, such as pesticides, solvents, paints, and cleaning solutions (Weinhold, 2011). This has been shown with the 2018 Camp Fire that burned 19,000 structures; the smoke caused dangerously high levels of air pollution in the Sacramento Valley and Bay Area and CARB found that high levels of heavy metals like lead and zinc traveled more than 150 miles (CARB, 2021).

2.16

Wildfire impacts disproportionately affect low-income and minority communities, as discussed in the Center's 2021 Built to Burn report (Yap, Rose, Broderick, et al., 2021). Past environmental hazards have shown that those in at-risk populations (*e.g.*, low-income, elderly, disabled, non-English-speaking, homeless) often have limited resources for disaster planning and preparedness (Richards, 2019). Vulnerable groups also have fewer resources to have cars to evacuate, buy fire insurance, implement defensible space around their homes, or rebuild, and

they have less access to disaster relief during recovery (Davis, 2018; Fothergill & Peek, 2004; Harnett, 2018; Morris, 2019; Richards, 2019).

In addition, emergency services often miss at-risk individuals when disasters happen because of limited capacity or language constraints (Richards, 2019). For example, evacuation warnings are often not conveyed to disadvantaged communities (Davies et al., 2018). In the aftermath of wildfires and other environmental disasters, news stories have repeatedly documented the lack of multilingual evacuation warnings leaving non-English speakers in danger. (Axelrod, 2017; Banse, 2018; Gerety, 2015; Richards, 2019). Survivors are left without resources to cope with the death of loved ones, physical injuries and emotional trauma from the chaos that wildfires have inflicted on their communities.

Health impacts from wildfires, particularly increased air pollution from fine particulates ($PM_{2.5}$) in smoke, also disproportionately affect vulnerable populations, including low-income communities, people of color, children, the elderly and people with pre-existing medical conditions (Delfino et al., 2009; Hutchinson et al., 2018; Jones et al., 2020; Künzli et al., 2006; Reid et al., 2016).

Increased $PM_{2.5}$ levels during wildfire events have been associated with increased respiratory and cardiovascular emergency room visits and hospitalizations, which were disproportionately higher for low socioeconomic status communities and people of color (Hutchinson et al., 2018; Jones et al., 2020; Liu et al., 2017; Reid et al., 2016). Similarly, asthma admissions were found to have increased by 34% due to smoke exposure from the 2003 wildfires in Southern California, with elderly and child age groups being the most affected (Künzli et al., 2006).

Farmworkers, who are majority people of color, often have less access to healthcare due to immigration or economic status. They are more vulnerable to the health impacts of poor air quality due to increased exposure to air pollution as they work. Yet farmworkers often have to continue working while fires burn, and smoke fills the air, or risk not getting paid (Herrera, 2018; Kardas-Nelson et al., 2020; Parshley, 2018).

In addition, there are significant economic impacts of wildfires on residents throughout the state. One study estimated that wildfire damages from California wildfires in 2018 cost $148.5 billion in capital losses, health costs related to air pollution exposure, and indirect losses due to broader economic disruption cascading along with regional and national supply chains (D. Wang et al., 2021). Meanwhile the cost of fire suppression and damages in areas managed by the California Department of Forestry and Fire (Cal Fire) has skyrocketed to more than $23 billion during the 2015-2018 fire seasons.

The proposed Project will bring more people and increased human activity into fire-prone landscapes and increase ignition risk. Such a Project requires careful and comprehensive analyses of the area's fire history, the various ecosystems' fire ecology, and potential mitigation measures to reduce risk of ignition and fire within and adjacent to the Project area and spreading to nearby communities.

2.16 cont.

A. The MND Fails to Adequately Assess and Mitigate the Project's Wildfire Impacts.

The MND fails to provide evidence that the Project would have less than significant wildfire related impacts. As detailed in a 2021 Center Report (Yap, Rose, Broderick, et al., 2021), development in highly fire-prone areas increases unintentional ignitions, places more people at risk (within and downwind of the Project area), and destroys native habitats that support high levels of biodiversity. Almost all contemporary wildfires in California (95-97%) are caused by humans in the wildland urban interface (Balch et al., 2017; Radeloff et al., 2018; Syphard et al., 2007; Syphard & Keeley, 2020). For example, the 2019 Kincade Fire, 2018 Camp and Woolsey fires, 2017 Tubbs and Thomas fires, and 2020 Silverado and Zogg fires were sparked by powerlines or electrical equipment. The 2020 Apple Fire and 2018 Carr Fire were caused by sparks from a vehicle, the 2020 El Dorado Fire was caused by pyrotechnics at a gender-reveal celebration, the 2020 Blue Ridge Fire was likely caused by a house fire.

The Project would increase the potential for wildfire ignitions to occur by placing more people in a fire-prone landscape and introducing ignition sources, particularly vehicles and electrical equipment. To access the Project, grape haul trucks, bulldozers, tractors, excavators, backhoes, dump trucks, water trucks, and ATVs would drive 1.8 miles down a private access road. (MND at 3.) Not only does that provide opportunities for ignitions, it also exposes people who work on the site to significant risk from wildfire. In 2022, the Napa Communities Firewise Foundation released a Fire Safe Community evaluation for the Hennessey Rector community, where the Project site is located. It identified long, narrow driveways and private access roads as impeding fire safety in the area. (Hennessy Rector at 27-28.) Those roads can limit access in the event of a fire when they have sharp, steep curves, when they have locked gates at the main road, and when they have abundant roadside vegetation. Trees will often burn and fall in a fire, and they can block the narrow access roads. For many properties, seemingly including the Project site, there is only one route in or out. Even if the road is relatively clear, Project construction and operations involves many large heavy vehicles that could cause delays on a small road during an emergency evacuation. If that road is blocked by fallen trees, the consequences could be severe. Because the MND provides no details about the width of this road, surface material, or the vegetation management on either side, it is impossible to evaluate if it would be sufficient for firefighters to access the property in the event of an emergency, or for people on the property to evacuate. Neither does the MND include any details of any evacuation plan, communication procedures, or emergency protocols that should be provided for the public to determine if they are sufficient to adequately reduce or avoid the Project's impacts to wildfire risk. The MND does not address or attempt to mitigate the Project's wildfire risk.

