KJS AND SORRENTO VINEYARD CONVERSION EROSION CONTROL PLAN APPLICATION #P17-00432-ECPA

Final Environmental Impact Report
State Clearinghouse #2018092042

Lead Agency
Napa County Department of Planning,
Building and Environmental Services
1195 Third Street, Suite 210
Napa, CA 94559

March 2023

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ACRONYMS AND OTHER ABBREVIATIONS

Acronym or Abbreviation	Definition
BAAQMD	Bay Area Air Quality Management District
BMP	best management practice
CAC	Climate Action Committee
CAL FIRE	California Department of Forestry and Fire Protection
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CDFG	California Department of Fish and Game
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
cfs	cubic feet per second
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CO_2e	carbon dioxide equivalent
County	Napa County
dbh	diameter at breast height
ECP	erosion control plan
ECPA	erosion control plan application
EIR	Environmental Impact Report
EPA	U.S. Environmental Protection Agency
ESA	Environmental Science Associates
GHG	greenhouse gas
GIS	Geographic Information System
GSA	Groundwater Sustainability Agency
GSP	Groundwater Sustainability Plan
IS	Initial Study
LSA	Lake and Streambed Alteration
MMRP	Mitigation Monitoring and Reporting Program
MT	metric ton(s)
NCC	Napa County Code
NEPA	National Environmental Policy Act
NFD	No Formal Description
NOP	Notice of Preparation
NO_X	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
NRCS	U.S. Natural Resources Conservation Service
NSH	Napa State Hospital

PM	particulate matter *or* fugitive dust
$PM_{2.5}$	particulate matter measuring 2.5 microns or less in diameter
PM_{10}	particulate matter measuring 10 microns or less in diameter
POI	Point of Interest
PRC	Public Resources Code
proposed project	KJS Investment Properties LLC and Sorrento Inc. Vineyard Conversion Erosion Control Plan Application Project (#P17-00432-ECPA)
RCD	Resource Conservation District
ROG	reactive organic gases
State Water Board	State Water Resources Control Board
STN	State Transportation Network
SVP	Society of Vertebrate Paleontology
UC DANR	University of California, Division of Agricultural and Natural Resources
USFWS	U.S. Fish and Wildlife Service

CHAPTER 1
INTRODUCTION AND LIST OF COMMENTERS

1.1 PURPOSE OF THIS DOCUMENT

This Final Environmental Impact Report (EIR) has been prepared for the Hyperion Vineyard Holdings LLC (a.k.a. KJS Investment Properties LLC and Sorrento Inc.) Vineyard Conversion Erosion Control Plan Application Project (#P17-00432-ECPA) (proposed project) in accordance with the California Environmental Quality Act (CEQA). This Final EIR and the Draft Environmental Impact Report (Draft EIR) (April 2021; State Clearinghouse #2018092042) and Draft EIR appendices, taken together, constitute the EIR for the proposed project that the Napa County (County) Planning, Building and Environmental Services Department will review and consider when it decides whether to approve the project.

Written comments on the Draft EIR were received by the County during the public comment period, which extended from April 26, 2021, through June 9, 2021.

This document includes all comments received on the Draft EIR from agencies and the public and presents a written response to each comment. Also included are changes to the text of the Draft EIR, either in response to the written comments or initiated by County staff. The responses and text changes correct, clarify, and amplify text in the Draft EIR, as appropriate. These changes do not alter the conclusions of the Draft EIR.

The KJS and Sorrento Vineyard Conversion Erosion Control Plan Application Project (#P17-00432-ECPA) Draft EIR and related documents can be found on Napa County's website:

https://pbes.cloud/index.php/s/6odoCfrPEZTidoK

1.2 SUMMARY OF THE PROPOSED PROJECT

The project proposes vegetation removal and earth-moving activities on slopes greater than 5 percent in connection with the development of 111.5 net acres of vineyard within 156.8 gross acres on a 950.9-acre project site.

Proposed vineyard development activities include removing pasture, hayfield, grassland, brush/ shrubland, and trees and woodland within the proposed clearing limits. Other proposed activities include ripping, rock removal, soil cultivation, seeding of a cover crop, mulching, trenching for irrigation pipelines, installing a trellis system and wildlife exclusion fence (i.e., deer fence), and laying out vine rows. In addition, temporary and permanent erosion control measures would be installed.

Vineyard development would take place between April 1 and September 15 in three phases, with development complete after three years. The project area would be winterized by September 15. Temporary erosion control measures could include installing water bars, straw wattles, and straw bale dikes and following other practices as needed.

Permanent erosion control measures include:

- Seeding of a permanent cover crop with vegetative cover maintained according to the erosion control plan (ECP).
- Drainage pipelines installed to collect surface water runoff at low points throughout the development area and transport it to protected outlets.
- Cutoff collars installed on all solid pipelines with slopes steeper than 5 percent.
- Standard drop inlets, non-standard drop inlets, and infield drop inlets installed at designated locations in the development area.
- Standard and non-standard diversion ditches[1] to convey surface water through or around proposed vineyard areas and direct it to a stable outlet or other stormwater conveyance infrastructure.
- Infield ditches and insloped avenues constructed in designated blocks to reduce the slope run length and intercept surface water runoff.
- Grading in designated locations to form outsloped roads to provide a safe and stable road for travel by vehicles and equipment.
- Culverts, rolling dips, and two rocked water crossings[2] installed in designated locations in Block 33.
- Pipe level spreaders installed in designated locations at the outfall of conveyance infrastructure to return concentrated flows within the pipe to sheet flow.
- Rock level spreaders installed in designated locations at the outfall of conveyance infrastructure to uniformly spread water onto the ground surface.
- Rock aprons installed at the outlets of pipes and ditches to help disperse concentrated flow and minimize erosion downstream of the outlet.
- Rock energy dissipaters installed to dissipate and reduce flow velocities at the outlet of diversion ditches.
- Junction boxes installed on the west side of proposed Block 8 and the west side of proposed Block 33E to transfer water from the proposed drainage pipelines to the

1 Non-standard diversion ditches have a larger cross section than standard diversions and therefore have an increased water conveyance capacity (see Draft EIR Appendix A).

2 Rocked water crossings in this ECPA are to be placed within existing ditches that are proposed to be repaired and maintained as part of the project; they are not new crossings that would cross a stream pursuant to NCC Section 18.108.025.

proposed pipe level spreaders; and a junction box installed on the east side of proposed Block 8 to transfer water from a proposed drainage pipeline to an existing culvert.

- Outsloped benches constructed in designated locations to allow safe access for equipment.
- Repair of existing headcutting in proposed Blocks 23A, 23B, 24A, 24E, and 33A.
- Riprap berms constructed at the downhill outlets from the proposed drainage lines into existing swales in proposed Blocks 24A and 24E, and repair of erosion in the swale in proposed Block 24E.
- A riprap berm constructed at the downhill outlet from a proposed drainage line into an existing natural basin in proposed Block 24E.
- A spillway berm and overflow structure constructed in an existing stockpond near proposed Block 29.

Water Right License 9125 (Application 13943) and Water Right Permit 18459 (Application 26165), both presented in Appendix C of the Draft EIR, collectively authorize diverting a total of 138 acre-feet of water to storage on the project site for various agricultural uses including irrigation, heat control, and frost protection of the existing vineyard, as well as for stockwatering. The existing vineyard is also irrigated with groundwater.

The Petition for Change on Water Right License 9125, which is pending with the State Water Resources Control Board (State Water Board), Division of Water Rights, requests an expansion of the place of use to 280 acres, which includes both the existing vineyard on the project site and the proposed vineyard. The water right petition pending with the State Water Board would add the existing offstream PITA Pond, located just south of Matheson Reservoir, as a point of rediversion in the water right license. Approval of the petition by the State Water Board would allow the Licensee/Petitioner[3] to release water diverted and stored at Matheson Reservoir to the PITA Pond, where it could store the water principally for frost protection operations.

The Petition for Change on Water Right Permit 18459, which is pending with the State Water Board, requests an expansion of the place of use to the same 280 acres described for the petition on License 9125. The purposes of use would be irrigation, frost protection, and heat protection of the place of use. Stockwatering would remain a purpose of use. The petition also proposes the development of a 48-acre-foot capacity, offstream reservoir, instead of construction of the permitted 48-acre-foot capacity onstream reservoir authorized by Permit 18459. The offstream pond would be located within the clearing limits of proposed Block 24. This proposed offstream reservoir would store water diverted at Point of Diversion 1 in Elder Creek (authorized in Permit 18459 but not yet constructed). A new diversion structure at Point of Diversion 1 in Elder Creek would divert water to offstream storage in the new offstream

[3] KJS Investment Properties and Sorrento Inc. are the “Applicant” of the Napa County ECPA, and they are a “Licensee/Petitioner” for the water rights petitions pending with the State Water Board.

reservoir and to the existing offstream PITA Pond as a point of rediversion. The Petition for Change also identifies Matheson Dam as a point of diversion to offstream storage at the proposed offstream reservoir. The Petition for Change as filed with the State Water Board does not propose a change in the permitted season of diversion, from November 1 to April 30. Water diverted under Permit 18459 would be limited to the quantity that could be beneficially used and would not exceed 48 acre-feet per year by storage collected from December 15 of each year to March 31 of the succeeding year. The Licensee/Petitioner has agreed to a shortened diversion season of December 15 to March 31 to reduce the potential for adverse effects to fish and other aquatic resources. Diversions under Permit 18459 would not occur unless the February median bypass flows of 0.6 cubic feet per second (cfs) at Point of Diversion 1 on Elder Creek and 0.9 cfs at Point of Diversion 2 at Matheson Reservoir were met, and the maximum rate of diversion to offstream storage would not exceed 0.29 cfs at Point of Diversion 1 or 0.41 cfs at Point of Diversion 2 (Wagner & Bonsignore 2020; Draft EIR Appendix J).

1.3 PROJECT ACTIONS

Adoption of the proposed project would include, but may not be limited to, the following Napa County actions:

- Certification of the EIR to determine that the EIR was completed in compliance with the requirements of CEQA, that the decision-making body has reviewed and considered the information in the EIR, and that the EIR reflects the independent judgment of Napa County.
- Adoption of a Mitigation Monitoring and Reporting Program, which specifies the methods for monitoring mitigation measures required to eliminate or reduce the project's significant effects on the environment.
- Adoption of Findings of Fact.

1.4 ORGANIZATION OF THE FINAL EIR

The Final EIR is organized as follows:

Chapter 1, *Introduction and List of Commenters*: This chapter summarizes the proposed project and describes the contents of the Final EIR. This chapter also contains a list of all agencies or persons who submitted comments on the Draft EIR during the public review period, presented in order by agency, organization, or individual, and date received.

Chapter 2, *Revisions to the Draft EIR*: This chapter summarizes text changes made to the Draft EIR in response to comments made on the Draft EIR. Changes to the text of the Draft EIR are shown by either ~~strikethrough~~ where text has been deleted, or <u>double underline</u> where new text has been inserted.

Chapter 3, *Comments and Responses*: This chapter contains the comment letters received on the Draft EIR, followed by responses to individual comments. Each comment letter is

presented with brackets that indicate how the letter has been divided into individual comments. Each comment is given a binomial with the number of the comment letter appearing first, followed by the comment number. For example, comments in Letter S1 are numbered S1-1, S1-2, S1-3, and so on (with S indicating State Agency). Immediately following the letter are responses, each with binomials that correspond to the bracketed comments.

If the subject matter of one letter overlaps that of another letter, the reader may be referred to more than one group of comments and responses to review all information on a given subject. Where this occurs, cross-references to other comments are provided.

Some comments that were submitted to the County do not pertain to substantial environmental issues or do not address the adequacy of the analysis contained in the Draft EIR. Responses to such comments, although not required, are included to provide additional information. When a comment does not directly pertain to environmental issues analyzed in the Draft EIR, does not ask a question about the adequacy of the analysis in the Draft EIR, expresses an opinion related to the merits of the proposed project, or does not question an element of or conclusion of the Draft EIR, the response notes the comment and may provide additional information where appropriate. Some comments express opinions about the merits or specific aspects of the proposed project; these are included in the Final EIR for consideration by the decision makers.

Chapter 4, *Mitigation Monitoring and Reporting Program*: This chapter contains the Mitigation Monitoring and Reporting Program to guide the County in its implementation and monitoring of measures adopted in the EIR, and to comply with the requirements of Public Resources Code Section 21081.6(a).

Chapter 5, *References Cited*: This chapter identifies the references cited in this Final EIR.

1.5 PUBLIC PARTICIPATION AND REVIEW

Napa County has complied with all noticing and public review requirements of CEQA. This compliance included notifying all responsible and trustee agencies and interested groups, organizations, and individuals that the Draft EIR was available for review. The following actions took place during the preparation, distribution, and review of the Draft EIR:

- A Notice of Preparation (NOP) for the EIR and an Initial Study (IS) were filed with the State Clearinghouse on September 18, 2018. The official 30-day public review comment period for the NOP ended on October 18, 2018 (State Clearinghouse #2018092042). The NOP/IS was distributed to federal, state, and local agencies; organizations; adjacent property owners within 1,000 feet of the project site; and to other interested parties. The NOP was also published on Napa County's website and was filed at the County Clerk's office.
- A Notice of Completion and copy of the Draft EIR were filed with the State Clearinghouse on April 26, 2021. The 45-day public review period for the Draft EIR was April 26, 2021, through June 9, 2021. A Notice of Availability for the Draft EIR was sent

to federal, state, and local agencies; organizations; adjacent property owners within 1,000 feet of the project site; and other interested parties. The Draft EIR was also published on the County's website at: https://pbes.cloud/index.php/s/6odoCfrPEZTidoK

- Paper copies of the Draft EIR were available for review at the following locations:

  Napa County
  Department of Planning, Building and Environmental Services
  1195 Third Street, 2nd Floor
  Napa, CA 94559

  Napa County Main Library
  580 Coombs Street
  Napa, CA 94559

1.6 CEQA CERTIFICATION AND PROJECT APPROVAL

Pursuant to State CEQA Guidelines Section 15090(a), before Napa County makes a decision regarding the proposed project, the County must first certify that the EIR has been completed in compliance with CEQA, that the County has reviewed and considered the information in the EIR, and that the EIR reflects the County's independent judgment and analysis.

In the event that Napa County approves the proposed project, CEQA requires that it file a Notice of Determination and adopt appropriate findings as set forth in State CEQA Guidelines Section 15091. Under State CEQA Guidelines Section 15092, a lead agency may only approve or carry out a project subject to an EIR if it determines that: (1) the project will not have a significant effect; or (2) the agency has eliminated or substantially lessened all significant effects on the environment where feasible, and any remaining significant effects on the environment that are found to be unavoidable are acceptable due to overriding considerations.

1.7 LIST OF COMMENTERS

Napa County received 12 comment letters during the comment period for the Draft EIR for the proposed project. **Table 1-1** indicates the letter type (e.g., state agency, organization/company, or individual) and numerical designation for each comment letter, the author of the comment letter, and the date of the comment letter.

TABLE 1-1
COMMENT LETTERS REGARDING THE KJS AND SORRENTO VINEYARD CONVERSION #17-00432-ECPA
DRAFT ENVIRONMENTAL IMPACT REPORT

Letter #	Entity	Author(s) of Comment Letter	Date of Comment Letter
State Agencies			
S1	California Department of Fish and Wildlife	Gregg Erickson, Regional Manager, Bay Delta Region	May 28, 2021
S2	California Department of Transportation, District 4	Mark Leong, District Branch Chief, Local Development - Intergovernmental Review	June 7, 2021
Local Agencies			
L1	City of Napa, Utilities Department	Joy Eldredge, Deputy Utilities Director	June 8, 2021
Organizations/Companies			
O1	California Wildlife Foundation and California Oaks Coalition	Janet Cobb, Executive Officer and Angela Moskow, Manager	June 3, 2021
O2	Gilpin Geosciences, Inc.	Lou Gilpin	June 3, 2021
O3	Center for Biological Diversity	Ross Middlemiss, Staff Attorney	June 9, 2021
O4	Buchalter	Alicia Guerra, Shareholder	June 9, 2021
O5	PPI Engineering	James R. Bushey, P.E., President; Matthew S. Bueno, P.E., Engineering Manager; and Annalee Sanborn, Project Manager	June 9, 2021
Individuals			
I1		Kellie Anderson	June 8, 2021
I2		Kellie Anderson	June 8, 2021
I3		Kellie Anderson	June 9, 2021
I4		Kellie Anderson	June 9, 2021

Source: Data compiled by Environmental Science Associates in 2021

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CHAPTER 2
REVISIONS TO THE DRAFT EIR

2.1 INTRODUCTION

This chapter describes changes made to the proposed project since publication of the Draft EIR, as well as text changes made to the Draft EIR initiated by Napa County staff in response to a comment letter.

Under CEQA, recirculation of all or part of an EIR may be required if significant new information is added after public review and prior to certification. According to State CEQA Guidelines Section 15088.5(a), new information is not considered significant "*unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project's proponents have declined to implement.*" More specifically, the State CEQA Guidelines define "significant new information" as including a disclosure showing that:

- A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.
- A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance.
- A feasible project alternative or mitigation measure considerably different from those others previously analyzed would clearly lessen the environmental impacts of the project, but the project's proponents decline to adopt it.
- The Draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.

The text changes described below update, refine, clarify, and amplify the project information and analyses presented in the Draft EIR. In some cases, the text changes reflect new regulatory requirements that became effective in April 2022. No new significant impacts are identified, and no information is provided that would involve a substantial increase in the severity of a significant impact that would not be mitigated by measures agreed to by Napa County. In addition, no new or considerably different Napa County alternatives or mitigation measures have been identified. Finally, there are no changes or set of changes that would reflect fundamental inadequacies in the Draft EIR. Recirculation of any part of the Draft EIR therefore is not required.

2.2 TEXT CHANGES TO THE DRAFT EIR

This section summarizes text changes made to the Draft EIR in response to a comment letter as initiated by Napa County staff. New text is indicated in double underline and text to be deleted is reflected by ~~strikethrough~~. Text changes are presented in the page order in which they appear in the Draft EIR.

The text changes provide clarification, amplification, and corrections that have been identified since publication of the Draft EIR. The text changes do not result in a change in the analysis or conclusions of the Draft EIR.

EXECUTIVE SUMMARY

Page ES-5, the first sentence of the second bullet is revised to read:

> The Reduced Intensity and Increased Stream and Wetland (Aquatic Resource) Setbacks Alternative includes the areas from the mitigated proposed project, which reduces the project acreage by 15.42 ~~21.73~~ gross acres (and avoids development of vineyard Block~~s~~ 5D~~, 16, 24G, 25, and 27~~) through avoidance of biological resources and mapped landslides through implementation of Mitigation Measures 3.3-1a, 3.3-1j, and 3.3-2a, ~~and 3.5-2,~~ as described in **Section 3.3, *Biological Resources*** ~~and **Section 3.5, *Geology and Soils***~~.

Page ES-5, the last sentence of the second bullet is revised to read:

> The Reduced Intensity and Increased Stream and Wetland (Aquatic Resource) Setbacks Alternative would develop approximately 97.44 ~~94.89~~ net acres of vineyard within an approximately 139.75 ~~134.16~~ acre development area.

Page ES-5, the first sentence of the third bullet is revised to read:

> The Reduced Vegetation Removal/Grading and Road Use Alternative also includes the areas from the mitigated proposed project, which reduces the project acreage by 15.42 ~~21.73~~ gross acres (and avoids development of vineyard Block~~s~~ 5D~~, 16, 24G, 25, and 27~~).

Page ES-5, the last sentence of the third bullet is revised to read:

> The Reduced Vegetation Removal/Grading and Road Use Alternative would develop approximately 82.09 ~~80.15~~ net acres of vineyard within an approximately 115.31 ~~111.82~~ acre development area.

Page ES-9, Impact 3.2-1, Mitigation Measures 3.2-1a and 3.2-1b in Table ES-2, Summary of Impacts and Mitigation Measures, are revised to read:

Resource Topic and Impact	Mitigation Measure
3.2-1: Construction and operation of the proposed project could conflict with or obstruct implementation of BAAQMD's 2017 Clean Air Plan.	~~**Mitigation Measure 3.2-1a (proposed project, Reduced Intensity and Increased Stream and Wetland [Aquatic Resource] Setbacks Alternative, and Reduced Vegetation Removal/ Grading and Road Use Alternative):** All construction equipment used in project construction shall meet Tier 3 Final standards to reduce emissions of NOX. Before initiation of vegetation removal, grading and earth-disturbing activities associated with any project phase, the owner/permittee shall submit to Napa County a construction equipment list that includes equipment Tier level to demonstrate and document that all construction equipment meets or exceed Tier 3 standards.~~ **Mitigation Measure 3.2-1a ~~b~~ (proposed project, Reduced Intensity and Increased Stream and Wetland [Aquatic Resource] Setbacks Alternative, and Reduced Vegetation Removal/ Grading and Road Use Alternative):** Construction contractors shall be required to implement the following measures consistent with the BAAQMD-recommended basic control measures during construction: 1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day. 2. All haul trucks transporting soil, sand, or other loose material offsite shall be covered. 3. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited. 4. All vehicle speeds on unpaved roads shall be limited to 15 miles per hour. 5. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used. 6. Idling times shall be minimized either by shutting equipment off when not in use or by reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure, 13 CCR Section 2485). Clear signage shall be provided for construction workers at all access points. 7. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition before operation. 8. A publicly visible sign shall be posted with the telephone number and person to contact at Napa County regarding dust complaints. This person shall respond and take corrective action within 48 hours. To ensure compliance with applicable regulations, BAAQMD's phone number shall also be visible.

Page ES-10, Impact 3.3-1, Mitigation Measure 3.3-1b in Table ES-2, Summary of Impacts and Mitigation Measures, is revised to read:

Resource Topic and Impact	Mitigation Measure
3.3-1: Construction and operation of the proposed project could have a substantial adverse effect, either directly or through habitat modifications, on a species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS.	**Mitigation Measure 3.3-1b (proposed project, Reduced Intensity and Increased Stream and Wetland [Aquatic Resource] Setbacks Alternative, and Reduced Vegetation Removal/ Grading and Road Use Alternative):** A qualified biologist shall provide a worker education and awareness program to all on-site personnel before the start of materials staging or ground-disturbing activities within 492 feet of Elder Creek or the unnamed pond. (The term "qualified" refers to a biologist or biological monitor who is knowledgeable and experienced in the biology and natural history of local herpetology, mammalian, and avian resources with potential to occur at the project site.) The qualified biologist shall explain to construction workers how best to avoid impacts on western pond turtle, foothill yellow-legged frog, and California red-legged frog. This education program shall include topics related to species identification, life history descriptions, and habitat requirements during various life stages. The program should include handouts, illustrations, photographs, and project maps showing areas where minimization and avoidance measures are in place, and where these species would most likely occur if present. Crew members shall sign a sign-in sheet documenting that they received the training. Documentation that the worker education and awareness program has occurred, including any education program handouts, illustrations, photographs, or project maps shall be submitted to Napa County before Project vegetation removal or earth-disturbing activities begin.

Page ES-10, Impact 3.3-1, Mitigation Measure 3.3-1c in Table ES-2, Summary of Impacts and Mitigation Measures, is revised to read:

Resource Topic and Impact	Mitigation Measure
3.3-1: Construction and operation of the proposed project could have a substantial adverse effect, either directly or through habitat modifications, on a species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS.	**Mitigation Measure 3.3-1c (proposed project, Reduced Intensity and Increased Stream and Wetland [Aquatic Resource] Setbacks Alternative, and Reduced Vegetation Removal/ Grading and Road Use Alternative):** i. A qualified biologist shall conduct a preconstruction survey within 24 hours before the removal of vegetation and initial Project grading within 492 feet of suitable aquatic habitat for western pond turtle and California red-legged frog. A preconstruction survey for foothill yellow-legged frog shall also occur and shall be focused on carefully examining the bank no less than 50 feet of the Elder Creek streambed where the water diversion structure will be installed, where appropriate, and at least 500 feet upstream and downstream of the water diversion structure site. During the preconstruction survey, the qualified biologist shall relocate any western pond turtles found within the proposed development area to suitable habitat away from the construction zone, but outside the development area. Should any active western pond turtle nests be observed within the development area, a minimum 50-foot avoidance buffer shall be established. No work shall occur within the buffer. ii. Should any California red-legged frogs be present within the development area during the preconstruction survey, no work shall begin. The qualified biologist shall contact Napa County, USFWS, and CDFW within 24 hours of the observation. Work shall not begin until USFWS has provided authorization and the frog has left on its own accord. If foothill yellow-legged frogs are discovered during the preconstruction survey, the qualified biologist shall contact Napa County and CDFW within 24 hours and project construction shall not begin until CDFW provides written permission to do so. If foothill yellow-legged frogs are discovered during project construction, all work in the immediate area shall cease until the individual moves out of harm's way, as determined by the on-site biological monitor. iii. A copy of the preconstruction survey results, that includes any find and relocation efforts shall be provided to Napa County and CDFW before Project vegetation removal or earth-disturbing activities begin.

Page ES-11, Impact 3.3-1, Mitigation Measure 3.3-1d in Table ES-2, Summary of Impacts and Mitigation Measures, is revised to read:

Resource Topic and Impact	Mitigation Measure
3.3-1: Construction and operation of the proposed project could have a substantial adverse effect, either directly or through habitat modifications, on a species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS.	**Mitigation Measure 3.3-1d (proposed project, Reduced Intensity and Increased Stream and Wetland [Aquatic Resource] Setbacks Alternative, and Reduced Vegetation Removal/Grading and Road Use Alternative):** i. A qualified biological monitor shall directly supervise all vegetation clearing, earth-disturbing activities ~~removal, initial grading activities~~, and infrastructure ~~pipe~~ installation occurring within 492 feet of suitable aquatic habitat for western pond turtle, ~~and~~ California red-legged frog, and foothill yellow-legged frog. Before Project vegetation removal or earth-disturbing activities begin, the owner/permittee shall provide documentation to Napa County that a qualified biologist (or biological monitor) is under contract to conduct the supervision, monitoring and reporting specified by this measure. ii. Should any western pond turtles be detected near the development area during construction, the biological monitor shall relocate any western pond turtles found within the development area to suitable habitat outside the development area, but within the project site. iii. Should any California red-legged frog be present within the development area during construction, work shall halt. The biological monitor shall contact Napa County, USFWS, and CDFW within 24 hours of the observation. Work shall not resume until the County and USFWS have provided authorization and the frog has left on its own accord. Within 14 days after the final monitoring event, the qualified biological monitor shall submit a letter report to the County summarizing the results of the biological monitoring. iv. If foothill yellow-legged frogs are discovered during project construction, all work in the immediate area shall cease until the individual moves out of harm's way, as determined by the on-site biological monitor.

Page ES-11, Impact 3.3-1, the bulleted list in Mitigation Measure 3.3-1f in Table ES-2, Summary of Impacts and Mitigation Measures, is revised to read:

Resource Topic and Impact	Mitigation Measure
3.3-1: Construction and operation of the proposed project could have a substantial adverse effect, either directly or through habitat modifications, on a species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS.	**Mitigation Measure 3.3-1f (proposed project, Reduced Intensity and Increased Stream and Wetland [Aquatic Resource] Setbacks Alternative, and Reduced Vegetation Removal/ Grading and Road Use Alternative):** If any active Swainson's hawk nests are found within 0.25 mile of the development areas proposed during that phase of construction, the qualified biologist shall contact Napa County and CDFW via phone call or email within one day after the preconstruction survey to report the findings. For this avoidance and minimization requirement, "construction activities" are defined to include operation of heavy equipment for construction (use of bulldozers or excavators, haul trucks, loaders, and tractors) or other project-related activities that could cause nest or fledging abandonment within 0.25 mile of a nest site between March 1 and September 15. Should active nest(s) be present within 0.25 mile of development areas, the County and CDFW shall be consulted to develop take avoidance measures including but not limited to the following: • Establishing appropriate noise buffers. • Installing high-visibility construction fencing around the buffer zone. Following the installation of any such fencing, it shall be inspected and approved by the County. • Implementing a monitoring and reporting program before any construction activities occur within 0.25 mile of the nest…

Page ES-12, Impact 3.3-1, Mitigation Measure 3.3-1g in Table ES-2, Summary of Impacts and Mitigation Measures, is revised to read:

Resource Topic and Impact	Mitigation Measure
3.3-1: Construction and operation of the proposed project could have a substantial adverse effect, either directly or through habitat modifications, on a species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS.	**Mitigation Measure 3.3-1g (proposed project, Reduced Intensity and Increased Stream and Wetland [Aquatic Resource] Setbacks Alternative, and Reduced Vegetation Removal/ Grading and Road Use Alternative):** A qualified biologist shall conduct a habitat assessment for burrowing owls. The survey area shall include a 500-foot radius around the annual grasslands within applicable development areas (i.e., annual grassland habitat). The qualified biologist shall provide a report to Napa County following the completion of the habitat assessment, which shall identify areas of suitable habitat for burrowing owl, if any. If the results of the habitat assessment determine that there is no suitable habitat for burrowing owls, then no further measures regarding burrowing owls are required. If suitable habitat is present, a qualified biologist shall conduct surveys ~~take avoidance survey for burrowing owl between 14 and 30 days before the start of construction for each Project phase,~~ in accordance with Appendix D of the 2012 Staff Report on Burrowing Owl Mitigation (~~Appendix E;~~ CDFG 2012). (A "qualified biologist" is defined as a person with a minimum of two years of experience implementing the 2012 Staff Report methodology ~~knowledgeable and experienced in the biology and natural history of local avian resources with potential to occur at the project site.) The survey area shall include a 500-foot radius around the annual grasslands within applicable development areas (i.e., annual grassland habitat)~~. Time lapses of project activities of greater than 14 days shall trigger subsequent surveys including but not limited to a final survey within 24 hours prior to ground disturbance before construction equipment mobilizes to areas deemed to be suitable habitat for burrowing owls. ~~If the survey is negative, the biologist shall provide a report to Napa County for its records documenting the results of the survey, and no additional measures are required for that phase as long as construction begins within 30 days of the take avoidance survey or does not halt for more than 30 days once construction begins. If either of these conditions occur, an additional take-avoidance survey shall be conducted between 14 and 30 days before the start or resumption of construction activities.~~ If burrowing owls are detected on or adjacent to the site, the following restricted activity dates and setback distances recommended per CDFW's Staff Report (CDFG 2012) shall be implemented, unless reduced buffers are accepted by CDFW in writing based on site-specific conditions: • From April 1 through October 15, low disturbance and medium disturbance activities shall have a 200-meter (656-foot) buffer, while high disturbance activities shall have a 500-meter (1,640-foot) buffer from occupied nests and wintering sites. • From October 16 through March 31, low disturbance activities shall have a 50-meter (164-foot) buffer, medium disturbance activities shall have a 100-meter (328-foot) buffer, and high

Resource Topic and Impact	Mitigation Measure
	disturbance activities shall have a 500-meter (1,640-foot) buffer from occupied nests and wintering sites. If burrowing owls are present outside of the nesting season, burrowing owls may be passively relocated from the project site and adjacent habitat using CDFW-accepted methods so that construction can proceed. Any required passive relocation of burrowing owls would require CDFW acceptance. If passive relocation of burrowing owls is necessary, a qualified biologist shall prepare a Relocation Plan, including compensatory habitat as described below, for CDFW review and acceptance prior to the start of construction activities. If the survey determines that the project site is actively being used by burrowing owls, or any owls are passively relocated as described above, then compensatory habitat mitigation shall be provided. The habitat mitigation/compensation plan shall be submitted to CDFW for review and approval prior to the start of project activities. If burrowing owls are observed during surveys, notification shall also be submitted to the California Natural Diversity Database (see https://wildlife.ca.gov/Data/CNDDB/Submitting-Data). ~~If active burrowing owl burrows or nests are observed in applicable development areas or within a 500-foot radius around the development areas containing grassland habitats, the qualified biologist shall prepare an impact assessment and take avoidance measures, in accordance with the 2012 Staff Report on Burrowing Owl Mitigation. The impact assessment and take avoidance measures shall be submitted to the County for review and approval in cooperation with CDFW. The take avoidance measures shall include but not be limited to establishing appropriate disturbance/noise buffers, installing high-visibility construction fencing around the buffer zones, and implementing a monitoring and reporting program before any construction activities occur within 500 feet of the nest/borrow.~~ ~~If the qualified biologist determines that certain work would not disturb an active burrow/nest, a reduced avoidance buffer may be established through coordination with the County and CDFW. If the qualified biologist determines that project activities may result in impacts on nesting, occupied, and satellite burrows and/or burrowing owl habitat, the owner/permittee shall delay the start of construction until the qualified biologist determines that the burrowing owls have fledged and/or the burrow is no longer occupied.~~

Page ES-13, Impact 3.3-1, Mitigation Measure 3.3-1k in Table ES-2, Summary of Impacts and Mitigation Measures, is revised to read:

Resource Topic and Impact	Mitigation Measure
3.3-1: Construction and operation of the proposed project could have a substantial adverse effect, either directly or through habitat modifications, on a species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS.	**Mitigation Measure 3.3-1k (proposed project, Reduced Intensity and Increased Stream and Wetland [Aquatic Resource] Setbacks Alternative, and Reduced Vegetation Removal/Grading and Road Use Alternative):** At least 30 days prior to tree removal activities, a qualified biologist shall assess all trees to determine if they contain suitable bat roosting habitat (e.g., cavities, crevices, deep bark fissures). If any trees contain such habitat, bat presence shall be presumed. Trees containing bat roosting habitat shall be removed using the method described below during the following seasonal periods of bat activity: Prior to maternity season – from approximately March 1 (or when night temperatures are above 45 degrees Fahrenheit and when rains have ceased) through April 15 (when females begin to give birth to young); and prior to winter torpor – from September 1 (when young bats are self-sufficiently volant) until October 15 (before night temperatures fall below 45 degrees Fahrenheit and rains begin). On day 1, in the afternoon and under the supervision of a qualified biologist, chainsaws only shall be used to remove tree limbs that do not contain suitable bat roosting habitat (e.g., cavities, crevices, deep bark fissures). The next day, the rest of the tree shall be removed. If bat habitat trees cannot be removed during the above seasonal periods of bat activity, a qualified biologist shall survey the trees to determine if the tree contains a maternity colony or winter torpor bats. If the qualified biologist cannot make this determination with certainty, the presence of maternity colonies or winter torpor bats shall be assumed, and removal of the tree shall be delayed until the seasonal periods of bat activity specified above. If the biologist determines that bats are present but maternity colony or winter torpor bats are absent, then the tree may be removed outside of the above periods of seasonal bat activity using the above two-step tree removal process. If the qualified biologist determines that bats are absent, then the tree may be removed without bat seasonality or method restrictions. ~~Within 14 days before the start of tree removal associated with Phases 1 and 2 of project construction, a qualified biologist shall conduct a preconstruction survey for special-status bats. If no special-status bats are observed roosting, the biologist shall provide a letter report to Napa County for its records, documenting the results of the survey, and no additional measures are required. If tree removal does not begin within 14 days of the preconstruction survey, or if removal halts for more than 14 days, a new survey shall be conducted.~~

Resource Topic and Impact	Mitigation Measure
	~~If bats are found in any trees proposed for removal, a minimum 10-foot avoidance buffer shall be established around the roost until it is no longer occupied. High-visibility construction fencing shall be installed around the buffer and shall remain in place until the tree is no longer occupied by bats. The fencing shall be inspected and approved by the County before the start of any earthmoving and/or development activities. The trees shall not be removed until a qualified biologist has determined that the roost is no longer occupied by the bats and documentation has been provided to the County that the roost(s) are no longer occupied.~~

Page ES-15, Impact 3.3-1, Mitigation Measure 3.3-5a in Table ES-2, Summary of Impacts and Mitigation Measures, is revised to read:

Resource Topic and Impact	Mitigation Measure
3.3-5: Construction and operation of the proposed project could conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.	**Mitigation Measure 3.3-5a (proposed project, Reduced Intensity and Increased Stream and Wetland [Aquatic Resource] Setbacks Alternative, and Reduced Vegetation Removal/Grading and Road Use Alternative):** In order to mitigate impacts to oak woodland resulting from development of the proposed project, the owner/permittee shall place in permanent protection a Preserve Area of no less than 61.24 acres of oak woodland (30.62 x 2, for a 2:1 preservation ratio), half of which shall be situated on developable lands (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 as shown in Figure 3.3-7) and include the 2.9 acres of woodland removed through other mitigation measures. The preserved woodlands shall have similar habitat value as that being removed, as determined by a qualified professional knowledgeable and experienced in local botany and habitats. Erosion Control Plan #P17-00432-ECPA shall be revised prior to approval to identify the Preservation Area. ~~The owner/permittee shall preserve a minimum of 60 acres of oak woodland (29.88 x 2, for a 2:1 preservation ratio) in similar habitat in the west-central or northwest portion of the project site.~~ All ~~This~~ acreage designated for preservation shall be identified as such in a mitigation easement with an accredited land trust ~~shall be preserved in an 'enforceable restriction', such as deed restriction, open space/conservation easement with an~~ organization such as the Land Trust of Napa County as the grantee, or other means of permanent protection acceptable to Napa County. The mitigation easement shall be prepared in a form acceptable to County Counsel and entered into and recorded with the Napa County Recorder's office prior to any earth disturbing activities, grading or vegetation removal, or within 12 months of project approval, whichever occurs first. In no case shall earthmoving activities be initiated until said mitigation easement is recorded. Any request by the Applicant for an extension of time to record the mitigation easement shall be considered by the PBES Director and shall be submitted to Napa County prior to the 12 month deadline, and shall provide sufficient justification for the extension. Land placed in protection shall be restricted from development and other uses that would potentially degrade the quality of the habitat (e.g., conversion to other land uses such as agriculture or urban development, and excessive off-road-vehicle use that increases erosion), and should otherwise be restricted by the existing goals and policies of Napa County. ~~The areas to be covered by the enforceable restriction shall be determined by a qualified botanist or biologist, and the determination shall be submitted to Napa County for review and approval. The owner/permittee shall record the enforceable restriction within 60 days of the County's approval of #P17-00432-ECPA. In no case shall the erosion control plan be initiated until said enforceable restriction is recorded.~~ Any county staff time spent assessing and monitoring said provision shall be charged to the permittee, at the rate in effect at the time assessment and monitoring occurs, pursuant to County Fee Policy Part 80.

Pages ES-15 and ES-16, Impact 3.3-1, Mitigation Measure 3.3-5b in Table ES-2, Summary of Impacts and Mitigation Measures, is revised to read:

Resource Topic and Impact	Mitigation Measure
3.3-5: Construction and operation of the proposed project could conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.	**Mitigation Measure 3.3-5b (proposed project, Reduced Intensity and Increased Stream and Wetland [Aquatic Resource] Setbacks Alternative, and Reduced Vegetation Removal/ Grading and Road Use Alternative):** The owner/permittee shall locate and construct the point of diversion and associated infrastructure in an area along Elder Creek that does not contain valley oak trees. The location shall avoid removal and damage to valley oaks by providing a minimum protective buffer that extends to the tree's dripline. "Removal and damage" also means trimming of the tree and/or work occurring within the tree's buffer area. The tree protective buffer fencing shall be inspected and approved by Napa County before construction of the point of diversion begins. If avoiding valley oak is infeasible during construction of the point of diversion, the owner/permittee shall provide justification of the infeasibility, and a removal and replacement plan prepared by a qualified biologist or restoration ecologist, for review and approval by Napa County before construction of the point of diversion commences. If a valley oak or other oaks are removed (which includes substantial trimming of the tree and/or work within the buffer area), they shall be replaced on-site with 15-gallon oak trees at the following ratios: 4:1 removal between 5 and 10 inches dbh, 5:1 removal between 10 and 15 inches dbh, and 10:1 for removal greater than 15 inches dbh. Replacement trees shall be installed and their good health shall be documented before completion and finalization of the erosion control plan. Replacement trees shall be monitored and maintained as necessary for ~~a minimum of~~ seven ~~five~~ years following planting to ensure that they achieve a minimum 80 percent survival. If valley oak plantings are not achieving this success criterion during the monitoring years, the owner/permittee shall replace the plantings and monitor them for an additional seven ~~five~~ years following the replanting until they achieve a minimum 80 percent survival rate. If avoidance of valley oaks is infeasible for construction of the point of diversion, the owner/ permittee also shall preserve a minimum of 0.06 acre of riparian woodland in similar habitat in the west-central or northwest portion of the project site. This acreage shall be preserved in a deed restriction, an open space easement with an organization such as the Land Trust of Napa County as the grantee, or other means of permanent protection acceptable to the County as described in Mitigation Measure 3.3-5a.

Page ES-17, Impact 3.5-2, Mitigation Measure 3.5-2 in Table ES-2, Summary of Impacts and Mitigation Measures, is revised to read:

Resource Topic and Impact	Mitigation Measure
3.5-2: Construction and operation of the proposed project could cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides.	None required. ~~**Mitigation Measure 3.5-2 (proposed project, Reduced Intensity and Increased Stream and Wetland [Aquatic Resource] Setbacks Alternative, and Reduced Vegetation Removal/Grading and Road Use Alternative):** Erosion Control Plan #P17-00432-ECPA shall be revised before approval to avoid the mapped landslide deposits in proposed vineyard Blocks 16, 24G, 25, and 27, and provide them with a 50-foot buffer.~~

Page ES-18, Impact 3.5-4, Mitigation Measure 3.5-4 in Table ES-2, Summary of Impacts and Mitigation Measures, is revised to read:

Resource Topic and Impact	Mitigation Measure
3.5-4: Construction and operation of the proposed project could occur on a geologic unit or soil that is unstable, or that would become unstable as a result of the project.	None required. ~~Implement Mitigation Measure 3.5-2 (proposed project, Reduced Intensity and Increased Stream and Wetland [Aquatic Resource] Setbacks Alternative, and Reduced Vegetation Removal/Grading and Road Use Alternative)~~

Page ES-18, Impact 3.5-5, Mitigation Measure 3.5-5b in Table ES-2, Summary of Impacts and Mitigation Measures, is revised to read:

Resource Topic and Impact	Mitigation Measure
3.5-5: Construction and operation of the proposed project could directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.	**Mitigation Measure 3.5-5b (proposed project, Reduced Intensity and Increased Stream and Wetland [Aquatic Resource] Setbacks Alternative, and Reduced Vegetation Removal/Grading and Road Use Alternative):** Initial earth-disturbing, grading and/or construction activities as defined by the County Conservation Regulations (NCC Chapter 18.108) in previously undisturbed sediments more than 2 feet deep in areas that are mapped as Great Valley Sequence (KJgvl or Jk)~~, or that exceed 5 feet deep in areas mapped as Quaternary alluvial fan deposits (Qf),~~ shall be monitored on a 'full time' basis during Phases 1 and 2 of ECPA development, in accordance with a Paleontological Monitoring Plan prepared and implemented by a qualified paleontologist, defined as an individual who has experience collecting and salvaging paleontological resources and meets the minimum standards of the SVP (2010). The Plan shall be submitted to Napa County for review and approval before commencement of any vegetation removal or earth-disturbing activities associated with the project. Within the Plan, the extent, and duration and timing of the monitoring shall be determined by the qualified paleontologist based on the location and extent of proposed ground disturbance within the Great Valley Sequence (KJgvl or Jk) ~~or Quaternary alluvial fan (Qf)~~ deposits. If the qualified paleontologist determines during project monitoring that full-time monitoring is no longer warranted, based on the specific geologic conditions at the surface or at depth, the paleontologist may recommend (subject to review and approval by Napa County) that monitoring be reduced to periodic spot-checking or cease entirely. Monitoring shall not be required in any artificial fill or for activities that do not reach the above-stated depth~~s~~ and mapping areas. Should fossils be encountered, construction work shall halt within the Great Valley Sequence ~~or Quaternary alluvial fan~~ deposits until a qualified paleontologist can assess the significance of the find and develop, for Napa County review and approval, additional Plan measures to avoid impacts to paleontological resources. Significant fossils shall be salvaged, following the standards of the SVP (2010) and curated at an accredited repository, such as the University of California Museum of Paleontology or Los Angeles County Museum of Natural History.

CHAPTER 3, ENVIRONMENTAL SETTING, IMPACTS, AND MITIGATION MEASURES

Page 3-2, the first paragraph under the bullets is revised to read:

> The environmental and regulatory setting descriptions provide a point of reference for assessing the environmental impacts of the proposed project. The setting discussion is followed by a discussion of impacts and mitigation measures. Consistent with State CEQA Guidelines Section 15125, the physical environmental conditions as they existed at the time the Notice of Preparation (NOP) was published (i.e., September 18, 2018) are described in this EIR. The vegetation on the property was subsequently burned in 2020 when a wildfire (LNU Fire Complex) swept through the project area. Conducting the assessment of environmental impacts based on the physical environmental conditions that existed at the time the NOP was published allows for the most conservative assessment of impacts. For example, the calculated percent reduction in soil loss and net decrease in peak flow rates would be greater if the analysis were based on conversion from burned ground cover to vineyard with a cover crop. Similarly, for biological resources, assessing impacts on special-status plant species and habitats based on the vegetation communities documented to occur on the project site at the time the NOP was published provides a conservative estimate of impacts compared to assessing impacts based on burned ground cover.