2.16 cont.

B. The MND Relies on Unsubstantiated Claims About Fire Safety and Vineyards.

The MND dismisses wildfire risk in a single paragraph that claims "the risk of fire in vineyards is low" and the Project would result in an "overall reduction of fuel loads within the project site compared with existing conditions." (MND at 34.) However, the MND does not provide any evidence to support its implication that the Project will lower fire risk compared to existing conditions.

Although data from the 2017 and 2020 wildfires in Napa (courtesy of Napa County and CalFire) show that large blocks of vineyards can be protective for many structures, vineyards and structures along the fringes, like the proposed Project, were still vulnerable to wildfire, and small, isolated vineyards did not act as effectively as fire breaks or substantially reduce fire spread. Fires burned through many vineyards – at least 27 and 31 wineries confirmed damage to wineries, vineyards, wine stock, or other structures on their property in 2017 and 2020, respectively (Mobley, 2020b; Orlin et al., 2017). When looking at addresses in the areas that burned in the 2017 fires, addresses located within vineyards were only 9% less likely to burn compared to addresses located outside of vineyards (i.e., 13.1% of addresses located within the fire footprint and located on a vineyard were destroyed compared to 22.3% of addresses within the fire footprint that were not located on a vineyard).

In addition, although large blocks of vineyards can act as fire breaks, they are not a failsafe. In 2020 the Glass Fire jumped across the Valley through about one mile of vineyards (Wilkinson, 2021). This is similar to what happened in the Tubbs Fire, with embers crossing about a mile of open space (which included the 101 Freeway) and spread the fire into the Coffey Park neighborhood. Therefore, vineyards like the proposed Project may not provide the beneficial fire breaks proclaimed. Meanwhile, vineyards (and other monoculture agriculture) destroy species habitat and degrade wildlife connectivity, which diminishes the resilience and adaptability to climate change of wildlife and human communities. Instead, limiting new development in high fire-prone areas, restoring native greenbelts and historical fire regimes, and prioritizing proven wildfire safety retrofits in existing communities should be prioritized.

Building more vineyards and placing more people in high fire-prone areas will increase ignition risk and threaten the communities and habitats that are already reeling from the past years' wildfires. And as mentioned previously, wildfires disproportionately affect low-income and minority communities. Some workers rely on income from the seasonal work of grape harvesting to support their families throughout the year. In 2020 hundreds of farmworkers, many undocumented, were sent into evacuation areas and even within the fire footprint so that they could harvest grapes, exposing them to toxic levels of wildfire smoke while most residents evacuated (A. Brown, 2020; Cotsirilos, 2021). More vineyards in high fire-prone areas could increase farmworker exposure to unsafe and unhealthy working conditions. The MND fails to adequately disclose, assess, and mitigate these impacts.

2.16 cont.

C. The MND Failed to Consider Historical Fire Regimes and Traditional Ecological Knowledge into Its Wildfire Analysis.

The MND does not mention or discuss the area's historical fire regimes and the role Indigenous communities likely played in shaping the fire ecology of habitats in and adjacent to the Project area. Indigenous communities should be included in discourse over climate change and wildfire. They are disproportionately impacted by wildfire. Native Americans were found to be six times more likely than other groups to live in high fire-prone areas, and high vulnerability due to socioeconomic barriers makes it more difficult for these communities to recover after a large wildfire (Davies et al., 2018). In addition, farmworkers, who are majority people of color and often include migrant workers that come from Indigenous communities, often have less

access to healthcare due to immigration or economic status. They are more vulnerable to the health impacts of poor air quality due to increased exposure to air pollution as they work. Yet farmworkers often have to continue working while fires burn, and smoke fills the air, or risk not getting paid (Herrera, 2018; Kardas-Nelson et al., 2020; Parshley, 2018).

If the County prepares and EIR for the Project as the Center recommends, the EIR should include historical wildfire regimes and traditional ecological knowledge in the wildlife analysis. Ramos (2022) states, "Indigenous communities have often been marginalized in the sciences through research approaches that are not inclusive of their cultures and histories." Traditional ecological knowledge ("TEK") is often excluded from analyses or distilled to conform to Western science (Ramos, 2022). Environmental reviews, like this one, often fail to acknowledge that Indigenous communities and cultural burning played a role in California's historical fire activity and often only mention previous wildfires in the area in CalFire records. This perpetuates the exclusion and marginalization of Indigenous communities and TEK. Consultation with local Native Tribes and incorporation of Indigenous science, including but not limited to oral histories, ethnographies (that may include burn scars and charcoal records), and archeological data should be incorporated in fire history analysis. As a society, we need to work towards integrative research that "transcends disciplinary boundaries" and employs a range of methodological options to get a deeper understanding of the relationship between people and ecosystems (Ramos, 2022). Doing so will help inform fire management strategies and mitigation measures that work towards reducing harms of wildfire to people while facilitating beneficial fire for the appropriate ecosystems.

2.16 cont.

D. The Economic Risk of More Vineyards in High Fire-prone Areas is High.

Planting more vineyards in high wildfire-prone areas will not necessarily reap the assumed economic gains of grape and wine production. As drought intensifies and wildfires occur year-round, the ability to irrigate and the increasing risk of grapes being exposed to smoke (smoke taint), are becoming more challenging (Mobley, 2020a). Although the 2017 harvest was not affected by smoke taint (fires occurred in the fall, after most grapes were harvested), the 2020 harvest saw an estimated $600 million in lost revenue due to actual and perceived smoke taint issues from the Hennessey/LNU fires over the summer (before the grapes were harvested). The Napa wine industry lost an estimated $2 billion in 2020 due to burned vineyards, destroyed inventory, and smoke taint.

VII. CONCLUSION

Given the possibility that the Center will be required to pursue appropriate legal remedies in order to ensure enforcement of CEQA, we would like to remind the County of its duty to maintain and preserve all documents and communications that may constitute part of the "administrative record." As you may know, the administrative record encompasses any and all documents and communications which relate to any and all actions taken by the County with respect to the Project, and includes "pretty much everything that ever came near a proposed [project] or [] the agency's compliance with CEQA . . . ." (*County of Orange v. Superior Court* (2003) 113 Cal.App.4th 1, 8.) The administrative record further contains all correspondence, emails, and text messages sent to or received by the County's representatives or employees,

2.17

which relate to the Project, including any correspondence, emails, and text messages sent between the County's representatives or employees and the project proponent's representatives or employees. Maintenance and preservation of the administrative record requires that, *inter alia*, the County (1) suspend all data destruction policies; and (2) preserve all relevant hardware unless an exact replica of each file is made.

Thank you for the opportunity to submit comments on the MND for the Chappellet Vineyard Erosion Control Plan. The MND has not adequately analyzed or mitigated impacts to biological resources, erosion, water quality, greenhouse gas, air quality, or wildfire. The County must prepare and circulate an EIR for the Project prior to taking any further action on the Project application.

Please ensure that the Center is on the notice list for all future updates and notices associated with the Project and its environmental review, and do not hesitate to contact the Center with any questions at the number or email listed below.

2.17 cont.

Sincerely,

Frances Tinney
Attorney
Center for Biological Diversity
1212 Broadway, Suite #800
Oakland, CA 94612
(509) 432-9256
ftinney@biologicaldiversity.org

Sofia Prado-Irwin, Ph.D.
Scientist
Center for Biological Diversity
1212 Broadway, Suite #800
Oakland, CA 94612
(510) 844-7100 x548
spradoirwin@biologicaldiversity.org

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Attachment 3

INSTITUTE FOR CONSERVATION ADVOCACY RESEARCH AND EDUCATION
ICARE
PO BOX 4256
NAPA, CA. 94558
cmalan1earth@gmail.com
icarenapa.org
707.322.8677

The Institute for Conservation Advocacy Research & Education, (ICARE) established in 2004, is a non profit community-based organization located in Napa County, California. ICARE's mission is to restore and conserve the biological integrity and ecosystems health of watersheds, the Napa River estuary and the greater San Francisco Bay Area through science-based advocacy, research and education

December 16, 2024

Donald Barrella
Napa County Planning Building and Environmental Services/PBES
ECPA P21-00206
Chappellet
41.8 acre conversion on a 238 holding
Rector watershed
Mixed Oak, chaparral
Mitigated Negative Declaration/MND

Comments

Due 12.17.2024

I. Exceeding 10% alteration of Rector watershed

The Rector watershed is suffering cumulative impacts from over 10% conversion of the this watershed to vineyards. Once a watershed reaches 10% land conversion detrimental hydrological impacts happen:

- increased flooding
- depletion of groundwater recharge
- off site incision of streams and the Napa River from increased rate of flows.

3.1

II. ECPAs cause severe erosion off site of the project

- This Napa County's erosion control plan application(s)/ECPA are harmful off site of the vineyard due to erosion of the bed and banks of all streams hence the Napa River causing incision-stream bed and bank erosion. How much soil erosion will this ECPA cause off site?
- ECPAs are designed to move stormwater off site of the land conversion
- ECPA hold, divert and pipe stormwater off site where erosion occurs at point of discharge on all slopes over 5% throughout the County. This is causing significant cumulative impacts to the Napa River hence San Francisco Bay Estuary, as millions of tons of sediment erodes from the bed and banks

3.2

- Is this project guaranteeing 100% year-round cover crop?

3.2 cont.

III. Harm to federally and stated listed endangered and threatened species

Chinook salmon, steelhead, California Freshwater Shrimp, Foothill Yellow-legged frogs, are either federally and/or state listed protected species guaranteed harm from humans. Erosion from ECPAs causes sediment to deposit throughout the Napa River watershed smothering eggs of these species. This increased sediment loading in the watershed causes other harm.

- Incision of the streams and River puts large amounts of sediment into creek gravel beds smothering salmonid eggs and causing embedded gravels tightly covered by sediment making it difficult for salmon to spawn or deposit their eggs into required loose gravels. Salmon swish their tails to create a bed to deposit the eggs but when excessive sediment is in the stream, it makes successful spawning unlikely.

- Increased sediment flowing off of this project causes turbidity in the creek which causes morbidity to salmon and steelhead eggs and young of the year fish.

3.3

IV. Climate Emergency

- Trees are needed to sequester carbon. We are in a climate emergency and no trees should be cut down for more vineyards.
- Napa County is suffering increased tree mortality. No healthy tree should be cut down

3.4

V. Public water supply

- With the amount of land conversion going on in the Rector watershed, this increases the amount of sediment in Rector Municipal Reservoir diminishing the holding capacity of the reservoir for municipal water storage.
- Rector Reservoir is a municipal public water supply. Will this project be organic with no pesticides, herbicides or fungicides?

3.5

VI. Other

- Current vineyards in the Rector watershed fail to have year around 80% cover crop, due to soils and difficulty in keeping the cover crop robust. What is the owner going to do to ensure that the cover crop is 80% viable year around?
- Does this property owner have a water right? If not they will need to comply with AB2121 when application is considered.