SECTION 3.2, AIR QUALITY AND GREENHOUSE GAS EMISSIONS

Page 3.2-16, the following new regulatory requirements are added to Section 3.2.2 (Regulatory Setting - Local Regulations; Bay Area Air Quality Management District,) after the second full paragraph:

> On April 20, 2022, the BAAQMD adopted updated thresholds of significance for climate impacts (CEQA Thresholds for Evaluating the Significance of Climate Impacts, BAAQMD April 2022).[1] The updated thresholds to evaluate GHG and climate impacts from land use projects are qualitative and geared toward building and transportation projects. Per the BAAQMD, all other projects should be analyzed against either an adopted local Greenhouse Gas Reduction Strategy (i.e., Climate Action Plan (CAP)) or other threshold determined on a case-by-case basis by the Lead Agency. If a project is consistent with the State's long-term climate goals of being carbon neutral by 2045, then a project would have a less-than-significant impact as endorsed by the California Supreme Court in Center for Biological Diversity v. Department of Fish & Wildlife (2015) *62 Cal. 4th 204).
>
> There is no proposed construction-related climate impact threshold at this time. Greenhouse gas (GHG) emissions from construction represent a very small portion of a project's lifetime GHG emissions. The proposed thresholds for land use projects are designed to address operational GHG emissions, which represent the vast majority of project GHG emissions. As stated above, the updated BAAQMD thresholds of significance of climate impacts for land use projects (BAAQMD April 2022) are qualitative, with no "bright-line" (quantitative) level below which to mitigate (also see Page 3.2-21).
>
> In light of the April 2022 BAAQMD Thresholds for Evaluating the Significance of Climate Impacts "Operational Emissions" for vineyard projects are interpreted to include: i) any reduction in the amount of carbon sequestered by existing woodland and forest that is removed as part of the project, and ii) ongoing emissions from the energy used to maintain and operate the vineyard including vehicular equipment and worker vehicle trips. Operational GHG/Climate Change emissions and impacts are weighed against no net decrease in carbon sequestration.

Page 3.2-19, the following disclosures have been added to Section 3.2.2 (Regulatory Setting - Local Regulations; Napa County Climate Action Plan) after the second paragraph under this section:

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

[1] https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines, April 2022.

legally defensible CAP. On April 13, 2016, the County, as the part of the first phase of development and preparation of the CAP, released Final Technical Memorandum #1: 2014 Greenhouse Gas Emissions Inventory and Forecast, April 13, 2016. This initial phase included: i) updating the unincorporated County's community-wide GHG emissions inventory to 2014, and ii) preparing new GHG emissions forecasts for the 2020, 2030, and 2050 horizons.

Page 3.2-20, the following is added to Section 3.2.2 (Regulatory Setting - Local Regulations; Napa County Climate Action Plan) after the bulleted list, before the first paragraph:

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

Page 3.2-21, the following is added to Section 3.2.3 (Impacts and Mitigation Measures – Thresholds of Significance; BAAQMD Significance Thresholds) at the bottom of the page after the bulleted list:

The BAAQMD Thresholds for Evaluating the Significance of Climate Impacts (April 2022) also do not include construction-related impact thresholds, as GHG emissions associated with the energy used to develop, prepare, and plant the project area represent a very small portion of a project's lifetime GHG emissions. The construction emissions analysis herein is for disclosure purposes only, as there is no threshold against which to analyze the potential significance of impact.

Page 3.2-22, the first paragraph has been revised to read:

For operational impacts, the following analysis uses BAAQMD's CEQA significance threshold for land use development projects: 1,100 MT CO2e per year. Furthermore, in light of the April 2022 BAAQMD Thresholds for Evaluating the Significance of Climate Impacts, operational impacts are also evaluated against any reduction in the amount of carbon sequestered by existing woodland/forest that is removed as part of the project.

Page 3.2-26, the following is added after the second paragraph (before Table 3.2-5):

The thresholds of significance for use in determining whether a proposed project will have a significant impact on GHG's and climate change (BAAQMD, April 2022) did not

affect the Air Quality CEQA Thresholds of Significance for the aforementioned air pollutants (i.e. ROG, NO_x, PM_{10} and $PM_{2.5}$) identified in Table 2-1 of the BAAQMD 2017 Guidelines. As such, those thresholds will be used to determine the significance of potential air quality impacts associated with air pollutant emissions. These air pollutant thresholds of significance are identified in **Table 3.2-5.**

Page 3.2-26, Table 3.2-5 and the paragraph immediately following the table is revised to read:

TABLE 3.2-5
AVERAGE DAILY CONSTRUCTION EMISSIONS

	Construction Emissions (pounds/day)			
	ROG	**NO_X**	**Exhaust PM_{10}**	**Exhaust $PM_{2.5}$**
Unmitigated Emissions				
Project Average	5.3 ~~5.8~~	46.8 ~~54~~	2.0 ~~2.3~~	1.8 ~~2.3~~
Mitigated Emissions				
Mitigated Project Average	4.7 ~~2.8~~	41.0 ~~50.7~~	1.7 ~~0.3~~	1.6 ~~0.3~~
BAAQMD Threshold	54	54	82	54
Exceed Threshold?	**No**	**No**	**No**	**No**

NOTES:

BAAQMD = Bay Area Air Quality Management District; NO_X = oxides of nitrogen; $PM_{2.5}$ = particulate matter measuring 2.5 microns or less in diameter; PM_{10} = particulate matter measuring 10 microns or less in diameter; ROG = reactive organic gases

SOURCE: Data compiled by Environmental Science Associates in 2022~~1~~ (see **Appendix D**)

The table shows daily emissions of criteria air pollutants as averaged over the entire duration of construction (approximately 432 workdays over three years), compared to the BAAQMD significance thresholds. As shown in **Table 3.2-5**, estimated project construction emissions would not exceed the BAAQMD significance threshold for any of the pollutants analyzed. ~~As unmitigated NOx emissions would be equal to the BAAQMD threshold, **Mitigation Measure 3.2-1a** is identified to reduce NOx emissions below the significance threshold.~~ Mitigated emissions~~, assuming use of Tier 3 construction equipment with diesel particulate filters,~~ are also shown in **Table 3.2-5**. ~~Diesel particulate filters verified by EPA and CARB are typically effective at reducing emissions of PM by 85–90 percent or more (EPA 2010). Using Tier 3 construction equipment reduces NOx emissions by up to 40 percent relative to emissions from Tier 2 equipment (John Deere 2019).~~

Pages 3.2-28 and 3.2-29 are revised to read:

Impact Conclusion

All project construction emissions of NOx would be below ~~at~~ the BAAQMD significance threshold (**Table 3.2-5**)~~, this unmitigated impact would be considered significant~~. ~~In addition, w~~ Without implementation of the BAAQMD-required measures, fugitive dust (PM) emissions during project construction would be considered significant. Operational impacts would be less than significant because estimates of all operational emissions

would be below BAAQMD significance thresholds for operation (**Table 3.2-6**). Because project construction emissions would not be significant without mitigation, the project would ~~not~~ be consistent with the 2017 Clean Air Plan. This impact would be **significant**.

> ~~**Mitigation Measure 3.2-1a:** All construction equipment used in project construction shall meet Tier 3 standards to reduce emissions of NO_X. Before initiation of vegetation removal, grading and earth-disturbing activities associated with any project phase, the owner/permittee shall submit to Napa County a construction equipment list that includes equipment Tier level to demonstrate and document that all construction equipment meets or exceed Tier 3 standards.~~
>
> **Mitigation Measure 3.2-1a ~~b~~:** Construction contractors shall be required to implement the following measures consistent with the BAAQMD-recommended basic control measures during construction...
>
> 1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
> 2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
> 3. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
> 4. All vehicle speeds on unpaved roads shall be limited to 15 miles per hour.
> 5. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
> 6. Idling times shall be minimized either by shutting equipment off when not in use or by reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure, 13 CCR Section 2485). Clear signage shall be provided for construction workers at all access points.
> 7. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition before operation.
> 8. A publicly visible sign shall be posted with the telephone number and person to contact at Napa County regarding dust complaints. This person shall respond and take corrective action within 48 hours. To ensure compliance with applicable regulations, BAAQMD's phone number shall also be visible.

Impact Significance after Mitigation: Implementing **Mitigation Measure~~s~~ 3.2-1a** ~~and **3.2-1b**~~ would reduce this impact to a **less-than-significant** level because ~~the use Tier 3 construction equipment with diesel particulate filters would reduce exhaust particulate emissions below BAAQMD's significance threshold, and~~ BAAQMD's required basic control measures would be implemented during construction to minimize fugitive dust emissions. The open burning condition of approval also would ensure that burning of cleared vegetation is conducted in accordance with BAAQMD Regulation 5.

Based on BAAQMD guidance, if a project does not result in significant and unavoidable air quality impacts after the application of feasible mitigation, the project may be considered consistent with the 2017 Clean Air Plan. Therefore, the proposed project would be consistent with the goals of the 2017 Clean Air Plan and would not conflict with or obstruct its implementation. This impact would be **less than significant with mitigation**.

Page 3.2-29, the last paragraph is revised to read:

Additionally, implementation of Mitigation Measures 3.3-1a, 3.3-1i, and 3.3-2a~~, and 3.5-2~~ would further reduce NO_X emissions during project construction and operational emissions because the project's acreage would be reduced by a total of approximately 15.42 ~~21.73~~ acres.

Page 3.2-30, the Impact Conclusion is revised to read:

Impact Conclusion

As shown in **Table 3.2-6**, the proposed project's operational emissions would be below the BAAQMD significance thresholds. Project construction emissions would also be below the thresholds (**Table 3.2-5**) ~~except for NOx, which would be at the significance threshold~~. ~~Further, w~~ Without implementation of BAAQMD's Basic Construction Mitigation Measures to address fugitive dust control, impacts from fugitive dust emissions would ~~also~~ be significant. Therefore, without mitigation, the proposed project's contribution to a significant cumulative air quality impact would be considered **significant**.

Impact Significance after Mitigation: Implementing **Mitigation Measure~~s~~ 3.2-1a ~~and 3.2-1b~~** would reduce this impact to a **less-than-significant** level. ~~As discussed above in Impact 3.2-1, project construction emissions of NOx would be reduced to below the BAAQMD significance threshold with the use of Tier 3 construction equipment with diesel particulate filters, as required by **Mitigation Measure 3.2-1a**.~~ Implementation of BAAQMD's required basic control measures during construction, included as part of **Mitigation Measure 3.2-1a~~b~~, would** reduce **fugitive dust emissions to less-than-significant levels**. Therefore, with implementation of **Mitigation Measure~~s~~ 3.2-1a ~~and 3.2-1b~~**, the proposed project

would not result in a cumulatively considerable contribution to a regional air quality impact during construction or operation.

Page 3.2-33, the first two paragraphs are revised to read:

However, as discussed in Impact 3.2-1, neither construction nor operation of the proposed project would exceed BAAQMD's mass emissions thresholds for ROG and NOX emissions ~~with mitigation~~. Thus, the proposed project would not likely result in an increase in ground-level ozone concentrations near the project site or elsewhere in the air basin that would cause or contribute to the exposure of sensitive receptors to concentrations in excess of health-protective levels.

Impact Conclusion

Total DPM emissions would be relatively minor compared to the 30-year exposure used in health risk assessments, considering the level and duration of exposure; the spatial variability of emissions during construction phases; and the seasonal aspects of ongoing operation of the proposed project~~; and the use of engines meeting the Tier 3 emission standards~~. Therefore, the health risk from exposure to TACs, particularly short-term DPM emissions from project construction, would be less than significant…

Pages 3.2-35 and 3.2-36 are revised to read:

Table 3.2-8 shows the overall project-related change in GHG emissions from carbon stocks and sequestration. This table shows the total one-time carbon storage loss from converting existing land uses into vineyard, along with the carbon sequestration loss of this conversion over the project's 30-year lifetime (16,475 ~~15,148~~ MT CO_2e). **Table 3.2-8** also shows the total one-time carbon storage gain from the new vineyard, along with the carbon sequestration gain of the new vineyard over the project's 30-year lifetime (14,607 MT CO_2e). **Table 3.2-8** presents these estimates for the mitigated proposed project with the implementation of Mitigation Measures 3.3-1a, 3.3-1i, and 3.3-2a, detailed in Section 3.3, *Biological Resources*.

TABLE 3.2-8
ESTIMATED CHANGE IN GREENHOUSE GAS EMISSIONS FROM CARBON STOCKS AND SEQUESTRATION

Vegetation/Land Use Type	Total Project MT CO_2e	Total Mitigated Project MT CO_2e
Carbon Loss—Existing Land Use Removal		
Carbon Storage	8,059~~7,697~~	7,303
Carbon Sequestration (annual)	281~~248~~	254
30-Year Lifetime Emissions	16,475~~15,148~~	14,933
Carbon Gains—New Land Use Types [a]		
Carbon Storage	-14,411	-12,626
Carbon Sequestration (annual)	-7	-6

TABLE 3.2-8
ESTIMATED CHANGE IN GREENHOUSE GAS EMISSIONS FROM CARBON STOCKS AND SEQUESTRATION

Vegetation/Land Use Type	Total Project MT CO_2e	Total Mitigated Project MT CO_2e
30-Year Lifetime Emissions	-14,607	-12,798
Total Project Lifetime Emissions	**1,868~~541~~**	**2,135**
Total Project Annual Emissions	**62~~18~~**	**71**

NOTES:
MT CO_2e = metric tons of carbon dioxide equivalents
[a] Emissions are reported as negative because they represent a greenhouse gas emissions sink.
SOURCE: Data compiled by Environmental Science Associates in 2022~~2018/2019~~

The proposed project could result in a one-time emissions sink of up to 6,352 ~~6,714~~ MT CO_2e (8,059 ~~7,697~~ minus 14,411), and annual ongoing emissions associated with loss of sequestration are estimated to be 274 ~~241~~ MT CO_{2e} per year (281 ~~248~~ minus 7). Thus, the project's total 30-year lifetime emissions would be 1,868 ~~541~~ MT CO_2e. In other words, the emissions from changes in carbon stock/storage and sequestration as a result of project-related land use changes would be approximately 62 ~~18~~ MT CO_2e per year (1,868 ~~541~~ divided by 30).

Table 3.2-9 summarizes the proposed project's operational emissions: emissions from vehicle trips and use of off-road equipment for project operations and maintenance, water pumping, and the change in CO_2e emissions from changes to carbon storage and sequestration associated with the conversion of existing land to vineyards. **Table 3.2-9** also presents these estimates for the mitigated proposed project with the implementation of Mitigation Measures 3.3-1a, 3.3-1i, and 3.3-2a detailed in Section 3.3, *Biological Resources.*

TABLE 3.2-9
ESTIMATED ANNUAL GREENHOUSE GAS EMISSIONS FROM PROJECT OPERATION

Source	CO_2e Project (metric tons per year)	CO_2e Mitigated Project (metric tons per year)
Mobile Sources	24	24
Water Pumping	6	6
Amortized Construction	72	72
Carbon Sequestration	62~~18~~	71
Total	**164~~120~~**	**173**

NOTE: CO_2e = carbon dioxide equivalents
SOURCE: Data compiled by Environmental Science Associates in 2022~~1~~ (see **Appendix D**)

Page 3.2-36, the following is added after Table 3.2-9:

The April 2022 BAAQMD Thresholds for Evaluating the Significance of Climate Impacts and reductions in carbon sequestered, with implementation of Mitigation Measures

3.3-1b through 3.3-1j, 3.3-2a, 3.3-2b, 3.3-4, and 3.3-5, habitats including woodland/ forest removal would be reduced by approximately 15 acres, from 32 acres to approximately 17 acres, and with a total overall acreage from 157.14 to 141.72 gross acres. In addition, implementation of Mitigation Measure 3.3-5a requires the permeant preservation of 61.24 acres of the site's oak woodland, half of which shall be comprised of developable oak woodland (i.e., outside of aquatic resource setbacks and on land with slopes less than 30%). All of these measures together would effectively offset the loss in carbon sequestration from the proposed project as mitigated, by protecting from development at a minimum, an equal amount of lost carbon sequestration due to woodland removal.

Further, as stated in **Section 3.10, *Transportation***, per the OPR Technical Advisory and County's TIS Guidelines, the addition of 110 or fewer daily trips is presumed to have a less than significant VMT impact. As detailed in **Section 3.10,** the most labor intensive period for vineyards, that generating the most traffic, is during harvest. This period typically extends for two to three weeks within a two-month period from late summer into fall. During that peak traffic period, the project would generate about 24 daily one-way trips by workers and four one-way grape truck trips per day. Therefore, daily trips (including passenger vehicle trips and truck trips) generated by the proposed project would be well below the County's TIS recommended screening criterion threshold for small projects generating fewer than 110 trips per day.

Page 3.2-37, the last sentence in the second paragraph is revised to read:

Annual emissions from changes in carbon stock/storage and sequestration as a result of project-related land use changes would be approximately 62 ~~18~~ MT CO_2e per year (**Table 3.2-8**).

Page 3.2-37, the following is added after the third paragraph (or after the second paragraph of *Impact Conclusion*):

Furthermore, given that the proposed project would result in the permanent preservation of equal amounts the carbon-sequestering woodland/forest that it proposes to remove as mitigated, and that the operational vehicle miles traveled fall well below the established threshold of 110 daily trips, the project is considered to be consistent with the State's long-term climate goals of being carbon neutral by 2045. Therefore, impacts related to operational GHG emissions would be **less than significant**.

Page 3.2-37, the last paragraph is revised to read:

Additionally, implementation of Mitigation Measures 3.3-1a, 3.3-1i, and 3.3-2a~~, and 3.5-2~~, which would reduce the project's acreage by approximately 15.42 ~~21.73~~ gross acres, would further reduce emissions ~~and~~ of this less-than-significant impact.

SECTION 3.3, BIOLOGICAL RESOURCES

Page 3.3-20, Table 3.3-3, Potentially Occurring Special-Status Species, the following row has been added above *Rana draytonii*, California red-legged frog:

Special-Status Species	Regulatory Status (Federal/State/ Local/CNPS)	Habitat Requirements	Identification/ Survey Period	Potential for Occurrence
Amphibians/Reptiles				
Rana boylii Foothill yellow-legged frog (Northwest/North Coast clade)	–/CSC/–	Rocky streams in a variety of habitats, including valley-foothill hardwood, valley-foothill hardwood-conifer, valley-foothill riparian, ponderosa pine, mixed conifer, coastal scrub, mixed chaparral, and wet meadow types.	Breeding adult surveys generally between April and June.	This species has been observed in Sage Creek, a direct tributary of Elder Creek, approximately 1.25 miles away from the project site.

Page 3.3-23, the following text has been added below the second paragraph:

Foothill Yellow-Legged Frog

Foothill yellow-legged frog (*Rana boylii*) has different listing statuses under the California Endangered Species Act, depending on which clade is being considered. The project site is located within the Northwest/North Coast clade. This clade is not proposed for listing as either threatened or endangered based on the 2020 California Fish and Game Commission findings; however, the clade of foothill yellow-legged frog is considered a California species of special concern. The foothill yellow-legged frog is found in or near rocky streams in a variety of habitats, including valley-foothill hardwood, valley-foothill hardwood-conifer, valley-foothill riparian, ponderosa pine, mixed conifer, coastal scrub, mixed chaparral, and wet meadow types. Adults often bask on exposed rock surfaces near streams. During periods of inactivity, especially during cold weather, individuals seek cover under rocks in the streams or on shore close to water. This species is rarely encountered (even on rainy nights) far from permanent water. They have been found underground or beneath surface objects more than 155 feet away from water, but generally these frogs generally spend most of their time in or near streams at all times of the year.

Based on CNDDB records, in 2004, this species was observed in Sage Creek, a direct tributary of Elder Creek, approximately 1.25 miles away from the project site. This species was not observed in the development area during the biological resources surveys.

Page 3.3-47, the last paragraph is revised to read:

Impacts of the proposed project on biological communities, including those that are sensitive, are discussed further under **Impacts 3.3-1**, **3.3-2**, **3.3-3**, and **3.3-5**. **Table 3.3-5** also identifies the acreages in the development area that would be affected

with implementation of the mitigation measures discussed in this section (i.e., the mitigated proposed project) ~~and with avoidance of the mapped landslides discussed in **Section 3.5, *Geology and Soils***~~.

Page 3.3-48, the last column in Table 3.3-5, Project Impacts by Biological Community, is revised to read:

Biological Communities	Direct Impact in the Development Area (acres[1])	Total Acreage on the Project Site[2]	Percent of Total Affected on the Project Site	Total Acreage in Napa County	Percent of Total Affected in Napa County	Direct Impact in the Development Area after Mitigation (acres[1])[3]
Upland Annual Grasslands and Forbs Formation	116.22	153.20	75.86	12,153	0.97	104.66 ~~99.10~~
Purple Needlegrass Grassland	0.19	Not quantified	N/A	Not quantified	N/A	0
Beardless Wildrye Grassland	0.05	Not quantified	N/A	Not quantified	N/A	0
Blue Wildrye Grassland	0.08	Not quantified	N/A	Not quantified	N/A	0
Blue Oak Alliance	5.56	35.27	15.76	44,104	0.01	5.56
Coast Live Oak–Blue Oak (Foothill Pine) NFD Association	6.54	165.37	3.95	26,374	0.02	5.83 ~~5.80~~
Interior Live Oak–Blue Oak (Foothill Pine) NFD Association	20.71	251.89	8.17	18,084	0.11	18.52 ~~17.81~~
Mixed Oak Alliance	0.71	68.77	1.03	28,703	0.002	0.71
Scrub Interior Live Oak–Scrub Oak (California Bay–Flowering Ash–Birch Leaf Mountain Mahogany–Toyon-California Buckeye) Mesic East County NFD Super Alliance	4.35	23.51	18.50	11,037	0.04	3.71
Valley Oak–(California Bay–Coast Live Oak–Walnut-Ash) Riparian Forest NFD Association	0.06	17.81	0.34	5,721	0.001	0.06
Urban or Built-Up	2.64	2.64	100	26,461	0.01	2.64
Riverine	0.02	0.02	100	389	0.01	0.02
Unnamed Pond	0.005	Not quantified	N/A	N/A	N/A	0
Total	**157.14**	**718.48**	**–**	**173,026**	**–**	**141.72 ~~135.41~~**

NOTES:

N/A = not applicable; NFD = No Formal Description

1 GIS calculations do not reflect exact acreage of the development area due to mapping platforms, spatial characteristics, and rounding. Because approximate plant communities and project acreages have been corroborated through Napa County GIS mapping, the County considers the values disclosed herein to be adequate for CEQA review and disclosure purposes of the subject application.

2 Project site acreages for biological communities that also occur in the development area are provided; the project site contains other biological communities (i.e., agriculture, Chamise Alliance, Mixed Willow Super Alliance, and Valley Oak Alliance, water, [Bulrush-Cattail] Fresh Water Marsh NFD Super Alliance) that are not included in this table.

3 Reflects implementation of the mitigated proposed project; see **Figure 3.3-6**.

SOURCES: Napa County 2005; data compiled by Environmental Science Associates in 2022 ~~2021~~

Page 3.3-49, the third paragraph is revised to read:

> *California Red-Legged Frog, Foothill Yellow-Legged Frog, and Western Pond Turtle*
> The proposed project could affect western pond turtles, California red-legged frogs, and foothill yellow-legged frogs at the following times during construction:
>
> - Installation of the water diversion structure, if the western pond turtles, foothill yellow-legged frogs, and California red-legged frogs are present in Elder Creek.
> - Installation of the spillway berm and overflow structure, if the western pond turtles and California red-legged frogs are present in the unnamed pond.
> - Vegetation clearing for the installation of the vineyard blocks and the irrigation pipelines in the annual grassland.
> - Construction work near Matheson Reservoir.

Page 3.3-49, the fourth paragraph is revised to read:

> Western pond turtles nest and overwinter in areas less than 492 feet from aquatic habitat (Rosenberg et al. 2009); thus, the use of equipment could cause take of the species, if any turtles are present within 492 feet of the suitable aquatic habitat. Large vehicles present on the site during daily operations would be limited to paved and graded roads and to speeds of less than 15 miles per hour. This analysis assumes that no western pond turtles would be nesting within the paved or graded roads. For this reason, and because the slow-traffic requirements would enable western pond turtles and California red-legged frogs to move out of the way, operational impacts are not considered significant. Since foothill-yellow legged frogs are largely limited in distribution to suitable stream sites and adjacent banks, this analysis assumes that only the installation of the water diversion structure in Elder Creek has the potential to disturb this species.

Page 3.3-49, the last paragraph is revised to read:

> The permanent loss of upland nesting habitat within 100 feet from either side/bank of Elder Creek and the unnamed pond is considered significant. Impacts on California red-legged frogs that are known to use similar upland habitat for overland movement and refuge would be considered significant. The potential impacts on foothill yellow-legged frogs are limited to the work immediately within or adjacent to Elder Creek associated with installation of the water diversion structure. Because the proposed project has the potential to affect western pond turtles, foothill yellow-legged frogs, California red-legged frogs, and their habitats, this impact would be **potentially significant**. Implementation of Mitigation Measure 3.3-1a would also reduce impacts on wildlife corridors, as discussed in further detail under Impact 3.3-4 below. Measures specific to wildlife exclusion fencing

on the project site are discussed in Mitigation Measure 3.3-4, which includes requirements specific to wildlife exclusion fencing configuration, design, and other limitations.

Page 3.3-53, Mitigation Measure 3.3-1b is revised to read:

> **Mitigation Measure 3.3-1b**: A qualified biologist shall provide a worker education and awareness program to all on-site personnel before the start of materials staging or ground-disturbing activities within 492 feet of Elder Creek or the unnamed pond. (The term "qualified" refers to a biologist or biological monitor who is knowledgeable and experienced in the biology and natural history of local herpetology, mammalian, and avian resources with potential to occur at the project site.) The qualified biologist shall explain to construction workers how best to avoid impacts on western pond turtle, foothill yellow-legged frog, and California red-legged frog. This education program shall include topics related to species identification, life history descriptions, and habitat requirements during various life stages. The program should include handouts, illustrations, photographs, and project maps showing areas where minimization and avoidance measures are in place, and where these species would most likely occur if present. Crew members shall sign a sign-in sheet documenting that they received the training. Documentation that the worker education and awareness program has occurred, including any education program handouts, illustrations, photographs, or project maps shall be submitted to Napa County before Project vegetation removal or earth-disturbing activities begin.

Page 3.3-53, Mitigation Measure 3.3-1c is revised to read:

i. A qualified biologist shall conduct a preconstruction survey within 24 hours before the removal of vegetation and initial Project grading within 492 feet of suitable aquatic habitat for western pond turtle and California red-legged frog. A preconstruction survey for foothill yellow-legged frog shall also occur and shall be focused on carefully examining the bank no less than 50 feet of the Elder Creek streambed where the water diversion structure will be installed, where appropriate, and at least 500 feet upstream and downstream of the water diversion structure site. During the preconstruction survey, the qualified biologist shall relocate any western pond turtles found within the proposed development area to suitable habitat away from the construction zone, but outside the development area. Should any active western pond turtle nests be observed within the development area, a minimum 50-foot avoidance buffer shall be established. No work shall occur within the buffer.

ii. Should any California red-legged frogs be present within the development area during the preconstruction survey, no work shall begin. The qualified biologist shall contact Napa County, USFWS, and CDFW within 24 hours of the observation. Work shall not begin until USFWS has provided authorization and the frog has left on its own accord. If foothill yellow-legged

frogs are discovered during the preconstruction survey, the qualified biologist shall contact Napa County and CDFW within 24 hours and project construction shall not begin until CDFW provides written permission to do so. If foothill yellow-legged frogs are discovered during project construction, all work in the immediate area shall cease until the individual moves out of harm's way, as determined by the on-site biological monitor.

iii. A copy of the preconstruction survey results, that includes any find and relocation efforts shall be provided to Napa County and CDFW before Project vegetation removal or earth-disturbing activities begin.

Page 3.3-53, Mitigation Measure 3.3-1d is revised to read:

i. A qualified biological monitor shall directly supervise all vegetation clearing, earth-disturbing activities, and infrastructure installation ~~removal, initial grading activities, and pipe installation~~ occurring within 492 feet of suitable aquatic habitat for western pond turtle, ~~and~~ California red-legged frog, and foothill yellow-legged frog. Before Project vegetation removal or earth-disturbing activities begin, the owner/permittee shall provide documentation to Napa County that a qualified biologist (or biological monitor) is under contract to conduct the supervision, monitoring and reporting specified by this measure.

ii. Should any western pond turtles be detected near the development area during construction, the biological monitor shall relocate any western pond turtles found within the development area to suitable habitat outside the development area, but within the project site.

iii. Should any California red-legged frog be present within the development area during construction, work shall halt. The biological monitor shall contact Napa County, USFWS, and CDFW within 24 hours of the observation. Work shall not resume until the County and USFWS have provided authorization and the frog has left on its own accord. Within 14 days after the final monitoring event, the qualified biological monitor shall submit a letter report to the County summarizing the results of the biological monitoring.

iv. If foothill yellow-legged frogs are discovered during project construction, all work in the immediate area shall cease until the individual moves out of harm's way, as determined by the on-site biological monitor.

Page 3.3-56, the bulleted list in Mitigation Measure 3.3-1f is revised to read:

Mitigation Measure 3.3-1f: If any active Swainson's hawk nests are found within 0.25 mile of the development areas proposed during that phase of construction, the qualified biologist shall contact Napa County and CDFW via phone call or email within one day after the preconstruction survey to report the findings. For this avoidance and minimization requirement, "construction activities" are defined to include operation of heavy equipment for construction (use of bulldozers or

excavators, haul trucks, loaders, and tractors) or other project-related activities that could cause nest or fledging abandonment within 0.25 mile of a nest site between March 1 and September 15.

Should active nest(s) be present within 0.25 mile of development areas, the County and CDFW shall be consulted to develop take avoidance measures including but not limited to the following:

- Establishing appropriate noise buffers.
- Installing high-visibility construction fencing around the buffer zone. Following the installation any such fencing, it shall be inspected and approved by the County.
- Implementing a monitoring and reporting program before any construction activities occur within 0.25 mile of the nest…

Pages 3.3-57 and 3.3-58, Mitigation Measure 3.3-1g is revised to read:

Mitigation Measure 3.3-1g: A qualified biologist shall conduct a habitat assessment for burrowing owls. The survey area shall include a 500-foot radius around the annual grasslands within applicable development areas (i.e., annual grassland habitat). The qualified biologist shall provide a report to Napa County following the completion of the habitat assessment, which shall identify areas of suitable habitat for burrowing owls, if any. If the results of the habitat assessment determine that there is no suitable habitat for burrowing owls, then no further measures regarding burrowing owls are required. If suitable habitat is present, a qualified biologist shall conduct surveys ~~take-avoidance survey for burrowing owl between 14 and 30 days before the start of construction for each Project phase,~~ in accordance with Appendix D of the 2012 Staff Report on Burrowing Owl Mitigation (~~Appendix E;~~ CDFG 2012). (A "qualified biologist" is defined as a person with a minimum of two years of experience implementing the 2012 Staff Report methodology ~~knowledgeable and experienced in the biology and natural history of local avian resources with potential to occur at the project site~~.) ~~The survey area shall include a 500-foot radius around the annual grasslands within applicable development areas (i.e., annual grassland habitat).~~ Time lapses of project activities of greater than 14 days shall trigger subsequent surveys including but not limited to a final survey within 24 hours prior to ground disturbance before construction equipment mobilizes to areas deemed to be suitable habitat for burrowing owls.

~~If the survey is negative, the biologist shall provide a report to Napa County for its records documenting the results of the survey, and no additional measures are required for that phase as long as construction begins within 30 days of the take avoidance survey or does not halt for more than 30 days once construction begins. If either of these conditions occur, an additional take-avoidance survey~~

~~shall be conducted between 14 and 30 days before the start or resumption of construction activities.~~

If burrowing owls are detected on or adjacent to the site, the following restricted activity dates and setback distances recommended per CDFW's Staff Report (CDFG 2012) shall be implemented, unless reduced buffers are accepted by CDFW in writing based on site-specific conditions:

- From April 1 through October 15, low disturbance and medium disturbance activities shall have a 200-meter (656-foot) buffer, while high disturbance activities shall have a 500-meter (1,640-foot) buffer from occupied nests and wintering sites.
- From October 16 through March 31, low disturbance activities shall have a 50-meter (164-foot) buffer, medium disturbance activities shall have a 100-meter (328-foot) buffer, and high disturbance activities shall have a 500-meter (1,640-foot) buffer from occupied nests and wintering sites.

If burrowing owls are present outside of the nesting season, burrowing owls may be passively relocated from the project site and adjacent habitat using CDFW-accepted methods so that construction can proceed. Any required passive relocation of burrowing owls would require CDFW acceptance. If passive relocation of burrowing owls is necessary, a qualified biologist shall prepare a Relocation Plan, including compensatory habitat as described below, for CDFW review and acceptance prior to the start of construction activities. If the survey determines that the project site is actively being used by burrowing owls, or any owls are passively relocated as described above, then compensatory habitat mitigation shall be provided. The habitat mitigation/compensation plan shall be submitted to CDFW for review and approval prior to the start of project activities.

If burrowing owls are observed during surveys, notification shall also be submitted to the California Natural Diversity Database (see https://wildlife.ca.gov/Data/CNDDB/Submitting-Data).

~~If active burrowing owl burrows or nests are observed in applicable development areas or within a 500-foot radius around the development areas containing grassland habitats, the qualified biologist shall prepare an impact assessment and take avoidance measures, in accordance with the 2012 Staff Report on Burrowing Owl Mitigation. The impact assessment and take avoidance measures shall be submitted to the County for review and approval in cooperation with CDFW. The take avoidance measures shall include but not be limited to establishing appropriate disturbance/noise buffers, installing high-visibility construction fencing around the buffer zones, and implementing a monitoring and reporting program before any construction activities occur within 500 feet of the nest/borrow.~~

~~If the qualified biologist determines that certain work would not disturb an active burrow/nest, a reduced avoidance buffer may be established through coordination with the County and CDFW. If the qualified biologist determines that project activities may result in impacts on nesting, occupied, and satellite burrows and/or burrowing owl habitat, the owner/permittee shall delay the start of construction until the qualified biologist determines that the burrowing owls have fledged and/or the burrow is no longer occupied.~~

Page 3.3-60, the paragraph under the bulleted list is revised to read:

With implementation of the mitigation measures in this Draft EIR, approximately 11.56 ~~17.44~~ acres of annual grassland would not be affected by the mitigated proposed project. This would reduce the impact on annual grassland to approximately 104.66 ~~99.10~~ acres, or less than 0.86 ~~0.82~~ percent of annual grassland in Napa County. Further, construction of the proposed project would not result in a significant reduction of suitable foraging habitat, given that migratory birds and raptors use a variety of habitats present in the vicinity of the development areas, depending the species, and that over ~~53~~ 48 acres of grassland habitat and over 500 acres of woodland habit would remain with mitigation incorporated.

Page 3.3-61, Table 3.3-7, Acreages of Biological Communities that Would Be Avoided by Block to Preserve Roosting Bat Habitat within Trees Greater than 30 inches in Diameter at Breast Height, is revised to read:

TABLE 3.3-7
ACREAGES OF BIOLOGICAL COMMUNITIES THAT WOULD BE AVOIDED BY BLOCK TO PRESERVE ROOSTING BAT HABITAT WITHIN TREES GREATER THAN 30 INCHES IN DIAMETER AT BREAST HEIGHT

Vineyard Block	Upland Annual Grasslands and Forbs Formation Acreage	Coast Live Oak–Blue Oak–(Foothill Pine) NFD Association	Interior Live Oak–Blue Oak–(Foothill Pine) NFD Association	Scrub Interior Live Oak–Scrub Oak (California Bay–Flowering Ash–Birch Leaf Mountain Mahogany–Toyon-California Buckeye) Mesic East County NFD Super Alliance
5D	0.19			
5F		0.01		
5H	0.18			
5J	0.05	0.12		
6		0.30		
8	0.45			
17	0.01			
23C			0.15	
23F	0.18			
23G	0.18		0.13	
24G	0.36			
25	0.36			

TABLE 3.3-7
ACREAGES OF BIOLOGICAL COMMUNITIES THAT WOULD BE AVOIDED BY BLOCK TO PRESERVE ROOSTING BAT HABITAT WITHIN TREES GREATER THAN 30 INCHES IN DIAMETER AT BREAST HEIGHT

Vineyard Block	Upland Annual Grasslands and Forbs Formation Acreage	Coast Live Oak–Blue Oak–(Foothill Pine) NFD Association	Interior Live Oak–Blue Oak–(Foothill Pine) NFD Association	Scrub Interior Live Oak–Scrub Oak (California Bay–Flowering Ash–Birch Leaf Mountain Mahogany–Toyon-California Buckeye) Mesic East County NFD Super Alliance
27	0.53			
29B				0.15
Total	**2.52**	**0.75** ~~**0.45**~~	**0.28**	**0.15**

NOTE: Acreages do not include avoided purple needlegrass areas or areas avoided by buffers from waters.

SOURCE: Data compiled by Environmental Science Associates in 2022 ~~2021~~

Page 3.3-62, Mitigation Measure 3.3-1k is revised to read:

Mitigation Measure 3.3-1k: At least 30 days prior to tree removal activities, a qualified biologist shall assess all trees to determine if they contain suitable bat roosting habitat (e.g., cavities, crevices, deep bark fissures). If any trees contain such habitat, bat presence shall be presumed. Trees containing bat roosting habitat shall be removed using the method described below during the following seasonal periods of bat activity:

Prior to maternity season – from approximately March 1 (or when night temperatures are above 45 degrees Fahrenheit and when rains have ceased) through April 15 (when females begin to give birth to young); and prior to winter torpor – from September 1 (when young bats are self-sufficiently volant) until October 15 (before night temperatures fall below 45 degrees Fahrenheit and rains begin).

On day 1, in the afternoon and under the supervision of a qualified biologist, chainsaws only shall be used to remove tree limbs that do not contain suitable bat roosting habitat (e.g., cavities, crevices, deep bark fissures). The next day, the rest of the tree shall be removed.

If bat habitat trees cannot be removed during the above seasonal periods of bat activity, a qualified biologist shall survey the trees to determine if the tree contains a maternity colony or winter torpor bats. If the qualified biologist cannot make this determination with certainty, the presence of maternity colonies or winter torpor bats shall be assumed, and removal of the tree shall be delayed until the seasonal periods of bat activity specified above. If the biologist determines that bats are present but maternity colony or winter torpor bats are absent, then the tree may be removed outside of the above periods of seasonal bat activity using the above two-step tree removal process. If the qualified

biologist determines that bats are absent, then the tree may be removed without bat seasonality or method restrictions.

~~Within 14 days before the start of tree removal associated with Phases 1 and 2 of project construction, a qualified biologist shall conduct a preconstruction survey for special-status bats. If no special-status bats are observed roosting, the biologist shall provide a letter report to Napa County for its records, documenting the results of the survey, and no additional measures are required. If tree removal does not begin within 14 days of the preconstruction survey, or if removal halts for more than 14 days, a new survey shall be conducted.~~

~~If bats are found in any trees proposed for removal, a minimum 10-foot avoidance buffer shall be established around the roost until it is no longer occupied. High-visibility construction fencing shall be installed around the buffer and shall remain in place until the tree is no longer occupied by bats. The fencing shall be inspected and approved by the County before the start of any earthmoving and/or development activities. The trees shall not be removed until a qualified biologist has determined that the roost is no longer occupied by the bats and documentation has been provided to the County that the roost(s) are no longer occupied.~~

Page 3.3-70, the second paragraph is revised to read:

The project site includes approximately 521.30 acres of oak woodland. The proposed project would directly affect approximately 33.52 acres of mixed oak woodland by clearing vegetation for development of the proposed vineyard blocks. (With the mitigated proposed project, this impact would be reduced to 30.62 ~~29.88~~ acres.) This includes 5.56 acres of Blue Oak Alliance (also 5.56 acres with the mitigated proposed project), 6.54 acres of Coast Live Oak–Blue Oak–(Foothill Pine) NFD Association (5.83 ~~5.80~~ acres with the mitigated proposed project), 20.71 acres of Interior Live Oak–Blue Oak (Foothill Pine) NFD Association (18.52 ~~17.81~~ acres with the mitigated proposed project), and 0.71 acre of Mixed Oak Alliance (also 0.71 acre with the mitigated proposed project) (**Table 3.3-5**).

Page 3.3-70, Mitigation Measure 3.3-5a is revised to read:

Mitigation Measure 3.3-5a: In order to mitigate impacts to oak woodland resulting from development of the proposed project, the owner/permittee shall place in permanent protection a Preserve Area of no less than 61.24 acres of oak woodland (30.62 x 2, for a 2:1 preservation ratio), half of which shall be situated on developable lands (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 as shown in Figure 3.3-7) and include the 2.9 acres of woodland removed through other mitigation measures. The preserved woodlands shall have similar habitat value as that being removed, as determined by a qualified

professional knowledgeable and experienced in local botany and habitats. Erosion Control Plan #P17-00432-ECPA shall be revised prior to approval to identify the Preservation Area.

~~The owner/permittee shall preserve a minimum of 60 acres of oak woodland (29.88 x 2, for a 2:1 preservation ratio) in similar habitat in the west-central or northwest portion of the project site.~~

All ~~This~~ acreage designated for preservation shall be identified as such in a mitigation easement with an accredited land trust ~~shall be preserved in an 'enforceable restriction', such as deed restriction, open space/conservation easement with an~~ organization such as the Land Trust of Napa County as the grantee, or other means of permanent protection acceptable to Napa County.

The mitigation easement shall be prepared in a form acceptable to County Counsel and entered into and recorded with the Napa County Recorder's office prior to any earth disturbing activities, grading or vegetation removal, or within 12 months of project approval, whichever occurs first. In no case shall earthmoving activities be initiated until said mitigation easement is recorded.

Any request by the Applicant for an extension of time to record the mitigation easement shall be considered by the PBES Director and shall be submitted to Napa County prior to the 12 month deadline, and shall provide sufficient justification for the extension.

Land placed in protection shall be restricted from development and other uses that would potentially degrade the quality of the habitat (e.g., conversion to other land uses such as agriculture or urban development, and excessive off-road-vehicle use that increases erosion), and should otherwise be restricted by the existing goals and policies of Napa County.

~~The areas to be covered by the enforceable restriction shall be determined by a qualified botanist or biologist, and the determination shall be submitted to Napa County for review and approval. The owner/permittee shall record the enforceable restriction within 60 days of the County's approval of #P17-00432-ECPA. In no case shall the erosion control plan be initiated until said enforceable restriction is recorded.~~

Any county staff time spent assessing and monitoring said provision shall be charged to the permittee, at the rate in effect at the time assessment and monitoring occurs, pursuant to County Fee Policy Part 80.

Page 3.3-71, Mitigation Measure 3.3-5b is revised to read:

> **Mitigation Measure 3.3-5b:** The owner/permittee shall locate and construct the point of diversion and associated infrastructure in an area along Elder Creek that does not contain valley oak trees. The location shall avoid removal and damage to valley oaks by providing a minimum protective buffer that extends to the tree's dripline. "Removal and damage" also means trimming of the tree and/or work occurring within the tree's buffer area. The tree protective buffer fencing shall be inspected and approved by Napa County before construction of the point of diversion begins.
>
> If avoiding valley oak is infeasible during construction of the point of diversion, the owner/permittee shall provide justification of infeasibility, and a removal and replacement plan prepared by a qualified biologist or restoration ecologist, for review and approval by Napa County before construction of the point of diversion commences. If a valley oak or other oaks are removed (which includes substantial trimming of the tree and/or work within the buffer area), they shall be replaced on-site with 15-gallon oak trees at the following ratios: 4:1 removal between 5 and 10 inches dbh, 5:1 removal between 10 and 15 inches dbh, and 10:1 for removal greater than 15 inches dbh. Replacement trees shall be installed and their good health shall be documented before completion and finalization of the erosion control plan. Replacement trees shall be monitored and maintained as necessary for ~~a minimum of~~ seven ~~five~~ years following planting to ensure that they achieve a minimum 80 percent survival. If valley oak plantings are not achieving this success criterion during the monitoring years, the owner/permittee shall replace the plantings and monitor them for an additional seven ~~five~~ years following the replanting until they achieve a minimum 80 percent survival rate.
>
> If avoidance of valley oaks is infeasible for construction of the point of diversion, the owner/permittee shall also preserve a minimum of 0.06 acre of riparian woodland in similar habitat in the west-central or northwest portion of the project site. This acreage shall be preserved in a deed restriction, an open space easement with an organization such as the Land Trust of Napa County as the grantee, or other means of permanent protection acceptable to the County as described in Mitigation Measure 3.3-5a.

Page 3.3-72, the paragraph above Table 3.3-9, Oak Woodland Project Impacts by Biological Community, and Table 3.3-9 are revised to read:

> As shown in **Table 3.3-9**, approximately 61 ~~60~~ acres of the oak woodland would be preserved on the project site in perpetuity. Although the other 429 ~~431~~ acres of oak woodland would not be preserved in perpetuity, they would remain undisturbed within

the project site (521 acres within the project site – 30.62 ~~29.88~~ acres of impact ~~–60.00~~ 61.24 acres of preservation at a 2:1 ratio = 429 ~~431~~acres).