3.6

VII. Environmental Impact Report/EIR

Considering that this project in addition to all previous vineyards over 5% are causing significant cumulative impacts to the streams, the Napa River and San Pablo Bay an EIR must be required. The Napa River is listed on the 303(d) list of the Clean Water Act for sediment, nutrients, pathogens, pesticides and mercury. This project does not mitigate for this.

3.7

Chris Malan, Executive Director, ICARE

Attachment 4

UTILITIES DEPARTMENT
WATER |ENGINEERING | SOLID WASTE

December 16, 2024

Mr. Donald Barella
County of Napa
Planning, Building & Environmental Sciences
1195 Third Street, Room 210
Napa, CA 94559-3092

Subject: Chappellet Vineyard Conversion (P21-00206-ECPA)
Assessor's Parcel: 032-560-022 & -033

Dear Mr. Barella:

The City of Napa Utilities Water Division has reviewed the above-mentioned project and determined that the mitigated negative declaration is sufficient to address our requirements. These include safeguarding against an increase (by no more than one percent individually or ten percent cumulatively) of sediment and other pollutants (i.e. nitrogen, phosphate, and sulfate) into the City's Lake Hennessey Reservoir. As State water quality compliance policies stiffen, the City continues to monitor the lake's water quality and consider the ten percent cumulative impacts amidst continual data collection, analysis, and reporting. 4.1

As stated in previous application review for the subject parcels, including, P20-00271-ECPA, the City reserves the right to request access for an additional water quality sampling point on the parcels identified in this letter. The requesting party (Chappellet) must prepare all transactional documents and pay all associated transactional expenses. The applicant will continue to work with the City for any re-alignments or changes in the road profiles for rights-of-way through City properties including any quit claims back to City. 4.2

The best management practices (BMP's) and regiment of the implementation schedule followed by annual maintenance, as noted, is needed to ensure the factors as outlined in the mitigated negative declaration, provide necessary infiltration for groundwater and mitigation of erosion and pollutants during peak runoff as modeled.

The maintenance, annual winterization, and BMP's will be necessary to mitigate water quality impacts of the fate and transport of sediment and pollutants as proposed, and the lack thereof is monitored via regulatory water quality monitoring programs. 4.3

Please contact me at 257-9918 if you have any questions or require additional information.

Respectfully,

Addison LeBlanc

Addison LeBlanc
Assistant Engineer

cc: Joy Eldredge, Erin Kebbas,

UTILITIES DEPARTMENT
WATER | ENGINEERING | SOLID WASTE

December 28, 2020

Mr. Donald Barrella
County of Napa
Planning, Building & Environmental Sciences
1195 Third Street, Room 210
Napa, CA 94559-3092

Subject: Chappellett Vineyard Conversion (P20-00271-ECPA)
Assessor's Parcel: 032-560-022 & -033

Dear Mr. Barrella:

The City of Napa Utilities Water Division has reviewed the above mentioned project and has determined that the proposed erosion control protection measures are sufficient to safeguard against an increase (by no more than one percent individually or ten percent cumulatively) of sediment or other pollutants into the City's reservoir (Lake Hennessey). As State water quality compliance policies stiffen, the City continues to monitor the lake's water quality and consider the ten percent cumulative impacts amidst continual data collection, analysis and reporting.

We appreciate the standard of care by the owner, as indicated in the Erosion Control Plan Application to use best management practices to ensure that erosion control measures remain intact and minimize erosion during and after storm events. The runoff from winter storm events recharges Lake Hennessey and contributes to the local drinking water supply storage.

Please contact me at 257-9319 if you have any questions or require additional information.

Respectfully,

Joy Eldredge, P.E.
Deputy Utilities Director

cc: Shannon Lemmon

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Attachment 5

Request for Public Notice Distribution

(Check all required boxes. Any boxes left unchecked will not be completed).

ADMIN USE ONLY:
Date Completed: 11·15·24
By: A. Quackenbush

Project Name:	Chappellet Vineyard
Project No(s):	P21-00206-ECPA
APN(s):	032-560-022 and 032-560-033
Project Planner:	Don Barrella

1. Specify Type of Notice(s)

☐	Early Project Courtesy Notice	☐	CEQA – Notice of Exemption (NOE) Journal request adriana.franco@countyofnapa.org & meetingclerk@countyofnapa.org
☐	Notice of Public Hearing	☐	CEQA – Notice of Determination (NOD) Journal request adriana.franco@countyofnapa.org & meetingclerk@countyofnapa.org
☐	Notice of ZA Intent to Approve or Deny	☑	CEQA – Notice of Intent to Adopt an ND or MND
☐	Notice of Administrative Decision	☐	CEQA – Notice of Preparation of an EIR
☐	Other (specify): _____	☐	CEQA – Notice of Availability of an EIR

2. Select Notice Location(s)

☑	**Napa Valley Register** Publication Date: (Publication dates: Tues, Thurs, Sat) 11/16/2024	☑	**Properties within 1000 ft. of Project Site** Mailing list provided. Yes ☐ No ☑
☑	**County Clerk** (CEQA Notices, NOE & NOD) Filing/Posting Date: ~~11/16/2024~~ 11/15/2024	☑	**Interested Parties/CEQA Notification List**
☐	**Applicant** Address: Email:	☐	**Representative** Address: Email:
☐	**Property Owner** Address: Email:	☐	**Nearest City(s), Town(s), or County(s)** Address: Email:

3. Other Special Instructions

See attached list for additional circulation including owner and applicant.
Thanks

A Tradition of Stewardship
A Commitment to Service

NAPA COUNTY PLANNING

NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION

NOTICE IS HEREBY GIVEN THAT THE DEPARTMENT OF PLANNING, BUILDING & ENVIRONMENTAL SERVICES OF THE COUNTY OF NAPA is considering adoption of a Mitigated Negative Declaration for the project identified below:

CHAPPELLET VINEYARD CONVERSION – ENVIRONMENTAL REVIEW of land disturbing activities on slopes greater than 5% associated with Agricultural Erosion Control Plan (ECPA) #P21-00206-ECPA for the clearing of mixed oak woodlands, chaparral scrub, and non-native grassland within the proposed project area (or clearing limits), earthmoving, and the installation and maintenance of erosion control measures and agricultural infrastructure in connection with the development of 41.8 gross acres of new vineyard (±33.1 net planted acres) within an approximate238-acre holding.

LOCATION: Approximately 1.8 miles southeast of the intersection of Sage Canyon Road (State Route 128) and a private access drive, Napa CA (Assessor's Parcel Nos. 032-560-022 and 032-560-033), within the Rector Reservoir area of the County, and an Agricultural Watershed (AW) Zoning District.

CEQA STATUS: Mitigated Negative Declaration Prepared. According to the proposed Mitigated Negative Declaration, the proposed project would have potentially significant environmental impacts on Biological Resources if mitigation measures are not included. This project site is not on any of the lists of hazardous waste sites enumerated under CA Government Code Section 65962.5.

The proposed Mitigated Negative Declaration application is available for inspection, along with copies of all documents that relate to the above-described project, between the hours of 8:00 AM. and 4:30 PM Monday through Friday, at the office of the Napa County Planning, Building, & Environmental Services Department, 1195 Third Street, Second Floor, Napa, California. Scheduling appointments to review documents is encouraged. Application materials are also available on the Department's Current Projects Explorer at: https://www.countyofnapa.org/2876/Current-Projects-Explorer

Written comments regarding the environmental effects of this project, the adequacy of the measures identified, and the adequacy of the proposed Mitigated Negative Declaration are solicited. All such comments must be presented during the public review period, which runs from **November 16, 2024,** through **December 17, 2024.**

Comments should be directed to Donald Barrella, Napa County Department of Planning, Building and Environmental Services, 1195 Third Street, Suite 210, Napa, California or via email at donald.barrella@countyofnapa.org and must be received before **5:00 p.m. on December 17, 2024.**

The Director of Planning, Building and Environmental Services will not act on the project during the public review period. Thereafter, the Director will consider all written comments received regarding whether or not the proposed project would have a significant effect on the environment, any written responses prepared, and the adequacy of the final environmental document produced prior to taking action on the project.

An appeal to the decisions of the Director of Planning, Building and Environmental Services regarding this project and the related environmental document must be filed in writing with the Clerk of the Board of Supervisors in the manner required by Napa County Code Chapter 2.88.

If you challenge these particular proceedings in court, you may be limited to raising only those issues you or someone else raised during the comment period described in this notice.

DATED: November 15, 2024

BY THE ORDER OF THE NAPA COUNTY DEPARTMENT OF PLANNING, BUILDING AND ENVIRONMENTAL SERVICES
BRIAN D. BORDONA, DIRECTOR

Bill Dyer
Napa Sierra Club
PO Box 5531
Napa, CA 94581

Bay Area Air Quality Management District
Andrea Gordon
375 Beale Street, Suite 600
San Francisco, CA 94105

032-560-018-000
SAGE HILL VINEYARDS LLC
1535 SAGE CANYON RD
SAINT HELENA CA 94574

Fred Hetzel
San Francisco Bay
Regional Water Quality Control Board
1515 Clay Street #1400
Oakland, CA 94612

Gregg Erickson
State Dept. of Fish & Wildlife
2825 Cordelia Road Suite 100
Fairfield CA 94534

032-560-030-000
CHAPPELLET WINERY INC ETAL
1581 SAGE CANYON RD
SAINT HELENA CA 94574-9628

Theresa Rettinghouse
Center for Biological Diversity
1212 Broadway St., Suite 800
Oakland CA 94612

Cyril Chappellet
Chappellet Vineyard LLC.
1581 Sage Canyon Road
St. Helena CA 94574

032-030-044-000
TIMAR LLC
1677 SAGE CANYON RD
SAINT HELENA CA 94574-9809

Applied Civil Engineering
2160 Jefferson Street, Suite 120
Napa CA 94558

Joy Eldredge
City of Napa Water Division
1700 Second Street, Suite 100
Napa, CA 94559

032-030-026-000
ZAVARIN VALENTINA TR
425 E 11TH ST UNIT 9
OAKLAND CA 94606

John Ferons
Town of Yountville Public Works
6550 Yount Street
Yountville CA 94558

Veterans Home of California, Yountville
Director of Operations
100 California Drive
Yountville CA 94599

032-560-038-000
RED DIRT GRAPES LLC
9000 CAMERON PKWY
OKLAHOMA CITY OK 73114

032-560-034-000
COLGIN CELLARS LLC
ATTN: WENDY MESSMAN
PO BOX 254
SAINT HELENA CA 94574

032-560-034-000
GALLO WINE SALES OF NEW JERSEY INC
PO BOX 1130
MODESTO CA 95353

032-560-012-000
ACME ROCKET SLEDS INC
450 NEWPORT CENTER DR #450
NEWPORT BEACH CA 92660-7620

POSTED
RECEIVED 11-15-24 BY: LC
COMPLETED: 12-16-24 BY: LL
NAPA COUNTY CLERK

A Tradition of Stewardship
A Commitment to Service

NAPA COUNTY PLANNING

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DATED: November 15, 2024
BRIAN D. BORDONA, DIRECTOR