TABLE 3.3-9
OAK WOODLAND PROJECT IMPACTS BY BIOLOGICAL COMMUNITY

Oak Woodland Biological Communities	Direct Impact in the Development Area after Mitigation (acres[1])	2:1 Acreage for Preservation on the Project Site	Total Acreage on the Project Site	Percent of Total Preserved through 2:1 Mitigation on the Project Site	Total Acreage in Napa County	Percent of Total Affected in Napa County
Blue Oak Alliance	5.56	11.12	35.27	31.53	44,104	0.01
Coast Live Oak–Blue Oak (Foothill Pine) NFD Association	5.83 ~~5.80~~	11.66 ~~11.60~~	165.37	7.05 ~~7.01~~	26,374	0.02
Interior Live Oak–Blue Oak (Foothill Pine) NFD Association	18.52 ~~17.81~~	37.04 ~~35.86~~	251.89	14.70 ~~14.24~~	18,084	0.10
Mixed Oak Alliance	0.71	1.42	68.77	2.06	28,703	0.00
Total	**30.62 ~~29.88~~**	**61.24 ~~60.00~~**	**521.30**	**-**	**117,265**	**0.03**

NOTES:

NFD = No Formal Description

1 Reflects implementation of the mitigated proposed project. Geographic Information System calculations do not reflect exact acreage of development area due to rounding.

SOURCES: Napa County 2005; data compiled by Environmental Science Associates in 2022 ~~2021~~

SECTION 3.5, GEOLOGY AND SOILS

Page 3.5-21, Table 3.5-3, Summary of Impact Conclusions—Geology and Soils, is revised to read:

Impact Statement	Impact Conclusion
3.5-1: Construction and operation of the proposed project could cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking.	Less than Significant
3.5-2: Construction and operation of the proposed project could cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides.	Less than Significant ~~with Mitigation~~
3.5-3: Construction and operation of the proposed project could result in substantial soil erosion or the loss of topsoil.	Less than Significant
3.5-4: Construction and operation of the proposed project could occur on a geologic unit or soil that is unstable, or that would become unstable as a result of the project.	Less than Significant ~~with Mitigation~~
3.5-5: Construction and operation of the proposed project could directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.	Less than Significant with Mitigation

Pages 3.5-22 and 3.5-23, the second paragraph of the Impact Conclusion for Impact 3.5-2 is revised to read:

> However, the impact of conducting ~~earthmoving~~ grading activities on the mapped landslide deposits would be **significant**. Based on the aerial photograph review,

geological reconnaissance mapping, and landform analysis by Gilpin Geosciences, ripping in the areas of mapped landslide deposits in proposed vineyard Blocks 16, 24G, 25, and 27 should be limited to a depth of 24 inches. This is noted on page EC-1 of the Erosion Control Plan (**Appendix A**); therefore, this impact would be **less than significant**.

Mitigation Measure: None required.

~~**Mitigation Measure 3.5-2:** Erosion Control Plan #P17-00432-ECPA shall be revised before approval to avoid the mapped landslide deposits in proposed vineyard Blocks 16, 24G, 25, and 27, and provide them with a 50-foot buffer.~~

~~**Impact Significance after Mitigation**: Implementing **Mitigation Measure 3.5-2** would reduce impacts related to landslides to a **less-than-significant** level because areas with mapped landslides would be avoided. The areas with mapped landslides in proposed vineyard Blocks 16, 24G, 25, and 27 are shown as avoided with 50-foot buffers in Figures 3.3-5 and 3.3-6 in **Section 3.3, *Biological Resources***, and the removed acreage is included in the quantification of biological communities that would not be affected by the mitigated proposed project.~~

~~Additionally, the following conditions would be implemented before project approval to ensure that erosion control measures would be installed according to recommendations from Gilpin Geosciences' Engineering Geologic Investigation (2018).~~

~~**Erosion and Runoff Control (i.e., Hydromodification) Installation and Operation—Conditions of Approval:**~~

~~The owner/permittee shall revise Erosion Control Plan #P17-00432-ECPA before approval to include the following recommendations from Gilpin Geosciences' Engineering Geologic Investigation as well as the County's standard hydromodification conditions (also identified below):~~

- ~~Vineyard blocks proposed for the hillsides of the project site shall avoid introducing concentrated surface runoff at drainages presently showing excessive erosion.~~
- ~~The vineyard blocks proposed for sidehill bench and ridgeline/knoll top areas shall control runoff with consideration for the abrupt change in the slope incline downslope of these features.~~
- ~~Surface runoff shall not be concentrated and shall be directed to an outlet outside of the mapped landslide, where it shall flow onto erosion-resistant surfaces.~~
- ~~No grading shall be attempted on the landslide deposits.~~

- ~~Ripping of the vineyard blocks within the landslide deposits shall be limited to a depth of 24 inches.~~
- ~~Permanent Erosion and Runoff Control Measures: Pursuant to Napa County Code Section 18.108.070(L), installation of runoff and sediment attenuation devices and hydromodification facilities, including but not limited to straw wattles and permanent no-till cover, 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 Napa County Code Section 18.108.135, "Oversight and Operation," the qualified professional who has prepared the erosion control plan (#P17-00432-ECPA) shall oversee its implementation throughout the duration of the project, and confirm that the 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 project has received a final inspection from the County or its agent and been found complete, the qualified professional shall inspect the site. The professional shall then certify in writing to the planning director, through an inspection report or formal letter of completion, that all 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 between 75 and 90 percent within the vineyard and vineyard avenues, consistent with the Erosion Control Plan. The cover crop may be strip sprayed in designated vineyard blocks as outlined in the Erosion Control Plan, with a strip no wider than 0.8 to 1.5 feet (9.6 to 18 inches) wide at the base of vines (see the Erosion Control Plan for details), using post-emergent herbicides; no pre-emergent sprays shall be used. 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's "Protocol for Replanting/ Renewal of Approved Non-Tilled Vineyard Cover Crops" dated July 19, 2004, or as amended.~~
- ~~Temporary and permanent erosion control measures and devices shall be free of plastic monofilament netting and should generally be composed of biodegradable or compostable materials, and/or utilize biodegradable or compostable materials in their construction, so that reptiles, amphibians, or animals do not become entangled within them.~~

Page 3.5-29, the Impact Conclusion for Impact 3.5-4 is revised to read:

> The proposed project would implement controls to limit concentrated surface runoff in areas susceptible to erosion. The proposed improvements to surface drainage would also reduce any potential project impacts compared to existing conditions. However, as discussed in **Impact 3.5-2**, the impact related to the potential for soil in the development area to become unstable during development of the proposed project would be potentially significant. Based on the aerial photograph review, geological reconnaissance mapping, and landform analysis by Gilpin Geosciences, ripping in the areas of mapped landslide deposits in proposed vineyard Blocks 16, 24G, 25, and 27 should be limited to a depth of 24 inches. This is noted on page EC-1 of the Erosion Control Plan (**Appendix A**); therefore, this impact would be **less than significant**.
>
> ~~**Impact Significance after Mitigation:** Implementing **Mitigation Measure 3.5-2** would reduce this potentially significant impact to a **less-than-significant level** because mapped landslide deposits would be avoided.~~ Further, the ~~The~~ Erosion and Runoff Control (i.e., Hydromodification) Installation and Operation Conditions of Approval would also ensure that erosion control measures would be installed according to the recommendations from Gilpin Geosciences' Engineering Geologic Investigation (2018) and that the County's standard hydromodification conditions would be implemented.
>
> **Mitigation Measure:** None required.

Pages 3.5-30, Mitigation Measure 3.5-5b for Impact 3.5-5 is revised to read:

> **Mitigation Measure 3.5-5b:** Initial earth-disturbing, grading and/or construction activities as defined by the County Conservation Regulations (NCC Chapter 18.108) in previously undisturbed sediments more than 2 feet deep in areas that are mapped as Great Valley Sequence (KJgvl or Jk)~~, or that exceed 5 feet deep in areas mapped as Quaternary alluvial fan deposits (Qf),~~ shall be monitored on a 'full time' basis during Phases 1 and 2 of ECPA development, in accordance with a Paleontological Monitoring Plan prepared and implemented by a qualified paleontologist, defined as an individual who has experience collecting and salvaging paleontological resources and meets the minimum standards of the SVP (2010). The Plan shall be submitted to Napa County for review and approval before commencement of any vegetation removal or earth-disturbing activities associated with the project.
>
> Within the Plan, the extent, and duration and timing of the monitoring shall be determined by the qualified paleontologist based on the location and extent of proposed ground disturbance within the Great Valley Sequence (KJgvl or Jk) ~~or Quaternary alluvial fan (Qf)~~ deposits. If the qualified paleontologist determines during project monitoring that full-time monitoring is no longer warranted, based

on the specific geologic conditions at the surface or at depth, the paleontologist may recommend (subject to review and approval by Napa County) that monitoring be reduced to periodic spot-checking or cease entirely.

Monitoring shall not be required in any artificial fill or for activities that do not reach the above-stated depth~~s~~ and mapping areas. Should fossils be encountered, construction work shall halt within the Great Valley Sequence ~~or Quaternary alluvial fan~~ deposits until a qualified paleontologist can assess the significance of the find and develop, for Napa County review and approval, additional Plan measures to avoid impacts to paleontological resources. Significant fossils shall be salvaged, following the standards of the SVP (2010) and curated at an accredited repository, such as the University of California Museum of Paleontology or Los Angeles County Museum of Natural History.

Page 3.5-31, the Impact Conclusion for Impact 3.5-5 is revised to read:

Impact Significance after Mitigation: Implementing **Mitigation Measures 3.5-5a** and **3.5-5b** would reduce this potentially significant impact to a **less-than-significant** level because construction personnel would be trained on the procedures to implement if fossils appear, and because ground-disturbing construction activities in previously undisturbed sediments more than 2 feet deep in areas mapped as Great Valley Sequence (KJgvl or Jk) ~~or 5 feet deep in areas mapped as Quaternary alluvial fan deposits (Qf)~~ would be monitored and any fossils encountered would be assessed and avoided and/or salvaged and curated.

SECTION 3.7, HYDROLOGY AND WATER QUALITY

Page 3.7-11, the following new regulatory requirements are added to Section 3.7.2 (Regulatory Setting - State Regulations) after the second paragraph:

Drought Emergency

On April 21, 2021, Governor Gavin Newsom declared a drought emergency in the state of California and as of July 8, 2021, 50 counties are under the drought state of emergency, including Napa County. The Governor directed the Department of Water Resources to increase resilience of water supplies during drought conditions. On June 8, 2021, the Napa County Board of Supervisors adopted a resolution declaring a Proclamation of Local Emergency due to drought conditions which are occurring in Napa County. On October 19, 2021, the Governor issued a proclamation extending the drought emergency statewide. The County requires all discretionary permit applications (such as use permits and ECPAs) to complete necessary water analyses in order to document that sufficient water supplies are available for the proposed project and to implement water saving measures to prepare for periods of limited water supply and to conserve limited groundwater resources.

Executive Order N-7-22

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

Page 3.7-1, the following new regulatory requirements are added to Section 3.7.2 (Regulatory Setting - Local Regulations) after the heading *Local Regulations*:

On March 8, 2022 and August 9, 2022, the Napa County Board of Supervisors adopted resolutions proclaiming a continued state of Local Emergency due to the 2021-2022 drought. On June 7, 2022, the Napa County Board of Supervisors provided direction regarding interim procedures to implement Executive Order N-7-22 for issuance of new, altered or replacement well permits and discretionary projects that would increase groundwater use during the declared drought emergency. The direction limits parcel's groundwater allocation to 0.3 acre feet per acre per year, or no net increase in groundwater use if that threshold is exceeded already for parcels located in the GSA Subbasin. For parcels not located in the GSA Subbasin (i.e., generally located in the hillsides), a parcel-specific Water Availability Analysis is necessary to assess potential impacts on groundwater supplies. Because the proposed project is relying on surface water a parcel specific WAA accessing potential impacts of groundwater pumping is not necessary. Further, because the project site is not within the GSA boundary and utilizing existing surface water rights, it is not subject to Executive Order N-7-22 Section 9b findings.

Page 3.7-26, the following has been added after the last paragraph under the heading Impact Conclusion (see **Appendix E** for the Hydrology and Water Quality Monitoring Plan referred to in the condition):

Further, project approval, if granted, would be subject to the following condition of approval, which would further address the water quality of source water for municipal drinking supplies.

Water Quality Monitoring—Condition of Approval

The owner/permittee shall grant access to the City to defined access points to the waterways upstream and downstream of the development area to conduct water quality

monitoring in accordance with the City and County's 2019 Memorandum of Understanding and 2022 Amendment No. 1 (and any subsequent amendments or extensions thereto) and its associated Hydrology and Water Quality Monitoring Plan. Sample analyses shall be conducted after rain events when the creeks are flowing. Should runoff water exhibit the presence of increased nutrients or any synthetic/ manufactured constituents, the City will work with the owner/permittee to ensure that BMPs are adjusted to protect water quality.

Page 3.7-33, the sixth paragraph is revised to read:

Implementation of Mitigation Measures 3.3-1a, 3.3-1i, and 3.3-2a~~, and 3.5-2~~, which would reduce the project's acreage by approximately 15.42 ~~21.73~~ acres, is anticipated to result in similar hydrologic effects and rates of runoff.

Page 3.7-34, the following has been added under the first paragraph of Impact 3.7-4:

Approximately 104 acres of vineyard exist on the project site and the existing vineyard water demand is 22.1 acre-feet per year on average. In the establishment period for the proposed project, the total expected water demand would be 63.3 acre-feet per year for 111.5 net vine acres as proposed in the ECP; however, this would be spread out over three years/phases as described on Draft EIR page 2-15. After establishment, the water demand for the vines would decrease significantly to about 9.9 acre-feet per year for the entire proposed 111.5 net acre vineyard. Implementation of Mitigation Measures 3.3-1a, 3.3-1i, and 3.3-2a, which would reduce the project's net acreage by approximately 13.81 acres, would result in water demand of approximately 54.7 acre-feet per year in the establishment years and 8.8 acre-feet per year in the long-term for 97.69 net acres of vineyard.

Page 3.7-37, the third paragraph of the **Vineyard Irrigation—Conditions of Approval** term is revised to read:

No new or existing on-site or off-site water sources, other than the surface water evaluated as part of the proposed project (i.e., existing water right License 9125 and Permit 18459) shall be used for irrigation of the proposed vineyard. Any other proposed irrigation source, including but not limited to wells, imported water, new or existing ponds/reservoir(s) or other surface water impoundments, to serve the vineyard, shall not be allowed without additional environmental review, if necessary, and may be subject to modification to this ECPA. Before the start of vegetation clearing and earth-disturbing activities for Phase 1 of ECPA development, the owner/permittee shall demonstrate that a minimum of 28 acre-feet of surface water is in storage on the project site. Before the start of vegetation clearing and earth-disturbing activities for Phase 2 of ECPA development, the owner/permittee shall demonstrate that a minimum of 28 acre-feet of surface water is in storage in addition to the amount necessary to irrigate Phase 1 plantings.

Page 3.7-37, the last paragraph is revised to read:

> With implementation of Mitigation Measures 3.3-1a, 3.3-1i, and 3.3-2a~~, and 3.5-2~~, which would reduce the project acreage by approximately 15.42 ~~21.73~~ acres, anticipated long-term surface water demand and corresponding downstream flow impairment would ~~slightly~~ decrease by approximately 1.1 acre-feet per year.

SECTION 3.10, TRANSPORTATION

Page 3.10-7, the second paragraph is revised to read:

> Implementation of Mitigation Measures 3.3-1a, 3.3-1i, and 3.3-2a~~, and 3.5-2~~, which would reduce the project's acreage by approximately 15.42 ~~21.73~~ acres, may further reduce the number of project-generated vehicles.

Page 3.10-10, the last paragraph is revised to read:

> Implementation of Mitigation Measures 3.3-1a, 3.3-1i, and 3.3-2a~~, and 3.5-2~~, which would reduce the project's acreage by approximately 15.42 ~~21.73~~ acres, may further reduce the number of project-generated vehicles.

SECTION 4.1, CUMULATIVE IMPACTS

Page 4-4, the second and third paragraphs are revised to read:

> The 3-mile radius around the project site contains approximately 29,544 acres. In 1993, approximately 830 acres (2.8 percent) of the land within this radius were developed as vineyard. As shown in **Table 4-1**, since 1993, approximately 192 ~~360~~ additional acres (0.7 ~~1.2~~ percent of the 3-mile radius) have been developed as vineyard, for a total of ~~4~~ 3.5 percent (approximately 1,022 ~~1,190~~ acres) of the 3-mile radius containing vineyard.
>
> Based on an evaluation of Napa County's Geographic Information System (GIS) layer identifying potentially productive soils within the 3-mile radius, approximately 4,818 acres (16 percent) of the land within this radius have the potential to be developed as vineyard. This, in conjunction with existing and approved vineyard development (approximately 1,022 ~~1,190~~ acres), results in a total potential buildout of approximately 5,840 ~~6,008~~ acres, or 20 percent of the 3-mile radius...

Page 4-5, Table 4-1, Cumulative Erosion Control Plan Projects List within 3 miles of the Proposed Project, is revised to read:

TABLE 4-1
CUMULATIVE EROSION CONTROL PLAN PROJECTS LIST WITHIN 3 MILES OF THE PROPOSED PROJECT (1993–2020)

File Number	Date Approved	Applicant Name	Vineyard Development Acres	Number	Date Approved	Applicant Name	Vineyard Development Acres
1993403	March 24, 1994	James Bushey	42	~~200900161~~	~~July 6, 2009~~	~~Mary Ann Gilson~~	~~11~~
~~1994295~~	~~May 18, 1995~~	~~Napa Valley Vineyard Engineering~~	~~12.4~~	~~201100114~~	~~March 31, 2011~~	~~Stagecoach Vineyards~~	~~106.8~~
~~1995126~~	~~October 14, 1995~~	~~Christina Vineyards~~	~~13~~	~~201100454~~	~~February 14, 2012~~	~~Sorrento Inc.~~	~~23.9~~
1996512	March 25, 1997	Patrick Kuleto	22	~~201200116~~	~~April 12, 2012~~	~~Somerston Vineyards~~	~~8.5~~
1997157	October 20, 1997	Jeffrey Gwinn	28	201300021	June 6, 2013	Fingerman	3
1997600	August 7, 1998	Priest Ranch–Orion Vineyards	20.56	~~201500132~~	~~May 4, 2015~~	~~Sorrento Inc. & KJS Investment Properties LLC~~	~~30.6~~
~~1996586~~	~~November 9, 1998~~	~~Stagecoach Vineyards~~	~~116~~	~~201500131~~	~~May 4, 2015~~	~~Sorrento Inc. & KJS Investment Properties LLC~~	~~30.3~~
1997544	March 5, 1999	Patrick Kuleto	19.29	~~201500256~~	~~September 2, 2015~~	~~Somerston Vineyards~~	~~31.1~~
~~2000078~~	~~August 18, 2000~~	~~Chappellet Vineyard~~	~~53~~	~~201500132~~	~~May 4, 2015~~	~~Sorrento Inc. & KJS Investment Properties LLC~~	~~30.6~~
1998240	August 3, 2001	Montesole/Priest	12.21	201500227	February 22, 2016	Phillip Sunseri	3.78
~~2001147~~	~~December 10, 2001~~	~~Lynch Ranch LLC~~	~~15.01~~	~~201600185~~	~~June 10, 2016~~	~~Somerston Vineyards~~	~~2.9~~
~~2002152~~	~~May 29, 2002~~	~~Barbour Vineyards~~	~~39.42~~	~~201700257~~	~~July 19, 2017~~	~~Sage Creek Vineyard ECP Replant II~~	~~37.35~~
01126	August 23, 2002	Greg Mountain Ranch LLC	3.3	~~201700285~~	~~August 3, 2017~~	~~Sage Canyon Track II Replant~~	~~11.9~~
2003490	August 23, 2005	Don DeCristo	1.4	~~201700242~~	~~August 15, 2017~~	~~Capra Company Track I Replant~~	~~71.84~~
20050359	May 5, 2006	Priest Ranch	12.3	201600337	November 27, 2017	Phelan Ranch	18.6
2000399	June 23, 2006	George Noble	5.06	~~201900063~~	~~March 25, 2019~~	~~Gallo/Stagecoach Vineyards~~	~~10.6~~
~~200601143~~	~~August 11. 2006~~	~~Kuleto Estates~~	~~6.5~~	~~201900500~~	~~January 27, 2020~~	~~Somerston Vineyards~~	~~15.9~~
~~2003522~~	~~March 8, 2007~~	~~Jacquelyn Joy Cordes~~	~~24~~	201800446	Pending	Gallo Stagecoach North	116.2
~~200700394~~	~~July 17, 2007~~	~~Somerston Vineyard~~	~~28.9~~	~~202000220~~	~~Pending~~	~~Prince Track I Replant~~	~~41.3~~
~~200700030~~	~~June 4, 2008~~	~~De Cristo Vineyard~~	~~0~~				

NOTE: ECP = Erosion Control Plan

SOURCE: Data compiled by Napa County in ~~2020~~ 2022

Page 4-6, the first paragraph is revised to read:

> The acreage of vineyard development including approved vineyard projects in the cumulative environment (i.e., the 3-mile radius) over the last 27 years (1993–2020) was used to estimate reasonably foreseeable vineyard development for the next three to five years. Over the past 27 years, approximately 7.1 ~~13.3~~ acres of agriculture per year (192 ~~360~~ divided by 27) were developed within the 3-mile radius. Considering Napa County policies and other site selection factors that limit the amount of land that can be converted to vineyard, the development of approximately 21–36 ~~40–67~~ acres within the 3-mile radius over the next three to five years is considered a reasonable estimate…

Page 4-9, the second paragraph is revised to read:

> With implementation of Mitigation Measure 3.3-1a, Mitigation Measure 3.3-1i, and Mitigation Measure 3.3-2a~~, and Mitigation Measure 3.5-2~~, which would reduce the project's acreage by approximately 15.42 ~~21.73~~ acres, the project would develop 141.72 ~~135.41~~ gross acres of vineyard. This acreage represents about four ~~two~~ times the total vineyard area expected to be developed in the 3-mile radius from the project site in the next five years. This area equals approximately 2.9 ~~2.8~~ percent of the total potential vineyard area (4,818 acres) within that radius.

CHAPTER 5, ALTERNATIVES

Page 5-4, the second paragraph is revised to read:

> Because ground-disturbing activities would not occur under the No Project Alternative, impacts on biological resources, potential impacts on previously unrecorded cultural and tribal cultural resources, geology and paleontological resources, and conflicts with applicable sections of the Napa County Code and Napa County General Plan would not occur. The approximately 157.14 acres of biological communities in the development area would remain on the project site. No potential impacts on special-status wildlife species would occur, and the approximately 33.52 acres of mixed oak woodland (or 30.62 ~~29.88~~ acres with the mitigated proposed project) would remain on the project site. Therefore, the No Project Alternative would not require implementation of Mitigation Measures 3.3-1a through 3.3-1k, 3.3-2a, 3.3-2b, 3.3-3a, 3.3-3b, 3.3-3c, 3.3-4, 3.3-5a, 3.3-5b, 3.4-1a, 3.4-1b, 3.4-2, 3.4-3, ~~3.5-2,~~ 3.5-5a, and 3.5-5b as identified for the proposed project to reduce impacts on biological resources, cultural and tribal cultural resources, geology and paleontological resources, and land use and planning to less-than-significant levels.

Pages 5-4 and 5-5, the first and second paragraphs under Section 5.3.2 are revised to read:

> The Reduced Intensity and Increased Stream and Wetland (Aquatic Resource) Setbacks Alternative includes the areas from the mitigated proposed project, which reduces the

project acreage by 15.42 ~~21.73~~ gross acres (and avoids development of Block~~s~~ 5D~~, 16, 24G, 25, and 27~~) through avoidance of biological resources ~~and mapped landslides~~ through implementation of Mitigation Measures 3.3-1a, 3.3-1i, and 3.3-2a~~, and 3.5-2~~, as described in **Section 3.3, *Biological Resources*** ~~and **Section 3.5, *Geology and Soils***~~. The Reduced Intensity and Increased Stream and Wetland (Aquatic Resource) Setbacks Alternative also includes setbacks from all streams based on slope (pursuant to current Napa County Code Section 18.108.025) and 50-foot setbacks from wetlands pursuant to current Napa County Code Section 18.108.026. As a result, less vineyard area would be developed than under the proposed project.

The Reduced Intensity and Increased Stream and Wetland (Aquatic Resource) Setbacks Alternative would consist of approximately 139.75 ~~134.16~~ gross acres of proposed vineyard, as shown in **Figure 5-1**. As described in **Table 5-1**, approximately 17.39 ~~22.98~~ gross acres would not be converted to vineyard compared to the proposed project.

Page 5-5, the first and second paragraphs under the heading *Ability to Meet Project Objectives* are revised to read:

The Reduced Intensity and Increased Stream and Wetland (Aquatic Resource) Setbacks Alternative would partially meet the project objectives, as it would allow for conversion of a portion of the project site (approximately 139.75 ~~134.16~~ gross acres) to vineyard; beneficially use surface water through Water Right License 9125 and Permit 18459; minimize impacts on riparian and aquatic resources by modifying Permit 18459 to allow construction of the storage reservoir at an offstream location rather than onstream; minimize soil erosion; protect water quality; preserve the on-site grasslands and woodlands; minimize impacts on rare, endangered, and candidate plant and animal species to the extent feasible; and develop a vineyard on portions of the property suitable for the cultivation of high-quality wine grapes. This alternative would provide opportunities for vineyard employment and economic development in Napa County.

However, the Reduced Intensity and Increased Stream and Wetland (Aquatic Resource) Setbacks Alternative would not meet all of the project objectives, specifically the goal to develop up to approximately 111.5 net acres of vineyard within an approximately 156.8-acre conversion area on the portions of the site that are suitable for cultivation of high-quality wine grapes. The alternative would avoid an additional 1.97 ~~1.25~~ acres within the project site compared to the mitigated proposed project to further minimize impacts on streams and wetland habitat to less-than-significant levels. The Reduced Intensity and Increased Stream and Wetland (Aquatic Resource) Setbacks Alternative would develop approximately 97.44 ~~94.89~~ net acres of vineyard within an approximately 139.75 ~~134.16~~ acre development area (**Table 5-2**). This would in turn slightly reduce the opportunities for vineyard employment and economic development in Napa County.

Page 5-6, Table 5-1, Biological Communities, Proposed Project, Mitigated Proposed Project, and Reduced Intensity and Increased Stream and Wetland (Aquatic Resources) Setbacks Alternative, is revised to read:

TABLE 5-1
BIOLOGICAL COMMUNITIES, PROPOSED PROJECT, MITIGATED PROPOSED PROJECT, AND REDUCED INTENSITY AND INCREASED STREAM AND WETLAND (AQUATIC RESOURCE) SETBACKS ALTERNATIVE

Biological Communities	Project Site	Proposed Project	Mitigated Proposed Project	Reduced Intensity and Increased Stream and Wetland (Aquatic Resource) Setbacks Alternative
Upland Annual Grasslands and Forbs Formation	153.2	116.22	104.66 ~~99.10~~	103.08 ~~98.23~~
Purple Needlegrass Grassland	Not quantified	0.19	0	0
Beardless Wildrye Grassland	Not quantified	0.05	0	0
Blue Wildrye Grassland	Not quantified	0.08	0	0
Blue Oak Alliance	35.27	5.56	5.56	5.56
Coast Live Oak-Blue Oak (Foothill Pine) NFD Association	165.37	6.54	5.83 ~~5.80~~	5.75 ~~5.72~~
Interior Live Oak-Blue Oak (Foothill Pine) NFD Association	251.89	20.71	18.52 ~~17.81~~	18.22 ~~17.51~~
Mixed Oak Alliance	68.77	0.71	0.71	0.71
Scrub Interior Live Oak-Scrub Oak (California Bay-Flowering Ash-Birch Leaf Mountain Mahogany-Toyon-California Buckeye) Mesic East County NFD Super Alliance	23.51	4.35	3.71	3.71
Valley Oak-(California Bay-Coast Live Oak-Walnut-Ash) Riparian Forest NFD Association	17.81	0.06	0.06	0.06
Urban or Built-Up	2.64	2.64	2.64	2.64
Riverine	0.02	0.02	0.02	0.02
Total	**718.48**	**157.14**	**141.72 ~~135.41~~**	**139.75 ~~134.16~~**

NOTE:

GIS calculations do not reflect the exact acreage of the development area due to mapping platforms, spatial characteristics, and rounding. Because approximate plant communities and project acreages have been corroborated through County GIS mapping, the values disclosed herein are considered by the County to be adequate for CEQA review and disclosure purposes of the subject application.

SOURCE: Data compiled by Environmental Science Associates in 2022 ~~2021~~

Pages 5-9 and 5-10, Table 5-2, Acreages of Biological Communities by Vineyard Block Under the Increased Stream and Wetland (Aquatic Resources) Setbacks Alternative, is revised as shown on the following pages:

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TABLE 5-2
ACREAGES OF BIOLOGICAL COMMUNITIES BY VINEYARD BLOCK UNDER THE INCREASED STREAM AND WETLAND (AQUATIC RESOURCE) SETBACKS ALTERNATIVE

Blocks	Biological Communities									
	Upland Annual Grasslands and Forbs Formation	Blue Oak Alliance	Coast Live Oak-Blue Oak (Foothill Pine) NFD Association	Interior Live Oak-Blue Oak (Foothill Pine) NFD Association	Scrub Interior Live Oak - Scrub Oak - (California Bay - Flowering Ash - Birch Leaf Mountain Mahogany - Toyon - California Buckeye) Mesic East County NFD Super Alliance	Mixed Oak Alliance	Valley Oak-(California Bay-Coast Live Oak-Walnut-Ash) Riparian Forest NFD Association	Riverine	Urban/Built Up	Total
1	0.78									**0.78**
2	0.61									**0.61**
3	0.85									**0.85**
4A	0.30									**0.30**
4B	0.18									**0.18**
5A	0.38									**0.38**
5B	0.06									**0.06**
5C	0.56									**0.56**
5E	0.06									**0.06**
5F	2.83		0.21							**3.03**
5G	0.17									**0.17**
5H	0.81									**0.81**
5J	1.05		0.04							**1.09**
6			0.28							**0.28**
7	0.99									**0.99**
8	0.84									**0.84**
9A	1.22									**1.22**
9B	1.15									**1.15**
9C	0.73									**0.73**
9D	2.43		0.07							**2.50**
9E			0.64							**0.64**
9F			1.58							**1.58**
9G			0.79							**0.79**
9H			0.09							**0.09**
10									0.21	**0.21**
11	0.29									**0.29**
12				1.27						**1.27**
13A					0.34				0.25	**0.58**
13B									0.95	**0.95**
14				0.89						**0.89**
15A			0.24	0.07						**0.31**
15B			0.18	0.94						**1.12**
16				0.23						**0.23**
17	0.19									**0.19**
18A				0.11						**0.11**
18B				0.51						**0.51**
19		0.80		0.30						**1.09**
20A		1.79		0.47						**2.25**

TABLE 5-2
ACREAGES OF BIOLOGICAL COMMUNITIES BY VINEYARD BLOCK UNDER THE INCREASED STREAM AND WETLAND (AQUATIC RESOURCE) SETBACKS ALTERNATIVE

Blocks	Biological Communities									
	Upland Annual Grasslands and Forbs Formation	Blue Oak Alliance	Coast Live Oak-Blue Oak (Foothill Pine) NFD Association	Interior Live Oak-Blue Oak (Foothill Pine) NFD Association	Scrub Interior Live Oak - Scrub Oak - (California Bay - Flowering Ash - Birch Leaf Mountain Mahogany - Toyon - California Buckeye) Mesic East County NFD Super Alliance	Mixed Oak Alliance	Valley Oak-(California Bay-Coast Live Oak-Walnut-Ash) Riparian Forest NFD Association	Riverine	Urban/Built Up	Total
20B				0.18						**0.18**
21		0.09		3.75						**3.84**
22				0.79						**0.79**
23A	1.78									**1.78**
23B	1.14									**1.14**
23C	0.01			0.68						**0.69**
23D		1.60		0.45						**2.05**
23E	0.26									**0.26**
23F	5.17									**5.17**
23G	1.19			0.99						**2.18**
24A	3.48									**3.48**
24B	0.17									**0.17**
24C	4.57									**4.57**
24D	0.17									**0.17**
24E	15.49									**15.49**
24F	2.74									**2.74**
24G	1.39									**1.39**
25	0.21									**0.21**
26	3.60									**3.60**
27	0.10									**0.10**
28					0.35					**0.35**
29A				0.97	0.93					**1.90**
29B					1.05					**1.05**
30	0.65									**0.65**
31	0.80									**0.80**
32			0.04	0.53		0.60				**1.18**
33A	1.92									**1.92**
33B	0.20									**0.20**
33C	2.48									**2.48**
33D	2.17									**2.17**
33E	4.44									**4.44**
Clearing Limits	31.68 ~~29.17~~	1.29	1.59 ~~1.56~~	5.11 ~~4.62~~	1.04	0.10			1.23	**42.05 ~~39.01~~**
Creek Crossing/Point of Diversion	0.17						0.06	0.02		**0.26**
Total	**103.08 ~~98.23~~**	**5.56**	**5.75 ~~5.72~~**	**18.22 ~~17.51~~**	**3.71**	**0.71**	**0.06**	**0.02**	**2.64**	**139.75 ~~134.16~~**

NOTE:

GIS calculations do not reflect the exact acreage of the development area due to mapping platforms, spatial characteristics, and rounding. Because approximate plant communities and project acreages have been corroborated through County GIS mapping, the values disclosed herein are considered by the County to be adequate for CEQA review and disclosure purposes of the subject application.

SOURCE: Data compiled by Environmental Science Associates in 2022 ~~2021~~

Page 5-11, the first sentence of the first paragraph is revised to read:

> The Reduced Intensity Stream and Wetland (Aquatic Resource) Setbacks Alternative would include construction and operation and maintenance activities similar to those of the proposed project, although the acreage developed would be less (approximately 97.44 ~~94.89~~ net acres of vineyard within an approximately 139.75 ~~134.16~~-acre development area).

Page 5-11, the first sentence of the fourth paragraph is revised to read:

> The Reduced Intensity Stream and Wetland (Aquatic Resource) Setbacks Alternative would include the development of a smaller vineyard and clearing-limits area (17.39 ~~22.98~~ gross acres less than under the proposed project).

Page 5-12, the first sentence in the second paragraph is revised to read:

> Compared to the mitigated proposed project, gross acres would be reduced by approximately 1.97 ~~1.25~~ acres under the Reduced Intensity Stream and Wetland (Aquatic Resource) Setbacks Alternative, including approximately 1.58 ~~0.87~~ acre of annual grassland and 0.08 ~~0.80~~ acre of coast live oak (**Table 5-1**).

Page 5-12, the fourth sentence in the third paragraph is revised to read:

> Implementation of Mitigation Measures ~~3.5-2,~~ 3.5-5a~~,~~ and 3.5-5b ~~and erosion and runoff control installation and operation conditions of approval~~ identified for the proposed project in **Section 3.5, *Geology and Soils*** would minimize impacts of the Reduced Intensity Stream and Wetland (Aquatic Resource) Setbacks Alternative on geology and soils to less-than-significant levels.

Page 5-13, the first sentence in the first full paragraph is revised to read:

> Although construction and operation and maintenance activities would be similar to those for the proposed project, the Reduced Intensity and Increased Stream and Wetland (Aquatic Resource) Setbacks Alternative would develop fewer vineyard acres than the proposed project (approximately 97.44 ~~94.89~~ net acres of vineyard within an approximately 139.75 ~~134.16~~-acre development area).

Page 5-13, the first and second paragraphs under Section 5.5.3 are revised to read:

> The Reduced Vegetation Removal/Grading and Road Use Alternative includes the areas from the mitigated proposed project, which reduces the project acreage by 15.42 ~~21.73~~ gross acres (and avoids development of vineyard Block~~s~~ 5D~~, 16, 24G, 25, and 27~~) through avoidance of biological resources ~~and mapped landslides~~ through implementation of Mitigation Measures 3.3-1a, 3.3-1i, and 3.3-2a, ~~and 3.5-2,~~ as described in **Section 3.3, *Biological Resources*** ~~and **Section 3.5, *Geology and Soils***~~. The

Reduced Vegetation Removal/Grading and Road Use Alternative also reduces blocks and block configurations as compared to the proposed project to limit vegetation removal/grading and road use, development, maintenance, and upgrades for areas that contain minimal vineyard development. Specifically, this alternative avoids the development of vineyard Blocks 5E, 6, 8, 9H, 10, 11, 13A, 14, 15A, 15B, 16, 18A, 18B, 20B, 23D, 24D, 24G, 27, 28, 29A, 29B, 30, 31, 32, and 33B. As a result, less vineyard would be developed than under the proposed project.

The Reduced Vegetation Removal/Grading and Road Use Alternative would consist of approximately 115.31 ~~111.82~~ gross acres of proposed vineyard, as shown in **Figure 5-2.** As described in **Table 5-3**, approximately 41.83 ~~45.32~~ gross acres would not be converted to vineyard compared to the proposed project.

Page 5-14, Table 5-3, Biological Communities, Proposed Project, Mitigated Proposed Project, and Reduced Vegetation Removal/Grading and Road Use Alternative, is revised to read:

TABLE 5-3
BIOLOGICAL COMMUNITIES, PROPOSED PROJECT, MITIGATED PROPOSED PROJECT, AND REDUCED VEGETATION REMOVAL/GRADING AND ROAD USE ALTERNATIVE

Biological Communities	Project Site	Proposed Project	Mitigated Proposed Project	Reduced Vegetation Removal/ Grading and Road Use Alternative
Upland Annual Grasslands and Forbs Formation	153.2	116.22	104.66 ~~99.10~~	95.91 ~~92.43~~
Purple Needlegrass Grassland	Not quantified	0.19	0	0
Beardless Wildrye Grassland	Not quantified	0.05	0	0
Blue Wildrye Grassland	Not quantified	0.08	0	0
Blue Oak Alliance	35.27	5.56	5.56	3.60
Coast Live Oak-Blue Oak (Foothill Pine) NFD Association	165.37	6.54	5.83 ~~5.80~~	3.57
Interior Live Oak-Blue Oak (Foothill Pine) NFD Association	251.89	20.71	18.52 ~~17.81~~	10.49
Mixed Oak Alliance	68.77	0.71	0.71	0.00
Scrub Interior Live Oak-Scrub Oak (California Bay-Flowering Ash-Birch Leaf Mountain Mahogany-Toyon-California Buckeye) Mesic East County NFD Super Alliance	23.51	4.35	3.71	0.00
Valley Oak-(California Bay-Coast Live Oak-Walnut-Ash) Riparian Forest NFD Association	17.81	0.06	0.06	0.06
Urban or Built-Up	2.64	2.64	2.64	1.65
Riverine	0.02	0.02	0.02	0.02
Total	**718.48**	**157.14**	**141.72 ~~135.41~~**	**115.31 ~~111.82~~**

NOTE:

GIS calculations do not reflect the exact acreage of the development area due to mapping platforms, spatial characteristics, and rounding. Because approximate plant communities and project acreages have been corroborated through County GIS mapping, the values disclosed herein are considered by the County to be adequate for CEQA review and disclosure purposes of the subject application.

SOURCE: Data compiled by Environmental Science Associates in 2022 ~~2021~~

Page 5-17, the first sentence in the first paragraph is revised to read:

> The Reduced Vegetation Removal/Grading and Road Use Alternative would partially meet the project objectives, as it would allow for conversion of a portion of the project site (115.31 ~~111.82~~ gross acres) to vineyard; beneficially use surface water through Water Right License 9125 and Permit 18459; minimize impacts on riparian and aquatic resources by modifying Permit 18459 to allow construction of the storage reservoir at an offstream location rather than onstream; minimize soil erosion; protect water quality; preserve the on-site grasslands and woodlands; minimize impacts on rare, endangered, and candidate plant and animal species to the extent feasible; and develop a vineyard on portions of the property suitable for the cultivation of high-quality wine grapes.

Page 5-17, the second and third sentences of the second paragraph are revised to read:

> The alternative would avoid an additional 26.41 ~~23.58~~ acres within the project site compared to the mitigated proposed project to limit vegetation removal/grading and road use, development, maintenance, and upgrades for areas that contain minimal vineyard development. The Reduced Vegetation Removal/Grading and Road Use Alternative would develop approximately 82.09 ~~80.15~~ net acres of vineyard within an approximately 115.31 ~~111.82~~ acre development area (**Table 5-4**).

Page 5-17, the first sentence of the third paragraph is revised to read:

> The Reduced Vegetation Removal/Grading and Road Use Alternative would include construction and operation and maintenance activities similar to those of the proposed project, although the acreage developed would be less (approximately 82.09 ~~80.15~~ net acres of vineyard within an approximately 115.31 ~~111.82~~ acre development area).

Page 5-18, the first sentence of the second paragraph is revised to read:

> The Reduced Vegetation Removal/Grading and Road Use Alternative would include the development of a smaller vineyard and clearing-limits area (41.83 ~~45.32~~ gross acres less than under the proposed project).

Pages 5-19 and 5-20, Table 5-4, Acreages of Biological Communities by Vineyard Block Under the Reduced Vegetation Removal/Grading and Road Use Alternative, is revised to read as shown on the following pages:

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TABLE 5-4
ACREAGES OF BIOLOGICAL COMMUNITIES BY VINEYARD BLOCK UNDER THE REDUCED VEGETATION REMOVAL/GRADING AND ROAD USE ALTERNATIVE

Blocks	Biological Communities									
	Upland Annual Grasslands and Forbs Formation	Blue Oak Alliance	Coast Live Oak-Blue Oak (Foothill Pine) NFD Association	Interior Live Oak-Blue Oak (Foothill Pine) NFD Association	Scrub Interior Live Oak - Scrub Oak - (California Bay - Flowering Ash - Birch Leaf Mountain Mahogany - Toyon - California Buckeye) Mesic East County NFD Super Alliance	Mixed Oak Alliance	Valley Oak-(California Bay-Coast Live Oak-Walnut-Ash) Riparian Forest NFD Association	Riverine	Urban/Built Up	Total
1	0.78									**0.78**
2	0.61									**0.61**
3	0.85									**0.85**
4A	0.30									**0.30**
4B	0.18									**0.18**
5A	0.38									**0.38**
5B	0.06									**0.06**
5C	0.56									**0.56**
5F	2.83		0.21							**3.03**
5G	0.17									**0.17**
5H	0.81									**0.81**
5J	1.05		0.04							**1.09**
7	0.99									**0.99**
9A	1.22									**1.22**
9B	1.15									**1.15**
9C	0.73									**0.73**
9D	2.43		0.07							**2.50**
9E			0.12							**0.12**
9F			1.58							**1.58**
9G			0.79							**0.79**
12				1.27						**1.27**
13B									0.95	**0.95**
17	0.19									**0.19**
19		0.80		0.30						**1.09**
20A		1.79		0.47						**2.25**
21		0.09		3.75						**3.84**
22				0.79						**0.79**
23A	1.78									**1.78**
23B	1.14									**1.14**
23C	0.01			0.68						**0.69**
23E	0.26									**0.26**
23F	5.17									**5.17**
23G	1.19			0.99						**2.18**
24A	3.48									**3.48**

TABLE 5-4
ACREAGES OF BIOLOGICAL COMMUNITIES BY VINEYARD BLOCK UNDER THE REDUCED VEGETATION REMOVAL/GRADING AND ROAD USE ALTERNATIVE

Blocks	Biological Communities									
	Upland Annual Grasslands and Forbs Formation	Blue Oak Alliance	Coast Live Oak-Blue Oak (Foothill Pine) NFD Association	Interior Live Oak-Blue Oak (Foothill Pine) NFD Association	Scrub Interior Live Oak - Scrub Oak - (California Bay - Flowering Ash - Birch Leaf Mountain Mahogany - Toyon - California Buckeye) Mesic East County NFD Super Alliance	Mixed Oak Alliance	Valley Oak-(California Bay-Coast Live Oak-Walnut-Ash) Riparian Forest NFD Association	Riverine	Urban/Built Up	Total
24B	0.17									**0.17**
24C	4.57									**4.57**
24E	15.43									**15.43**
24F	2.74									**2.74**
24G	1.39									**1.39**
26	3.25									**3.25**
33A	1.92									**1.92**
33C	2.48									**2.48**
33D	2.17									**2.17**
33E	4.44									**4.44**
Clearing Limits	28.32 ~~26.78~~	0.92	0.77	2.25					0.70	**32.96 ~~31.42~~**
Creek Crossing/Point of Diversion	0.17						0.06	0.02		**0.26**
Total	**95.91 ~~92.43~~**	**3.60**	**3.57**	**10.49**	**0**	**0**	**0.06**	**0.02**	**1.65**	**115.31 ~~111.82~~**

NOTE:
GIS calculations do not reflect the exact acreage of the development area due to mapping platforms, spatial characteristics, and rounding. Because approximate plant communities and project acreages have been corroborated through County GIS mapping, the values disclosed herein are considered by the County to be adequate for CEQA review and disclosure purposes of the subject application.