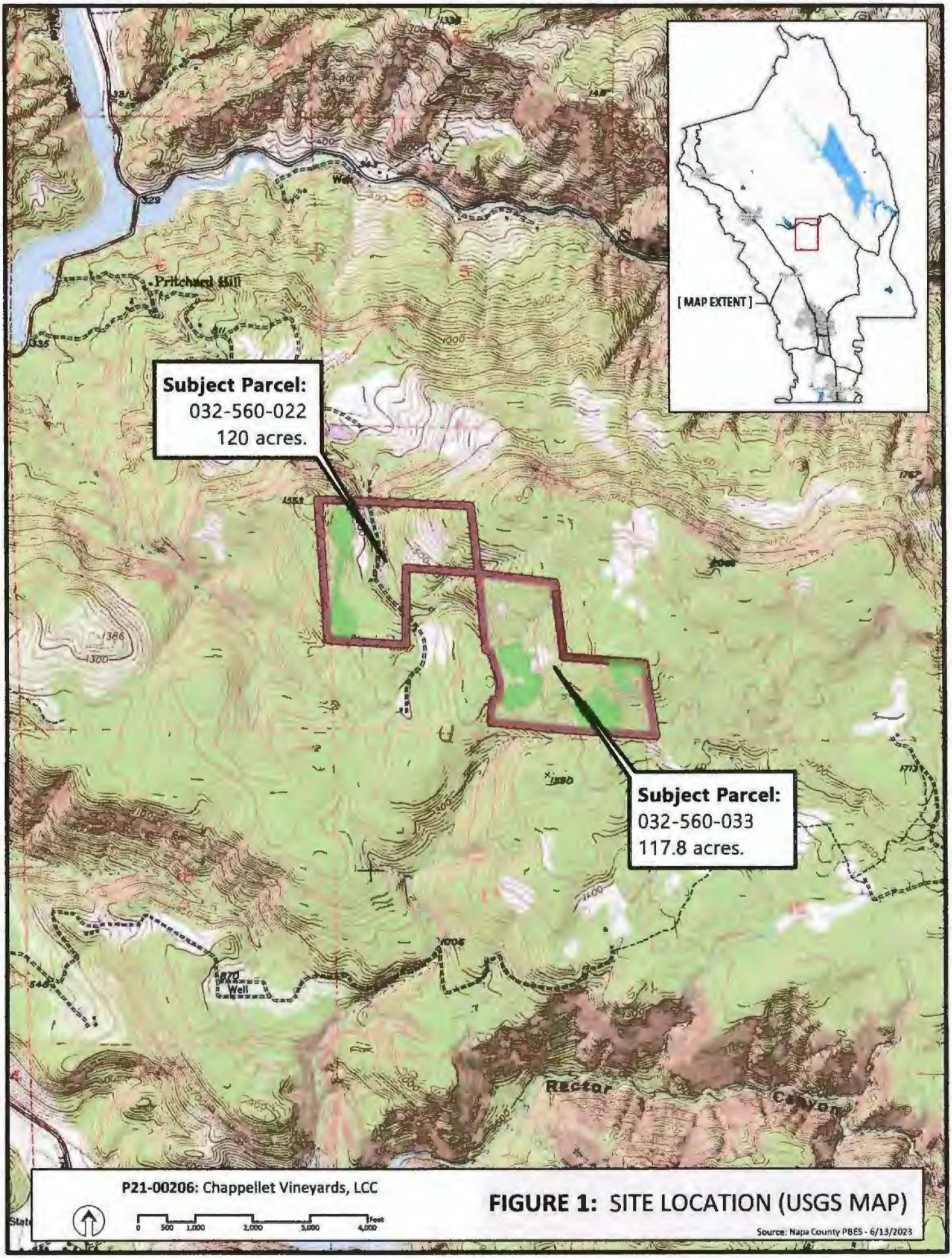

FIGURE 1: SITE LOCATION (USGS MAP)

Source: Napa County PBES - 6/13/2023

Attachment 6

A Tradition of Stewardship
A Commitment to Service

Planning, Building & Environmental Services

1195 Third Street, Suite 210
Napa, CA 94559
www.countyofnapa.org

David Morrison
Director

MEMORANDUM

12/1/21

To:	Don Barrella Conservation Division	From:	Alexei Belov Engineering Division
Date:	December 1, 2021	Re:	**Permit No. P21-00206** **Chappellet Vineyard LLC** Erosion Control Plan – Track I

The Engineering Division has reviewed the technical studies for the proposed Chappellet Vineyard Development – Erosion Control Plan (ECP) application, P21-00206, located on Assessor parcel number 032-056-022 & -033. The proposed plan requests approximately 34 net acres of vineyard conversion of woodlands & grasslands.

The Engineering Division has determined the proposed project's Revised Soil Loss Analysis dated December 2020 prepared by David Steiner, CPESC, CPSWQ, and Hydrology Studies dated September 2021, with addendum dated November 2021, to be technically adequate with respect to Napa County's Conservation Regulation Chapter 18.108, including Policy CON-48 and Policy CON-50(c) of Napa County's General Plan.

Any changes in use or design may necessitate additional review and approval. If you have any questions regarding the above items please contact Alexei Belov from the Napa County PBES Department Engineering Division at (707) 299.2177 or via e-mail at Alexei.Belov@countyofnapa.org.

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Attachment 7

Chappellet Vineyard LLC.,
Agricultural Erosion Control Plan #P21-00206-ECPA: SCH #2024110524
Mitigation Monitoring and Reporting Program

Potential Environmental Impact	Adopted Mitigation Measure	Monitoring and Reporting Actions and Schedule	Implementation	Monitoring	Reporting & Date of Compliance/ Completion
Impact BIO-1: Implementation of #P21-00206-ECPA has the potential to impact Sensitive Biotic Communities, Special-status plants, and their habitat.	**Mitigation Measure BIO-1:** The owner/permittee shall implement to following measures to minimize potential impacts to special-status plant species (i.e., holly-leaved ceanothus and green monardella) and its habitat, and to oak woodlands and associated cover canopy:	Permittee shall implement **Measure BIO-1a** through **BIO-1d.**			
	a. Special Status Plant and Habitat Preservation: Revise Erosion Control Plan #P21-00206-ECPA prior to approval to identify a minimum of 19.92-acres of holly-leaved ceanothus plant species and habitat, 0.2-acre green monardella plant species and habitat, 2.22-acres of common manzanita chaparral vegetation alliance, and 2.16-acres of leather oak – chamise chaparral sensitive vegetation alliance, resulting in an overall special-status plant and plant habitat preservation area of no less that 24.5-acres. These areas will be identified as Special Status Plant and Habitat Preservation Areas in the revised ECPA and be permanently preserve as specified in **Mitigation Measure BIO-1c**.	Schedule **BR-1a:** Prior to approval of #P21-00206-ECPA.	P	CD	PA __/__/__
	b. Oak Woodland/Vegetation Canopy Cover Preservation: Revise Erosion Control Plan #P21-00206-ECPA prior to approval to identify and permanently preserve a minimum of 2.48-acres of developable oak woodland (i.e., on land with slopes less than 30% and located outside of aquatic resource setbacks pursuant to NCC Sections 18.108.025 and 18.108.026) that includes a minimum of 2.46-acres of associated developable Vegetation Cover Canopy generally as shown in (**Exhibit B-3**). These areas shall be identified as Oak Woodland/Vegetation Canopy Cover Preservation Areas in revised #P21-00206-ECPA and be permanently preserve as specified in **Mitigation Measure BIO-1c**.	Schedule **BIO-1b:** Prior to approval of #P21-00206-ECPA.	P	CD	PA __/__/__
	c. The Preservation Areas identified in **Mitigation Measure BIO-1 a** and **b** shall be identified and designated for preservation in a mitigation easement with an accredited land trust organization such as the Land Trust of Napa County as the grantee, or other means of permanent protection acceptable to Napa County, as approved by the Director of	Schedule **BR-1c:** Prior to initiation of #P21-00206-ECPA.	P	CD	PC __/__/__

Notes: P = Permittee, CD = Conservation Division, CDFW = California Dept of Fish & Wildlife, EH = Environmental Health, PW = Public Works Dept, PE/G =Project Engineer/Geologist.
PA = Prior to Approval, PC = Prior to Project Commencement, CPI = Construction Period Inspections FI = Final Inspection OG = Ongoing, PI= Prior to Installation of vineyard infrastructure and planting.

Potential Environmental Impact	Adopted Mitigation Measure	Monitoring and Reporting Actions and Schedule	Implementation	Monitoring	Reporting & Date of Compliance/ Completion
	PBES. Areas placed in protection shall be restricted from development and other uses that would potentially degrade the quality of the habitat (including, but not limed 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. Upon County Counsel's review and approval as to the form of the mitigation easement or other means of permanent protection, the owner/permittee shall record the restriction prior to the commencement of any ground disturbing activities or vegetation removal, or within 12 months of project approval, whichever occurs first: in no case shall earthmoving activities or vegetation removal be initiated until said restriction is recorded. Any request by the owner/permittee for an extension of time to record the mitigation easement shall be considered by the Director of PBES and shall be submitted to Napa County prior to the 12-month deadline and shall provide sufficient justification for the extension.				
	d. In accordance with Napa County Code Section 18.108.100 (Erosion hazard areas – Vegetation preservation and replacement) any special-status plants/populations inadvertently removed as part of development authorized under #P21-00206-ECPA shall be replaced on-site at a ratio of 3:1 at locations with similar habitat. For such removal a replacement plan shall be prepared by a qualified botanist or ecologist for review and approval by the Director prior to vineyard planting. At a minimum, the replacement plan shall include i) a site plan showing the locations where replacement plants will be planted, ii) a plant pallet composed the special-status plans specie(s) being removed including sizes and/or application rates, iii) planting notes and details including any recommended plant protection measures, iv) invasive species removal and management specifications, v) an implementation and monitoring schedule, and vi) performance standards with a minimum success rate of 80% to ensure the success of re-vegetation efforts. Any replaced special-status plants shall be monitored for a period of at least three years to success criteria are met.	Schedule **BIO-1d:** During construction and operations of #P21-00206-ECPA.	P	CD	CPI/FI __/__/__

Notes: P = Permittee, CD = Conservation Division, CDFW = California Dept of Fish & Wildlife, EH = Environmental Health, PW = Public Works Dept, PE/G =Project Engineer/Geologist.
PA = Prior to Approval, PC = Prior to Project Commencement, CPI = Construction Period Inspections FI = Final Inspection OG = Ongoing, PI= Prior to Installation of vineyard infrastructure and planting.