SOURCE: Data compiled by Environmental Science Associates in 2022 ~~2021~~

Page 5-21, the first paragraph and bulleted list are revised to read:

Compared to the mitigated proposed project, gross acres would be reduced by approximately 26.41 ~~23.58~~ acres under the Reduced Vegetation Removal/Grading and Road Use Alternative; biological communities are summarized in **Table 5-3**. Vegetation removal would be reduced by avoiding development of vineyard Blocks 5E, 6, 8, 9H, 10, 11, 13A, 14, 15A, 15B, 16, 18A, 18B, 20B, 23D, 24D, 24G, 27, 28, 29A, 29B, 30, 31, 32, and 33B. In addition, avoidance of the following vineyard blocks would further reduce impacts on biological resources:

- Block 5E: Mapped as Upland Annual Grasslands and Forbs Formation; avoidance would also protect areas around the purple needlegrass grassland that would be avoided with a 50-foot buffer with implementation of Mitigation Measure 3.3-2a and increase the distance from mapped possible waters of the United States.
- Block 6: Mapped as Coast Live Oak-Blue Oak-(Foothill Pine) NFD Association and Interior Live Oak-Blue Oak-(Foothill Pine) NFD Association; avoidance would also protect areas around mapped oak trees greater than 30 inches diameter at breast height that would be avoided with a 50-foot buffer with implementation of Mitigation Measure 3.3-1i and increase the wildlife corridor along Elder Creek.
- Block 8: Mapped as Upland Annual Grasslands and Forbs Formation; avoidance would also protect areas around the purple needlegrass grassland that would be avoided with a 50-foot buffer with implementation of Mitigation Measure 3.3-2a, mapped oak trees that would be avoided with a 50-foot buffer with implementation of Mitigation Measure 3.3-1i, and increase the distance from the wetland swale and mapped possible waters of the U.S.
- Blocks 15A and 15B: Mapped as Coast Live Oak-Blue Oak-(Foothill Pine) NFD Association and Interior Live Oak-Blue Oak-(Foothill Pine) NFD Association; avoidance would also preserve areas surrounding the blue wildrye grassland that bisects vineyard Block 15A that would be avoided with a 50-foot buffer with implementation of Mitigation Measure 3.3-2a.
- Block 16: Mapped as Interior Live Oak-Blue Oak (Foothill Pine) NFD Association.
- Blocks 18A and 18B: Mapped as Interior Live Oak-Blue Oak-(Foothill Pine) NFD Association; avoidance would protect areas generally containing high biological diversity, as well as blue wildrye grassland in proposed vineyard Block 18A that would be avoided with a 50-foot buffer with implementation of Mitigation Measure 3.3-2a.
- Blocks 24G: Mapped as Upland Annual Grasslands and Forbs Formation; avoidance would also protect mapped oak trees that would be avoided with a 50-foot buffer with implementation of Mitigation Measure 3.3-1i, and increase the distance from the mapped possible waters of the United States.

- Block 27: Mapped as Upland Annual Grasslands and Forbs Formation; avoidance would also protect mapped oak trees that would be avoided with a 50-foot buffer with implementation of Mitigation Measure 3.3-1i.
- Blocks 29A and 29B: Mapped as Interior Live Oak-Blue Oak-(Foothill Pine) NFD Association and Scrub Interior Live Oak–Scrub Oak–Mesic East County NFD Super Alliance; avoidance would increase potential wildlife habitat areas in the vicinity of the stock pond and connect it to wildlife habitat to the north.
- Blocks 30 and 31: Mapped as Upland Annual Grasslands and Forbs Formation; avoidance would protect high-quality grassland connected to wildlife habitat to the north.
- Block 33B: Mapped as Upland Annual Grasslands and Forbs Formation; avoidance would increase the distance from mapped possible waters of the United States.

Page 5-22, the third sentence in the second paragraph is revised to read:

> Implementation of Mitigation Measures ~~3.5-2,~~ 3.5-5a~~,~~ and 3.5-5b ~~and erosion and runoff control installation and operation conditions of approval~~ identified for the proposed project in **Section 3.5, *Geology and Soils*** would minimize impacts of the Reduced Vegetation Removal/Grading and Road Use Alternative on geology and soils to less-than-significant levels.

Page 5-22, the first sentence in the third paragraph is revised to read:

> Although construction and operation and maintenance activities would be similar to those for the proposed project, the Reduced Vegetation Removal/Grading and Road Use Alternative would develop fewer vineyard acres than the proposed project (approximately 82.09 ~~80.15~~ net acres of vineyard within an approximately ~~111.82~~115.31-acre development area).

Page 5-24, Impacts 3.5-2 and 3.5-4 in Table 5-5, Summary of Key Impacts between Alternatives, are revised to read:

Resource Topic and Impact	Significance Before Mitigation: Proposed Project	Significance Before Mitigation: No Project Alternative	Significance Before Mitigation: Reduced Intensity and Increased Stream and Wetland (Aquatic Resource) Setbacks Alternative	Significance Before Mitigation: Reduced Vegetation Removal/ Grading and Road Use Alternative
3.5-2: Construction and operation of the proposed project could cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides.	LS~~M~~	NI	LS~~M~~	LS~~M~~
3.5-4: Construction and operation of the proposed project could occur on a geologic unit or soil that is unstable, or that would become unstable as a result of the project.	LS~~M~~	NI	LS~~M~~	LS~~M~~

Page 5-27, the first sentence in the third paragraph is revised to read:

> The Reduced Intensity and Increased Stream and Wetland (Aquatic Resource) Setbacks Alternative would include the development of approximately 17.39 ~~22.98~~ gross acres less than the proposed project, and the Reduced Vegetation Removal/Grading and Road Use Alternative would include the development of approximately 41.83 ~~45.32~~ gross acres less than the proposed project.

CHANGES TO FIGURES

Draft EIR Figure 3.3-5 (*Proposed Avoidance Buffers*), Figure 3.3-6 (*Mitigated Proposed Project*), and Figure 5-1 (*Reduced Intensity and Increased Stream and Wetlands [Aquatic Resources] Setbacks*) are revised to add back in proposed Blocks 16, 24G, 25, and 27. The mitigated wildlife exclusion fencing was also updated on Figure 3.3-6 and the existing fencing was added to this figure.

Draft EIR Figure 5-2 (*Reduced Vegetation Removal/Grading and Road Use Alternative*) is revised to add back in Block 24G. Colored shading was also added to Figures 5-1 and 5-2 to clarify the mitigation areas removed (shown with green shading) and the additional areas removed due to the alternative (shown with green cross hatch shading).

Draft EIR Figures 3.3-6, 5-1, and 5-2 are also revised to straighten and shift the avenue between proposed Blocks 5C and 6.

New Draft EIR Figure 3.3-7 is included to show oak woodlands situated on developable lands in the project site.

Figure 4-1, *Cumulative ECP Projects within 3 Miles of the Proposed Project*, is revised to show the cumulative ECP projects within 3 miles of the proposed project, excluding replanting plans and ECPA modifications that did not add new vineyard.

All revised Draft EIR figures are included at the end of this chapter (Figures 3.3-5, 3.3-6, 4-1, 5-1, and 5-2).

CHANGES TO APPENDICES

Draft EIR Appendix D, *Air Quality Modeling Results and Carbon Sequestration Analysis*, is revised to update the modeling to take into account the smaller footprint of the mitigated proposed project (approximately 97.69 net acres of vineyard), as described in Mitigation Measures 3.3-1a, 3.3-1i, and 3.3-2a. The start year for construction was also updated from 2021 to 2022. The carbon storage factor for the Live Oak Alliance was also updated in the Appendix D memorandum.

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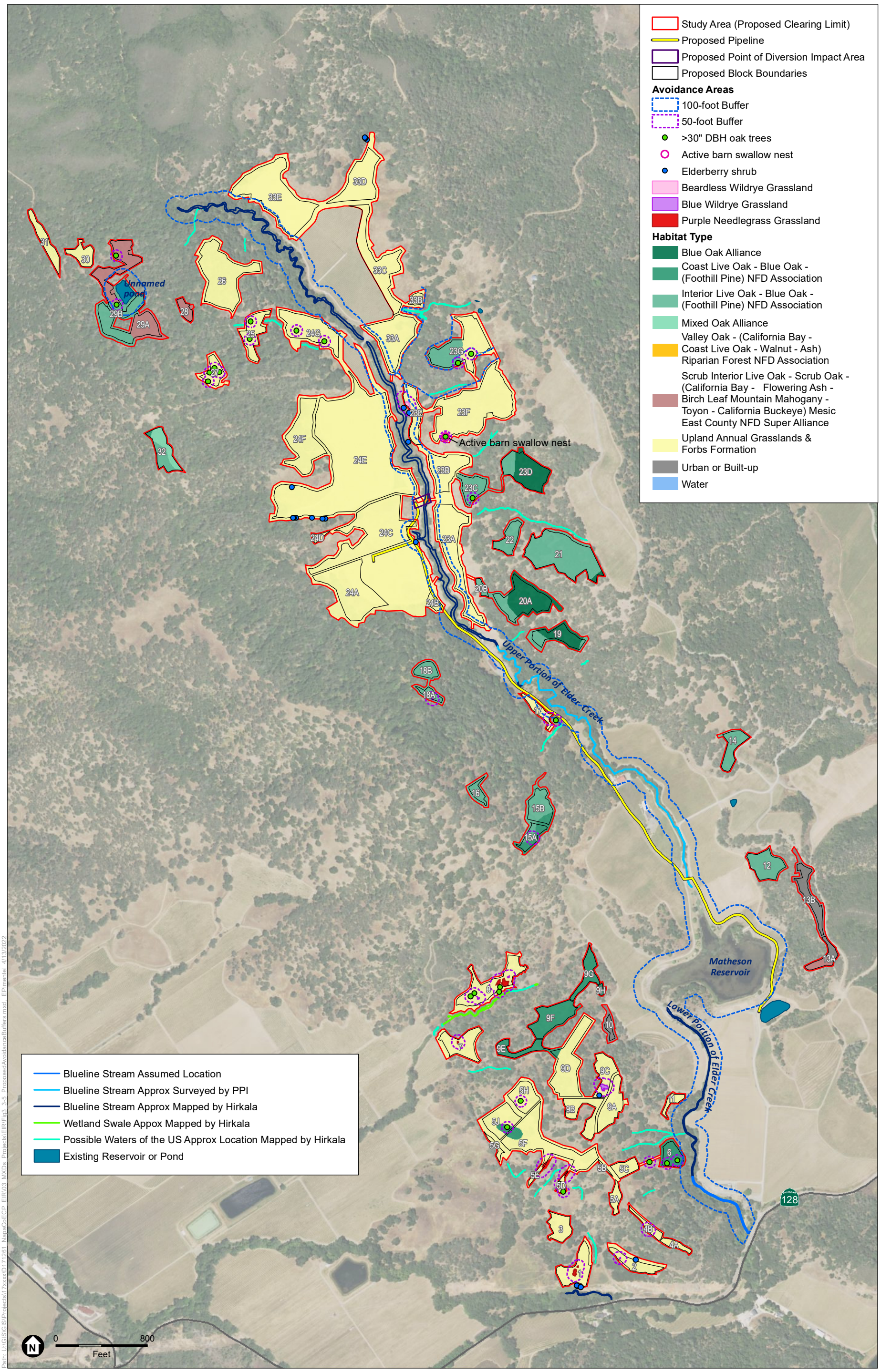
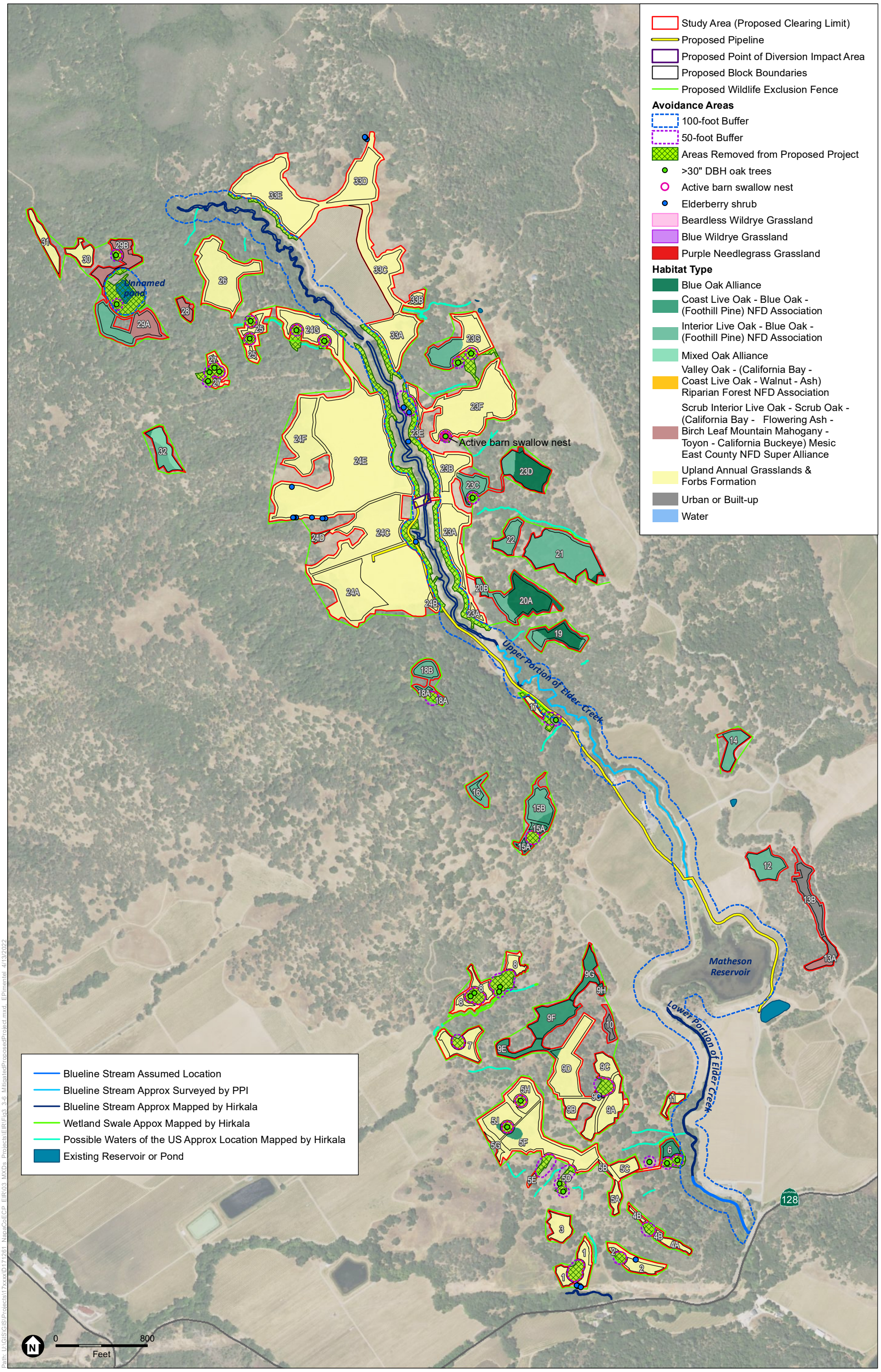


SOURCE: NAIP, 2020; CDFW; 2015; Napa County, 2018; ESA, 2022

KJS Investment Properties & Sorrento Inc. ECP Application

Figure 3.3-5
Proposed Avoidance Buffers

ESA



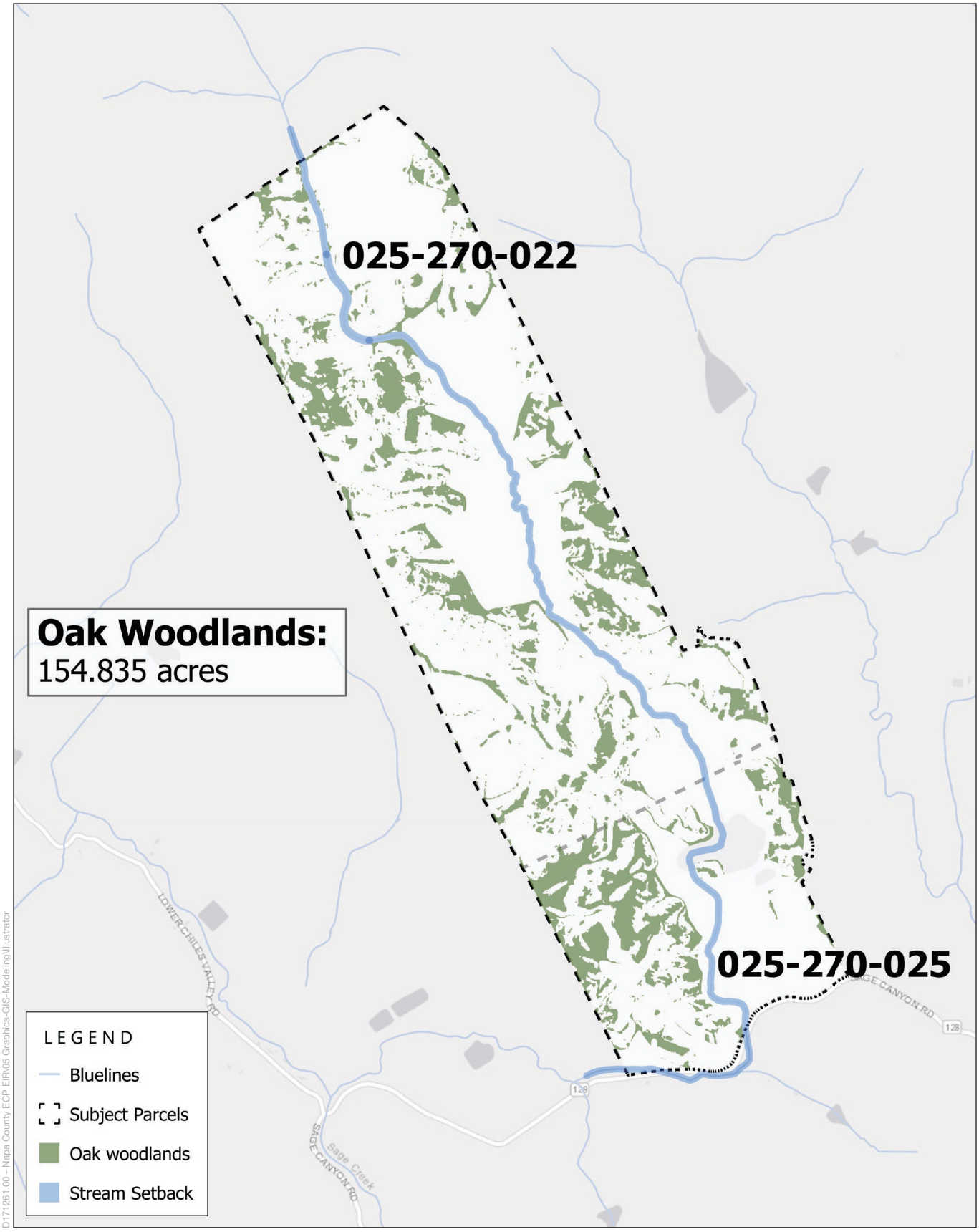
SOURCE: NAIP, 2020; CDFW; 2015; Napa County, 2018; ESA, 2022

KJS Investment Properties & Sorrento Inc. ECP Application

Figure 3.3-6
Mitigated Proposed Project

ESA

Path: U:\GIS\GIS\Projects\17xxxx\D171261_NapaCoECP_EIR\03_MXDs_Projects\EIR\Fig3_3-6_MitigatedProposedProject.mxd EPimentel 4/13/2022

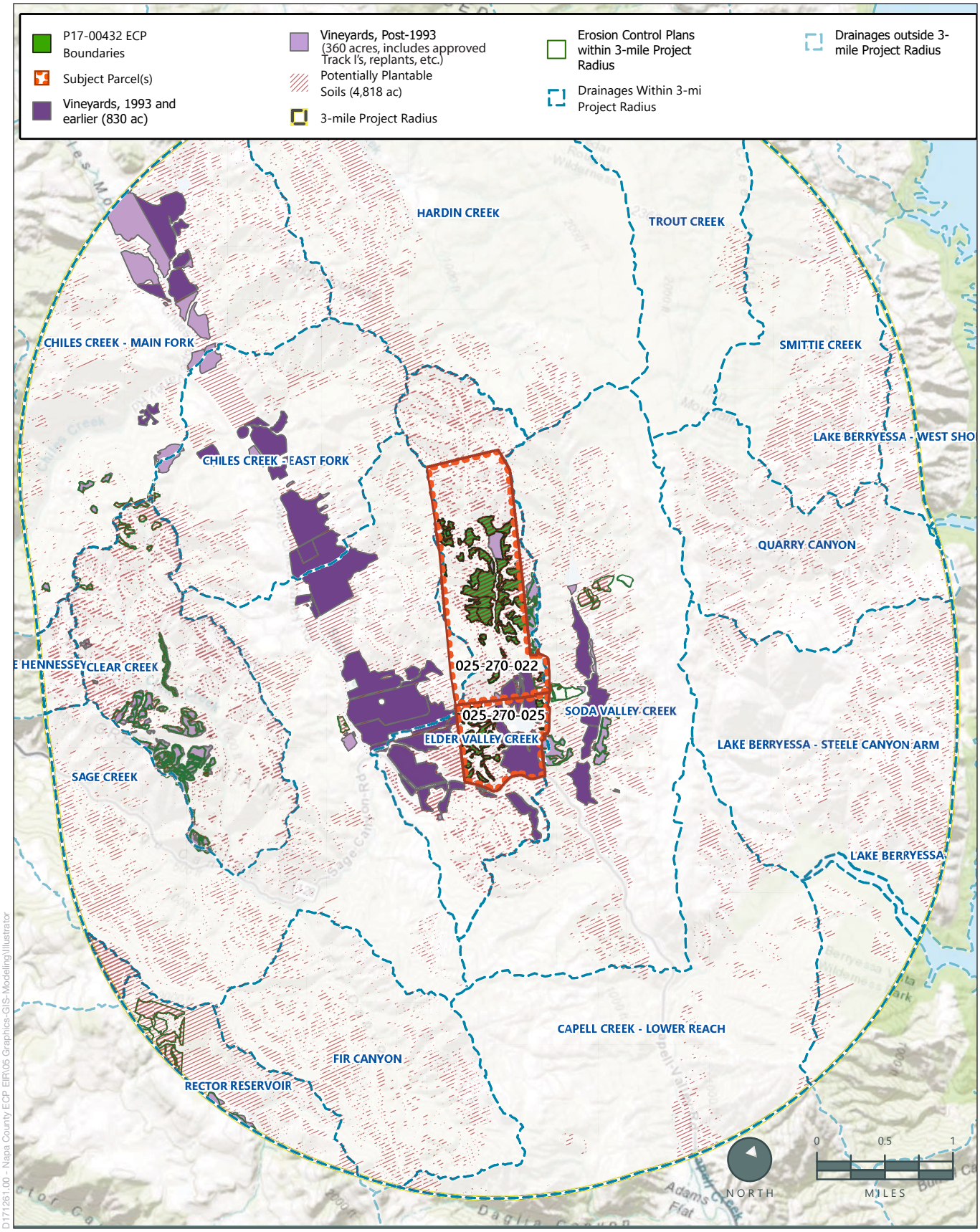


SOURCE: Napa County PBES, 2023

Napa County ECP EIR

Figure 3.3-7
Oak Woodlands Situated on Developable Lands

ESA

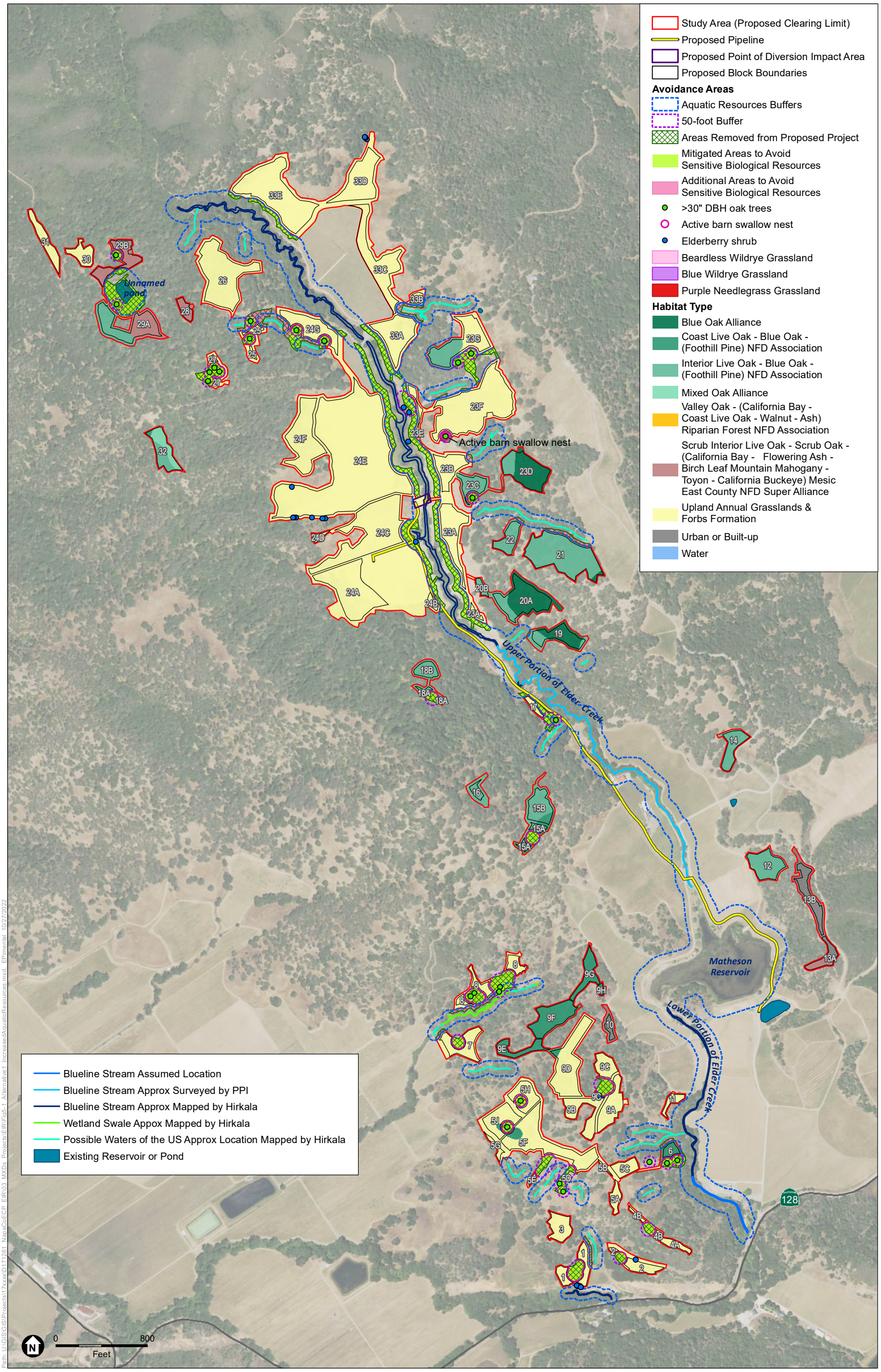


SOURCE: Napa County, 2020

KJS and Sorrento Vineyard Conversion #P17-00432 ECPA

Figure 4-1
Cumulative Erosion Control Plan Projects within 3 Miles of the Proposed Project

ESA



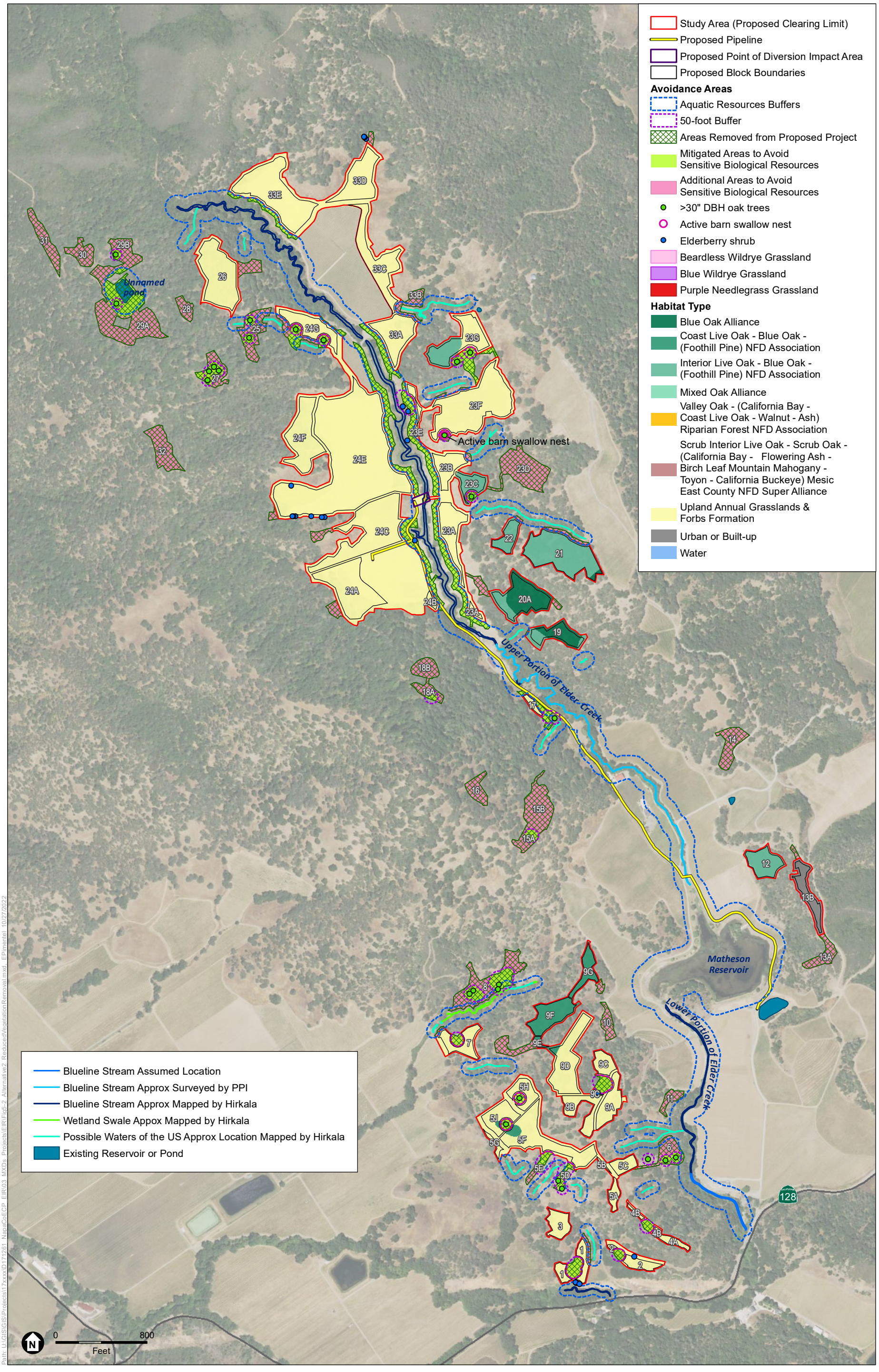
SOURCE: NAIP, 2020; CDFW; 2015; Napa County, 2018; ESA, 2022

KJS Investment Properties & Sorrento Inc. ECP Application

Figure 5-1

Alternative 1 - Reduced Intensity and Increased Stream and Wetlands (Aquatic Resources) Setbacks

ESA



SOURCE: NAIP, 2020; CDFW; 2015; Napa County, 2018; ESA, 2022

KJS Investment Properties & Sorrento Inc. ECP Application

Figure 5-2
Alternative 2 - Reduced Vegetation Removal/Grading and Road Use Alternative

ESA

DRAFT EIR APPENDIX D

AIR QUALITY MODELING RESULTS AND CARBON SEQUESTRATION ANALYSIS

CONSTRUCTION DATA

Construction Schedule

Construction Phase	Start Date	End Date	Days/Week	Total Workdays
Phase 1 - 2022	4/1/2022	9/15/2022	6	144
Phase 2 - 2023	4/1/2023	9/15/2023	6	144
Phase 3 - 2024	4/1/2024	9/15/2024	6	144
				432

Project Construction Equipment

Phase 1 - 2022

Project Construction Equipment	Equivalent Equipment in CalEEMod	Number of Equipment	Workdays used in Phase	Hours per Workday	Average horsepower (hp)	Load Factor
Large Excavator	Excavators	2	144	9	400	0.38
Medium Excavator	Excavators	1	144	9	158	0.38
D9 Bulldozer	Rubber Tired Dozer	1	144	9	474	0.40
D8 Bulldozer	Rubber Tired Dozer	1	144	9	359	0.40
Haul Truck	Off-Highway Trucks	2	144	9	402	0.38
Loader	Rubber Tired Loaders	2	144	9	203	0.36
Water Truck	Off-Highway Trucks	1	144	9	402	0.38
Farm Tractor with Trailer	Off-Highway Tractors	4	144	9	124	0.44
Total Emissions						

Phase 2 - 2023

Project Construction Equipment	Equivalent Equipment in OFFROAD	Number of Equipment	Workdays used in Phase	Hours per Workday	Average horsepower (hp) from CalEEMod	Load Factor
Large Excavator	Excavators	2	144	9	400	0.38
Medium Excavator	Excavators	1	144	9	158	0.38
D9 Bulldozer	Rubber Tired Dozer	1	144	9	474	0.40
D8 Bulldozer	Rubber Tired Dozer	1	144	9	359	0.40
Haul Truck	Off-Highway Trucks	2	144	9	402	0.38
Loader	Rubber Tired Loaders	2	144	9	203	0.36
Water Truck	Off-Highway Trucks	1	144	9	402	0.38
Farm Tractor with Trailer	Off-Highway Tractors	4	144	9	124	0.44
Total Emissions						

Phase 3 - 2024

Project Construction Equipment	Equivalent Equipment in OFFROAD	Number of Equipment	Workdays used in Phase	Hours per Workday	Average horsepower (hp) from CalEEMod	Load Factor
Farm Tractor with Trailer	Off-Highway Tractors	4	144	9	124	0.44
Total Emissions						

On-road Truck and Worker Commute Trips dring Construction

Construction Phase	Ave. trips/day (round trips)	One way trips/day	One Way Trip length (miles)	Truck Trip miles per day
Phase 1 - 2022				
Truck trips to deliver and remove construction equipment	0.14	0.28	45	12.5
Worker commute trips	9	18	25	450
Worker commute trips	3	6	25	150
Phase 1 - Total				
Phase 2 - 2023				
Truck trips to deliver and remove construction equipment	0.14	0.28	45	12.5
Worker commute trips	9	18	25	450
Worker commute trips	3	6	25	150
Phase 2 - Total				
Phase 3 - 2024				
Material delivery truck trips	0.07	0.14	45	6.25
Worker commute trips	9	18	25	450
Worker commute trips	3	6	25	150
Phase 3 - Total				

EMISSIONS SUMMARIES - Napa County Vineyards

Construction Emissions - CAP - Uncontrolled

Construction Year	No. of Construction Workdays	Tons over Construction Period				Average Pounds per day				
		ROG	NOx	Exhaust PM-10	Exhaust PM-2.5	ROG	NOx	Exhaust PM-10	Exhaust PM-2.5	
Phase 1 - 2022	144	0.6	5.1	0.2	0.2	7.8	70.9	3.0	2.7	
Phase 2 - 2023	144	0.5	4.5	0.2	0.2	7.2	62.5	2.6	2.4	
Phase 3 - 2024	144	0.1	0.5	0.0	0.0	0.9	7.0	0.3	0.3	
Total - Project	432	1.1	10.1	0.4	0.4	5.3	46.8	2.0	1.8	111.5 acres
Total - Mitigated Project	432	1.0	8.9	0.4	0.3	4.7	41.0	1.7	1.6	97.69 acres

Construction Emissions - GHG as MT

Construction Year	CO_2	CH_4	N_2O	CO_2e
Phase 1 - 2022	977.5	0.303	0.00000	985
Phase 2 - 2023	976.4	0.303	0.00000	984
Phase 3 - 2024	175.3	0.044	0.00000	176
Total $MTCO_2e$ - Project				2146
Life of project (years)				30
Ave. annual emissions ($MTCO_2e$/year) - Project				71.5
Total $MTCO_2e$ - Mitigated Project				1880
Life of project (years)				30
Ave. annual emissions ($MTCO_2e$/year) - Mitigated Project				62.7

OPERATIONAL ASSUMPTIONS

Calculation of workdays

Season	Start	End	No. of workdays
January - March	1-Jan	31-Mar	64
April	1-Apr	30-Apr	22
May - August	1-May	31-Aug	88
September - October	1-Sep	31-Oct	44
November - December	1-Nov	31-Dec	43

Calculation of annual on-road vehicle miles

Source	Workers/day	One way trips/day	Number of workdays
January - March			
Workers - Annual pruning of vines	25	50	64
Workers - Monitor and maintain erosion control measures	5	10	64
April			
Workers - Chemical, mechanical and manual weed control, sulfur applications to protect against mildew	5	10	22
Workers - Monitor and maintain erosion control measures	5	10	22
May - August			
Workers - Chemical, mechanical and manual weed control, sulfur applications to protect against mildew	5	10	88
September - October			
Workers - Harvest, winterize vineyard, vineyard avenues and vineyard roads	30	60	44
November - December			
Workers - Monitor and maintain erosion control measures	5	10	43
TOTAL ANNUAL		**8230**	**261**
Trips/workday		31.53	

OPERATIONAL EMISSIONS

Operational Emissions - CAP

Emissions Source	Tons per year				Pounds per day			
	ROG	NOx	Total PM-10	Total PM-2.5	ROG	NOx	Total PM-10	Total PM-2.5
Mobile - worker and truck trips	0.01	0.03	0.02	0.01	0.0	0.2	0.1	0.0
TOTAL	0.01	0.03	0.02	0.01	0.030	0.165	0.123	0.034

Operational Emissions - GHG as tons per year

Source	CO_2	CH_4	N_2O	CO_2e
Mobile - worker and truck trips	22.861	8.40E-04	0	22.9
Water	5.4	0.001	0.000	5.5

TOTAL				28.4

GHG Emissions from Water Use during Operation

Based on Bloodlines LLC Soda Canyon Vineyard EIR

Outdoor Water Use	Acres of vineyard	gal/year	Mgal/year
Soda Canyon Example project	83.1	7887520	7.89
Project	111.5	10583135	10.58

From CalEEMod,

Electricity Intensity Factor to supply	2117	kWhr/Mgal
Electricity Intensity Factor to treat	111	kWhr/Mgal
Electricity Intensity Factor to distribute	1272	kWhr/Mgal
Total Electricity Intensity Factor for Water	3500	kWhr/Mgal

	CO_2	CH_4	N_2O
PG&E GHG emission factor (lb/MWhr)	294	0.029	0.006
PG&E GHG emission factor (lb/kWhr)	0.294	0.000029	0.000006
GW potential	1	25	298
GHG emissions from water use (tons /year)	= Mgal/year X kWhr/Mgal X lb/kWhr x 0.0005		
	5.4	0.001	0.0
GHG emissions from water use (tons of CO_2e/year)	5.4	0.013	0.033
Total tons of CO_2e/year	5.5		

CalEEMod Users Guide, Appendx A - Page 41

Napa County Vineyards - construction + operation

Napa County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Recreational	1.00	User Defined Unit	158.80	0.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.6	**Precipitation Freq (Days)**	64
Climate Zone	4			**Operational Year**	2025
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	210	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - PG&E GHG emission factor based on <http://www.pgecorp.com/corp_responsibility/reports/2019/assets/PGE_CRSR_2019.pdf>

Land Use - Project data

Construction Phase - Project construction schedule

Off-road Equipment - Project does not include this phase

Off-road Equipment - Project does not include this phase

Off-road Equipment - Project does not include this phase

Off-road Equipment - Project does not include this phase

Off-road Equipment - Project data

Off-road Equipment - Projct data

Off-road Equipment - Project data

Off-road Equipment - Project does not include this phase

Trips and VMT - Project data

On-road Fugitive Dust - Project data

Grading - Project data

Architectural Coating - No building

Vehicle Trips - Project data

Area Coating - no buildings

Energy Use -

Water And Wastewater - Project water use

Construction Off-road Equipment Mitigation - Tier 4 Final engines assumed for BACT compliance

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Fleet Mix -

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tblConstructionPhase	PhaseStartDate	11/7/2025	4/1/2024
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2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.5587	5.1034	4.7337	0.0111	0.5252	0.2125	0.7377	0.2782	0.1955	0.4737	0	977.5216	977.5216	0.303	0	985.0967
2023	0.5216	4.5035	4.5873	0.0111	0.5252	0.1878	0.713	0.2782	0.1728	0.451	0	976.4194	976.4194	0.303	0	983.995
2024	0.068	0.5034	1.0588	1.97E-03	0.0374	0.0225	0.0599	0.0101	0.0207	0.0308	0	175.3293	175.3293	0.0442	0	176.4349
2027	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2038	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2039	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.5587**	**5.1034**	**4.7337**	**0.0111**	**0.5252**	**0.2125**	**0.7377**	**0.2782**	**0.1955**	**0.4737**	**0.0000**	**977.5216**	**977.5216**	**0.3030**	**0.0000**	**985.0967**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.5587	5.1034	4.7337	0.0111	0.5252	0.2125	0.7377	0.2782	0.1955	0.4737	0.0000	977.5205	977.5205	0.3030	0.0000	985.0956
2023	0.5216	4.5035	4.5873	0.0111	0.5252	0.1878	0.7130	0.2782	0.1728	0.4510	0.0000	976.4183	976.4183	0.3030	0.0000	983.9939
2024	0.0680	0.5034	1.0588	1.9700e-	0.0374	0.0225	0.0599	0.0101	0.0207	0.0308	0.0000	175.3292	175.3292	0.0442	0.0000	176.4348
2027	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2038	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2039	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.5587**	**5.1034**	**4.7337**	**0.0111**	**0.5252**	**0.2125**	**0.7377**	**0.2782**	**0.1955**	**0.4737**	**0.0000**	**977.5205**	**977.5205**	**0.3030**	**0.0000**	**985.0956**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**4-1-2022**	**6-30-2022**	3.0656	3.0656
2	**7-1-2022**	**9-30-2022**	2.5940	2.5940
5	**4-1-2023**	**6-30-2023**	2.7209	2.7209
6	**7-1-2023**	**9-30-2023**	2.3023	2.3023
9	**4-1-2024**	**6-30-2024**	0.3086	0.3086
10	**7-1-2024**	**9-30-2024**	0.2611	0.2611
		Highest	3.0656	3.0656

2.2 Overall Operational

Operational emissions not estimated in this run

3.0 Construction

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	4/1/2022	3/31/2022	5	0	
2	Site Preparation	Site Preparation	1/6/2023	1/5/2023	5	0	
3	Phase 1	Grading	4/1/2022	9/15/2022	6	144	
4	Phase 2	Grading	4/1/2023	9/15/2023	6	144	
5	Phase 3	Grading	4/1/2024	9/15/2024	6	144	
6	Building Construction	Building Construction	1/15/2027	1/14/2027	5	0	
7	Paving	Paving	12/3/2038	12/2/2038	5	0	
8	Architectural Coating	Architectural Coating	10/7/2039	10/6/2039	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Excavators	0	0.00	158	0.38
Demolition	Rubber Tired Dozers	0	0.00	247	0.40
Demolition	Concrete/Industrial Saws	0	0.00	81	0.73
Demolition	Excavators	0	0.00	158	0.38
Demolition	Rubber Tired Dozers	0	0.00	247	0.40
Site Preparation	Rubber Tired Dozers	0	0.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Phase 1	Excavators	2	9.00	400	0.38
Phase 1	Excavators	1	9.00	158	0.38
Phase 1	Graders	0	0.00	187	0.41
Phase 1	Off-Highway Tractors	4	9.00	124	0.44
Phase 1	Off-Highway Trucks	3	9.00	402	0.38
Phase 1	Rubber Tired Dozers	1	9.00	474	0.40
Phase 1	Rubber Tired Dozers	1	9.00	359	0.40
Phase 1	Rubber Tired Loaders	2	9.00	203	0.36

Phase 1	Scrapers	0	0.00	367	0.48
Phase 1	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Phase 2	Excavators	2	9.00	400	0.38
Phase 2	Excavators	1	9.00	158	0.38
Phase 2	Graders	0	0.00	187	0.41
Phase 2	Off-Highway Tractors	4	9.00	124	0.44
Phase 2	Off-Highway Trucks	3	9.00	402	0.38
Phase 2	Rubber Tired Dozers	1	9.00	474	0.40
Phase 2	Rubber Tired Dozers	1	9.00	359	0.40
Phase 2	Rubber Tired Loaders	2	9.00	203	0.36
Phase 2	Scrapers	0	0.00	367	0.48
Phase 2	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Phase 3	Excavators	0	0.00	158	0.38
Phase 3	Graders	0	0.00	187	0.41
Phase 3	Off-Highway Tractors	4	9.00	124	0.44
Phase 3	Rubber Tired Dozers	0	0.00	247	0.40
Phase 3	Scrapers	0	0.00	367	0.48
Phase 3	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Building Construction	Cranes	0	0.00	231	0.29
Building Construction	Forklifts	0	0.00	89	0.20
Building Construction	Generator Sets	0	0.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Building Construction	Welders	0	0.00	46	0.45
Paving	Pavers	0	0.00	130	0.42
Paving	Paving Equipment	0	0.00	132	0.36
Paving	Rollers	0	0.00	80	0.38
Architectural Coating	Air Compressors	0	0.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	0	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 1	14	24.00	2.00	0.00	25.00	45.00	20.00	LD_Mix	HDT_Mix	HHDT
Phase 2	14	24.00	2.00	0.00	25.00	45.00	20.00	LD_Mix	HDT_Mix	HHDT
Phase 3	4	24.00	2.00	0.00	25.00	45.00	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	0	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	0	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	0	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2022