Potential Environmental Impact	Adopted Mitigation Measure	Monitoring and Reporting Actions and Schedule	Implementation	Monitoring	Reporting & Date of Compliance/ Completion
Impact BIO-2: Implementation of #P21-00206-ECPA has potential impact nesting special status and nesting birds and raptors.	**Mitigation Measure BIO-2:** The owner/permittee shall revise Erosion Control Plan #P21-00206-ECPA prior to approval to include the following measures to minimize impacts associated with the potential loss and disturbance of special-status and nesting birds and raptors consistent with and pursuant to California Fish and Game Code Sections 3503 and 3503.5:	Permittee shall implement **Measure BIO-2a** through **BIO-2e.**			
	a. For earth-disturbing activities occurring between February 1 and August 31 (which coincides with the grading season of April 1 through September 15 – NCC Section 18.108.027(C), and bird breeding and nesting seasons), a qualified biologist (defined as knowledgeable and experienced in the biology and natural history of local avian resources with the potential to occur at the project site) shall conduct a preconstruction surveys for nesting birds within all suitable habitat on the development area, and where there is potential for impacts adjacent to the development area (typically within 500 feet of project activities). The preconstruction survey shall be conducted no earlier than 7 days prior to when vegetation removal and ground disturbing activities are to commence. Should ground disturbance commence later than 7 days from the survey date, surveys shall be repeated. A copy of the survey shall be provided to the Napa County Conservation Division and the California Department of Fish and Wildlife (CDFW) prior to commencement of work.	Schedule **BIO-1a:** Prior to initiation of #P21-00206-ECPA.	P	CD	PC __/__/__
	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.	Schedule **BIO-2b:** Prior to re-initiation of #P21-00206-ECPA.	P	CD	CPI __/__/__
	c. In the event that nesting birds are found, the owner/permittee shall identify appropriate avoidance methods and exclusion buffers in consultation with the County Conservation Division and the U.S. Fish and Wildlife Service (USFWS) and/or CDFW prior to initiation of project activities. Exclusion buffers may vary in size, depending on habitat characteristics, project activities/disturbance levels, and species as determined by a qualified biologist in consultation with County Conservation Division and/or the USFWS or CDFW.	Schedule **BIO-2c:** prior to initiation of #P21-00206-ECPA.	P	CD	PC/CPI __/__/__
	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	Schedule BIO-2**d:** prior to initiation of #P21-00206-ECPA.	P	CD PE	PC/CPI

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Potential Environmental Impact	Adopted Mitigation Measure	Monitoring and Reporting Actions and Schedule	Implementation	Monitoring	Reporting & Date of Compliance/ Completion
	the commencement of any earthmoving and/or development activities. Exclusion buffers shall remain in effect until the young have fledged or nest(s) are otherwise determined inactive by a qualified biologist.				__/__/__
	e. Alternative methods aimed at flushing out nesting birds prior to preconstruction surveys, whether physical (i.e., removing or disturbing nests by physically disturbing trees with construction equipment), audible (i.e., utilizing sirens or bird cannons), or chemical (i.e., spraying nesting birds or their habitats) would be considered an impact to nesting birds and is prohibited. Any act associated with flushing birds from project areas should undergo consultation with the USFWS/CDFW prior to any activity that could disturb nesting birds.	Schedule BIO-2**e:** prior to initiation of #P21-00206-ECPA.	P	CD	PC/CPI __/__/__
Impact BIO-2: Implementation of #P21-00206-ECPA has potential impact foothill yellow-legged frog (FYLF).	**Mitigation Measure BIO-3**: The owner/permittee shall revise Erosion Control Plan #P21-00206-ECPA prior to approval to include the following measures to minimize potential impacts on FYLF:	Permittee shall implement **Measure BIO-3a** through **BIO-3c.**			
	a. A qualified biologist (defined as having demonstrable qualifications and experience with the particular species for which they are surveying) shall conduct a pre-construction survey to determine if the streams in the project site are wetted. The survey shall be conducted at least 7 days in advance of project initiation. A copy of the survey findings shall be provided to the Napa County Conservation Division and CDFW prior to commencement of work.	Schedule **BIO-3a:** Prior to initiation of #P21-00206-ECPA.	P	CD	PC __/__/__
	b. If the streams are wet during the pre-construction survey, the qualified biologist shall conduct two surveys along the streams at least 14 days prior to project initiation. The surveys must have remarkably different light angles (e.g., early morning and early afternoon), but may be conducted on the same day. Survey areas (streams) will be systematically walked upstream, zig-zagging between the bank and the thalweg in wide areas, and bank-to-bank in narrow areas. All areas that could support frogs will be searched, including rocks, ledges, woody debris, overhanging vegetation, etc., as well as accessible natural cover within 50 feet of the wetted perimeter where frogs could be present. The qualified biologist will use binoculars to reduce disturbing frogs and flashlights for searching darkened crevices and shaded areas. Slow-moving and/or still waters will	Schedule **BIO-3b:** Prior to re-initiation of #P21-00206-ECPA.	P	CD	PC __/__/__

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Potential Environmental Impact	Adopted Mitigation Measure	Monitoring and Reporting Actions and Schedule	Implementation	Monitoring	Reporting & Date of Compliance/ Completion
	be closely inspected for the presence of tadpoles. If no FYLF are present during the pre-construction survey, no additional measures are warranted. c. If FYLF are present, one daytime survey shall be completed within 48 hours of project initiation. If FYLF are or will likely be present at the time of ground-breaking, protective measures such as installation of exclusion fencing, presence of an on-site biologist during ground disturbance activities, and implementation of a worker education program, shall be implemented. Exclusion fencing will be installed along the inhabited areas immediately adjacent to the proposed vineyard blocks, extending 100 feet beyond the terminus of the proposed vineyard blocks in each direction. The on-site biologist will be present to perform a survey of the vineyard blocks in the morning prior to that day's ground-breaking activities. If a FYLF is present within the vineyard block, individual frogs shall be allowed to leave the disturbance area of their own accord, as confirmed by the biologist. Alternatively, other measures shall be derived and approved in coordination with CDFW. The worker education program will consist of a qualified biologist providing construction personnel with information regarding the identification and ecology of FYLF, the potential for occurrence of the species within work areas, the legal status of the species and ramifications for take, the specific measures being implemented to avoid impacts to FYLF, and the role of the on-site biologist.	Schedule **BIO-3c:** Prior to initiation of #P21-00206-ECPA and during construction.	P	CD	PC/CPI __/__/__

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