Phase not used

3.3 Site Preparation - 2023

Phase not used

3.4 Phase 1 - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.4878	0.0000	0.4878	0.2681	0.0000	0.2681	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.5457	5.0475	4.6361	0.0106		0.2122	0.2122		0.1952	0.1952	0.0000	933.4672	933.4672	0.3019	0.0000	941.0148
Total	**0.5457**	**5.0475**	**4.6361**	**0.0106**	**0.4878**	**0.2122**	**0.7000**	**0.2681**	**0.1952**	**0.4633**	**0.0000**	**933.4672**	**933.4672**	**0.3019**	**0.0000**	**941.0148**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.8200e-003	0.0477	0.0127	2.0000e-004	5.8000e-003	1.7000e-004	5.9700e-003	1.6700e-003	1.7000e-004	1.8400e-003	0.0000	19.0971	19.0971	5.4000e-004	0.0000	19.1106
Worker	0.0112	8.2600e-003	0.0849	2.8000e-004	0.0316	1.9000e-004	0.0318	8.4000e-003	1.8000e-004	8.5800e-003	0.0000	24.9572	24.9572	5.7000e-004	0.0000	24.9714
Total	**0.0131**	**0.0559**	**0.0976**	**4.8000e-004**	**0.0374**	**3.6000e-004**	**0.0378**	**0.0101**	**3.5000e-004**	**0.0104**	**0.0000**	**44.0544**	**44.0544**	**1.1100e-003**	**0.0000**	**44.0819**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.4878	0.0000	0.4878	0.2681	0.0000	0.2681	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.5457	5.0474	4.6361	0.0106		0.2122	0.2122		0.1952	0.1952	0.0000	933.4661	933.4661	0.3019	0.0000	941.0137
Total	**0.5457**	**5.0474**	**4.6361**	**0.0106**	**0.4878**	**0.2122**	**0.7000**	**0.2681**	**0.1952**	**0.4633**	**0.0000**	**933.4661**	**933.4661**	**0.3019**	**0.0000**	**941.0137**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.8200e-003	0.0477	0.0127	2.0000e-004	5.8000e-003	1.7000e-004	5.9700e-003	1.6700e-003	1.7000e-004	1.8400e-003	0.0000	19.0971	19.0971	5.4000e-004	0.0000	19.1106
Worker	0.0112	8.2600e-003	0.0849	2.8000e-004	0.0316	1.9000e-004	0.0318	8.4000e-003	1.8000e-004	8.5800e-003	0.0000	24.9572	24.9572	5.7000e-004	0.0000	24.9714
Total	**0.0131**	**0.0559**	**0.0976**	**4.8000e-004**	**0.0374**	**3.6000e-004**	**0.0378**	**0.0101**	**3.5000e-004**	**0.0104**	**0.0000**	**44.0544**	**44.0544**	**1.1100e-003**	**0.0000**	**44.0819**

3.5 Phase 2 - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.4878	0.0000	0.4878	0.2681	0.0000	0.2681	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.5098	4.4652	4.4986	0.0106		0.1875	0.1875		0.1725	0.1725	0.0000	933.8484	933.8484	0.3020	0.0000	941.3990
Total	**0.5098**	**4.4652**	**4.4986**	**0.0106**	**0.4878**	**0.1875**	**0.6753**	**0.2681**	**0.1725**	**0.4407**	**0.0000**	**933.8484**	**933.8484**	**0.3020**	**0.0000**	**941.3990**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.3100e-003	0.0309	0.0111	1.9000e-004	5.8000e-003	7.0000e-005	5.8700e-003	1.6700e-003	7.0000e-005	1.7400e-003	0.0000	18.5754	18.5754	5.0000e-004	0.0000	18.5878
Worker	0.0105	7.4000e-003	0.0776	2.7000e-004	0.0316	1.9000e-004	0.0318	8.4000e-003	1.7000e-004	8.5700e-003	0.0000	23.9956	23.9956	5.0000e-004	0.0000	24.0082
Total	**0.0118**	**0.0383**	**0.0887**	**4.6000e-004**	**0.0374**	**2.6000e-004**	**0.0376**	**0.0101**	**2.4000e-004**	**0.0103**	**0.0000**	**42.5710**	**42.5710**	**1.0000e-003**	**0.0000**	**42.5960**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.4878	0.0000	0.4878	0.2681	0.0000	0.2681	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.5098	4.4652	4.4986	0.0106		0.1875	0.1875		0.1725	0.1725	0.0000	933.8473	933.8473	0.3020	0.0000	941.3979
Total	**0.5098**	**4.4652**	**4.4986**	**0.0106**	**0.4878**	**0.1875**	**0.6753**	**0.2681**	**0.1725**	**0.4407**	**0.0000**	**933.8473**	**933.8473**	**0.3020**	**0.0000**	**941.3979**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.3100e-003	0.0309	0.0111	1.9000e-004	5.8000e-003	7.0000e-005	5.8700e-003	1.6700e-003	7.0000e-005	1.7400e-003	0.0000	18.5754	18.5754	5.0000e-004	0.0000	18.5878
Worker	0.0105	7.4000e-003	0.0776	2.7000e-004	0.0316	1.9000e-004	0.0318	8.4000e-003	1.7000e-004	8.5700e-003	0.0000	23.9956	23.9956	5.0000e-004	0.0000	24.0082
Total	**0.0118**	**0.0383**	**0.0887**	**4.6000e-004**	**0.0374**	**2.6000e-004**	**0.0376**	**0.0101**	**2.4000e-004**	**0.0103**	**0.0000**	**42.5710**	**42.5710**	**1.0000e-003**	**0.0000**	**42.5960**

3.6 Phase 3 - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0569	0.4664	0.9767	1.5200e-003		0.0223	0.0223		0.0205	0.0205	0.0000	133.8103	133.8103	0.0433	0.0000	134.8922
Total	**0.0569**	**0.4664**	**0.9767**	**1.5200e-003**	**0.0000**	**0.0223**	**0.0223**	**0.0000**	**0.0205**	**0.0205**	**0.0000**	**133.8103**	**133.8103**	**0.0433**	**0.0000**	**134.8922**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.2800e-003	0.0304	0.0106	1.9000e-004	5.8000e-003	7.0000e-005	5.8700e-003	1.6700e-003	7.0000e-005	1.7400e-003	0.0000	18.4820	18.4820	5.0000e-004	0.0000	18.4944
Worker	9.7900e-003	6.6500e-003	0.0715	2.5000e-004	0.0316	1.8000e-004	0.0318	8.4000e-003	1.7000e-004	8.5700e-003	0.0000	23.0371	23.0371	4.5000e-004	0.0000	23.0483
Total	**0.0111**	**0.0370**	**0.0821**	**4.4000e-004**	**0.0374**	**2.5000e-004**	**0.0376**	**0.0101**	**2.4000e-004**	**0.0103**	**0.0000**	**41.5190**	**41.5190**	**9.5000e-004**	**0.0000**	**41.5427**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0569	0.4664	0.9767	1.5200e-003		0.0223	0.0223		0.0205	0.0205	0.0000	133.8101	133.8101	0.0433	0.0000	134.8921
Total	**0.0569**	**0.4664**	**0.9767**	**1.5200e-003**	**0.0000**	**0.0223**	**0.0223**	**0.0000**	**0.0205**	**0.0205**	**0.0000**	**133.8101**	**133.8101**	**0.0433**	**0.0000**	**134.8921**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.2800e-003	0.0304	0.0106	1.9000e-004	5.8000e-003	7.0000e-005	5.8700e-003	1.6700e-003	7.0000e-005	1.7400e-003	0.0000	18.4820	18.4820	5.0000e-004	0.0000	18.4944
Worker	9.7900e-003	6.6500e-003	0.0715	2.5000e-004	0.0316	1.8000e-004	0.0318	8.4000e-003	1.7000e-004	8.5700e-003	0.0000	23.0371	23.0371	4.5000e-004	0.0000	23.0483
Total	**0.0111**	**0.0370**	**0.0821**	**4.4000e-004**	**0.0374**	**2.5000e-004**	**0.0376**	**0.0101**	**2.4000e-004**	**0.0103**	**0.0000**	**41.5190**	**41.5190**	**9.5000e-004**	**0.0000**	**41.5427**

3.7 Building Construction - 2027

Phase not used

3.8 Paving - 2038

Phase not used

3.9 Architectural Coating - 2039

Phase not used

Unmitigated Construction On-Site

4.0 Operational Detail - Mobile

Operational emissions not estimated in this run

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memorandum

date	April 15, 2022
to	Jennifer Aranda, Senior Managing Associate
cc	Mathew Fagundes, Air Quality Specialist
from	Brian Schuster, Jyothi Iyer, Air Quality Specialists
subject	Napa County Vineyard Conversion Erosion Control Plan Carbon Stock and Sequestration Analysis

Introduction

This analysis has been prepared as part of the greenhouse gas (GHG) analysis for the ~~The Napa County Planning, Building and Environmental Services Department (Napa County) prepared this~~ Environmental Impact Report (EIR) to evaluate impacts of implementing the KJS Investment Properties LLC and Sorrento Inc. Vineyard Conversion Erosion Control Plan Application (ECPA) Project (#P17-00432-ECPA).

This analysis includes an assessment of the carbon stock and carbon sequestration of the existing land use types that would be lost as a result of land conversion from the KJS Investment Properties LLC and Sorrento Inc. Vineyard Conversion Erosion Control Plan Application (ECPA) Project (proposed project). The analysis also includes an assessment of the carbon stock and sequestration that would be gained as a result of converting existing land uses into vineyards.

Analysis

The following sources and sinks of carbon and greenhouse gas (GHG) emissions is included:

1. One-time emissions associated with carbon stocks and storage lost or released when site vegetation is removed. This includes above-ground carbon, such as woody debris and downed wood, and below-ground carbon, such as in the soil. Soil carbon is released when soil is ripped in preparation for vineyard development and planting. For the purpose of this analysis it is assumed that all removed vegetation would be burned, even though some may be chipped/mulched.
2. Annual emissions associated with carbon sequestration lost when site vegetation is removed.
3. One-time emission sinks associated with carbon stocks and storage gained when the new vineyards are planted. As for the above, this includes above-ground and below-ground carbon.

4. Annual emission sinks associated with carbon sequestration gained through the growth and maintenance of the new vineyards.

A number of different sources were consulted to estimate the carbon stocks and carbon sequestration of all land types associated with the project. These sources include the following:

- **Napa County Draft Climate Action Plan Appendix A (2016).**[1] The Napa County Draft Climate Action Plan (CAP) was used to estimate carbon storage for grasslands and scrublands, along with carbon sequestration for all land use types.
- **California Oak Foundation: An Inventory of Carbon and California Oaks (2008)**.[2] This report was used to estimate above- and below-ground carbon storage for oaks.
- **Williams et. al. 2011, Assessment of carbon in woody plants and soil across a vineyard-woodland landscape.**[3] This paper was used to determine above- and below-ground carbon storage for vineyards.

The carbon storage and sequestration factors used in the analysis are presented below in **Table 1**. The table includes all land use types associated with the project and presents the source of each factor.

These carbon stock and sequestration factors are utilized in this assessment because they provide the most conservative estimate of potential emissions from removed vegetation at the project site. As such, the County considers the anticipated potential emissions resulting from the proposed project that are disclosed in this analysis reasonably reflect proposed conditions and therefore are considered appropriate and adequate for project impact assessment. Emissions associated with loss of sequestration due to land use change (i.e., the conversions of grassland, scrubland, and oak woodlands to vineyard) have been calculated based the sources identified above, which indicates that grasslands and scrublands sequester a negligible quantity of carbon dioxide (CO_2) acre per year (essentially zero), and oak woodland sequesters approximately 2.0 metric tons carbon (MT C) per acre per year.

Grapevines are photosynthetic plants and therefore have value in terms of carbon capture. Additionally, the use of cover crops, which are also photosynthetic plants, tends to result in less soil CO_2 loss from vineyard soils. Carbon sequestration loss would be somewhat offset by the proposed vineyard, which would likely act as a sink for atmospheric CO_2, depending on the longevity of grapevine roots and the quantity of carbon stored in deep roots. In addition to vines, the sequestration of atmospheric carbon is also achieved by the soil between vine rows through cover-cropping.

It is worth noting that the quantitative estimate of carbon stocks and sequestration presented in this analysis requires many assumptions about what would happen during the next 30-100 years onsite under "project" and "no project" conditions (e.g., the life expectancy of the proposed vineyard and existing site vegetation, incidences of disease and fire, etc.).

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1 Ascent Environmental, 2016. *Napa County Climate Action Plan: Appendix A Technical Memo #1 - Greenhouse Gas Emissions Inventory and Forecasts*. Table 16. Available: https://www.countyofnapa.org/DocumentCenter/View/297/Appendix-A-Revised-Final-Tech-Memo-1-PDF. Accessed January 2019.

2 California Oak Foundation, 2008. *An Inventory of Carbon and California Oaks*. Tables 4 and 5. Available: http://californiaoaks.org/wp-content/uploads/2016/04/CarbonResourcesFinal.pdf. Accessed January 2019.

3 Williams, J. N., D. Hollander, A T. O'Geen, L. A. Thrupp, R. Hanifin, K. Steenwerth, G. McGourty, L. E. Jackson (2011). Assessment of carbon in woody plants and soil across a vineyard-woodland landscape. *Carbon Balance and Management*, 2011; 6:11. doi: 10.1186/1750-0680-6-11. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3287142/.

TABLE 1
CARBON STOCKS/STORAGE AND ANNUAL SEQUESTRATION FACTORS

Vegetation/Land Use Type	Carbon Storage/Stock per Acre (MT C/acre)				Carbon Sequestration (MT C/year)
	Wood/ Trees	Soil	Litter/duff/ understory	Total	
Existing Land Use Types					
Upland Annual Grasslands and Forbs Formation [a]	-	-	-	2.6	0.0
Purple Needlegrass Grassland [a]	-	-	-	2.6	0.0
Beardless Wildrye Grassland [a]	-	-	-	2.6	0.0
Blue Wildrye Grassland [a]	-	-	-	2.6	0.0
Blue Oak Alliance [b]	12.5	11.3	23.1	46.9	2.017
Coast Live Oak-Blue Oak (Foothill Pine) NFD Association [b]	22.3	11.3	25.9	59.5	2.017
Interior Live Oak-Blue Oak (Foothill Pine) NFD Association [b]	18.6	11.3	20.6	50.6	2.017
Mixed Oak Alliance [b]	29.9	11.3	18.6	59.9	2.017
Scrub Interior Live Oak-Scrub Oak (California Bay-Flowering Ash-Birch Leaf Mountain Mahogany-Toyon-California Buckeye) Mesic East County NFD Super Alliance [a]	-	-	-	34.912.8	2.0170.0
Valley Oak-(California Bay-Coast Live Oak-Walnut-Ash) Riparian Forest NFD Association [b]	10.1	11.3	26.7	48.2	2.017
Urban or Built-Up [c]	0.0	0.0	0.0	0.0	0.0
Riverine [c]	0.0	0.0	0.0	0.0	0.0
Unnamed Pond [c]	0.0	0.0	0.0	0.0	0.0
New Land Use Types					
Vineyard [d]	1.2	34.0	0.0	35.2	0.016
Reservoir [c]	0.0	0.0	0.0	0.0	0.0
Roads/other [c]	0.0	0.0	0.0	0.0	0.0

NOTES:

[a] Values are from the 2012 Napa CAP, Appendix A, Table 16. For grasslands and scrublands, only a total carbon storage value was available.

[b] Carbon storage values are from California Oaks Foundation (2008), Tables 4 and 5. Carbon sequestration values are from the 2012 Napa CAP, Appendix A, Table 16.

[c] It was assumed that these land types have no carbon storage or annual carbon sequestration.

[d] Carbon storage values are from Williams (2011), Table 1. Carbon sequestration values are from the 2012 Napa CAP, Appendix A, Table 16.

ABBREVIATIONS:

MT = metric tons
C = carbon
NFD = no formal description
- = value not available

SOURCES:

1. Ascent Environmental, 2016. *Napa County Climate Action Plan: Appendix A Technical Memo #1 - Greenhouse Gas Emissions Inventory and Forecasts*. Table 16. Available at: https://www.countyofnapa.org/DocumentCenter/View/297/Appendix-A-Revised-Final-Tech-Memo-1-PDF. Accessed January 2019.
2. California Oak Foundation, 2008. *An Inventory of Carbon and California Oaks*. Tables 4 and 5. Available at: http://californiaoaks.org/wp-content/uploads/2016/04/CarbonResourcesFinal.pdf. Accessed January 2019.
3. Williams, J. N., D. Hollander, A T. O'Geen, L. A. Thrupp, R. Hanifin, K. Steenwerth, G. McGourty, L. E. Jackson (2011). Assessment of carbon in woody plants and soil across a vineyard-woodland landscape. *Carbon Balance and Management*, 2011; 6: 11. doi: 10.1186/1750-0680-6-11. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3287142/.

Table 2 presents the estimated carbon stocks/storage at the project site for existing land uses. These represent one-time emissions resulting from vegetation removal and soil preparation associated with the conversion of approximately 157.1~~158.3~~ acres of grassland, oak woodlands, scrublands, and riverine/pond and grassland to

vineyard, reservoir, and roads. As mentioned above, for the purpose of this analysis it is assumed that all removed vegetation would be burned, even though some may be chipped/mulched. Because there is not yet a universally accepted scientific methodology or modeling method to calculate GHG emissions due to vegetation conversion and soil disturbance, the carbon stock factors collected from the sources identified above are utilized to determine potential project site carbon stocks and associated emissions. As shown in Table 2, total existing project site carbon stocks are estimated to be approximately 2,1982,099 MT C or approximately 8,0597,697 metric tons of carbon dioxide equivalent ($MTCO_2e$).[4]

TABLE 2
ESTIMATED PROJECT SITE CARBON STOCKS/STORAGE – EXISTING[a]

Vegetation/Land Use Type	Project Acreage	Carbon Storage/ Stock per Acre (MT C/acre) [b]	Total Carbon Storage (MT C) [c]	Total Carbon Storage ($MTCO_2e$) [d]
Upland Annual Grasslands and Forbs Formation	116.22~~117.38~~	2.6	302.2~~305.2~~	1,108.0~~1,119.0~~
Purple Needlegrass Grassland	0.19	2.6	0.5	1.8
Beardless Wildrye Grassland	0.05	2.6	0.1	0.5
Blue Wildrye Grassland	0.08	2.6	0.2	0.8
Blue Oak Alliance	5.56	46.9	261.0	957.0
Coast Live Oak-Blue Oak (Foothill Pine) NFD Association	6.54	59.5	389.1	1,426.5
Interior Live Oak-Blue Oak (Foothill Pine) NFD Association	20.71	50.6	1,047.6	3,841.3
Mixed Oak Alliance	0.71	59.9	42.5	155.9
Scrub Interior Live Oak-Scrub Oak (California Bay-Flowering Ash-Birch Leaf Mountain Mahogany-Toyon-California Buckeye) Mesic East County NFD Super Alliance	4.35~~3.92~~	34.9~~12.8~~	151.8~~50.2~~	556.7~~184.0~~
Valley Oak-(California Bay-Coast Live Oak-Walnut-Ash) Riparian Forest NFD Association	0.06	48.2	2.9	10.6
Urban or Built-Up	2.64~~3.08~~	0.0	0.0	0.0
Riverine	0.02	0.0	0.0	0.0
Unnamed Pond	0.005	0.0	0.0	0.0
Total	**157.14~~158.31~~**	**-**	**2,197.92,099.3**	**8,059.17,697.5**

NOTES:

[a] Values may not sum exactly due to rounding

[b] Values from Table 1

[c] Project acreage multiplied by carbon storage/stock per acre

[d] MT C is converted to MTCO2e by multiplying MT C by 44/12 (or 3.67), which is the ratio of the atomic mass of a carbon dioxide molecule to the atomic mass of a carbon atom.

ABBREVIATIONS:

MT = metric tons
C = carbon
$MTCO_2e$ = metric tons carbon dioxide equivalent
NFD = no formal description

[4] The Carbon Dioxide Equivalent (CO_2e) is the commonly reported unit of GHG emissions to represent total emissions from all the different greenhouse gases, based on CO_2 as the reference gas for climate change. Carbon is converted to CO_2e by multiplying the carbon amount by 44/12 (or 3.67), which is the ratio of the atomic mass of a carbon dioxide molecule to the atomic mass of a carbon atom.

Table 3 presents the estimated annual carbon sequestration at the project site for existing land uses. This represents lost carbon sequestration resulting from vegetation removal and soil preparation associated with the project's land use conversion. As for carbon storage factors above, because there is not yet a universally accepted scientific methodology or modeling method to calculate GHG emissions due to vegetation conversion and soil disturbance, the carbon sequestration factors collected from the sources identified above are utilized to determine the potential loss in annual carbon sequestration at the project site. As shown in Table 3, it is anticipated that the annual emissions associated with existing carbon sequestration at the project site is approximately 76.567.7 MT C per year or 280.5248.3 $MTCO_2e$ per year.

TABLE 3
ESTIMATED PROJECT SITE CARBON SEQUESTRATION – EXISTING [a]

Vegetation/Land Use Type	Project Acreage	Annual Carbon Sequestration per Acre (MT C/acre) [b]	Annual Carbon Sequestration (MT C) [c]	Annual Carbon Sequestration ($MTCO_2e$) [d]
Upland Annual Grasslands and Forbs Formation	116.22~~117.38~~	0.0	0.0	0.0
Purple Needlegrass Grassland	0.19	0.0	0.0	0.0
Beardless Wildrye Grassland	0.05	0.0	0.0	0.0
Blue Wildrye Grassland	0.08	0.0	0.0	0.0
Blue Oak Alliance	5.56	2.0	11.2	41.1
Coast Live Oak-Blue Oak (Foothill Pine) NFD Association	6.54	2.0	13.2	48.4
Interior Live Oak-Blue Oak (Foothill Pine) NFD Association	20.71	2.0	41.8	153.2
Mixed Oak Alliance	0.71	2.0	1.4	5.3
Scrub Interior Live Oak-Scrub Oak (California Bay-Flowering Ash-Birch Leaf Mountain Mahogany-Toyon-California Buckeye) Mesic East County NFD Super Alliance	4.35~~3.92~~	2.00.0	8.80.0	32.20.0
Valley Oak-(California Bay-Coast Live Oak-Walnut-Ash) Riparian Forest NFD Association	0.06	2.0	0.1	0.4
Urban or Built-Up	2.64~~3.08~~	0.0	0.0	0.0
Riverine	0.02	0.0	0.0	0.0
Unnamed Pond	0.005	0.0	0.0	0.0
Total	**157.14~~158.31~~**	**-**	**76.5~~67.7~~**	**280.5~~248.3~~**

NOTES:

[a] Values may not sum exactly due to rounding

[b] Values from Table 1

[c] Project acreage multiplied by carbon storage/stock per acre

[d] MT C is converted to MTCO2e by multiplying MT C by 44/12 (or 3.67), which is the ratio of the atomic mass of a carbon dioxide molecule to the atomic mass of a carbon atom.

ABBREVIATIONS:

MT = metric tons
C = carbon
$MTCO_2e$ = metric tons carbon dioxide equivalent
NFD = no formal description

Table 4 presents the future estimated carbon stocks/storage at the project site for new land uses, including the vineyards. This represents new carbon storage associated with the new vineyards' biomass. As shown in Table 4,

total project-related carbon stocks are estimated to be approximately 3,930 MT C or approximately 14,411 $MTCO_2e$.

TABLE 4
ESTIMATED PROJECT SITE CARBON STOCKS/STORAGE – PROJECT [a]

Vegetation/Land Use Type	Project Acreage	Carbon Storage/Stock per Acre (MT C/acre) [b]	Total Carbon Storage (MT C) [c]	Total Carbon Storage ($MTCO_2e$) [d]
Vineyard	111.5	35.2	3,930.2	14,410.6
Reservoir	4.5	0.0	0.0	0.0
Roads/other	40.8	0.0	0.0	0.0
Total	**156.8**	**0.0**	**3,930.2**	**14,410.6**

NOTES:

[a] Values may not sum exactly due to rounding

[b] Values from Table 1

[c] Project acreage of individual vegetation/land use types multiplied by carbon storage/stock per acre

[d] MT C is converted to MTCO2e by multiplying MT C by 44/12 (or 3.67), which is the ratio of the atomic mass of a carbon dioxide molecule to the atomic mass of a carbon atom.

ABBREVIATIONS:
MT = metric tons
C = carbon
$MTCO_2e$ = metric tons carbon dioxide equivalent
NFD = no formal description

Table 5 presents the estimated annual carbon sequestration at the project site for new land uses. This represents gained carbon sequestration from photosynthesis by the new vineyards. As shown in Table 5, it is anticipated that the annual emissions associated with new carbon sequestration at the project site is approximately 1.8 MT C per year or 6.5 $MTCO_2e$ per year.

TABLE 5
ESTIMATED PROJECT SITE CARBON SEQUESTRATION – PROJECT [a]

Vegetation/Land Use Type	Project Acreage	Annual Carbon Sequestration per Acre (MT C/acre) [b]	Annual Carbon Sequestration (MT C) [c]	Annual Carbon Sequestration ($MTCO_2e$) [d]
Vineyard	111.5	0.016	1.8	6.5
Reservoir	4.5	0.0	0.0	0.0
Roads/other	40.8	0.0	0.0	0.0
Total	**156.8**	**-**	**1.8**	**6.5**

NOTES:

[a] Values may not sum exactly due to rounding

[b] Values from Table 1

[c] Project acreage multiplied by carbon storage/stock per acre

[d] MT C is converted to $MTCO_2e$ by multiplying MT C by 44/12 (or 3.67), which is the ratio of the atomic mass of a carbon dioxide molecule to the atomic mass of a carbon atom.

ABBREVIATIONS:
MT = metric tons
C = carbon
$MTCO_2e$ = metric tons carbon dioxide equivalent
NFD = no formal description

Based on the above estimates, **Table 6** presents overall project-related GHG emissions. This table shows the total one-time carbon storage loss associated with converting existing land uses into vineyards along with the 30-year project lifetime carbon sequestration loss of this conversion, which is 16,475~~15,148~~ $MTCO_2e$. The table also shows the total one-time carbon storage gain associated with the new vineyards along with the 30-year project lifetime carbon sequestration gain of the new vineyards, which is 14,607 $MTCO_2e$. Accordingly, the proposed project could result in a one-time emissions sink of up to 6,352~~6,713~~ $MTCO_2e$ (8,059~~7,697~~ minus 14,411) and annual on-going emissions associated with loss of sequestration estimated to be 274~~242~~ MT CO_{2e} per year (281~~248~~ minus 7), for a total 30-year lifetime project emission of 1,868~~541~~ $MTCO_2e$ or 510~~148~~ MT C. In other words, it is anticipated that the annual emissions associated with changes in carbon stock/storage and sequestration as a result of project-related land use changes would be approximately 17~~5~~ MT C per year or 62~~18~~ $MTCO_2e$ per year.

TABLE 6
ESTIMATED OVERALL ~~PROJECT-RELATED~~ GHG EMISSIONS - PROJECT

Vegetation/Land Use Type	Total $MTCO_2e$
Carbon Loss - existing land use removal	
Carbon Storage	8,059~~7,697~~
Carbon Sequestration (annual)	281~~248~~
30-year lifetime emissions	16,475~~15,148~~
Carbon Gains - new land use types [a]	
Carbon Storage	-14,411
Carbon Sequestration (annual)	-7
30-year lifetime emissions	-14,607
Total Project Lifetime Emissions	**1,868~~541~~**
Total Project Annual Emissions	**62~~18~~**

NOTES:

[a] Emissions are reported as negative because they represent a GHG emissions sink

ABBREVIATIONS:
GHG = greenhouse gas emissions
$MTCO_2e$ = metric tons carbon dioxide equivalent

Table 7 presents overall project-related GHG emissions for the mitigated proposed project described in the Draft EIR (development of approximately 97.69 acres of vineyard within approximately 141.7 acres). The total one-time carbon storage loss associated with converting existing land uses into vineyards along with the 30-year project lifetime carbon sequestration loss of this conversion would be 14,933 $MTCO_2e$. The table also shows the total one-time carbon storage gain associated with the 97.69 acres of new vineyards along with the 30-year project lifetime carbon sequestration gain of the new vineyards, which is 12,626 $MTCO_2e$. Accordingly, the mitigated proposed project could result in a one-time emissions sink of up to 5,323 $MTCO_2e$ (7,303 minus 12,626) and annual on-going emissions associated with loss of sequestration estimated to be 249 MT CO_{2e} per year (254 minus 6), for a total 30-year lifetime project emission of 7,458 $MTCO_2e$. In other words, it is anticipated that the annual emissions associated with changes in carbon stock/storage and sequestration associated with the mitigated project would be approximately 71 $MTCO_2e$ per year.

TABLE 7
ESTIMATED OVERALL GHG EMISSIONS – MITIGATED PROJECT

Vegetation / Land Use Type	Total $MTCO_2e$
Carbon Loss - existing land use removal	
Carbon Storage[a]	7,303
Carbon Sequestration (annual)	254
30-year lifetime sequestration emissions	14,933
Carbon Gains - new land use types [a]	
Carbon Storage	-12,626
Carbon Sequestration (annual)	-6
30-year lifetime sequestration emissions	-12,798
Total Project Lifetime Emissions	**2,135**
Total Project Annual Emissions	**71**

NOTES:

[a] Emissions are reported as negative because they represent a GHG emissions sink

ABBREVIATIONS:
GHG = greenhouse gas emissions
$MTCO_2e$ = metric tons carbon dioxide equivalent

References

Ascent Environmental, 2016. *Napa County Climate Action Plan: Appendix A Technical Memo #1 - Greenhouse Gas Emissions Inventory and Forecasts*. Table 16. Available: https://www.countyofnapa.org/DocumentCenter/View/297/Appendix-A-Revised-Final-Tech-Memo-1-PDF. Accessed January 2019.

California Oak Foundation. 2008. *An Inventory of Carbon and California Oaks*. Tables 4 and 5. Available at: http://californiaoaks.org/wp-content/uploads/2016/04/CarbonResourcesFinal.pdf. Accessed January 2019.

Williams, J. N., D. Hollander, A T. O'Geen, L. A. Thrupp, R. Hanifin, K. Steenwerth, G. McGourty, L. E. Jackson (2011). Assessment of carbon in woody plants and soil across a vineyard-woodland landscape. *Carbon Balance and Management*, 2011; 6: 11. doi: 10.1186/1750-0680-6-11. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3287142/.

KJS Vineyards - Carbon Sequestration Analysis EIR Tables

Updated: 4/15/2022

Project Vegetation by Acreage

Biological Communities	Total Acreage on Project Site	Original Project Acreage	Mitigated Project Acreage	% of Original Project Acreage	% of Mitigated Project Acreage
Existing Vegetation					
Upland Annual Grasslands and Forbs Formation	153.2	116.22	104.66	74.0%	73.8%
Purple Needlegrass Grassland	Not quantified	0.19	0	0.1%	0.0%
Beardless Wildrye Grassland	Not quantified	0.05	0	0.0%	0.0%
Blue Wildrye Grassland	Not quantified	0.08	0	0.1%	0.0%
Blue Oak Alliance	35.27	5.56	5.56	3.5%	3.9%
Coast Live Oak–Blue Oak (Foothill Pine) NFD Association	165.37	6.54	5.83	4.2%	4.1%
Interior Live Oak–Blue Oak (Foothill Pine) NFD Association	251.89	20.71	18.52	13.2%	13.1%
Mixed Oak Alliance	68.77	0.71	0.71	0.5%	0.5%
Scrub Interior Live Oak–Scrub Oak (California Bay–Flowering Ash–Birch Leaf Mountain Mahogany–Toyon-California Buckeye) Mesic East County NFD Super Alliance	23.51	4.35	3.71	2.8%	2.6%
Valley Oak–(California Bay–Coast Live Oak–Walnut-Ash) Riparian Forest NFD Association	17.81	0.06	0.06	0.0%	0.0%
Urban or Built-Up	2.64	2.64	2.64	1.7%	1.9%
Riverine	0.02	0.02	0.02	0.0%	0.0%
Unnamed Pond	Not quantified	0.005	0	0.0%	0.0%
Total	718.48	157.14	141.72	100.0%	100.0%
New Vegetation					
Vineyard		111.5	97.7		

Carbon Stock & Carbon Sequestration Factors

Vegetation	Carbon Storage / Stock per Acre (MT C/acre)				Carbon Sequestration (MT C/acre/year)
	Wood/Trees	Soil	Litter / duff / understory	Total	
Existing Vegetation					
Upland Annual Grasslands and Forbs Formation	0.0	0.0	0.0	2.6	0.0
Purple Needlegrass Grassland	0.0	0.0	0.0	2.6	0.0
Beardless Wildrye Grassland	0.0	0.0	0.0	2.6	0.0
Blue Wildrye Grassland	0.0	0.0	0.0	2.6	0.0
Blue Oak Alliance	12.5	11.3	23.1	46.9	2.017
Coast Live Oak–Blue Oak (Foothill Pine) NFD Association	22.3	11.3	25.9	59.5	2.017
Interior Live Oak–Blue Oak (Foothill Pine) NFD Association	18.6	11.3	20.6	50.6	2.017
Mixed Oak Alliance	29.9	11.3	18.6	59.9	2.017
Scrub Interior Live Oak–Scrub Oak (California Bay–Flowering Ash–Birch Leaf Mountain Mahogany–Toyon-California Buckeye) Mesic East County NFD Super Alliance	0.0	0.0	0.0	34.9	2.017
Valley Oak–(California Bay–Coast Live Oak–Walnut-Ash) Riparian Forest NFD Association	10.1	11.3	26.7	48.2	2.017
Urban or Built-Up	0.0	0.0	0.0	0.0	0.0
Riverine	0.0	0.0	0.0	0.0	0.0
Unnamed Pond	0.0	0.0	0.0	0.0	0.0
New Vegetation					
Vineyard	1.2	34.0	0.0	35.2	0.016

Estimated Project Site Carbon Stocks/Storage

Vegetation	Original Project Acreage	Carbon Storage / Stock per Acre (MT C/acre)	Total Carbon Storage (MT C)	Total Carbon Storage ($MTCO_2e$)	Mitigated Project Acreage	Carbon Storage / Stock per Acre (MT C/acre)	Total Carbon Storage (MT C)	Total Carbon Storage ($MTCO_2e$)
Upland Annual Grasslands and Forbs Formation	116.2	2.6	302.2	1108.0	104.7	2.6	272.1	997.8
Purple Needlegrass Grassland	0.2	2.6	0.5	1.8	0.0	2.6	0.0	0.0
Beardless Wildrye Grassland	0.1	2.6	0.1	0.5	0.0	2.6	0.0	0.0
Blue Wildrye Grassland	0.1	2.6	0.2	0.8	0.0	2.6	0.0	0.0
Blue Oak Alliance	5.6	46.9	261.0	957.0	5.6	46.9	261.0	957.0
Coast Live Oak–Blue Oak (Foothill Pine) NFD Association	6.5	59.5	389.1	1426.5	5.8	59.5	346.8	1271.7
Interior Live Oak–Blue Oak (Foothill Pine) NFD Association	20.7	50.6	1047.6	3841.3	18.5	50.6	936.8	3435.1
Mixed Oak Alliance	0.7	59.9	42.5	155.9	0.7	59.9	42.5	155.9
Scrub Interior Live Oak–Scrub Oak (California Bay–Flowering Ash–Birch Leaf Mountain Mahogany–Toyon-California Buckeye) Mesic East County NFD Super Alliance	4.4	34.9	151.8	556.7	3.7	34.9	129.5	474.8
Valley Oak–(California Bay–Coast Live Oak–Walnut-Ash) Riparian Forest NFD Association	0.1	48.2	2.9	10.6	0.1	48.2	2.9	10.6
Urban or Built-Up	2.6	0.0	0.0	0.0	2.6	0.0	0.0	0.0
Riverine	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Unnamed Pond	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	**157.1**		**2,197.9**	**8,059.1**	**141.7**		**1,991.7**	**7,302.8**

Estimated Project Site Carbon Sequestration

Vegetation	Original Project Acreage	Annual Carbon Sequestration per Acre (MT C/acre)	Annual Carbon Sequestration (MT C)	Annual Carbon Sequestration ($MTCO_2e$)	Mitigated Project Acreage	Annual Carbon Sequestration per Acre (MT C/acre)	Annual Carbon Sequestration (MT C)	Annual Carbon Sequestration ($MTCO_2e$)
Upland Annual Grasslands and Forbs Formation	116.2	0.0	0.0	0.0	104.7	0.0	0.0	0.0
Purple Needlegrass Grassland	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Beardless Wildrye Grassland	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Blue Wildrye Grassland	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Blue Oak Alliance	5.6	2.0	11.2	41.1	5.6	2.0	11.2	41.1
Coast Live Oak–Blue Oak (Foothill Pine) NFD Association	6.5	2.0	13.2	48.4	5.8	2.0	11.8	43.1
Interior Live Oak–Blue Oak (Foothill Pine) NFD Association	20.7	2.0	41.8	153.2	18.5	2.0	37.4	137.0
Mixed Oak Alliance	0.7	2.0	1.4	5.3	0.7	2.0	1.4	5.3
Scrub Interior Live Oak–Scrub Oak (California Bay–Flowering Ash–Birch Leaf Mountain Mahogany–Toyon-California Buckeye) Mesic East County NFD Super Alliance	4.4	2.0	8.8	32.2	3.7	2.0	7.5	27.4
Valley Oak–(California Bay–Coast Live Oak–Walnut-Ash) Riparian Forest NFD Association	0.1	2.0	0.1	0.4	0.1	2.0	0.1	0.4
Urban or Built-Up	2.6	0.0	0.0	0.0	2.6	0.0	0.0	0.0
Riverine	0.02	0.0	0.0	0.0	0.02	0.0	0.0	0.0
Unnamed Pond	0.005	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	**157.1**		**76.5**	**280.5**	**141.7**		**69.4**	**254.3**

Estimated Project Carbon Stocks/Storage - Gained

Vegetation	Original Project Acreage	Carbon Storage / Stock per Acre (MT C/acre)	Total Carbon Storage (MT C)	Total Carbon Storage ($MTCO_2e$)	Mitigated Project Acreage	Carbon Storage / Stock per Acre (MT C/acre)	Total Carbon Storage (MT C)	Total Carbon Storage ($MTCO_2e$)
Vineyard	111.5	35.2	3,930.2	14,410.6	97.7	35.2	3,443.4	12,625.8
Total	**111.5**		**3,930.2**	**14,410.6**	**97.7**		**3,443.4**	**12,625.8**

Estimated Project Site Carbon Sequestration - Gained

Vegetation	Original Project Acreage	Annual Carbon Sequestration per Acre (MT C/acre)	Annual Carbon Sequestration (MT C)	Annual Carbon Sequestration ($MTCO_2e$)	Mitigated Project Acreage	Annual Carbon Sequestration per Acre (MT C/acre)	Annual Carbon Sequestration (MT C)	Annual Carbon Sequestration ($MTCO_2e$)
Vineyard	111.5	0.016	1.8	6.5	97.7	0.016	1.6	5.7
Total	**111.5**		**1.8**	**6.5**	**97.7**		**1.6**	**5.7**

Estimated Overall Project-related GHG Emissions

Vegetation Type/Carbon Storage	Original Project $MTCO_2e$	Mitigated Project $MTCO_2e$	
Carbon Loss - Existing Vegetation Removal			
Carbon Storage	8,059	7,303	Assumes all removed vegetation will be burned
Carbon Sequestration (Annual)	281	254	
30-year lifetime sequestration emissions	16,475	14,933	
Carbon Gains - From New Vegetation			
Carbon Storage	-14,411	-12,626	
Carbon Sequestration (Annual)	-7	-6	
30-year lifetime sequestration emissions	-14,607	-12,798	
Total Project Lifetime Emissions	**1,868**	**2,135**	
Total Project Annual Emissions	**62**	**71**	

KJS Vineyards - Carbon Sequestration Analysis

Last updated 4/15/2022

Carbon Storage

Land Use Category	Value (MT C/acre)	Notes	Source
Wood/Trees			
Upland Annual Grasslands and Forbs Formation		*see below for total from NAPA CAP*	
Purple Needlegrass Grassland		*see below for total from NAPA CAP*	
Beardless Wildrye Grassland		*see below for total from NAPA CAP*	
Blue Wildrye Grassland		*see below for total from NAPA CAP*	
Blue Oak Alliance	12.5	Sacramento - Blue Oak	California Oak Foundation 2008, An Inventory of Carbon and California Oaks, Table 4
Coast Live Oak–Blue Oak (Foothill Pine) NFD Association	22.3	Central Coast - Coast Oak	California Oak Foundation 2008, An Inventory of Carbon and California Oaks, Table 4
Interior Live Oak–Blue Oak (Foothill Pine) NFD Association	18.6	Sacramento - Interior Oak	California Oak Foundation 2008, An Inventory of Carbon and California Oaks, Table 4
Mixed Oak Alliance	29.9	Sacramento - Mixed Oak	California Oak Foundation 2008, An Inventory of Carbon and California Oaks, Table 4
Scrub Interior Live Oak–Scrub Oak (California Bay–Flowering Ash–Birch Leaf Mountain Mahogany–Toyon-California Buckeye) Mesic East County NFD Super Alliance		*see below for total from NAPA CAP*	
Valley Oak–(California Bay–Coast Live Oak–Walnut-Ash) Riparian Forest NFD Association	10.1	Central Coast - Valley Oak	California Oak Foundation 2008, An Inventory of Carbon and California Oaks, Table 4
Urban or Built-Up	0	assume no carbon	
Riverine	0	assume no carbon	
Unnamed Pond	0	assume no carbon	
Vineyard	1.2	Carbon by reservoir - Vineyards - Avg	Hollander 2011, Assessment of carbon in woody plants and soil across a vineyard-woodland landscape, Table 1
Soil			
Upland Annual Grasslands and Forbs Formation		*see below for total from NAPA CAP*	
Purple Needlegrass Grassland		*see below for total from NAPA CAP*	
Beardless Wildrye Grassland		*see below for total from NAPA CAP*	
Blue Wildrye Grassland		*see below for total from NAPA CAP*	
Blue Oak Alliance	11.3	soil organics	California Oak Foundation 2008, An Inventory of Carbon
Coast Live Oak–Blue Oak (Foothill Pine) NFD Association	11.3	soil organics	California Oak Foundation 2008, An Inventory of Carbon and California Oaks, Table 5
Interior Live Oak–Blue Oak (Foothill Pine) NFD Association	11.3	soil organics	California Oak Foundation 2008, An Inventory of Carbon and California Oaks, Table 5
Mixed Oak Alliance	11.3	soil organics	California Oak Foundation 2008, An Inventory of Carbon and California Oaks, Table 5

Scrub Interior Live Oak–Scrub Oak (California Bay–Flowering Ash–Birch Leaf Mountain Mahogany–Toyon-California Buckeye) Mesic East County NFD Super Alliance		*see below for total from NAPA CAP*	
Valley Oak–(California Bay–Coast Live Oak–Walnut-Ash) Riparian Forest NFD Association	11.3	soil organics	California Oak Foundation 2008, An Inventory of Carbon and California Oaks, Table 5
Urban or Built-Up	0	assume no carbon	
Riverine	0	assume no carbon	
Unnamed Pond	0	assume no carbon	
Vineyard	34.0	Carbon by reservoir - Vineyards - Avg	Hollander 2011, Assessment of carbon in woody plants and soil across a vineyard-woodland landscape, Table 1
Litter/Duff/Understory			
Upland Annual Grasslands and Forbs Formation		*see below for total from NAPA CAP*	
Purple Needlegrass Grassland		*see below for total from NAPA CAP*	
Beardless Wildrye Grassland		*see below for total from NAPA CAP*	
Blue Wildrye Grassland		*see below for total from NAPA CAP*	
Blue Oak Alliance	23.1	understory + downed woody debris + duff/litter	California Oak Foundation 2008, An Inventory of Carbon and California Oaks, Table 5
Coast Live Oak–Blue Oak (Foothill Pine) NFD Association	25.9	understory + downed woody debris + duff/litter	California Oak Foundation 2008, An Inventory of Carbon and California Oaks, Table 5
Interior Live Oak–Blue Oak (Foothill Pine) NFD Association	20.6	understory + downed woody debris + duff/litter	California Oak Foundation 2008, An Inventory of Carbon and California Oaks, Table 5
Mixed Oak Alliance	18.6	understory + downed woody debris + duff/litter	California Oak Foundation 2008, An Inventory of Carbon and California Oaks, Table 5
Scrub Interior Live Oak–Scrub Oak (California Bay–Flowering Ash–Birch Leaf Mountain Mahogany–Toyon-California Buckeye) Mesic East County NFD Super Alliance		*see below for total from NAPA CAP*	
Valley Oak–(California Bay–Coast Live Oak–Walnut-Ash) Riparian Forest NFD Association	26.7	understory + downed woody debris + duff/litter	California Oak Foundation 2008, An Inventory of Carbon and California Oaks, Table 5
Urban or Built-Up	0	assume no carbon	
Riverine	0	assume no carbon	
Unnamed Pond	0	assume no carbon	
Vineyard		Included in other values above	
Total			
Upland Annual Grasslands and Forbs Formation	2.6	Carbon stored per acre (MT C/acre) for grassland	Napa CAP Appendix A Table 16
Purple Needlegrass Grassland	2.6	Carbon stored per acre (MT C/acre) for grassland	Napa CAP Appendix A Table 16
Beardless Wildrye Grassland	2.6	Carbon stored per acre (MT C/acre) for grassland	Napa CAP Appendix A Table 16
Blue Wildrye Grassland	2.6	Carbon stored per acre (MT C/acre) for grassland	Napa CAP Appendix A Table 16
Blue Oak Alliance	46.9		
Coast Live Oak–Blue Oak (Foothill Pine) NFD Association	59.5		
Interior Live Oak–Blue Oak (Foothill Pine) NFD Association	50.6		

Mixed Oak Alliance	59.9		
Scrub Interior Live Oak–Scrub Oak (California Bay–Flowering Ash–Birch Leaf Mountain Mahogany–Toyon-California Buckeye) Mesic East County NFD Super Alliance	34.9	Oak Woodlands - Carbon stored per acre (MT C/acre)	Napa CAP Appendix A Table 16 - https://www.countyofnapa.org/DocumentCenter/View/297/Appendix-A-Revised-Final-Tech-Memo-1-PDF
Valley Oak–(California Bay–Coast Live Oak–Walnut-Ash) Riparian Forest NFD Association	48.2		
Urban or Built-Up	0	assume no carbon	
Riverine	0	assume no carbon	
Unnamed Pond	0	assume no carbon	
Vineyard	35.2	totalled from above	

Carbon Sequestration

Land Use Category	Value (MT C/acre)	Notes	Source
Upland Annual Grasslands and Forbs Formation	0.0	Annual Net Carbon Sequestration per acre (MT C/acre/yr) for grassland	Napa CAP Appendix A Table 16
Purple Needlegrass Grassland	0.0	Annual Net Carbon Sequestration per acre (MT C/acre/yr) for grassland	Napa CAP Appendix A Table 16
Beardless Wildrye Grassland	0.0	Annual Net Carbon Sequestration per acre (MT C/acre/yr) for grassland	Napa CAP Appendix A Table 16
Blue Wildrye Grassland	0.0	Annual Net Carbon Sequestration per acre (MT C/acre/yr) for grassland	Napa CAP Appendix A Table 16
Blue Oak Alliance	2.017	Oak Woodlands - Annual Net Carbon Sequestration per acre (MT C/acre/yr)	Napa CAP Appendix A Table 16
Coast Live Oak–Blue Oak (Foothill Pine) NFD Association	2.017	Oak Woodlands - Annual Net Carbon Sequestration per acre (MT C/acre/yr)	Napa CAP Appendix A Table 16
Interior Live Oak–Blue Oak (Foothill Pine) NFD Association	2.017	Oak Woodlands - Annual Net Carbon Sequestration per acre (MT C/acre/yr)	Napa CAP Appendix A Table 16
Mixed Oak Alliance	2.017	Oak Woodlands - Annual Net Carbon Sequestration per acre (MT C/acre/yr)	Napa CAP Appendix A Table 16
Scrub Interior Live Oak–Scrub Oak (California Bay–Flowering Ash–Birch Leaf Mountain Mahogany–Toyon-California Buckeye) Mesic East County NFD Super Alliance	2.017	Oak Woodlands - Annual Net Carbon Sequestration per acre (MT C/acre/yr)	Napa CAP Appendix A Table 16
Valley Oak–(California Bay–Coast Live Oak–Walnut-Ash) Riparian Forest NFD Association	2.017	Oak Woodlands - Annual Net Carbon Sequestration per acre (MT C/acre/yr)	Napa CAP Appendix A Table 16
Urban or Built-Up	0	assume no carbon	
Riverine	0	assume no carbon	
Unnamed Pond	0	assume no carbon	
Vineyard	0.016	Annual Net Carbon Sequestration per acre (MT C/acre/yr)	

KJS Sorrento - Carbon Sequestration Analysis Research

Last updated 10/22/2021

Oak Woodlands - Blue Oaks			
Carbon Storage			
	Metric Tons per Hectare of Oak Woodland and Forest Carbon Stored in Trees - Woodlands -		
31	Sacramento	Table 4: http://californiaoaks.org/wp-content/uploads/2016/04/CarbonResourcesFinal.pdf	
	Non-tree Carbon Pools in Metric Tons per Hectare	Table 5: http://californiaoaks.org/wp-content/uploads/2016/04/CarbonResourcesFinal.pdf	
15	Understory Shrubbery and Forbs		
12	Downed Woody Debris		
30	Duff and Litter Layers		
28	Soil Organics		
84	Total non-tree		
34.9	Oak Woodlands - Carbon stored per acre (MT C/acre)	Napa CAP Appendix A Table 16 - https://www.countyofnapa.org/DocumentCenter/View/297/Appendix-A-Revised-Final-Tech-Memo-1-PDF	Calculated from carbon fractions and biomass ratios from IPCC 2006a and per-acre aboveground biomass factors and tree densities from USDA 2005. Tree densities represent 12 northern California counties, including Napa County. Calculated factor represents above and below ground live biomass only. Represents average of eight oak species
Carbon Sequestration			
2.017	Oak Woodlands - Annual Net Carbon Sequestration per acre (MT C/acre/yr)	Napa CAP Appendix A Table 16	Calculated from annual growth rates derived from Table 13 in USDA 2005 calculated carbon storage values per tree from IPCC 2006a and USDA 2005, and
77.2	annual growth rate (MCF)	USDA 2005	
Vineyards			
Carbon Storage			
84.1	Carbon by reservoir - Vineyards - Avg - Soil (Mg C/ha)	Williams et al., Assessment of carbon in Woody Plants and Soil across a Vineyard-Woodland Landscape, 2011. Available: https://cbmjournal.biomedcentral.com/track/pdf/10.1186/1750-0680-6-11.pdf	
3.0	Carbon by reservoir - Vineyards - Avg - AG-Wood	Williams et al., Assessment of carbon in Woody Plants and Soil across a Vineyard-Woodland Landscape, 2011. Available: https://cbmjournal.biomedcentral.com/track/pdf/10.1186/1750-0680-6-11.pdf	
87.1	Total		
1.2	Carbon stored per acre (MT C/acre)	Napa CAP Appendix A Table 16	
3.0	Carbon Content of Land Cover - Horticulture/Vineyard - t C/ha	Brown 2004, as cited in Napa CAP Appendix A Table 16	
1.2	Carbon Content of Land Cover - Horticulture/Vineyard - MT C/acre	Caculated value from Brown 2004	
Carbon Sequestration			
0.016	Annual Net Carbon Sequestration per acre (MT C/acre/yr)	Napa CAP Appendix A Table 16. Factor converted directly from page 1980 of Kroodsma, et. al. 2006. Includes sequestration in woody mass, pruning, removal of vineyards after a 25-year lifetime, burial in soil, and an average level of conversion to biomass energy.	
Grassland			
Carbon Storage			
2.6	Carbon stored per acre (MT C/acre) for grassland	Napa CAP Appendix A Table 16	
Carbon Sequestration			
0	Annual Net Carbon Sequestration per acre (MT C/acre/yr) for grassland	Napa CAP Appendix A Table 16	
4.31	Default annual CO2 accumulation per acre (MT CO2/ acre)	CAPCOA 7.1.2	
Agriculture			
Carbon Storage			
2.2	Carbon stored per acre (MT C/acre) for croplands (not vineyards)	Napa CAP Appendix A Table 16	
Carbon Sequestration			
0.081	Annual Net Carbon Sequestration per acre (MT C/acre/yr) for croplands (not vineyards)	Napa CAP Appendix A Table 16	
Shrublands			
Carbon Storage			
12.8	Carbon stored per acre (MT C/acre) for shrublands	Napa CAP Appendix A Table 16	
Carbon Sequestration			
0	Annual Net Carbon Sequestration per acre (MT C/acre/yr) for shrublands	Napa CAP Appendix A Table 16	
Riparian Woodland - Valley Oaks			
Carbon Storage			
	Metric Tons per Hectare of Oak Woodland and Forest Carbon Stored in Trees - Woodlands -		
24	North Coast	Table 4: http://californiaoaks.org/wp-content/uploads/2016/04/CarbonResourcesFinal.pdf	
	Non-tree Carbon Pools in Metric Tons per Hectare	Table 5: http://californiaoaks.org/wp-content/uploads/2016/04/CarbonResourcesFinal.pdf	
21	Understory Shrubbery and Forbs		
14	Downed Woody Debris		
31	Duff and Litter Layers		
28	Soil Organics		
93	Total		
57	Riparian Woodlands - Carbon stored per acre (MT C/acre)	Napa CAP Appendix A Table 16	
Carbon Sequestration			
4.744	Riparian Woodlands - Annual Net Carbon Sequestration per acre (MT C/acre/yr)	Napa CAP Appendix A Table 16	

Table 16 2014 Unincorporated Napa County GHG Inventory: Lost Carbon Stock and Sequestration Factors by Land Use Type[1]

Land Use Type	Stored Carbon		Annual Sequestration	
	Carbon stored per acre (MT C/acre)	Method or Sources	Annual Net Carbon Sequestration per acre (MT C/acre/yr)	Method or Sources
Oak Woodlands	34.9	Calculated from carbon fractions and biomass ratios from IPCC 2006a and per-acre aboveground biomass factors and tree densities from USDA 2005. Tree densities represent 12 northern California counties, including Napa County. Calculated factor represents above and below ground live biomass only. Represents average of eight oak species.	2.017	Calculated from annual growth rates derived from Table 13 in USDA 2005 calculated carbon storage values per tree from IPCC 2006a and USDA 2005, and tree densities from USDA 2005. Represents average of eight oak species.
Coniferous Forest	47.0	Calculated from carbon fractions and biomass ratios from IPCC 2006a, per-tree aboveground biomass factors from CUFR 2009, and tree densities from USDA 2005. Tree densities represent 12 northern California counties, including Napa County. Calculated factor represents above and below ground live biomass only.	3.129	Softwood factors calculated from ratio of growth and mortality rates between California softwoods and hardwoods from Table 3 in Liang et. al. 2005 and adjusted against hardwood growth rates in USDA 2005.
Riparian Woodlands	57.0	Calculated based on average of eight oak species, tanoaks, and redwoods using same sources as above IPCC 2006a, USDA 2005, and CUFR 2009, as directed by the County. Calculated factor represents above and below ground live biomass only.	4.744	Average of 8 oak species, tanoaks, and redwoods, a softwood, using same methods as above depending on wood type.
Grasslands	2.6	Factor calculated from total area and total carbon stocks for grassland from Table 5 in Battles, et. al. 2014.	0	Factor available directly from page 19 of Brown, et. al. 2004.
Shrublands	12.8	Factor calculated based on page 18 in Battles, et. al. 2014 that states that on average, the carbon density of grassland is only 20% of shrublands.	0	Factor available directly from page 19 of Brown, et. al. 2004.
Croplands (Not Vineyards)	2.2	Includes the County mix of olives, vegetables, and hay as reported in the County's 2014 Crop Report. Carbon storage factors from Battles, et. al. 2014 and Brown, et. al. 2004 scaled by acreage for each crop type.	0.081	Weighted average of olives, vegetables, and hay sequestration rates based on acreages in Proietti et. al. 2014 and the 2014 Crop Report. Assumes vegetables and hay have zero annual sequestration.
Vineyards	1.2	Factor converted directly from Table 2.6 in Brown, et. al. 2004.	0.016	Factor converted directly from page 1980 of Kroodsma, et. al. 2006. Includes sequestration in woody mass, pruning, removal of vineyards after a 25-year lifetime, burial in soil, and an average level of conversion to biomass energy.

Note: MT = metric tons; C = carbon; GHG = greenhouse gas. See Attachment A for detailed calculations of the carbon storage and sequestration factors.

[1] Changes in land use patterns do not immediately change soil carbon levels. Instead, changes to soil carbon may be gradual, while change in land use patterns would have immediate impacts on aboveground and some belowground biomass. As such, soil carbon is not included in this analysis.

Source: IPCC 2006a, USDA 2005, CUFR 2009, Battles, et. al. 2014, Brown, et. al. 2004, Liang et. al. 2005, Proietti et. al. 2014, Napa County 2015, Kroodsma, et. al. 2006, Hade, pers. comm., 2015; data compiled by Ascent Environmental, 2016.

Oak Woodlands	IPCC, 2006a. Volume 4: Agriculture, Forestry and Other Land Use. In: 2006 IPCC Guidelines for National Greenhouse Gas Inventories. Available: http://www.ipcc-nggip.iges.or.jp/public/2006gl/vol4.html. Accessed: August 15, 2016. U.S. Department of Agriculture. 2005 (February). Oak Woodlands and Other Hardwood Forests of California, 1990s. Forest Service. Pacific Northwest Research Station. Resource Bulletin. Prepared by K.L. Waddell and T.M. Barrett, Portland, OR.
Coniferous Forest	IPCC, 2006a. Volume 4: Agriculture, Forestry and Other Land Use. In: 2006 IPCC Guidelines for National Greenhouse Gas Inventories. Available: http://www.ipcc-nggip.iges.or.jp/public/2006gl/vol4.html. Accessed: August 15, 2016. Center for Urban Forestry Research. 2009. CUFR Tree Carbon Calculator. Developed by the Center for Urban Forest Research. Pacific Southwest Research Station. U.S. Forest Service. In partnership with the California Department of Forestry and Fire Protection. Available: http://www.fs.usda.gov/ccrc/tools/tree-carbon-calculator-ctcc. Accessed August 15, 2016. Liang, J., J. Buongiorno, and R.A. Monserud. 2005 (June). Estimation and application of a growth and yield model for uneven-aged mixed conifer stands in California. In International Forestry Review, Volume 7, Number 2, 101-112. ResearchGate. U.S. Department of Agriculture. 2005 (February). Oak Woodlands and Other Hardwood Forests of California, 1990s. Forest Service. Pacific Northwest Research Station. Resource Bulletin. Prepared by K.L. Waddell and T.M. Barrett, Portland, OR.
Riperian Woodlands	IPCC, 2006a. Volume 4: Agriculture, Forestry and Other Land Use. In: 2006 IPCC Guidelines for National Greenhouse Gas Inventories. Available: http://www.ipcc-nggip.iges.or.jp/public/2006gl/vol4.html. Accessed: August 15, 2016. Center for Urban Forestry Research. 2009. CUFR Tree Carbon Calculator. Developed by the Center for Urban Forest Research. Pacific Southwest Research Station. U.S. Forest Service. In partnership with the California Department of Forestry and Fire Protection. Available: http://www.fs.usda.gov/ccrc/tools/tree-carbon-calculator-ctcc. Accessed August 15, 2016. U.S. Department of Agriculture. 2005 (February). Oak Woodlands and Other Hardwood Forests of California, 1990s. Forest Service. Pacific Northwest Research Station. Resource Bulletin. Prepared by K.L. Waddell and T.M. Barrett, Portland, OR.
Grasslands	Battles. J., P. Gonzales, T. Robards, B. Collins, D. Shah. 2014 (January). California Forest and Rangeland Greenhouse Gas Inventory Development. Fina Report. Revised January 30, 2014. Available: http://www.arb.ca.gov/cc/inventory/pubs/battles%20final%20report%2030jan14.pdf. Accessed October 20, 2015. Brown. S., T. Pearson, A. Dushku, J. Kadyzewski and Y. Qi. 2004. Baseline Greenhouse Gas Emissions for Forest, Range and Agricultural Lands in California. CEC-500-04-069F. Prepared for the California Energy Commission by Winrock International.
Shrublands	Battles. J., P. Gonzales, T. Robards, B. Collins, D. Shah. 2014 (January). California Forest and Rangeland Greenhouse Gas Inventory Development. Final Report. Revised January 30, 2014. Available: http://www.arb.ca.gov/cc/inventory/pubs/battles%20final%20report%2030jan14.pdf. Accessed October 20, 2015. Brown. S., T. Pearson, A. Dushku, J. Kadyzewski and Y. Qi. 2004. Baseline Greenhouse Gas Emissions for Forest, Range and Agricultural Lands in California. CEC-500-04-069F. Prepared for the California Energy Commission by Winrock International.
Croplands (Not Vineyards)	Battles. J., P. Gonzales, T. Robards, B. Collins, D. Shah. 2014 (January). California Forest and Rangeland Greenhouse Gas Inventory Development. Final Report. Revised January 30, 2014. Available: http://www.arb.ca.gov/cc/inventory/pubs/battles%20final%20report%2030jan14.pdf. Accessed October 20, 2015. Brown. S., T. Pearson, A. Dushku, J. Kadyzewski and Y. Qi. 2004. Baseline Greenhouse Gas Emissions for Forest, Range and Agricultural Lands in California. CEC-500-04-069F. Prepared for the California Energy Commission by Winrock International.
Vineyards	Brown. S., T. Pearson, A. Dushku, J. Kadyzewski and Y. Qi. 2004. Baseline Greenhouse Gas Emissions for Forest, Range and Agricultural Lands in California. CEC-500-04-069F. Prepared for the California Energy Commission by Winrock International. Kroodsma, D. A., and Field, C. B. 2006. Carbon Sequestration in California Agriculture, 1980– 2000. Ecological Applications. 16, 1975-1985.

Biological Communities	Direct Impact in the Development Area (acres[1])	Total Acreage on the Project Site[2]	Percent of Total Affected on the Project Site	Direct Impact in the Development Area after Mitigation (acres[1])[3]
Upland Annual Grasslands and Forbs Formation	116.22	153.2	75.86	104.66
Purple Needlegrass Grassland	0.19	Not quantified	N/A	0
Beardless Wildrye Grassland	0.05	Not quantified	N/A	0
Blue Wildrye Grassland	0.08	Not quantified	N/A	0
Blue Oak Alliance	5.56	35.27	15.76	5.56
Coast Live Oak–Blue Oak (Foothill Pine) NFD Association	6.54	165.37	3.95	5.83
Interior Live Oak–Blue Oak (Foothill Pine) NFD Association	20.71	251.89	8.17	18.52
Mixed Oak Alliance	0.71	68.77	1.03	0.71
Scrub Interior Live Oak–Scrub Oak (California Bay–Flowering Ash–Birch Leaf Mountain Mahogany–Toyon-California Buckeye) Mesic East County NFD Super Alliance	4.35	23.51	18.5	3.71
Valley Oak–(California Bay–Coast Live Oak–Walnut-Ash) Riparian Forest NFD Association	0.06	17.81	0.34	0.06
Urban or Built-Up	2.64	2.64	100	2.64
Riverine	0.02	0.02	100	0.02
Unnamed Pond	0.005	Not quantified	N/A	0
Total	**157.14**	**718.48**	**–**	**141.72**

CHAPTER 3
COMMENTS AND RESPONSES

3.1 INTRODUCTION

This chapter contains the comment letters received on the Draft EIR. Following each comment letter is a response by Napa County intended to supplement, clarify, or amend information provided in the Draft EIR, or to refer the reader to the appropriate place in the document where the requested information can be found. Comments not directly related to environmental issues may be discussed or noted in the responses for the record. Where text changes in the Draft EIR are warranted based on comments on the Draft EIR, those changes are included in Chapter 2, *Revisions to the Draft EIR*.

Occasionally, a response to a comment provides a cross-reference to another response to comment. This occurs when the same or a very similar comment was made or question asked, and an appropriate response was included elsewhere.

3.2 RESPONSES TO DRAFT EIR COMMENTS

LETTER S1

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

May 28, 2021

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

Subject: KJS and Sorrento Vineyard Conversion Erosion Control Plan Application #P17-00432-ECPA, Draft Environmental Impact Report, SCH No. 2018092042, Napa County

Dear Mr. Barrella:

California Department of Fish and Wildlife (CDFW) personnel reviewed the draft Environmental Impact Report (EIR) for the KJS and Sorrento Vineyard Conversion Erosion Control Plan (Project). CDFW is submitting comments on the draft EIR to inform Napa County, as Lead Agency, of our concerns regarding potentially significant impacts to sensitive resources associated with the proposed Project.

CDFW is a Trustee Agency pursuant to the California Environmental Quality Act (CEQA) and is responsible for the conservation, protection, and management of the State's biological resources (Pub. Resources Code, § 21000 et seq.; Cal. Code Regs., tit. 14, § 15386). CDFW is also considered a Responsible Agency if a project would require discretionary approval, such as a California Endangered Species Act (CESA) Permit, a Native Plant Protection Act Permit, or a Lake and Streambed Alteration (LSA) Agreement, and other provisions of the Fish and Game Code that afford protection to the State's fish and wildlife trust resources.

S1-1

ENVIRONMENTAL SETTING

The 950.9-acre KJS Investment Properties and Sorrento Inc. Ranch (i.e., Project property) is located at 3370 and 3380 Sage Canyon Road, approximately 10 miles east of the City of St. Helena and approximately 3.75 miles west of Lake Berryessa in unincorporated Napa County. The Project property resides in Elder Valley. Elder Creek, a tributary to Sage Creek thence Lake Hennessey, bisects the Project site. The Project property contains a 90 acre-feet on-stream reservoir (Matheson Reservoir) and a few off-stream ponds. Approximately 104 acres of vineyard exists on the Project property. Within the Project development area, there is 116.54 acres of annual grassland habitat, 33.58 acres of mixed oak woodland, and 4.35 acres of Chaparral/Scrub habitat. Elevations within the development area range from 940 feet to 1,680 feet above mean sea level. Ground slopes within the development area range from 3 percent to over 30 percent.

S1-2

PROJECT DESCRIPTION

The Project would develop 156.8 acres of vineyard within 33 vineyard blocks. Vineyard development activities include removing pasture, hayfield, grassland, brush/shrubland, and trees and woodland within the proposed development area. Other activities include soil ripping, rock removal, soil cultivation, seeding of a cover crop, mulching, trenching for irrigation pipelines, installing a trellis system and wildlife exclusion fence, and laying out vine rows. In addition, temporary and permanent erosion control measures would be installed. The Project also includes Petitions for Change on Water Right License 9125 and Permit 18459. Water Right Permit 18459 allows the diversion of 48 acre-feet of water per year from Elder Creek to storage in an on-stream reservoir; however, the Petition for Change includes relocating to storage in an off-stream reservoir. The Project also proposes to construct a point of diversion within Elder Creek.

S1-2 cont.

COMMENTS AND CONCERNS

Western Burrowing Owl (*Athene cunicularia*)

Mitigation Measure 3.3-1g in the draft EIR would not reduce potential impacts to burrowing owl, a California Species of Special Concern, to less-than-significant because conducting a single survey within 14 to 30 days of the start of Project activities would be unlikely to detect burrowing owls. Burrowing owls may use the Project site and adjacent habitat for foraging, overwintering, and/or nesting habitat.

CDFW recommends the following mitigation measures:

A qualified biologist conduct a habitat assessment and if suitable habitat is present surveys in accordance with the California Department of Fish and Game (now CDFW) 2012 Staff Report on Burrowing Owl Mitigation survey methodology (see https://wildlife.ca.gov/Conservation/Survey-Protocols#377281284-birds). Surveys shall encompass the project area and a sufficient buffer zone to detect owls nearby that may be impacted. Time lapses between surveys or project activities shall trigger subsequent surveys including but not limited to a final survey within 24 hours prior to ground disturbance before construction equipment mobilizes to the Project area. The qualified biologist shall have a minimum of two years of experience implementing the CDFW 2012 Staff Report survey methodology resulting in detections.

S1-3

If burrowing owls are detected on or adjacent to the site, the following restricted activity dates and setback distances recommended per CDFW's Staff Report (2012) shall be implemented, unless reduced buffers are accepted by CDFW in writing based on site-specific conditions:

- *From April 1 through October 15, low disturbance and medium disturbance activities shall have a 200-meter (656 feet) buffer while high disturbance activities*

shall have a 500-meter (1,640 feet) buffer from occupied nests and wintering sites.

- *From October 16 through March 31, low disturbance activities shall have a 50-meter buffer (164 feet), medium disturbance activities shall have a 100-meter (328 feet) buffer, and high disturbance activities shall have a 500-meter (1,640 feet) buffer from occupied nests and wintering sites.*

If burrowing owls are present outside of the nesting season, burrowing owls may be passively relocated from the project site and adjacent habitat using CDFW-accepted methods so that construction can proceed. Any required passive relocation of burrowing owls would require CDFW acceptance. If passive relocation of burrowing owls is necessary, a qualified biologist shall prepare a Relocation Plan, including compensatory habitat as described below, for CDFW review and acceptance prior to the start of construction activities.

If the survey determines that the project site is actively being used by burrowing owl, or any owls are passively relocated as described above, then compensatory habitat mitigation shall be provided. The habitat mitigation/compensation plan shall be submitted to CDFW for review and approval prior to the start of project activities. Habitat compensation acreages shall be approved by CDFW, as the amount depends on site-specific conditions, and completed before project construction. It shall also include placement of a conservation easement and preparation and implementation of a long-term management plan. If burrowing owls are observed during surveys, notification shall also be submitted to the California Natural Diversity Database (CNDDB; see https://wildlife.ca.gov/Data/CNDDB/Submitting-Data).

S1-3 cont.

Roosting Bats

The Project would remove trees that could contain roosting habitat for bats, including special-status species like the pallid bat (*Antrozous pallidus*), a California Species of Special Concern. Mitigation Measures 3.3-1i, 3.3-1j, and 3.3-1k are proposed to reduce impacts to bats to a level of less-than-significant.

CDFW recommends that Mitigation Measure 3.3-1k be revised as follows:

At least 30 days prior to tree removal activities, a qualified biologist shall assess all trees to determine if they contain suitable bat roosting habitat (e.g., cavities, crevices, deep bark fissures). If any trees contain such habitat, bat presence shall be presumed. Trees containing bat roosting habitat shall be removed using the method described below during the following seasonal periods of bat activity:

Prior to maternity season – from approximately March 1 (or when night temperatures are above 45°F and when rains have ceased) through April 15 (when females begin to

S1-4

give birth to young); and prior to winter torpor – from September 1 (when young bats are self-sufficiently volant) until October 15 (before night temperatures fall below 45 degrees Fahrenheit and rains begin).

On day 1, in the afternoon and under the supervision of a qualified biologist, chainsaws only shall be used to remove tree limbs that do NOT contain suitable bat roosting habitat (e.g., cavities, crevices, deep bark fissures). The next day, the rest of the tree shall be removed.

If bat habitat trees cannot be removed during the above seasonal periods of bat activity, a qualified biologist shall survey the trees to determine if the tree contains a maternity colony or winter torpor bats. If the qualified biologist cannot make this determination with certainty, the presence of maternity colonies or winter torpor bats shall be assumed, and removal of the tree shall be delayed until the seasonal periods of bat activity specified above. If the biologist determines bats are present but maternity colony or winter torpor bats are absent, then the tree may be removed outside of the above periods of seasonal bat activity using the above two step tree removal process. If the qualified biologist determines that bats are absent, then the tree may be removed without bat seasonality or method restrictions.

S1-4 cont.

Foothill Yellow-Legged Frog (*Rana boylii*)

The Northwest/North Coast foothill yellow-legged frog (FYLF) clade is a California Species of Special Concern and has been observed approximately 1.25 miles away from the Project site in Sage Creek (a direct tributary of Elder Creek). FYLF make seasonal movements out of mainstem streams into headwater tributaries to avoid high winter flows. CDFW recommends that FYLF is added to Mitigation Measures 3.3-1b, 3.3-1c, and 3.3-1d. Mitigation Measure 3.3-1b requires that a qualified biologist conduct a worker education program for all on-site personnel prior to starting construction; Mitigation Measure 3.3-1c requires that a qualified biologist conduct a pre-construction survey for special-status species 24 hours prior to starting construction, and Mitigation Measure 3.3-1d requires that a biological monitor oversee all vegetation removal, grading activities, and pipe installation within 492 feet of suitable aquatic habitat.

S1-5

CDFW recommends the following additional mitigation measures:

Prior to starting project construction, a qualified biologist shall conduct a pre-construction survey for foothill yellow legged frog using a methodology accepted by CDFW. Survey methodology shall target all life stages and shall include carefully searching under rocks, within vegetation such as sedges and other clumped vegetation, and under undercut banks, no less than 50 feet from the streambed, where appropriate, and at least 500 feet upstream and downstream of the project area. If foothill yellow-

legged frog is observed during the survey, CDFW shall be notified within 24 hours and project construction shall not begin until CDFW provides written permission to do so.

If foothill yellow-legged frogs are discovered during pre-Project surveys or during Project construction, all work in the immediate area shall cease until the individual moves out of harm's way, as determined by the on-site biological monitor.

S1-5 cont.

Riparian Habitat

Approximately 0.02 acres of Elder Creek and 0.005 acres of the unnamed pond would be permanently impacted by the Project. Impacts to riparian habitat would be potentially significant.

CDFW recommends the following mitigation measures:

Permanent impacts shall be mitigated by offsite restoration within the same stream or watershed at a minimum 3:1 mitigation to impact ratio for the linear distance and acres permanently impacted. Temporary impacts shall be restored onsite at a 1:1 ratio. A restoration plan shall be prepared and implemented within the same year that Project construction is completed. The plan shall be prepared by a qualified biologist and shall include success criteria, maintenance, and monitoring of plantings for five years. If success criteria are not met, replacement planting, maintenance, and monitoring will be required for an additional five years.

The above recommended mitigation measures would likely be required under the LSA Agreement for the Project, if issued by CDFW.

S1-6

REGULATORY REQUIREMENTS

California Endangered Species Act

Please be advised that a CESA Incidental Take Permit (ITP) must be obtained if the Project has the potential to result in take of plants or animals listed under CESA, either during construction or over the life of the Project. Issuance of a CESA Permit is subject to CEQA documentation; the CEQA document must specify impacts, mitigation measures, and a mitigation monitoring and reporting program. If the project will impact CESA listed species, early consultation is encouraged, as significant modification to the project and mitigation measures may be required to obtain a CESA ITP.

S1-7

CEQA requires a Mandatory Finding of Significance if a project is likely to substantially restrict the range or reduce the population of a threatened or endangered species (Pub. Resources Code, §§ 21001, subd. (c), 21083; CEQA Guidelines, §§ 15380, 15064, & 15065). Impacts must be avoided or mitigated to less-than-significant levels unless the CEQA Lead Agency makes and supports Findings and a Statement of Overriding

S1-8

Consideration (SOC). The Lead Agency's SOC does not eliminate the Project proponent's obligation to comply with CESA.

S1-8 cont.

Lake and Streambed Alteration

CDFW requires an LSA Notification, pursuant to Fish and Game Code section 1600 et seq., for project activities affecting lakes or streams and associated riparian habitat. Notification is required for any activity that may 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. Work within ephemeral streams, washes, watercourses with a subsurface flow, and floodplains are subject to notification requirements. CDFW, as a Responsible Agency, will 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.

S1-9

Pursuant to the draft EIR, the Project will submit an LSA Notification for constructing a point of diversion in Elder Creek, a spillway berm and overflow structure at the unnamed pond near proposed Block 29, and a 48-acre-foot capacity off-stream pond. Any associated impacts to riparian vegetation resulting from the above Project activities shall also be covered under the LSA Notification. CDFW must execute a final, signed LSA Agreement before the abovementioned Project activities may begin, unless otherwise approved by CDFW.

Migratory Birds and Raptors

CDFW has authority over actions that may disturb or destroy active nest sites or take birds. Fish and Game Code sections 3503, 3503.5, and 3513 protect birds, their eggs, and nests. Fully protected species may not be taken or possessed at any time (Fish & G. Code, § 3511). Migratory birds are also protected under the federal Migratory Bird Treaty Act.

S1-10

ENVIRONMENTAL DATA

CEQA requires that information developed in EIRs 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 CNNDB online field survey form and other methods for submitting data can be found 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://wildlife.ca.gov/Data/CNDDB/Plants-and-Animals.

S1-11

FILING FEES

CDFW anticipates that the Project will have an impact on fish and/or wildlife, and assessment of filing fees is necessary (Fish and Game Code, § 711.4; Pub. Resources Code, § 21089). Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. S1-12

CDFW appreciates the opportunity to provide comments on the draft EIR for the proposed Project and is available to meet with you to further discuss our concerns. If you have any questions, please contact Mr. Garrett Allen, Environmental Scientist, at Garrett.Allen@wildlife.ca.gov; or Ms. Melanie Day, Senior Environmental Scientist (Supervisory), at Melanie.Day@wildlife.ca.gov. S1-13

Sincerely,

DocuSigned by:
Gregg Erickson
BE74D4C93C604EA...

Gregg Erickson
Regional Manager
Bay Delta Region

cc: State Clearinghouse (2018092042)

Letter S1	**Gregg Erickson, Regional Manager Bay Delta Region, California Department of Fish and Wildlife**
Response	May 28, 2021

S1-1 Napa County thanks the California Department of Fish and Wildlife (CDFW) for the Draft EIR comments provided as a trustee and responsible agent pursuant to CEQA. The comment describes CDFW's jurisdiction over the conservation, protection, and management of fish and wildlife resources. As noted in Draft EIR Section 2.4.5, *Anticipated Regulatory Requirements, Permits and Approvals* (page 2-19), anticipated regulatory approvals include a Section 1602 Lake or Streambed Alteration Agreement with CDFW, and compliance with the California Endangered Species Act, as stated in the comment.

S1-2 The comment describes the environmental setting and summarizes the project description. The comment is noted.

S1-3 Mitigation Measure 3.3-1g has been modified to incorporate the recommended changes in the burrowing owl mitigation measure recommended by CDFW; see Chapter 2, *Revisions to the Draft EIR* and Chapter 4, *Mitigation Monitoring and Reporting Program*.

S1-4 Mitigation Measure 3.3-1k has been modified to incorporate the recommended changes in the special-status bats mitigation measure recommended by CDFW; see Chapter 2, *Revisions to the Draft EIR* and Chapter 4, *Mitigation Monitoring and Reporting Program*.

S1-5 Foothill yellow-legged frog was discussed in the 2019 Biological Resources Report (page 3-13 in Draft EIR Appendix E). The report noted that while Elder Creek within and in the vicinity of the project site provides marginal habitat, the creek does not contain water year round and lacks ponded areas for foothill yellow-legged frogs to breed in. However, given the sighting within 1.25 miles that is noted in the comment, discussion regarding foothill yellow-legged frog has been added to Draft EIR Table 3.3-3, and a general description and listing status for this species has been added to Draft EIR page 3.3-23. Mitigation Measures 3.3-1b through 3.3-1d have been revised to include foothill yellow-legged frog. See Chapter 2, *Revisions to the Draft EIR* and Chapter 4, *Mitigation Monitoring and Reporting Program*.

S1-6 If a Lake and Streambed Alteration (LSA) Agreement is issued for this project, the mitigation ratio will depend on mutual agreement between the Applicant and the CDFW LSA Program. Mitigation Measure 3.3-3a alludes to the requirement for at least 1:1 mitigation for impacts on waters of the United States. If the CDFW LSA Program considers that a higher mitigation ratio is warranted, then it will be the responsibility of the Applicant to comply with the conditions of approval within the final mutually signed LSA Agreement.

S1-7 The comment regarding clarification that issuance of a California Endangered Species Act (CESA) Incidental Take Permit is subject to CEQA documentation is noted. The Applicant is responsible for acquiring any Incidental Take Permits, if necessary, for the project prior to construction.

S1-8 The comment is noted. It is recognized that the CESA and CEQA processes are separate.

S1-9 The comment is noted. It is recognized that CDFW cannot execute a final LSA Agreement until it has complied with CEQA as a Responsible Agency.

S1-10 The comment is noted. It is recognized that CDFW has authority over migratory birds and raptors under the Fish and Game Code.

S1-11 The comment is noted. If there are any findings of special-status species, the biologist will report findings to the California Natural Diversity Database (CNDDB).

S1-12 The comment regarding CEQA filing fees is noted and will be paid at time of filing the Notice of Determination.

S1-13 The contact information for CDFW is noted.

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY GAVIN NEWSOM, Governor

DEPARTMENT OF TRANSPORTATION
DISTRICT 4
OFFICE OF TRANSIT AND COMMUNITY PLANNING
P.O. BOX 23660, MS-10D
OAKLAND, CA 94623-0660
www.dot.ca.gov

Making Conservation a California Way of Life.

June 7, 2021

SCH #: 2018092042
GTS #: 04-NAP-2018-00236
GTS ID: 12690
Co/Rt/Pm: NAP/128/17.15

Donald Barrella
Napa County Department of Planning, Building and Environmental Services
1195 Third Street, Suite 210
Napa, CA 94559

Re: KJS Sorrento Vineyard Conversion Erosion Control Plan Application – Draft Environmental Impact Report (DEIR)

Dear Donald Barrella:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for this project. We are committed to ensuring that impacts to the State's multimodal transportation system and to our natural environment are identified and mitigated to support a safe, sustainable, integrated and efficient transportation system. The following comments are based on our review of the April 2020 DEIR. S2-1

Project Understanding
The project proposes vegetation removal and earthmoving activities on slopes greater than five percent in connection with the development of 111.5 net acres of vineyard within 156.8 gross acres on a 972.8-acre project site. The project site is located at 3370 and 3380 Sage Canyon Road, directly adjacent to State Route (SR)-128. There would be no improvements to the access point along SR-128 proposed as part of the project. S2-2

Highway Operations
On page 3.10-8 in the DEIR, it is mentioned that "the proposed project would generate an anticipated maximum of 24 one-way worker trips and two one-way truck trips per day, and operation would generate an anticipated maximum of 60 one-way worker trips and two one-way truck trips per day (during the annual two- to three-week harvest)". please specify the sources of these values provided in the report. S2-3

Construction-Related Impacts
Project work that requires movement of oversized or excessive load vehicles on state roadways requires a transportation permit that is issued by Caltrans. To apply, visit: https://dot.ca.gov/programs/traffic-operations/transportation-permits. S2-4

Lead Agency
As the Lead Agency, the County of Napa is responsible for all project mitigation, including any needed improvements to the State Transportation Network (STN). The project's fair share contribution, financing, scheduling, implementation responsibilities and lead agency monitoring should be fully discussed for all proposed mitigation measures. S2-5

Encroachment Permit
Please be advised that any permanent work or temporary traffic control that encroaches onto Caltrans' Right of Way (ROW) requires a Caltrans-issued encroachment permit. As part of the encroachment permit submittal process, you may be asked by the Office of Encroachment Permits to submit a completed encroachment permit application package, digital set of plans clearly delineating the State ROW, digital copy of signed, dated and stamped (include stamp expiration date) traffic control plans, this comment letter, your response to the comment letter, and where applicable, the following items: new or amended Maintenance Agreement (MA), approved Design Standard Decision Document (DSDD), approved encroachment exception request, and/or airspace lease agreement. Your application package may be emailed to D4Permits@dot.ca.gov.

To download the permit application and to obtain more information on all required documentation, visit https://dot.ca.gov/programs/traffic-operations/ep/applications. S2-6

Thank you again for including Caltrans in the environmental review process. Should you have any questions regarding this letter, please contact Yunsheng Luo at Yunsheng.Luo@dot.ca.gov. Additionally, for future notifications and requests for review of new projects, please contact LDIGR-D4@dot.ca.gov. S2-7

Sincerely,

MARK LEONG
District Branch Chief
Local Development - Intergovernmental Review

c: State Clearinghouse

Letter S2	**Mark Leong, District Branch Chief, Local Development - Intergovernmental Review, California Department of Transportation, District 4**
Response	June 7, 2021

S2-1 Napa County thanks the California Department of Transportation (Caltrans) for the Draft EIR comments provided. The comment describes Caltrans' jurisdiction over the state's multimodal transportation system and natural environment.

S2-2 The comment summarizes the project description and environmental setting for the proposed project. The comment is noted.

S2-3 Information in the Draft EIR about the anticipated worker and truck trips for project construction and operation was provided to the County by the project Applicant based on the number of workers required to farm the existing on-site vineyards. The number of trucks delivering equipment was estimated based on the amount and type of equipment that would be required. Existing employees are transported by a 15-passenger van to minimize the number of vehicle trips. The Applicant has been practicing this for the last 7 years on the current vineyards and would continue this practice for the proposed vineyard. The Draft EIR estimated 24 one-way worker trips during construction, which is extremely conservative in that it does not take into account the existing practice of vanpooling.

S2-4 The comment is noted. As stated on page 2-19 of the Draft EIR, an estimated 10 truck trips weighing 20 tons each would occur during harvest. In most cases, a load is considered an oversize load, or an oversize/overweight load requiring a state or county oversize load permit when: the load's height exceeds 13 feet 6 inches, the load's width exceeds 8 feet 6 inches, the load's length exceeds 48 feet, and the load's weight exceeds 40 tons (80,000 pounds).

S2-5 The comment is noted. The proposed project and project mitigation would not require improvements to the State Transportation Network (STN) that would require a fair share contribution.

S2-6 The comment that any permanent work or temporary traffic control that encroaches into Caltrans' right-of-way requires a Caltrans-issued encroachment permit is noted. No traffic control within Caltrans' right-of-way is proposed with the project. The contact and website information for the permit application and documentation is also noted.

S2-7 Napa County thanks Caltrans for the Draft EIR comments provided. The contact information for Caltrans is noted.

LETTER L1

CITY OF NAPA

Utilities Department

June 8, 2021

County of Napa
Department of Planning, Building & Environmental Services
ATTN: Donald Barrella
1195 Third Street, Suite 210
Napa, CA 94559-3092

Subject: KJS Investment & Sorrento, Inc. Vineyard Conversion P17-00432 - ECPA
Assessor's Parcel: 025-270-022 and -025 (3370 and 3380 Sage Canyon Road)("Proposed Project")

Dear Mr. Barrella:

We have reviewed the Draft Environmental Impact Report ("DEIR") for the Proposed Project dated April 2021. We provide the following comments. L1-1

Water Supply Impacts

"CEQA's informational purposes are not satisfied by an EIR that simply ignores or assumes a solution to the problem of supplying water to a proposed land use project. Decision makers must, under the law, be presented with sufficient facts to 'evaluate the pros and cons of supplying the amount of water that the [project] will need.'" (*Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 430-431 [citing *Santiago County Water Dist. v. County of Orange* (1981) 118 Cal.App.3d 818].)

It is well settled that a DEIR must analyze a proposed project's water supply impacts, including the project's water demand, the source of supply identified to serve the project, and impacts of using the supply for the proposed project. (*Vineyard Area Citizens* at 441 [finding EIR deficient where it discussed short term water impacts but "neglect[ed] to explain the likely sources of water and analyze their impacts . . . [and left] long-term water supply considerations to later stages of the project."]; see also *Santiago County Water District, supra,* 118 Cal.App.3d at 829.) L1-2

The DEIR's water supply impacts analysis must also include alternative water supply approaches and enforceable mitigation measures that would avoid significant direct, indirect and cumulative impacts. (*Vineyard Area Citizens*, 40 Cal.4th at 444.) Here, the DEIR contains no meaningful discussion, much less analysis, of potentially significant impacts to L1-3

water supply, short term or long term, which may result from the Proposed Project. The absence of any real water supply impacts analysis renders the DEIR deficient. L1-3 cont.

Although the DEIR purports to analyze the significance of the project's water supply reduction impacts on downstream water users (DEIR at 3.7-17), the DEIR has no project baseline from which to measure and assess the significance of the project's water use, any changed use, any discussion of the water needs for the Proposed Project, and any discussion of cumulative impacts, which may result from this Proposed Project in addition to the number of other projects, including vineyards, pending approval before the County. There is simply no meaningful analysis of water supply to inform the public of potential impacts from the Proposed Project. This is especially disconcerting in a time of extreme drought, and when the Proposed Project will be diverting surface water upstream and away from Lake Hennessey, the major local water source for the City of Napa's public drinking water system. (See City of Napa Urban Management Water Plan, § 3.2.) L1-4

The State Water Resource Control Board's public records for the two water right permits, one water right license and two riparian rights the DEIR describes as part of the Project show minimal to no diversion and use of water. (See Report of Licensee for License No. 009125 [2020][showing use of 10.3 acre-feet]; see also Progress Report by Permittee for 2020, Permit No. 018459 [2020][showing use of zero (0) acre-feet]; see also Progress Report by Permittee for 2020; Permit No. 018282 [2020][showing use of zero (0) acre-feet].) For purposes of CEQA, that sets the baseline water use for the Proposed Project very low, if not at zero use. The DEIR is unclear about what is the environmental baseline water use and why, what is the water use of the proposed project, and what is the significance of the resulting downstream water supply reduction on the City's largest local source of drinking water supply (Hennessey Reservoir), both individually and cumulatively with other past, present and future projects. The DEIR seems to indicate that the Proposed Project will divert and use many times more water than is currently diverted and used, so there will be an impact to downstream surface water supplies, including to the City's Hennessey Reservoir. L1-5

The City's water right for Hennessey Reservoir has a 1945 priority date, which is senior to the Project's water right license (1950) and permits (1980). In the face of one of the driest winters on record and with Hennessey Reservoir receiving historically low runoff for the past two winters in a row, the City Council in May 2021 adopted the resolution R2021-034 (Attachment 1) declaring a water shortage and implementing water use restrictions so customers reduce demand by 15 percent. The DEIR describes the Project's proposal to modify its water rights and to expand water diversion and use—all upstream from Hennessey Reservoir. Despite the Project's reducing the amount of water that otherwise would flow into Hennessey Reservoir (by an amount that is unclear from the DEIR), the DEIR provides no analysis of this water supply impact and its significance to Hennessey Reservoir, the City of Napa, and its 79,000 citizens who depend on the City for their drinking water. L1-6

The DEIR seems to assert that no impact analysis is required with respect to downstream water rights with priority dates junior to the project's water rights priorities, but that L1-7

conflicts with CEQA's mandate to analyze environmental change from baseline conditions, which are unaffected by water right priorities. And that conflicts with the proposed project's plan to change its water rights, which triggers Water Code requirements prohibiting changes that would injure downstream water users by reducing water availability – regardless of their water right priority dates. (See, e.g., Water § 1702.) Again, because the DEIR provides no meaningful water supply analysis, one cannot ascertain whether this impact is potentially significant, or if and how it will be mitigated.

L1-7 cont.

Specific Request: Given that the DEIR contains no meaningful water supply impact analysis despite clear evidence of a potentially significant impact, it is deficient. An analysis of potential water supply impacts must be done. Further, as is required of all potentially significant impacts, the County should make every effort to mitigate the impact to less than significant or consider project alternatives that cause no impact, such as a no project alternative. Accordingly, the DEIR must be revised to include a thorough water supply impact analysis that passes muster under the Supreme Court's decision in *Vineyard Area Citizens* and related case law.

L1-8

Water Quality Impacts

The Proposed Project also implicates water quality impacts, some of which are discussed in the DEIR. The DEIR lacks, however, enforceable mitigation measures that appropriately reduce these impacts. Water Quality is the subject of ongoing conversations between the City and the County. The City and the County have already invested significant time and energy developing a Memorandum of Understanding for Water Quality Monitoring of the Hennessey and Milliken Watersheds ("MOU"). To support the effectiveness of such monitoring, the City has sought monitoring specific to other County-approved vineyard projects. In the spirit of the MOU and to further support water quality monitoring efforts and to mitigate impacts to water quality in the watershed, monitoring as well as other feasible mitigation measures must be applied to the Proposed Project. (CEQA Guidelines § 15126.4.)

L1-9

Water Quality Monitoring

The DEIR, Section 3.7 Hydrology and Water Quality paragraph 2 references the letter from the City of Napa Utilities Department that states erosion control measures should be maintained to prevent an exceedance of baseline natural runoff levels of sediment and nutrients. The Proposed Project puts forth erosion control measures as part of the Erosion Control Plan but lacks any confirmation sampling or analyses to prove efficacy.

L1-10

Page 3.7-7 of the DEIR describes Surface Water Quality deposition of course sediment, and then goes on to acknowledge fine sedimentation issues and TMDL in the Napa River, but does not describe Sage Creek—a direct tributary to Lake Hennessey municipal reservoir—or any mitigations to protect potable drinking water supply.

L1-11

Since 2018 the City and County has created a Watershed Analysis Risk Management Framework (WARMF) Model of the Lake Hennessey watershed. Staff have been conducting water quality monitoring at select areas throughout the watershed to better understand the quality of surface water that runs off of the surrounding hillsides and fills the municipal drinking supply reservoir. There is one sample location downstream of the project and located upstream of the confluence of Sage Creek and Chiles Creek. Without proof through monitoring and analyses, the project implies no mitigations required by the DEIR. The Farm Water Quality Protection Plan will document BMPs to comply with the Regional Board waste discharge requirements. However, this does not address source water for municipal drinking supplies.

The municipal drinking water supply was established in the 1940s and will be a vital resource for human consumption into the future. To ensure there are no impacts to water quality, sample analyses after rain events is necessary when the creeks are flowing. Should runoff water exhibit the presence of increased nutrients or any man-made constituents, the City is committed to working with the project to ensure BMPs are adjusted to protect water quality.

Specific Request: Consistent with requirements placed on similar projects approved by the County (Walt Ranch and Le Colline Vineyards), the Proposed Project shall be required to grant access to the City to defined access points to the waterways upstream and downstream of the Proposed Project to conduct water quality monitoring in accordance with the City and County's MOU.

L1-11 cont.

Use of Herbicides

The ECP page EC-5, Item 3.
It is stated that no pre-emergent herbicides will be used for weed management. The City concurs with this practice.

However, the first practice goes on to say: "contact or systemic herbicides may be applied in spring (no earlier than February 15th to ensure adequate vegetative cover in the spray strips for the remainder of the rainy season)."

In Blocks 1, 3, 4A, 4B, 5B, 5C, 5E, 5F, 5J, 6, 7, 9A, 9B, 9C, 9D, 9E, 9F, 11, 14, 15A, 16, 17, 18A, 18B, 19, 20A, 20B, 23C, 23F, 24B, 29A, 29B & 33C, spot spraying of contact or systemic herbicides in spring (no earlier than February 15) will be allowed provided the 85% or 90% vegetative cover is achieved in each block. If the owner chooses to farm without herbicide, an alternative will be to hand-hoe around the base of the vine only, or other methods that do not result in a continuous bare strip.

L1-12

The application of herbicides in the watershed area may drain into the municipal water supply and cause significant water quality impacts; such impacts must be addressed.

Specific Request: Require farm practices without herbicide.

L1-12 cont.

Use of Fertilizer

The ECP page EC-5, Item 6.

"Fertilizer shall be applied as necessary by vineyard management personnel for both the vineyard and to ensure specified percent vegetative cover crop is achieved. Site specific soil analysis should be performed."

Application of fertilizer brings further concern regarding impacts to water quality. Fertilizer and nutrients have the potential to mobilize into the waterway and contribute to algal growth in the City's drinking water reservoir. The presence of algae in source water is problematic for municipal drinking water supplies. Mitigation of algae requires a combination of source water pre-treatment and additional water treatment processes to address the taste and odor associated with algal growth.

Specific Request: Require farm practices without addition of fertilizers.

L1-13

These additional water quality mitigation measures are not only necessary to adequately reduce the impacts of the Proposed Project to the quality of the City's water supply, they are also feasible. Accordingly, the County should impose such measures as a part of any eventual project approval.

L1-14

Please contact me at 257-9521 if you have any questions or require additional information.

Respectfully,

Joy Eldredge
Deputy Utilities Director, City of Napa

cc: Scoop/File/Author
Steve Potter, City Manager
Michael Barrett, City Attorney
Philip Brun, Utilities Director
Shannon Lemmon, Associate Engineer

RESOLUTION R2021-034

RESOLUTION OF THE CITY COUNCIL OF THE CITY OF NAPA, STATE OF CALIFORNIA, DECLARING A MODERATE WATER SHORTAGE TO IMPLEMENT THE CITY'S WATER SHORTAGE REGULATIONS SET FORTH IN NAPA MUNICIPAL CODE CHAPTER 13.10, IN ORDER TO ACHIEVE A 15% COMMUNITY-WIDE DEMAND REDUCTION AND MAINTAIN WATER SUPPLY RELIABILITY, AND DETERMINING THAT THE ACTIONS AUTHORIZED BY THIS RESOLUTION ARE EXEMPT FROM CEQA PURSUANMT TO CEQA GUIDELINES SECTIONS 15307, 15308, AND 15329

WHEREAS, 2021 is characterized as a critically dry year and state and local reservoir storage levels are below normal across the state; and

WHEREAS, Lake Hennessey has received historically low runoff for the past two winters and is at 67% capacity holding 20,812 acre feet (AF) as of April 1, 2021; and

WHEREAS, due to a critically dry year leaving the state's major reservoirs and snowpack well below normal, the State Department of Water Resources has allocated 5% of State Water Project (SWP) supplies to all contractors, which results in a substantial decrease in water made available to the City from the SWP; and

WHERAS, the City expects to use the 5% allocation and carryover supplies from the SWP as well as supplemental Advanced Table A and dry year water purchases, if available; and

WHEREAS, City of Napa water demands in 2020 were 14,100 AF; and

WHEREAS, during the 2015-16 drought City of Napa customers reduced demands to 12,100 AF; and

WHEREAS, based on available water supplies in 2021, conservation to reduce demands by 15% compared to 2020 is necessary which will result in consumption of 12,100 AF, similar to the last critically dry year of 2015-16; and

WHEREAS, the Moderate Water Shortage Regulations contained in Chapter 13.10 of the Napa Municipal Code constitute the appropriate actions necessary to achieve a 15% community-wide demand reduction and maintain water supply reliability; and

WHEREAS, the City Council has considered all information related to this matter, as presented at the public meeting of the City Council identified herein, including any supporting reports by City Staff, and any information provided during public meetings.

NOW, THEREFORE, BE IT RESOLVED, by the City Council of the City of Napa, as follows:

1. The City Council hereby finds that the facts set forth in the recitals to this Resolution are true and correct; and establish the factual basis for the City Council's adoption of this Resolution.

2. The City Council hereby finds that there is a shortage in local and statewide water supplies, and reasonable mandatory restrictions on water use by City water customers will help the City achieve a target of 15% demand reduction, thereby improving the City's water supply reliability into an uncertain 2022.

3. In accordance with Napa Municipal Code ("NMC") Section 13.10.010, the City Council hereby determines and declares that a "moderate water shortage emergency" exists in the City of Napa. This declaration of moderate water shortage emergency shall remain in effect until the City Council finds that the moderate water shortage emergency no longer exists.

4. During the term of this moderate water shortage emergency: (a) each customer shall comply with the water use regulations set forth in NMC Section 13.10.040, and the prohibitions and limitations set forth in NMC Section 13.10.050; and (b) each customer is encouraged to use the water use guidelines set forth in NMC Section 13.10.060.

5. The City Council hereby determines that the actions taken under this resolution are exempt from CEQA pursuant to CEQA Guidelines Sections 15307, 15308, and 15329 which exempt actions taken by the City to assure the maintenance, restoration, or enhancement of a natural resource or protection of the environment where the regulatory process involves procedures for protection of the environment; and exempt actions taken by the City to prevent or mitigate the impacts of an emergency.

6. This Resolution shall take effect immediately upon its adoption.

I HEREBY CERTIFY that the foregoing Resolution was duly adopted by the City Council of the City of Napa at a public meeting of said City Council held on the 4th day of May, 2021, by the following vote:

AYES: Luros, Narvaez, Painter, Alessio, and Sedgley

NOES: None

ABSENT: None

ABSTAIN: None

ATTEST: _____

Tiffany Carranza
City Clerk

Approved as to form:

Michael W. Barrett
City Attorney

Letter L1 Response	Joy Eldredge, Deputy Utilities Director, City of Napa, Utilities Department June 8, 2021

L1-1 Napa County thanks the City of Napa Utilities Department for the Draft EIR comments provided.

L1-2 The comment is noted; see Responses to Comments L1-3 through L1-7 for specific responses addressing water supply impacts.

Draft EIR Section 2.4.2, *Water Right License, Permits, and Statements*, describes Water Right License 9125 (Application 13943) and Water Right Permit 18459 (Application 26165) that are on file with the State Water Resources Control Board and would supply irrigation water to the proposed project. Unlike the *Vineyard Area Citizens v. Rancho Cordova* (2007) case referenced in the comment, the proposed project would use water under these existing rights. The proposed project would be phased during construction and managed pursuant to conditions so that the new vineyard would not use water if no surface water under the water rights is available (i.e., the proposed project would not irrigate when no water is available). Further, the proposed project is an agricultural project and not a residential project as was the situation with the *Vineyard Area Citizens v. Rancho Cordova* (2007) case. As such, Senate Bill 610 requirements for residential projects does not apply and any impacts an agricultural crop suffers due to dry-farming is outside the scope of CEQA because common sense indicates that *not* irrigating a commercial crop does not cause an environmental impact. (**Appendix C**; Buchalter 2022)

L1-3 Impact 3.7-4 in Draft EIR Section 3.7, *Hydrology and Water Quality*, starting on Draft EIR page 3.7-34, provides an assessment of the water supply changes that would occur with the proposed project, and the methods of analysis for Impact 3.7-4 and the hydrologic analysis prepared by Wagner & Bonsignore Consulting Civil Engineers in support of the proposed project (Memorandum to County of Napa by Wagner & Bonsignore Consulting Civil Engineers dated February 19, 2020, referred to herein as Draft EIR Appendix J Hydrologic Analysis for Diversion) are summarized on Draft EIR pages 3.7-20 and 3.7-21. As stated on Draft EIR page 3.7-17, the assessment used the significance criteria established by the State Water Resources Control Board (State Water Board), Division of Water Rights, and the Draft EIR Appendix J Hydrologic Analysis for Diversion was prepared consistent with requirements from the State Water Board for an analysis of incremental impacts on unimpaired flow attributable to the proposed project after considering impacts on unimpaired flow attributable to existing diversions (baseline condition). As stated on Draft EIR page 3.7-36, based on modeling in the Draft EIR Appendix J Hydrologic Analysis for Diversion and the incremental impairment percentages shown in Draft EIR Table 3.7-5, the proposed project would not result in a significant cumulative reduction in the water supply downstream of the diversion or a

significant reduction in water supply to downstream senior water right holders. Project approval, if granted, would also be subject to the vineyard irrigation conditions of approval stated on Draft EIR page 3.7-36, which would further reduce potential impacts associated with water use as a result of vineyard establishment and ongoing vineyard operations and maintenance. Text was added to the vineyard irrigation conditions of approval to ensure there is surface water in storage for planting the first and second phases (before vegetation clearing and earth-disturbing activities) (see Chapter 2, *Revisions to the Draft EIR* and **Appendix F**). See also Responses to Comments L1-4 and O3-16 through O3-18.

The Draft EIR adequately assesses and discloses the potential environmental impacts of the proposed project in accordance with CEQA (California Public Resources Code Section 21000 et seq.), the State CEQA Guidelines (California Code of Regulations Title 14, Section 15000 et seq.), and *Napa County's Local Procedures for Implementing the California Environmental Quality Act* (Napa County 2015).

L1-4 An assessment of the water supply changes that would occur with the proposed project are addressed in Impact 3.7-4 in Draft EIR Section 3.7, *Hydrology and Water Quality*, starting on Draft EIR page 3.7-34 (not Draft EIR page 3.7-17 as stated in the comment), and the methods of analysis for Impact 3.7-4 and the Draft EIR Appendix J Hydrologic Analysis for Diversion are summarized on Draft EIR pages 3.7-20 and 3.7-21.

Regarding the baseline condition, the Draft EIR Appendix J Hydrologic Analysis for Diversion was prepared based on direction from the State Water Board, which required an analysis of incremental impacts on unimpaired flow attributable to the proposed project after considering impacts on unimpaired flow attributable to existing diversions (i.e., baseline condition). In this case, at the time that the Petition for Extension of Time was filed on Permit 18459, the State Water Board had previously granted License 9125 on the Applicant's Matheson Reservoir. License 9125 allows diversion of 90 acre-feet to storage and the withdrawal of 85 acre-feet annually for irrigation, frost protection, and other uses. The State Water Board's issuance of License 9125 was confirmation of the water diverted and put to beneficial use during the permit period preceding license issuance.[1] At the time the Petition was filed, there had been no development of the 48 acre-feet of water allowed under Permit 18459. Accordingly, the baseline condition is the diversion and use of up to 90 acre-feet allowed under License 9125, plus the maximum amount that has been diverted and used under the Applicant's direct diversion right for frost protection under Permit 26179 (Application 18282), plus diversion and use under any other valid non-jurisdictional rights. The approval of the Petition on Permit 18459 would allow for an additional 48 acre-feet of water to be diverted and used annually over and above the baseline condition.

1 License 9125 has a "made proof date" of May 7, 1969; the License was issued on February 9, 1970.

The Draft EIR Appendix J Hydrologic Analysis for Diversion was based on direction from the State Water Board and focused on issues raised by the California Department of Fish and Game (now California Department of Fish and Wildlife, CDFW) in its protest against the Petition filed on Permit 18459. The State Water Board reviewed the Hydrologic Analysis for Diversion prior to release of the Draft EIR and advised the County that the diversion rates and amounts, as well as bypass flows, in the Draft EIR Chapter 2, *Project Description*, and Impact 3.7-4 conditions of approval are consistent with those in the Hydrologic Analysis for Diversion. The State Water Board did not request any changes to the Hydrologic Analysis for Diversion and did not request any mitigation measures based on the results of the analysis.

Regarding cumulative impacts on downstream water users, the Draft EIR Appendix J Hydrologic Analysis for Diversion evaluated impairment at specified locations downstream of the proposed project under baseline and with-project conditions (the summary is on Draft EIR page 3.7-36 and in Draft EIR Table 3.7-5). Per the State Water Board's GIS database, there are only two diverters of record downstream of the proposed project. The first point of diversion downstream is associated with the privately held License 10130 (Application 22073) located about 1.5 miles downstream of Matheson Dam (see Plate I in Draft EIR Appendix J Hydrologic Analysis for Diversion). License 10130 allows for the diversion of up to 20 acre-feet per year to offstream storage from November 1 to May 1. The maximum rate of diversion from the source stream to offstream storage is 2.6 cubic feet per second (cfs). Diversions under this License were considered in the daily operational analysis described in the Draft EIR Appendix J Hydrologic Analysis for Diversion.[2] License 10130 is senior in priority to the project's water right permits but junior to the project's License 9125 on Matheson Dam, which allows for the diversion and storage of 90 acre-feet. For the with-project condition, over the 16-year period of record considered in the analysis, the full amount of License 10130 (20 acre-feet) was obtainable in all years. Thus, the proposed project has no impact on License 10130.

The second downstream diverter of record is the City of Napa, which holds Permit 6960 (Application 10990). Permit 6960 allows for the direct diversion of 35 cfs and the collection to storage of up to 30,500 acre-feet annually at Lake Hennessey during a diversion season of November 1 to May 1.[3] The City's permit is senior in priority to the project's water right license and permits. The Draft EIR Appendix J Hydrologic Analysis for Diversion evaluated baseline and with-project effects on seasonal "unimpaired flow" as required by the State Water Board. The most downstream point evaluated in the Draft EIR Appendix J Hydrologic Analysis for Diversion was Point of Interest 6 (POI 6) located on Sage Creek just below the confluence with Clear Creek and about 2 miles upstream of Lake Hennessey

2 The daily operational analysis is described in Section 9.0 the Draft EIR Appendix J Hydrologic Analysis for Diversion.

3 By letter to the State Water Board dated December 28, 2007, the City of Napa requested licensure of Permit 6960 in the amounts of 17,524 acre-feet diversion to storage and beneficial use (direct diversion and withdrawal from storage) in the amount of 12,315 acre-feet. Based on a licensing analysis conducted in 2014, the State Water Board concluded that a maximum of 17,524 acre-feet had been placed into storage and the maximum annual amount beneficially used was 13,840 acre-feet. The State Water Board's analysis has not been finalized and these amounts are considered to be draft.

(see Plate I in the Draft EIR Appendix J Hydrologic Analysis for Diversion and description on Draft EIR page 3.7-21). The results of the impairment analysis are summarized in the table on page 7 of the Draft EIR Appendix J Hydrologic Analysis for Diversion, which shows that the baseline impairment of 5.13 percent at POI 6 would increase to 5.71 percent with project buildout, an increase of only about 0.58 percent (also summarized in Draft EIR Table 3.7-5). The watershed above POI 6 is about 12 square miles, or only about 23 percent of the Lake Hennessey watershed reckoned at Conn Dam (about 52 square miles).[4] Clearly, the incremental impairment of unimpaired flow to Lake Hennessey (based on its entire watershed) would be much less than the 0.58 percent for POI 6.

See also Responses to Comment O3-18 and O3-19 and **Appendices C and D**.

L1-5 Approximately 104 acres of vineyard exist on the project site. The existing vineyard water demand is 22.1 acre-feet per year on average. Data on existing vineyard water demand are available going back to 2015, as summarized in **Table 3-1** and shown in **Appendix B**, with the exception of 2017, which was excluded from the average water demand because 2017 records were unavailable or incomplete. Per information obtained from the Applicant, the annual vineyard water use on the property for the past several years is as shown in Table 3-1.

TABLE 3-1
WATER USE FOR EXISTING VINEYARD (2015-2021)

Year	Water Use (acre-feet)
2015	23.4
2016	23.9
2018	29.7
2019	23.2
2020	10.4

Source: PPI Engineering 2021; Appendix B

The Applicant has been implementing a replanting program for numerous blocks on the property, and therefore the recent vineyard water use is higher than typical as these blocks are in the establishment period. The total water use is expected to decrease significantly in the next several years, which is already reflected in the available data (see Table 3-1 and **Appendix B**). Because the existing vineyard should reach maturity before the vineyards proposed under this project are planted, water use for the existing vineyards will be lower.

During the vineyard establishment period for the proposed project, typically the first three years, young vines would require approximately 6 gallons per plant per week over the 16-week irrigation season, or 96 gallons per plant per year. The original proposed

4 https://streamstats.usgs.gov/ss.

project described in Draft EIR Chapter 2, *Project Description*, was 111.5 net acres of vines at varying density depending on whether blocks were proposed to be tractor- or hand-farmed. In the establishment period for the proposed project, the total expected water demand would be 20,618,098 gallons or 63.3 acre-feet per year for 111.5 net vine acres as proposed in the ECP; however, this would be spread out over three years/ phases as described on Draft EIR page 2-15. After establishment, the water demand for the vines would decrease significantly to about 12–15 gallons per plant over the entire irrigation season. Assuming a conservative estimate of 15 gallons per plant, in the long-term, the entire 111.5 net acre vineyard would require only 9.9 acre-feet per year.

As discussed in Response to Comment O2-2, the biological resources mitigation measures would reduce the final vineyard footprint and therefore the proposed water demand. The water demand for the revised mitigated proposed project acreage (141.72 gross acres, 97.69 net acres) would be approximately 54.7 acre-feet per year in the establishment years and 8.8 acre-feet per year long-term based on the same gallons per plant per year estimates used for the proposed project.

The project description included phased planting of the vineyard, where half the vineyard would be planted in the second phase and the remaining half of the vineyard would be planted in the third phase. This results in staggered water demand with only three years where all of the proposed vineyard would be in the establishment period with the higher water demand. Refer to **Table 3-2** below for a breakdown of the proposed water demand over each year of development for the revised mitigated proposed project acreage (as shown in the last column in Table 3.3-5 in Chapter 2, *Revisions to the Draft EIR*).

TABLE 3-2
WATER DEMAND FOR THE REVISED MITIGATED PROPOSED PROJECT

Year	Activity	Water Demand (acre-feet) Per Acre	Total Water Demand (acre-feet)
Year 1	½ land development	0	0
Year 2	½ vineyard planted, establishment ½ land development (remaining)	0.56	27.4
Year 3	½ vineyard 1 year old ½ vineyard (remaining) planted	0.56	54.7
Year 4	½ vineyard 2 years old ½ vineyard 1 year old	0.56	54.7
Year 5	½ vineyard 3 years old ½ vineyard 2 years old	0.56	54.7
Year 6	½ vineyard 4 year (long-term) ½ vineyard 3 years old	0.33	4.4+27.4 = 31.8
Year 7 (and on)	All vineyard established	0.09	8.8

Notes: ½ vineyard=48.9 acres; the PPI Engineering 2021 reference lists the mitigated project acreage as 99.9 net acres; however, it would be 97.7 net acres after accounting for the buffers around the 30 inch and greater dbh trees in the areas of mapped landslides. Therefore, the water demand data in Table 3-2 uses the acre-feet per acre demand numbers from the PPI Engineering 2021 source (i.e., Years 2-5=0.56 acre-feet/acre, Year 6=0.33 acre-feet/acre, Year 7 and on=0.09 acre-feet/acre) but updates the data based on the 97.7 net acres.

Source: PPI Engineering 2021, Appendix B

See Response to Comment L1-4 regarding the baseline condition and the significance of the resulting cumulative downstream water supply reduction.

L1-6 See Response to Comment L1-4 regarding the baseline condition and the significance of the resulting cumulative downstream water supply reduction summarized in Draft EIR Impact 3.7-4 and assessed in Draft EIR Appendix J Hydrologic Analysis for Diversion. Per the State Water Board's direction for these types of impairment analyses, the Draft EIR Appendix J Hydrologic Analysis for Diversion assumes that all reservoirs are empty at the start of the diversion season and that all water rights evaluated divert at the full face value amount of the right if water is available. These are conservative assumptions, as most agricultural reservoir owners do not empty their reservoirs every year; some water is typically carried over in storage at the end of the irrigation season. This means that less than the face value amount of water is diverted in the ensuing wet season to fill the reservoir.

Contrary to the City's assertion, the Draft EIR is clear about the reduction in the amount of water that would flow into Lake Hennessy. Per Table 9 in the Draft EIR Appendix J Hydrologic Analysis for Diversion, the maximum amount of water under Permit 18459 (48 acre-feet) would have been obtainable in 5 of the 16 years in the study period, and the average annual amount diverted would be about 28.4 acre-feet.

Given recent drought conditions experienced in California, a review of the applicability of the adjusted historical streamflow gage data used in Draft EIR Appendix J Hydrologic Analysis for Diversion for a gaging station on Conn Creek below Conn Dam was conducted. In the Draft EIR Appendix J analysis, a 16-year period of gage data for Water Years 1930 to1945 was selected for the analysis because it predated the existence of Conn Dam and therefore was representative of natural, unimpaired flow for a range of water year types. This unimpaired flow data set was then used as the basis to evaluate water availability for the project, i.e., yield, after considering the effects of all senior diverters of record within the portion of the Sage Creek watershed analyzed. The State Water Resources Control Board, Division of Water Rights reviewed the Draft EIR Appendix J analysis prior to circulating the Draft EIR and did not have any objections or request any revisions to the analysis.

The 16-year study period used in the Draft EIR Appendix J Hydrologic Analysis for Diversion is similar to the long-term average based on the monthly precipitation records for the Napa State Hospital (NSH) station and is representative of the pattern of regional rainfall for Napa County. This is based on historical precipitation records which give monthly precipitation data from 1893 through January 2023. Although precipitation amounts can vary from year to year, drought and wet year cycles are common for California and data supports the conclusion that historical hydrologic conditions are similar to recent hydrologic conditions and that there is sufficient water supply reliability to support the proposed project (see **Appendix D**; Wagner and Bonsignore 2022 and 2023).

It is noted that the proposed project includes measures that minimize and mitigate for any potentially significant impact on the City. Because the City of Napa is a senior water right holder relative to the project's appropriative rights, the City was notified of the original water right applications at the time they were filed by prior owners and was thereby provided the opportunity to protest those filings and negotiate terms and conditions to protect its prior rights. As a result, Term 16 was included in the original Permit 18459 to protect the City's prior right on Lake Hennessey. Term 16 states the following:

> "Permittee shall install and maintain in his reservoir a staff gage meeting the approval of the State Water Resources Control Board for the purpose of determining water levels in the reservoir. Permittee shall supply the staff gage reading on or about October 1 of each year, verified by the City of Napa or its designated representative, to the State Water Resources Control Board.
>
> In the event that City of Napa's prior rights are not satisfied by May 1 of any year, permittee shall, upon request by City of Napa or its designated representative, immediately release from its reservoir an amount of water necessary to satisfy City of Napa's prior rights, up to the total amount of water which permittee has impounded in its reservoir since October 1 of that storage year. In no event shall permittee be obligated to release water below the previous October 1 staff gage reading. If requested by permittee, City of Napa shall furnish release records and lake elevation records to prove that City of Napa's prior rights have not been satisfied by the previous May 1.
>
> Permittee shall allow City of Napa or its designated representative reasonable access to the reservoir for the purpose of determining whether or not water should be released in accordance with this condition."

The extension of Permit 18459 will maintain Term 16; therefore, the proposed project is self-mitigating as to the potential impact on the City of Napa's prior right on Lake Hennessey.

In addition, to address concerns raised by CDFW, the proposed project includes limitations on the maximum rate of diversion to offstream storage that would be allowed under Permit 18459, as well as minimum bypass flows before diversions are allowed. While these limitations are intended to avoid significant impacts on instream resources downstream of the proposed project,[5] they also serve to minimize potential impacts on downstream diverters such as the City of Napa.

[5] CDFW's comments about the Draft EIR did not include any adverse comments about the hydrologic analysis or request any other conditions on proposed water operations.

L1-7 Per the State Water Board's GIS database, there are only two diverters of record downstream of the proposed project, and they were evaluated in Draft EIR Appendix J Hydrologic Analysis for Diversion for impairment under baseline and with-project conditions. See Response to Comment L1-4.

L1-8 See Responses to Comments L1-3 through L1-7 for specific responses addressing water supply impacts. The Draft EIR adequately assesses and discloses the potential environmental impacts of the proposed project in accordance with CEQA (California Public Resources Code Section 21000 et seq.), the State CEQA Guidelines (California Code of Regulations Title 14, Section 15000 et seq.), and *Napa County's Local Procedures for Implementing the California Environmental Quality Act* (Napa County 2015).

As discussed in Draft EIR Impact 3.7-4, based on the evaluation provided in Draft EIR Appendix J Hydrologic Analysis for Diversion, the proposed project would not result in a significant cumulative reduction in the water supply downstream of the diversion or a significant reduction in water supply to downstream senior water right holders. Project approval, if granted, would also be subject to the vineyard irrigation conditions of approval stated on Draft EIR page 3.7-36, which would further reduce potential impacts associated with water use as a result of vineyard establishment and ongoing vineyard operations and maintenance. Additionally, Term 16 in Permit 18459 protects the City's prior right on Lake Hennessey.

L1-9 The comment is noted. See Responses to Comments L1-10 and L1-11.

L1-10 The comment states that although the proposed project includes erosion control measures, sampling or analyses to prove efficacy are not included. The comment is noted.

L1-11 The Draft EIR water quality analysis focused on Elder Creek and areas downstream of Lake Hennessey as well as the Napa River watershed since that is where constituents would collect, and those downstream water bodies are where sampling and monitoring are done. The comment provides information about the water quality monitoring that City staff have been conducting in select areas of the Lake Hennessey watershed. The following condition of approval has been added under Impact 3.7-1 to address the water quality of source water for municipal drinking supplies. See also Chapter 2, *Revisions to the Draft EIR,* and **Appendix E** and **Appendix F**.

> **Water Quality Monitoring—Condition of Approval**
>
> The owner/permittee shall grant access to the City to defined monitoring sites located on the waterways upstream and downstream of the project area to conduct water quality monitoring in accordance with the City and County's 2019 Memorandum of Understanding and 2022 Amendment No. 1 (and any subsequent amendments or extensions thereto) and its associated Hydrology and Water Quality Monitoring Plan. Sample analyses shall be conducted after rain events when the creeks are

flowing. Should runoff water exhibit the presence of increased nutrients or any synthetic/manufactured constituents, the City will work with the owner/permittee to ensure that BMPs are adjusted to protect water quality.

L1-12 The comment is noted. The use of herbicides for agricultural operations is allowed under Napa County's Right-to-Farm Ordinance (Napa County Code of Ordinances, 2.94.020). However, as stated in Response to Comment L1-11, a Water Quality Monitoring Condition of Approval was added to the Final EIR. See also Chapter 2, *Revisions to the Draft EIR,* and **Appendix C**.

The proposed project would be required to conform with federal and state laws enforced by the U.S. Environmental Protection Agency and the California Department of Pesticide Regulation. The project also must achieve performance standards for the discharge of nutrients and pesticides established by the San Francisco Bay Regional Water Quality Control Board's waste discharge requirements for vineyards 5 acres or larger that are located in the Napa River watershed. Discharge performance standards pertain to soil erosion rates in the farm area, sediment delivery from existing unpaved roads and new roads, stormwater runoff from existing or new Hillslope Vineyards, pesticide management, and nutrient management (San Francisco Bay Regional Water Board 2017).

Elder Creek and tributaries in the development area that meet the County's definition of a stream (Napa County Code Section 18.108.030) have required setbacks of 35–150 feet depending on slope, as outlined in Napa County Code Section 18.108.025 and discussed in Draft EIR Impact 3.7-1. All waters of the United States not requiring a County stream setback, and all wetlands, would be avoided and afforded a 50-foot buffer, consisting of a 26-foot undisturbed area and a 24-foot vegetated vineyard avenue. The U.S. Natural Resources Conservation Service (NRCS 2000) and the University of California, Division of Agricultural and Natural Resources (UC DANR 2006) recommend 50-foot-wide vegetated buffers for protection of streams and wetlands. As discussed in Impact 3.6-1, under most conditions, this buffer width is generally adequate to provide enough vegetation to entrap sediments and soils, and to filter chemicals adequately by facilitating degradation within buffer soils and vegetation. These buffer areas serve as filter strips and have the potential to trap as much as 75–100 percent of sediment, capture nutrients and herbicides, and remove more than 60 percent of certain pathogens from runoff (Grismer et al. 2006).

See also Responses to Comments O3-33 and O3-34.

L1-13 The comment is noted. The use of fertilizers for agricultural operations is allowed under Napa County's Right-to-Farm Ordinance (Napa County Code of Ordinances, 2.94.020). However, as stated in Response to Comment L1-11, a Water Quality Monitoring Condition of Approval was added to the Final EIR. See also Chapter 2, *Revisions to the Draft EIR,* and **Appendix C**. See also Responses to Comments L1-12, O3-33, and O3-34.

L1-14 The commenter's contact information is noted. See Response to Comment L1-11 for the Water Quality Monitoring Condition of Approval that was added to the Final EIR.

LETTER O1

California Wildlife Foundation/California Oaks, 201 University Avenue, Berth H-43 Berkeley, CA 94710, (510) 763-0282

June 3, 2021

Donald Barrella, Planner III
Napa County Department of Planning,
Building and Environmental Services
1195 Third Street, Second Floor
Napa, CA 94559

RE: KJS and Sorrento Vineyard Conversion Erosion Control Plan Application #P17-00432-ECPA Draft Environmental Impact Report, SCH No. 2018092042, Napa County, State Clearinghouse # 2018092042

Submitted via email: Donald.Barrella@countyofnapa.org

Dear Mr. Barrella:

The California Oaks program of California Wildlife Foundation (CWF/CO) works to conserve oak ecosystems because of their critical role in sequestering carbon, maintaining healthy watersheds, providing wildlife habitat, and sustaining cultural values. A citizen reached out to CWF/CO with concerns about the proposed project impacts on oak trees at the Hyperion Vineyard Holding LLC (AKA KJS Investment Properties and Sorrento Inc.) (hereafter referred to as Hyperion) site.

CWF/CO reviewed the Draft Environmental Impact Report (DEIR) for the Hyperion Erosion Control Plan Application and found a number of deficiencies, as discussed below.

O1-1

Environmental documentation must assess and provide a mitigation plan for impacts to all oak woodlands: The assessment of oak impacts must include all lands where oak canopy is above 10%.[1] The discussions of oaks of 30-inch or greater diameter in grasslands as well as some of the photographs and maps in the Final Environmental Impact Report (FEIR) caused CWF/CO to question whether some of those lands are defined by California law as oak woodlands. The Board of Forestry and Fire Protection communicated to counties and cities that greater than 10% canopy cover is the appropriate measure to define oak woodlands for California Environmental Quality Act (CEQA) reviews after the enactment of Public Resources Code §21083.4, which applies to mitigation for the removal of oaks that are not commercial species and that are five inches or more in diameter as measured at a point 4.5 feet (breast height) above natural grade level. Health and Safety Code §42801.1(g) provides the following definition: "*Forest* means lands that support, or can support, at least 10 percent tree canopy cover and that allow for management of one or more forest resources including timber, fish and wildlife, biodiversity, water quality, recreation, aesthetics, and other public benefits." Public Resources

O1-2

[1] The DEIR only identifies oak communities with canopy densities that are much higher than 10%: Approximately 0.06 acre of riparian woodland (valley oak-California bay-coast live oak-walnut-ash) riparian forest NFD association, 5.56 acres of blue oak alliance, 6.54 acres of coast live oak-blue oak-(foothill pine) NFD association, 20.71 acres of interior live oak-blue oak (foothill pine) NFD association, and 0.71 acre of mixed oak alliance.

Code §4793(e) provides the following definition: "*Forest land* means land at least 10 percent occupied by trees of any size that are native to California, including native oaks, or formerly having had that tree cover and not currently zoned for uses incompatible with forest resource management."

If some of the land that is mapped as Upland Annual Grassland & Forbs Formation supports oak woodland canopy greater than 10% then the environmental documentation is deficient because project impacts on oaks growing on those lands will need to be assessed and mitigated. Likewise, other parcels that contain oaks with canopy density of 10% or greater must also be assessed and mitigated per Public Resources Code §21083.4.

O1-2 cont.

Percentage retention requirement: A 70% retention of tree canopy is required by the Napa County Water Quality and Tree Protection Ordinance (see 18.108.020). The chart that appears on page c-1 Appendix A, which is dated June 2018, shows a retention requirement of 60% tree canopy rather than the 70% required by the ordinance, which was enacted May 9, 2019 and became effective 30 days later.

O1-3

Mitigation ratios for tree replacement are inadequate: The replacement mitigation metric must conform to the aforementioned ordinance, which is generally 3:1, as described in the text, below, quoted from the ordinance:

> **D. Vegetation Removal Mitigation.** In the AW zoning district, the removal of any vegetation canopy cover shall be mitigated by permanent replacement or preservation of comparable vegetation canopy cover, on an acreage basis at a minimum 3:1 ratio unless otherwise set forth below.
>
> (1) Replacement or preservation shall first be accomplished on-site on lands with slopes of thirty percent or less and outside of stream and wetland setbacks.
>
> (2) If sufficient vegetation canopy cover cannot be reasonably accomplished under subsection (D)(1) of this section, on-site preservation or replacement may occur on slopes greater than thirty percent and up to fifty percent in areas that result in the highest biological and water quality protections as determined by the director.
>
> (3) If sufficient vegetation canopy cover cannot be reasonably accomplished under subsection (D)(1) or under subsection (D)(2) of this section, off-site replacement or preservation may occur if it is within the same watershed and the habitat is of the same or better quality as determined by the director.
>
> (4) Replacement of vegetation canopy cover may occur within stream setbacks at a minimum 2:1 preservation ratio where a restoration plan prepared by a qualified professional biologist has been approved by the director, and where consistent with Section 18.108.025 (D) as determined by the director. Alternatively, the removal of any vegetation canopy cover may be mitigated by permanent replacement or preservation of comparable vegetation canopy cover, on an acreage basis at a minimum 2:1 ratio, where the project includes substantial public benefits as determined by the director. Preserved vegetation canopy cover shall be enforceably restricted with a perpetual protective easement or perpetual deed restriction preserving and conserving the preserved vegetation canopy cover.

O1-4

Regional Water Quality Control Board (RWQCB) requirements, which are only for parcels where the slope is below 5%, call for 3:1 replacement as well. The average 19% slope of this

parcel is an argument for much more stringent watershed protections and thus a much higher mitigation ratio:

> **(RWQCB) Mitigation Measure BR-7: Limitations on Vegetation Removal and Replanting**
>
> (#4) Except (as applicable) with approval from CDFW, there will be no cutting or removal of native trees 4" or greater diameter at breast height (DBH), except willows, for which there will be no cutting or removal of trees 6" or greater DBH. (F-7)
>
> (#5) If native trees over 6" DBH are to be removed (with approval from CDFW), they will be replaced at a 3:1 ratio. (F-8)

O1-4 cont.

Monitoring and maintenance of mitigation plantings: Mitigation plantings must be maintained for **seven years** per Public Resources Code §21083.4. The five-year maintenance requirement is associated with the Regional Water Quality Control Board requirements. This deficiency must be corrected (See Mitigation Measure 3.3-5b).

O1-5

Oaks require protection within the root protection zone: Dripline (described in the DEIR as the "tree buffer area") protections for valley oaks proximate to development activities are not adequate (see Mitigation Measure 3.3-5b). Oaks should have no disturbance within the root protection zone (RPZ). RPZ is the area that extends beyond the dripline to a distance that is half the distance between the trunk and the dripline. *Care of California's Native Oaks*, which is downloadable from http://californiaoaks.org/oak-tree-care/, provides additional information. The text below is from this publication:

> **Root protection zone:** The best practice is to leave the tree's root protection zone (RPZ) undisturbed. This area, which is half again as large as the area from the trunk to the dripline, is the most critical to the oak. Many problems for oaks are initiated by disturbing the roots within this zone.

O1-6

Napa County's 2010 Voluntary Oak Woodland Management Plan aspires to achieve a number of conservation outcomes, including:

> (7) Encourage land use, transportation, and infrastructure planning that is consistent with oak woodlands conservation efforts; and
>
> (8) Maximize the total amount of oak woodland canopy cover to achieve erosion, flood, habitat, and air quality protection benefits, while recognizing the importance of including a variety of canopy cover levels within conserved and restored woodlands to provide habitat diversity.

O1-7

Unfortunately, the Reduced Vegetation Removal/Grading and Road Use Alternative for the Hyperion project fails to advance these conservation outcomes. The project should not advance.

Sincerely,

Janet Cobb
Executive Officer
California Wildlife Foundation

Angela Moskow
Manager
California Oaks Coalition

Letter O1 Response	Janet Cobb, Executive Officer, California Wildlife Foundation and Angela Moskow, Manager, California Oaks Coalition June 3, 2021

O1-1 Napa County thanks the California Wildlife Foundation for the Draft EIR comments provided. The commenter's concern about impacts on oak trees as a result of the proposed project is noted.

O1-2 The reference to Public Resources Code Section 21083.4 does not apply to this project. As stated in Public Resources Code Section 21083.4 subsection (d)(3), the following is exempt from this section: conversion of oak woodlands on agricultural land that includes land that is used to produce or process plant and animal products for commercial purposes. Because Napa County vineyard ECPs are agricultural in nature, Public Resources Code Section 21083.4 does not apply.

Considerations of the project's effect on forest land as defined by Public Resource Code Section 12220(g) was addressed in the Initial Study included as Draft EIR Appendix B, under the environmental checklist questions regarding "Agriculture and Forest Resources." As stated in the Initial Study, the proposed project would not have an impact on forest land since it would not conflict with existing zoning for the project site. The biological resources assessment mapped terrestrial biological communities within the project site by vegetation alliances, which reflects more detailed mapping of the extent of different biological communities. As such, the County considers that vegetation classification mapping conducted to support the biological resources section of the Draft EIR accurately reflects the boundaries of existing oak woodland.

Furthermore, Mitigation Measure 3.3-5a includes encumbering oak woodland at a 2:1 ratio (half of which shall be situated on lands with slopes less than 30% and located outside of aquatic resource setbacks) ensuring that the oak woodland is preserved in perpetuity via a mitigation easement with an accredited land trust organization or other means of permanent protection acceptable to Napa County, in the spirit of Public Resources Code Section 21083.4. Mitigation Measure 3.3-5b would protect valley oak and other oak trees during construction of the point of diversion and associated infrastructure in and along Elder Creek, even if they were not mapped within an area mapped as an oak alliance. This mitigation measure states that if a valley oak or other oak is removed or undergoes substantial trimming, it would be replaced on-site with 15-gallon oak trees at a minimum 4:1 ratio (with increasing ratios for affected trees with larger dbh). As such, the Draft EIR is considered to be adequate and no changes were made in the Draft EIR in response to this comment.

O1-3 As stated on page 1-2 in Draft EIR Chapter 1, *Introduction*, the original project application submittal (December 14, 2017) contained the application materials that were required by the County's Erosion Control Plan Application Checklist at that time. As a

result, the application was determined to be a “substantially conforming and qualified permit application’’ pursuant to the recently enacted Water Quality and Tree Protection Ordinance (Ordinance #1438), which became effective on May 9, 2019. Therefore, continued processing and review of this application will not be subject to the County Conservation Regulations (Napa County Code Chapter 18.108), as amended by the Water Quality and Tree Protection Ordinance. This application is subject to the County Conservation Regulations that were in effect before May 2019.

O1-4 See Response to Comment O1-3 regarding the Water Quality and Tree Protection Ordinance.

Furthermore, the proposed level of canopy retention is also consistent with the minimum tree canopy retention requirements for projects within a Sensitive Domestic Water Supply Drainage pursuant to Napa County Code Section 18.108.027(B). As stated on Draft EIR page 3.3-69, the proposed project must retain a minimum of 60 percent of the tree canopy existing on the parcels within the Elder Valley Creek Sensitive Domestic Water Supply Drainage in 1993, pursuant to Napa County Code Section 18.108.027(B). With the proposed project, approximately 95 percent of the tree canopy cover existing in 1993 would remain.

The County therefore considers the existing mitigation ratio to be appropriate for all parcels within the project footprint where vegetation would be removed. Other agencies that may exercise regulatory authority over the project (e.g., Regional Water Quality Control Board) may include more detailed mitigation requirements as part of their conditions for approval than the mitigation language presented in the Draft EIR. As such, the existing language in the Draft EIR is considered to be appropriate and no changes were made in the Draft EIR in response to this comment.

O1-5 Mitigation Measure 3.3-5b has been modified to state that monitoring and maintenance of replacement trees is to occur for seven years, as recommended in the comment; see Chapter 2, *Revisions to the Draft EIR* and Chapter 4, *Mitigation Monitoring and Reporting Program*.

O1-6 The buffer as specified in Mitigation Measure 3.3-5b is a minimum protective buffer, which could be extended farther away from the trunk of the tree if deemed appropriate by the County. For example, if construction activities are solely at the ground surface, they would not be expected to interfere with the tree’s root zone, and hence there would be no need to expand the protective buffer fencing farther out than the tree’s dripline. As such, the language in the Draft EIR is considered appropriate; no changes in the Draft EIR were made in response to this comment.

O1-7 The commenter’s statement that the Reduced Vegetation Removal/Grading and Road Use Alternative for the proposed project fails to advance the conservation outcomes in

Napa County's 2010 Voluntary Oak Woodland Management Plan, and opinion that the project should not advance are noted.

Losses of oak woodland would be addressed through implementation of Mitigation Measures 3.3-5a and 3.3-5b. These measures include encumbering oak woodland at a 2:1 ratio (half of which shall be situated on lands with slopes less than 30% and located outside of aquatic resource setbacks) ensuring that the oak woodland is preserved into perpetuity via a mitigation easement with an accredited land trust organization or other means of permanent protection acceptable to Napa County. Furthermore, as per Mitigation Measure 3.3-5b, if oaks cannot be avoided during construction of the point of diversion and associated infrastructure, they shall be replaced at a minimum 4:1 ratio. Additionally, if avoidance of valley oaks is infeasible for construction of the point of diversion and associated infrastructure, then the requirement to preserve a minimum of 0.06 acre of riparian woodland would be implemented. Given the totality of these measures, the proposed project would be consistent with Napa County's policies pertaining to the protection of oak woodlands. As such, the language in the Draft EIR is considered appropriate; no changes in the Draft EIR were made in response to this comment.

GILPIN GEOSCIENCES, INC.
Earthquake & Engineering Geology

MEMORANDUM

To: Don Barella, Napa County Planning, Building, and Environmental Services Department.

From: Lou Gilpin, Gilpin Geosciences, Inc.

Date: June 3, 2021

Project: KJS-Sorrento Vineyard Development

Project No.: 91620.03

Subject: Response to Draft EIR

This memorandum summarizes our comments on the County-prepared EIR for the proposed vineyard development at the KJS-Sorrento Property at 3450 Sage Canyon Road near St Helena, California. We previously prepared an Engineering Geological Investigation report for the project (Gilpin Geosciences, Inc., 2018).

We have reviewed the KJS and Sorrento Vineyard Conversion #P17-00432-ECPA Draft Environmental Impact Report (ESA, 2021) as comissioned by the County of Napa. In particular, we have reviewed the Section 3.5 Geology and Soils section of the Chapter 3 Environmetal Setting, Impacts, and Mitigation Measures.

O2-1

Although we find numerous errors throughout the section we take particular issue with the presentation/interpretation of our conclusions and recommendations regarding the proposed vineyard conversion. The EIR concludes that to reduce the impact to less than significant the vineyards cannot be constructed on any landslides, dormant or active.

We present the following, excerpted from Gilpin Geosciences, Inc. 2018, Engineering Geologic Investigation Somerston Vineyard Development APN 025-270-022 & 025-270-025 3450 Sage Canyon Road St Helena, California:

CONCLUSIONS

Based on our aerial photograph review, geological reconnaissance mapping, subsurface exploration, and landform analysis, ***we believe it is feasible to develop the proposed vineyard blocks.*** *We do not believe the existing conditions will adversely impact the proposed*

O2-2

development. Because the proposed vineyard development implements surface runoff controls with attention to limiting concentrated surface runoff in areas susceptible to erosion, we do not believe the proposed development will adversely impact the existing slope stability. ***Likewise, the proposed surface drainage improvements will reduce any potential impacts to both on and off site resources as a result of the project as compared to existing conditions****. We present our recommendations for maintaining hillside stability in the proposed vineyard area in the following section. (emphasis added)*

RECOMMENDATIONS

The majority of the vineyards proposed for development lie on or slightly above the valley floor and are characterized by alluvial fan landforms. These vineyards pose the lowest category of potential slope instability.

Vineyard blocks proposed for the hillsides of the project site should avoid introducing concentrated surface runoff at drainages presently showing excessive erosion. The vineyard blocks proposed for sidehill bench and ridgeline/knoll top areas should control runoff with consideration for the abrupt change in slope inclination downslope of these features.

We have considered the activity of landslide deposits mapped on the site during our aerial photograph review, reconnaissance mapping and landform analysis. Based on our multiple year aerial photograph review spanning 1968 to 1999 combined with our search for any indications of recent ground surface movement associated with the landslides on the site, we believe the landslides are not active, and will not be adversely impacted by the proposed vineyard development; nor will the vineyard development be impacted by the dormant landslides. Surface runoff should not be concentrated and should outlet outside of the mapped landslide onto erosion-resistent surfaces. No grading should be attemped on the landslide deposits.

Ripping of the vineyard blocks is acceptable for all areas except the landslide deposits where it should be limited to a depth of 24 inches.

O2-2 cont.

There appears to be some confusion in the EIR document regarding the definition of grading. Grading is the construction process by which excavation equipment is employed to alter the topographic grades of a site in order to accommodate roads, buildings or other improvements. Ripping is an agricultural process that allows aeration and drainage enhancements but does not involve changing local site grades.

O2-3

We are of the opinion and it is our experience, that vineyard construction along with the associated local improvements to drainage, enhance the site slope stability by

O2-4

controlling the runoff intensity and outfall to avoid areas susceptible to erosion, such as active and dormant landslides. This will reduce the sediment load impact to local streams and creeks. This was clearly stated in our 2018 Report and it is inappropriate that the Draft EIR would mischaracterize our recommendations. We request that the EIR be updated immediately to accurately reflect our recommendations. O2-4 cont.

The EIR goes into a very detailed presentation of the impacts to paleontologic resouces that may or may not be present at the site. We agree with the authors that a licensed paleotologist should be engaged to determine the potential impact of the proposed vineyard conversion. Although we are not licensed paleontologists we disagree with the authors' somewhat arbitrary assumption that there is a high potential for encountering paleontologic resources at the site. We have been mapping large areas of Northern California for the last 35 years and have never found a site with a "High Potential" for paleontologic resources. We have visited such sites on guided field trips during professional meetings. No paleontological resources were identified during our subsurface exploration of the property for the 2018 geological investigation. O2-5

We trust this memorandum provides you with the information you require at this time. If you have any questions or need additional information regarding this memorandum, please call or email. O2-6

Letter O2 **Lou Gilpin, Gilpin Geosciences, Inc.**
Response June 3, 2021

O2-1 Napa County thanks Gilpin Geosciences, Inc. for the Draft EIR comments provided. The comment describes Gilpin Geosciences' involvement in the preparation of an Engineering Geological Investigation report for the project and review of Draft EIR Section 3.5, *Geology and Soils*.

O2-2 The comment restates Gilpin Geosciences' recommendation that ripping of the vineyard in the areas of the landslide deposits is acceptable if it is limited to a depth of 24 inches, based on Gilpin Geosciences' multiple year aerial photograph review spanning 1968 to 1999, combined with their search for any indications of recent ground surface movement associated with the landslides on the site. The County acknowledges that Gilpin Geosciences believes the landslides are not active and will not be adversely impacted by the proposed vineyard development; nor that the vineyard development will be impacted by the dormant landslides, as long as surface water runoff is not concentrated and outlets outside of the mapped landslide onto erosion-resistant surfaces.

Draft EIR Impacts 3.5-2 and 3.5-4 have been revised to allow development in proposed vineyard Blocks 16, 24G, 25, and 27, with ripping in the area of mapped landslide deposits limited to a depth of 24 inches (see Chapter 2, *Revisions to the Draft EIR*). This changes the mitigated proposed project acreage to 141.72 gross acres (97.69 net acres), instead of 135.41 gross acres as described in Draft EIR Table 3.3-5, *Project Impacts by Biological Community*. Note that buffers to protect biological resources identified in these areas still apply. See also Response to Comment O4-14.

These areas were also added back to the Reduced Intensity and Increased Stream and Wetland (Aquatic Resource) Setbacks Alternative. Block 24G was added back to the Reduced Vegetation Removal/Grading and Road Use Alternative, and Blocks 16, 25, and 27 remain excluded from the Reduced Vegetation Removal/Grading and Road Use Alternative due to the isolated/minimal vineyard areas created in those areas when combined with other buffers to protect biological resources.

O2-3 The comment is noted. See also Response to Comment O2-2.

O2-4 The comment is noted. See also Response to Comment O2-2.

O2-5 The Draft EIR reports the geologic units mapped by the U.S. Geological Survey for the project site. As stated on Draft EIR page 3.5-1, mapping provided in USGS' *Geologic Map and Map Database of Eastern Sonoma and Western Napa Counties, California* (Graymer et al. 2007) was reviewed, and the USGS National Geologic Map Database was used to produce the geologic map presented in Draft EIR Figure 3.5-1. The geologic

units on the project site were assigned paleontological sensitivity rankings in accordance with SVP (2010) standards, as stated on Draft EIR page 3.5-29.

The commenter's statements that they have never found a site with a high potential for paleontological resources in Northern California and that no paleontological resources were identified during subsurface exploration of the project site for the 2018 geological investigation are noted.

Impact 3.5-5 states that grading or excavations deeper than the average 2-foot ripping has the potential to affect fossil resources, particularly previously undisturbed sediments more than 2 feet deep in areas that are mapped as Great Valley Sequence (KJgvl or Jk), or that exceed 5 feet deep in areas mapped as Quaternary alluvial fan deposits (Qf). Given that the maximum ripping depth would be 4 feet, depending on site conditions, and based on Gilpin Geosciences' field experience in the project area with paleontological resources, the text of Mitigation Measure 3.5-5b related to monitoring in areas mapped as Quaternary alluvial fan deposits (Qf) was removed (see Chapter 2, *Revisions to the Draft EIR*). See also Responses to Comment O4-15 and O5-8.

O2-6 Napa County thanks the commenter for the Draft EIR comments provided.

LETTER O3

CENTER *for* BIOLOGICAL DIVERSITY *Because life is good.*

June 9, 2021

Sent via email

Don 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 Hyperion Vineyard Holdings LLC., (A.K.A. KJS Investment Properties and Sorrento Inc.) Erosion Control Plan Draft Environmental Impact Report (State Clearinghouse No. 2018092042)

Dear Mr. Barrella:

These comments are submitted on behalf of the Center for Biological Diversity (the "Center") regarding the Hyperion Vineyard Holdings LLC (aka KJS Sorrento) Erosion Control Plan #P17-00432 (the "Project"). The Center has reviewed the Draft Environmental Impact Report ("DEIR") closely and is concerned that the DEIR fails to properly disclose, analyze and mitigate potentially significant environmental impacts to biological resources, greenhouse gas emissions ("GHGs"), water supply, and water quality, among other effects. The Center urges the County to correct the deficiencies identified in this letter and recirculate a new DEIR for public comment prior to preparing a Final EIR for the Project. O3-1

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. O3-2

CEQA and the CEQA Guidelines impose numerous requirements on public agencies proposing to approve or carry out projects. Among other things, CEQA mandates that significant environmental effects be avoided or substantially lessened where feasible. (Pub. Res. Code § 21002; CEQA Guidelines §§ 15002(a)(3), 15021(a)(2), 15126(d).) Unfortunately, the DEIR for the Project fails to comply with CEQA and the CEQA Guidelines in numerous respects. O3-3

I. The Project Description Fails to Comply with CEQA O3-4

Under CEQA, a "project" is defined as "the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment . . . ." (*Tuolumne County Citizens for Responsible Growth, Inc. v. City of Sonora* (2007) 155 Cal.App.4th 1214, 1222 (citing CEQA Guidelines § 15378, subd. (a).) An "accurate, stable and finite project description is the *sine qua non* of an informative and legally sufficient EIR." (*Cnty. of Inyo v. City of Los Angeles* (1977) 71 Cal.App.3d 185, 193; (*San Joaquin Raptor Rescue Center v. County of Merced* (2007) 149 Cal.App.4th 645, 655 (project description held unstable and misleading) [hereinafter "*San Joaquin Raptor*"].) "However, a curtailed, enigmatic or unstable project description draws a red herring across the path of public input." (*San Joaquin Raptor*, 149 Cal.App.4th, at 655.)

O3-4 cont.

An inaccurate or truncated project description is prejudicial error because it fails to "adequately apprise all interested parties of the true scope of the project." (*See City of Santee v. Cnty. of San Diego* (1989) 214 Cal.App.3d 1438, 1454-55 [hereinafter "*City of Santee*"].) "Only through an accurate view of the project may the public and interested parties and public agencies balance the proposed project's benefits against its environmental cost, consider appropriate mitigation measures, assess the advantages of terminating the proposal and properly weigh other alternatives." (*San Joaquin Raptor*, 149 Cal.App.4th, at 655.)

Here, the Project Description and other sections of the DEIR present a convoluted picture of planned vineyards within the Project site and fails to clarify which proposed mitigation measures will be adopted. Specifically, the DEIR makes it unclear what the actual final acreage of the project will be. The DEIR describes the Proposed Project as including a cleared area of up to 111.5 planted acres (DEIR at 2-7), but later describes a version of the Project designed to mitigate harms to biological resources that closely resembles the environmentally preferable alternatives and appears to require development on roughly 21 fewer acres of land. (DEIR at 3.3-48; Figures 5-1 & 5-2.) However, at no point does the DEIR clearly commit to these mitigation measures, making it difficult to determine the acreage and impact of the final project.

O3-5

The DEIR compounds this confusion by describing the Project in the Alternatives Analysis section *without* these mitigation measures: "The proposed project would involve development of 111.5 net acres of vineyards within an approximately 156.8 net acres of vineyards. . ." (DEIR 5-26 [emphasis added].) This suggests that the biological resources mitigation measures reducing the total cleared acreage would not be implemented, creating substantial confusion about the scope of the Project. This is significant, because the Alternative Analysis rejects environmentally preferable project designs since the Proposed Project because the DEIR concludes that it does not achieve all the project objectives. (DEIR 5-27.) This analysis strongly implies that the Project would not include the biological resources mitigation measures, which would prevent the Project from achieving this acreage goal. (*See id*.) Conversely, if the Project does include the biological resources mitigation measures, then the DEIR relies on an inaccurate description of the Project to reject environmentally preferable alternatives. Either way, the DEIR is ambiguous.

O3-6

Moreover, the conclusion that the environmentally superior alternatives do not meet project objectives is confusing and flawed. The DEIR rejects the alternatives because neither achieves the first listed project objective "develop[ing] up to approximately 111.5 net acres of

O3-7

vineyard." (DEIR at 2-6.) However, there is no reason to believe a version of the project with fewer acres do not achieve this goal, because the DEIR never sets a floor for acreage to be developed. (DEIR at 5-27.) The FEIR's analysis does not explain why developing fewer acres of vineyard would not be feasible, which is particularly confusing because the DEIR includes no minimum viable acreage for the winery and the project goals significantly emphasize conservation goals that would inarguably be better served by lower impact alternatives. (DEIR at 2-6-7) The EIR must be substantially modified to explain why the environmentally preferable alternatives are not viable.

O3-7 cont.

In sum, the DEIR analysis relies on multiple versions of the Project, failing to uphold CEQA's mandate that the DEIR "adequately apprise all interested parties of the true scope of the project." (*See City of Santee*, *supra*, 214 Cal.App.3d at 1454-55.) The Project Description in the DEIR violates CEQA and the DEIR must be modified to comply with its requirements.

O3-8

II. The DEIR's Analysis of and Mitigation for the Project's Greenhouse Gas Emissions is Inadequate

The DEIR's analysis of the proposed Project's GHG emissions (DEIR Section 3.2) is inadequate. The Project would result in potentially significant amounts of GHG emissions during construction and operation of the Project, but the DEIR dedicates only a handful of pages to its conclusory analysis. (See DEIR 3.2-34-37.) The DEIR's approach violates CEQA's requirement that an EIR fully analyze and attempt to mitigate all potentially significant direct and indirect impacts of a project. (CEQA Guidelines § 15126.2; Pub. Res. Code § 21002.)

O3-9

A. The DEIR ignores the carbon storage and sequestration value of grassland habitat

The DEIR's conclusion that GHG impacts will be less than significant is not supported by substantial evidence. The DEIR under-counts the carbon storage that will be lost resulting from the clearing of predominantly grassland habitat on the Project site, while failing to offer support for the carbon storage and sequestration values attributed to vineyards.

O3-10

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) (White et al. 2000). 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 excluded from carbon calculations and neglected as important carbon sinks and biodiversity hotspots.

O3-11

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.,

O3-12

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; McDowell & Allen, 2015; Stevens-Rumann et al., 2018; 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).

O3-12 cont.

There are other diverse habitats with carbon storage potential that can supplement the carbon sequestration of trees and forests, some of which may be more reliable carbon sinks in the face of climate change. For example, habitats in arid and semi-arid regions, such as shrublands and grasslands, 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.

Grasslands cover about 10% of California's land area (Figure 1, Eviner 2016). Although they are mostly dominated by non-native plant species, they continue to be biodiversity hotspots that support almost 90% of state-listed rare and endangered species and 75 federally listed plants and animals (Eviner, 2016). Their above-ground biomass may not be as impressive as forests or shrublands, but there is significant potential for carbon storage in their roots and soils (Germino et al., 2019; Kravchenko et al., 2019; Silver et al., 2010; Soudzilovskaia et al., 2019; Yang et al., 2019). Although it depends on the species and ecological region, native grasslands have been found to have 75-93% of their biomass below-ground (Paruelo et al., 2010; Yang et al., 2019). Studies have found that native grasses store more carbon than non-native grasses (Koteen et al., 2011; Yang et al., 2019), and grasslands with higher plant diversity facilitate greater soil carbon storage (Chen et al., 2018; Fornara & Tilman, 2008; Isbell et al., 2011; Kravchenko et al., 2019; Lange et al., 2015; Yang et al., 2019; Zavaleta et al., 2010) and are likely more resilient to climate change (Craine et al., 2013; Dass et al., 2018; Vicente-Serrano et al., 2013).

O3-13

Like California shrublands, grasslands in semi-arid regions have an adaptive capacity to drought and wildfire. Multiple studies suggest that diverse grasslands can adjust to increased

drought (Craine et al., 2013; Dass et al., 2018; Vicente-Serrano et al., 2013), perhaps through the local expansion of drought-tolerant species (Craine et al., 2013). And although the historic fire regimes of California grasslands are not well-understood, when fires burn through them they release less carbon than woody habitats because most of the carbon they store is underground, and they recover relatively quickly (Dass et al., 2018; Donovan et al., 2020). In fact, one study found that California grasslands may be a more reliable carbon sink than trees and forests in the face of climate change, particularly if global warming exceeds 1.7ºC above pre-industrial levels (Dass et al., 2018). Evidence suggests that forest resilience to drought and wildfires is already declining under climate change, which further highlights the urgency of preserving and restoring remaining intact native grasslands and their biodiversity in addition to protecting forests and trees to improve our chances of limiting warming to 1.5ºC and avoiding the most devastating impacts of climate change.

O3-13 cont.

B. The DEIR's analysis of GHG impacts in misleading

The Project calculates the amount of stored carbon based on values that grossly misrepresent the carbon storage potential of grassland-dominated habitats with the Project's development footprint. The DEIR notes that 117.7 acres of grassland acreage would be removed during Project construction. (DEIR App. D § 11.0.)[1] The DEIR only attributes 2.6 MT carbon per acre of this habitat type, a value taken from the 2012 Napa County Draft Climate Action Plan ("Draft CAP"). (DEIR App. D.) As a threshold matter, the Draft CAP is not a credible source, as that document is out-dated, and more importantly, was never finalized nor adopted, and bears no authority in the County's approach to cataloging GHG emissions. Furthermore, the carbon storage values provided in Appendix D appear as a collection of recommendations, with different values matched with varying criteria. (DEIR App. D § 11.0.) There is no discussion of why certain values were used instead of other in the DEIR's calculations. The appendix also appears to include notes and questions, possibly to be answered as part of the analysis, but answers and conclusions are not included, and the inclusion of such notes supports an interpretation that the appendix is nearly a draft that collects potentially relevant information, and not an authoritative document used to support the DEIR's conclusions. (Id.) Lastly, the most recent document cited as a source of the storage/sequestration values is the 2012 Draft Cap, which is inapplicable, as discussed above. (Id.) The other source material is either from 2011 or 2008. (Id.) The DEIR must be revised to incorporate the most recent scientific information about carbon storage and sequestration potential for different land cover types.

O3-14

The DEIR fails to use the best available science when determining the carbon storage lost during construction, and that improper calculation resulted in a significant underreporting of the Project's GHG emissions. The DEIR must be revised to properly disclose and analyze the scope of carbon storage loss that will occur during project construction and operation.

O3-15

III. The DEIR Fails to Accurately Explain and Analyze the Project's Water Use

California is in the grip of a historic drought, with the entire state facing reductions in available water supply. (2021 Drought Proclamations.) The entirety of Napa County is in

O3-16

[1] Appendix D does have page numbers, making direct citations challenging.

exceptional drought, among the most impacted 25% of California. (U.S. Drought Monitor, Exhibit 1.) In response to the growing crises, the City of Napa, joining other Napa County jurisdictions, implemented water use restrictions on its residents meant to reduce consumption by 15%.[2] It is in this context that the Project seeks approval to add over 100 acres of vines, acres to which the irrigation tap can't be shutoff in dry years, in the Lake Hennessey watershed. (See DEIR at 3.7-5.) As the frequency and intensity of droughts in California increase due to climate change, it is critical that land use decisionmaking be made based on robust and thorough water supply analyses. Unfortunately, the DEIR completely ignores the reality in which the proposed Project would operate, and fails to include a legally adequate discussion of the Projects demand for water, the available supply, nor the environmental consequences of providing the needed supply.

O3-16 cont.

A. The DEIR fails to assess whether adequate water is available to meet project demand

The DEIR's water supply analysis is doomed from the start because it fails to clearly disclose how much water the Project will use. The lack of a clear accounting of how much water the project will use undermines the DEIR's ability to inform the public and decisionmakers of the Project's impacts, in violation of CEQA. (See *Napa Citizens for Honest Government v. Napa County Bd. of Supervisors* (2001) 91 Cal.App.4th 342, 356 [An EIR's validity depends upon "whether it provides the information necessary for the County and public to understand the nature and environmental consequences of the Project"].) The DEIR fails to communicate how much water the new vineyards will use each year, focusing instead on a discussion of the water rights permit applications that are a part of the Project. (See DEIR at 3.7-36; 2-10.) The proposed Project would be neighbor existing vineyards that would be under the same surface water permit. (DEIR at ES-2.) As such, data would be available for how much water has been used for irrigation on the existing vineyards. The DEIR must be revised to include a quantification of the proposed Project's water demand for the life of the Project.

O3-17

B. The DEIR fails to analyze the availability of water to serve the Project

CEQA requires lead agencies to show how much water a Project will use, where that water will come from, and the potential impacts associated with acquiring the supply. (See *Vineyard Area Citizens v. Rancho Cordova* (2007) 40 Cal.4th 412, 434.) Installation of a new vineyard would lock in water demand for decades which makes it necessary for an environmental review of such a project to clearly state how much water the vineyard will require over the planning horizon. Here, the DEIR doesn't even attempt to quantify the necessary water to meet project objectives, the operation of an economically viable vineyard, nor does it make such an assessment in consideration of climate change and the future availability of water. The DEIR only discusses the existing water rights and pending applications. (DEIR at 2-10.) Accordingly, the DEIR's failures to accurately assess project-specific water supply impacts

O3-18

[2] Dry winter leads Napa to curb irrigation, outdoor water use in city. Napa Valley Register. May 5, 2021. Available at https://napavalleyregister.com/news/local/dry-winter-leads-napa-to-curb-irrigation-outdoor-water-use-in-city/article_7722e50d-9ce0-5136-bad2-05882f745837.html.

deprives the public of its ability to analysis the "pros and cons" of supplying water to the Project. (*Vineyard Area Citizen*s, *supra*, 40 Cal.4th at 430-31.)

O3-18 cont.

When discussing the water rights permits, the DEIR fails to address how much of the permitted water will *actually* be available for Project use on a yearly basis. Because there are conditions in place that might limit diversion of water under the permits, it is not certain that all the permitted water will actually be available. Reliance on "paper water" entitlement alone, in the absence of a showing of what can be delivered and considerations of the uncertainties involved, renders the DEIR inadequate. (See *Vineyard Area Citizens*, *supra*, 40 Cal.4th at 430 [internal quotations omitted].) Similar to the failure to quantify demand, as there are existing surface water rights being used on the existing vineyards onsite, there is surely information about how much water is actually being diverted. With the timing and magnitude of precipitation patterns in flux due to climate change, the DEIR must disclose, analyze, and mitigate the impacts to surface water supplies.

O3-19

The DEIR also fails to address the potential impacts that Project water use will have on other water users, specifically residents of the City of Napa that rely on Lake Hennessey as a municipal drinking water reservoir. CEQA requires, in addition to an assessment of available supplies, that a Project analyze its potential impacts on other water users. (See *Santiago County Water Dist. v. County of Orange* (1981) 118 Cal.App.3d 818, 830-31.) Each acre-foot of water that the Project pulls from Elder creek to irrigate its vines might otherwise end up in Lake Hennessey, requiring the DEIR to consider the impacts on City of Napa residents that would result from the Project.

O3-20

IV. The DEIR does not Adequately Disclose or Mitigate the Project's Water Quality Impacts

The Project's 157-acre vineyard conversion would dramatically alter the landscape and potentially impact important watershed resources in a remote area of Napa County. The Project is located largely in the Elder Creek watershed, which flows into Lake Hennessy, and eventually into the Napa River. A small area of the project is in the Putah Creek watershed, which flows into Lake Berryessa. Lake Hennessey is designated as a sensitive domestic water supply, and serves as a municipal water supply for the City of Napa. The Project would entail the development of vineyards in close proximity to Lake Hennessey and other onsite streams. (*See* DEIR at 4.9-5.) Given the Project's proximity to sensitive water resources and the recent history of erosion from vineyards negatively affecting water supplies in the County, it is especially important that the DEIR carefully consider and mitigate or avoid impacts to water quality. Unfortunately, the DEIR falls short in this regard.

O3-21

A. The DEIR Uses an Improper Baseline for Erosion, Runoff, and Sedimentation

The DEIR's water quality impacts analysis fails to evaluate the Project's impacts against the baseline of existing conditions at the Project site. Under CEQA, an EIR 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

O3-22

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.) In general, the environmental conditions at the time the Notice of Preparation is issued constitute the environmental baseline. (CEQA Guidelines § 15125(a).) The DEIR fails to provide sufficient observational data on baseline soil characteristics, erosion conditions, and runoff dynamics, and is overly reliant on abstract modeling.

O3-22 cont.

The DEIR contains only a page and half addressing existing runoff conditions at the Project site. The first section merely describes soil types found on the property, and the second describes, in general terms, the types of vegetation on the project site. (DEIR at 3.7-6.) Then, instead of providing a detailed analysis of existing conditions based on field data gathered from the Project site, the DEIR cites to Appendix J, (a hydrologic analysis) which use HydroCAD modeling to conclude that the Project will marginally reduce sediment production and runoff on the Project site. (DEIR at 3.7-32 to -33.)

O3-23

Hydrologic modeling of *hypothetical* existing sediment, erosion, and runoff conditions is no substitute for an *actual* determination and description of 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 DEIR is highly reliant on the findings of the hydrological study, that study should be informed by extensive and detailed site-specific baseline data derived from observational study. Otherwise, the study's conclusion that erosion and runoff will be reduced by the Project could be highly inaccurate and therefore fail to constitute substantial evidence to support the DEIR's analysis.

O3-24

The DEIR's heavy reliance on the appended hydrological study obfuscates the method of analysis and makes the impact conclusions difficult to understand. The DEIR must include this critical information upfront, in the document, rather than burying it in appendices. "[D]ata in an EIR must not only be sufficient in quantity, it must be presented in a manner calculated to adequately inform the public and decision makers, who may not be previously familiar with the details of the project." (*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)].)

O3-25

These shortcomings are especially problematic here because the DEIR uses its hypothetical baseline to support one of the DEIR's most startling and implausible conclusions: that converting existing natural forestland on steep slopes above a natural stream to agricultural use will actually *lessen* erosion, sedimentation, and runoff. (DEIR at 3.7-32 to -33.)

O3-26

Modeling is no substitute for an adequate baseline analysis, especially when the DEIR's conclusion is inconsistent with abundant evidence showing that forest cover plays a critical role in regulating water flow, maintaining water quality, promoting groundwater recharge, and maintaining overall watershed health. Reduced forest cover has been shown to result in increased runoff, erosion, sedimentation, and water temperatures; changes in channel morphology;

O3-27

decreased soil retention; and decreased terrestrial and aquatic biodiversity (Brown & Krygier, 1970; Elliot, 2010; Jedlicka et al., 2014; Lawrence et al., 2011; Moyle et al., 2011). Conversion of grasslands and forests to vineyards has also 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., 2021) The DEIR states that cover planting will reduce the effects of runoff and erosion, but does not analyze or explain what types of vegetation will be used as cover, and how that vegetation compares to naturally occurring and currently present vegetation. In 2016, the General Water Manager of the City of Napa ("the Manager") stated that nutrient and pesticide pollution originating from vineyards continued to degrade water quality in Lake Hennessey, despite the implementation of erosion control plans. (Eldredge Letter, 2016). The Manager's letter calls into question the efficacy of erosion control plans, and casts doubt on modeling that shows vineyard development will reduce runoff and result in less than significant impacts to water quality. (Id.)

O3-27 cont.

The DEIR and hydrologic study used an environmental conditions baseline prior to the 2020 Hennessey Fire, which affected the project site.[3] While CEQA sets the date of the Notice of Preparation as the default baseline date for an EIR, agencies have flexibility to adjust the date from which baseline conditions are measured. (*Communities for a Better Env't v. S. Coast Air Quality Mgmt. Dist.*, (2010) 48 Cal. 4th 310, 226 P.3d 985.) This is particularly true when environmental conditions change quickly. (Id.) Given the change in conditions at the Project site resulting from the Hennessey Fire, the DEIR should provide more recent information on the condition of the site following the fire. Fires typically increase erosion and runoff, but also impact vegetation and forest succession. (Cole et al., 2020; Rulli & Rosso, 2005). The DEIR does not provide any information on the site conditions after the Hennessey Fire, nor any analysis of how the project's effects might interact with a partially burned landscape. Will excavation and development interfere with post-fire vegetation growth? How might the character of runoff and sediment loads be different if excavation or development occurs on burned areas? Although the fires effects may be limited or temporary, the EIR should at least consider whether commencing with development on a burned site would result in previously uncontemplated impacts.

O3-28

The DEIR 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 DEIR 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.

O3-29

B. The DEIR does not Disclose the Baseline Conditions for Water Quality in Elder Creek, Sage Creek, and Soda Valley Creek

O3-30

[3] [The Project site is entirely within the 2020 Hennessey Fire perimeter. The precise level of burn damage is unclear. Cal Fire determined that 5 buildings in the Elder Creek Valley near the Project site were not damaged, however, satellite imagery from Google Maps shows burned areas surrounding and interspersed throughout the project site. (CITE CalFire, Google Satellite img)]

The DEIR's insufficient data regarding existing water quality conditions results in inadequate baseline information from which to assess the Project's impacts on local and regional water quality. Without this data, the DEIR cannot provide sufficient baseline information to allow for comparison and evaluation of the Project's potential impact on these streams. (CEQA Guidelines § 15125(a); *see Communities for a Better Environment v. South Coast Air Quality Management District* (2010) 48 Cal.App.4th 310, 315.) The DEIR cites some publicly available information regarding water quality in the Napa River and Lake Hennessey (DEIR at 3.7-7 to -8, -24 to -26), but does not contain any information regarding water quality in Elder Creek, Sage Creek, Soda Valley Creek, or Lake Berryessa. The DEIR further claims that there is "less than significant risk" of chemical and sediment loading for the Napa River and Lake Hennessey (DEIR at 3.7-26), but fails to address the risk of chemical loading to Elder Creek, Sage Creek, or Soda Valley Creek. The DEIR Fails to Consider the Impacts of Reduced Flows in Elder Creek.

O3-30 cont.

The DEIR states that the Project will result in surface water diversions of up to 48 acre-feet per year (afa), and that diversions will not occur unless February median bypass flows of 0.6 cubic feet per second (cfs) and 0.9 cfs are met at each of two diversion points. Even if they are accurate, the DEIR has not demonstrated that the Project's water use will not have an impact on flows in Elder Creek, Sage Creek, and Soda Valley Creek (and, accordingly, on water supply and impacts to aquatic species as a result). The DEIR does not address the project area's overall contribution to flow levels in Elder Creek, or the Project's effect (through diversion and storage) on this contribution. Small, intermittent, and seasonal streams, like Elder Creek and Sage Creek, can be severely impacted by relatively small withdrawals and diversions, with detrimental impacts for sensitive biota that rely on timing and volume of intermittent flows. (Chiu et al, 2017). These changes can reduce vegetation and intervertebral species that perform important biological services that impact water quality. (Id.)

O3-31

The DEIR's conclusion that adhering to minimum bypass flows will effectively protect aquatic resources and water quality, in the absence of supporting evidence, fails to meet CEQA's requirements. *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova*, (2007) 40 Cal. 4th 412, 427). The property contains slopes and swales that flow into Elder Creek and supply water to Sage Creek. The DEIR fails to address the likelihood that diversions and changes to the surface use on the project site will divert or reduce surface or subsurface flow rates from these drainages and reduce water levels or water quality in Sage Creek downstream of the Project.

O3-32

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

The DEIR asserts that erosion control measures, stream setbacks, and the Integrated Pest Management Plan (IPM) will reduce the likelihood and amount of pesticides and nutrient pollution that reach Elder Creek and downstream waters. Rather than providing estimates of pesticide and fertilizer use and potential impacts on water quality, the DEIR merely states that applying IPM and erosion control will minimize impacts, presumably compared to a baseline without IPM or compliance with pollution control regulations. 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 DEIR should provide

O3-33

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).

O3-33 cont.

The DEIR implicitly acknowledges that IPM strategies implemented in the County have not prevented the migration of pesticides and herbicides into the County's waters. 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. The DEIR states that "Safe Drinking Water Information System… indicates a recent uptick in various pesticides and herbicides within Lake Hennessey; however, no maximum contaminant levels have been set for these particular chemicals." (DEIR at 3.7-25.) Yet the DEIR states merely that "certain contaminants commonly associated with vineyard land uses are below set MCLs." (Id.) However, 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 project." *Protect the Historic Amador Waterways v. Amador Water Agencies* (2004) 116 Cal.App.4th 1099, 1108. The DEIR concludes that because the "guidelines" set forth in the IPM "limit the use of pesticides, herbicides, and fertilizers," the Project would not have a significant impact on a variety of pollutant levels in Lake Hennessey. This is simply untrue. In 2016, the General Water Manager of the City of Napa stated that nutrient and pesticide pollution originating from vineyards continued to degrade water quality in Lake Hennessey, despite the implementation of erosion control plans and IPM. The Manager noted that Lake Hennessey had significantly higher levels of several pollutants compared to other Napa water sources. At the time, Napa City's expenditures to ameliorate algae growth in Lake Hennessey were increasing, along with resident complaints about municipal water quality. Though erosion control plans and IPM likely prevented more severe consequences, the Manager warned that the cumulative effect of continued vineyard development would result in further deterioration of water quality in Lake Hennessey. (Eldredge Letter, 2016). Neither the IPM nor the DEIR places 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 DEIR 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.)

O3-34

V. The DEIR's Alternatives Analysis does not Comply with CEQA

CEQA requires agencies to consider reasonable alternatives to a proposed project. A proper analysis of alternatives is essential to comply with CEQA's mandate that significant environmental damage be avoided or substantially lessened where feasible. (Pub. Res. Code § 21002; CEQA Guidelines §§ 15002(a)(3), 15021(a)(2), 15126(d); *Citizens for Quality Growth v. City of Mount Shasta* (1988) 198 Cal.App.3d 433, 443-45.) "Without meaningful analysis of alternatives in the DEIR, neither the courts nor the public can fulfill their proper roles in the

O3-35

CEQA process . . . .[Courts will not] countenance a result that would require blind trust by the public, especially in light of CEQA's fundamental goal that the public be fully informed as to the consequences of action by their public officials." (*Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Ca1.3d 376, 404.) Critically, an EIR's consideration of alternatives must "foster informed decision-making and public participation." (CEQA Guidelines § 15126.6(a); *Laurel Heights*, 47 Ca1.3d at 404 ["An EIR's discussion of alternatives must contain analysis sufficient to allow informed decision-making."].) The discussion of alternatives must focus on alternatives to the project or its location that are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede the attainment of the project objectives to some degree or would be more costly. (CEQA Guidelines § 15126.6(b).) The DEIR fails to meet this requirement because its analysis of the Project alternatives is inadequate.

O3-35 cont.

A. The DEIR uses confusing and unclear Project objectives to manufacture a basis for rejecting environmentally preferable alternatives

O3-36

The DEIR employs improperly unclear Project objectives to reject environmentally superior alternatives without sufficient explanation. Specifically, the DEIR defines the Project's goals as developing up to 111.5 net acres of vineyard, and then applies that goal as though it requires maximization of vineyard acreage, thereby artificially manufacturing a basis for rejecting environmentally superior alternatives. (*See* DEIR at 5-2.)

When drafting an EIR, a project's objectives may not be so narrowly defined that they essentially preordain the selection of the agency's proposed alternative. (*North Coast Rivers Alliance v. Kawamura* (2015) 243 Cal.App.4th 647, 668-670 [EIR violated CEQA where it narrowly defined project a project objective, then dismissed alternatives that would not accomplish this objective].) Case law under CEQA's federal equivalent, the National Environmental Policy Act ("NEPA") can be helpful in interpreting CEQA, and California courts agree that "NEPA cases continue to play an important role in adjudication of CEQA cases, especially when a concept developed in NEPA decisions has not yet been applied to CEQA cases." (*Del Mar Terrace Conservancy, Inc. v. City Council* (1992) 10 Cal.App.4th 712, 732.) "The "purpose" of a project is a slippery concept, susceptible of no hard-and-fast definitions. One obvious way for an agency to slip past the strictures of NEPA is to contrive a purpose so slender as to define competing "reasonable alternatives" out of consideration (and even out of existence). The federal courts cannot condone an agency's frustration of Congressional will." *Simmons v. U.S. Army Corps of Eng'rs* (7th Cir. 1997) 120 F.3d 664, 669.

O3-37

Here, the DEIR "fixes" the results of its alternatives analysis by stating that the Project goals are to develop a vineyard up to a certain size, but that only proposals that maximize vineyard conversion can fully achieve the Project objective. Of the fourteen "project objectives" listed in the DEIR, the objective of "[d]evelop[ing] . . . up to approximately 111.5 net acres of vineyard" is the primary objective not satisfied by the environmentally preferable alternatives. (DEIR at 5-1-2.) Moreover, despite listing ten objectives at the beginning of the alternatives section, the DEIR emphasizes one goals over the rest: maximizing vineyard conversion up to 111.5 net acres. (*See* DEIR at 5-27 (noting that converting 111.5 net acres of vineyard is the "main objective").

O3-38

Given the implied objective of maximizing vineyard conversion up to 111.5 net acres, the DEIR leaves no room for meaningful consideration of alternatives to the preferred project. By including such specific elements—*down to the net acreage of vineyard to be planted*—as optimal and primary project outcomes, the DEIR preordains the development of the Project. Moreover, the analysis that results from removing prioritized maximized acreage for vineyard conversion from the Project objective illuminates the fact that there is no other legitimate reason for the DEIR to adopt the chosen version of the Project, which is substantially more environmentally harmful than the two alternatives explored in the DEIR. (*See* DEIR at 5-13, 5-22.)

O3-38 cont.

In fact, the environmentally preferable alternatives would likely provide better means of achieving several of the other identified project goals. Specifically, the DEIR identifies minimizing erosion, sustainable farming, minimizing impacts on special status plant and animal species, and using water efficiently as project goals. (DEIR 5-2.) The environmentally preferable alternative would almost certainly be more likely to achieve all these goals than the version of the Project chosen. (*See* DEIR at 5-12, 5-22.) This further highlights the disingenuous nature of the alternatives analysis: While the DEIR has included many goals beyond building a vineyard of a certain acreage, only building a vineyard of a certain size is seriously considered in the alternatives analysis when actually deciding which version of the Project to select. (DEIR 5-27.) By including such specific elements as required objectives of the Project–and refusing to seriously consider a range of reduced size alternatives–the DEIR preordains the development of the Project as proposed, in violation of the authorities cited above.

O3-39

B. The DEIR does not explain why the environmentally preferable alternatives are not economically feasible beyond the failure to meet one impermissible, narrowly drawn project goal

The DEIR fails to provide satisfactory explanation of why the environmentally preferable alternative is not feasible. The DEIR identifies the No Project Alternative as the environmentally superior alternative. (DEIR at 5-23.) However, the DEIR rejects both the Reduced Intensity and Reduced Vegetation Removal Alternatives because they would allow for the development of fewer acres of vineyard. (DEIR at 5-27.) In rejecting these alternatives, the DEIR relies entirely on the difference in acreage between the proposed project and environmentally preferable alternatives. (*Id.*)

O3-40

As discussed in the above section, the narrowness of the DEIR objective of maximizing vineyard acreage up to 111.5 acres of vineyard is impermissible narrowing of the Project goals. Because this impermissible objective is the only reason that the DEIR appears to reject two environmentally preferable alternatives that otherwise appear satisfy the other project goals (sometimes better than the proposed project), the analysis in this section of the EIR is insufficient. Because of this, the DEIR fails to comply with CEQA's requirement that all feasible mitigation measures be adopted. (*See* Pub. Res. Code § 21002; CEQA Guidelines §§ 15002(a)(3), 15021(a)(2), 15126(d); *Citizens for Quality Growth v. City of Mount Shasta* (1988) 198 Cal.App.3d 433, 443-45.) The DEIR also fails to present evidence or analysis showing that either of the environmentally-superior alternatives would result in significantly fewer

O3-41

employment opportunities or less economic development. The DEIR essentially assumes that vineyard acreage is a proxy for employment and economic development, but offers no data or explanation to support that assumption.

O3-41 cont.

Moreover, the conclusion that the environmentally superior alternatives do not meet project objectives is confusing and flawed. The DEIR rejects the alternatives because neither achieves the first listed project objective "develop[ing] up to approximately 111.5 net acres of vineyard." (DEIR at 2-6.) However, there is no reason to believe a version of the project with fewer acres do not achieve this goal, because the DEIR never sets a floor for acreage to be developed. (DEIR at 5-27.) The DEIR's analysis does not explain why developing fewer acres of vineyard would not be feasible, which is particularly confusing because the DEIR includes no minimum viable acreage for the winery and the project goals significantly emphasize conservation goals that would inarguably be better served by lower impact alternatives. (DEIR at 2-6-7) The EIR must be substantially modified to explain why the environmentally preferable alternatives are not viable.

O3-42

Features of both the Reduced Intensity Alternative and Reduced Vegetation Removal Alternative should be the focus of the Project DEIR. Excluding the improperly narrow project objective of maximizing vineyard conversion up to 111.5 acres, both Alternatives would satisfy the project objectives while representing an environmentally superior project as compared to the proposed Project. Avoiding impacts on an additional 21 acres of biological communities while converting most of the expected vineyard acreage is both feasible and achieves the basic Project goal of expanding vineyard acreage. The DEIR errs in declining to adopt one of these alternatives.

O3-43

C. The DEIR concludes that the environmentally preferable alternatives would have worse erosion-related outcomes because less land will be subject to erosion control measures without proper analysis

The DEIR considers two project alternatives, both of which would require less clearing and would preserve more plant resources on the property. (DEIR at 5-5, 5-17.) The DEIR's discussion of both of these alternatives draws the suspect conclusion that they will be worse for erosion. (DEIR at 5-12, 5-22.) This conclusion is inadequately supported by specific evidence, and instead relies on unsupported generalizations and unreliable modeling that do not meet CEQA's mandate to provide analysis that allows the public to fully assess the distinctions between alternative versions of the Project.

O3-44

Specifically, the DEIR concludes that both these alternatives, despite including the removal of fewer native trees and plants, would lead to less soil loss than the Project, because the Project includes an erosion control program. (DEIR 5-12, 5-22.) However, the DEIR includes no analysis explaining why the erosion control program would be superior to leaving the additional tree cover, pasture, grassland, and local scrub in place as a means of preventing erosion. (*Ibid.*) Although the soil loss report concludes that the Project will reduce soil loss (DEIR Appendix J), there is no analysis in the DEIR explaining whether the specific changes that would result from adopting one of the environmentally preferable alternatives would have any impact on soil retention. (DEIR at 5-12, 5-22.) Instead, the DEIR simply assumes that because the alternatives

would reduce the Project area, this would necessarily reduce soil loss with no further analysis. (*Ibid.*)

Because the assumptions underlying the conclusion that the otherwise environmentally preferable alternatives are worse for erosion are not explained, the alternatives analysis here is insufficient to provide the public with the ability to assess the harms and benefits of the chosen project as is required by CEQA.

O3-44 cont.

VI. The DEIR's Biological Resources Analysis and Mitigation Measures are Inadequate

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.). 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 (Rundel et al. 2005; 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 threatened California red-legged frog (*Rana draytonii*), the endangered Ridgway's rail (formerly the California clapper rail, *Rallus longirostris obsoletus*), and the threatened steelhead trout (*Oncorhynchus mykiss*), 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 mitigation all impacts on special status species, as well as species listed under the Federal Endangered Species Act or California Endangered Species Act. The DEIR fails to comply with this requirement.

O3-45

A. The mitigation plans for special status plants and animals require inadequate replacement ratios and lack sufficient planning to ensure mitigation succeeds

O3-46

The County acknowledges that the Project has the potential to have a significant impacts on habitat for special status plants and animals, but provides insufficient mitigation plans for minimizing the Project's foreseeable harms.

i. The DEIR does not include sufficient mitigation measures for restoring plant and animal populations that may be harmed during construction.

O3-47

The DEIR fails to plan for proper mitigation for harm to special status species and their habitat on the project site. While based on previous surveys, the County concluded special status plant or animal species are not present at the project site, the DEIR includes no planning for habitat replacement should special status species be found at the construction site. (DEIR at 3.3-

49-62.) This is particularly concerning since the DEIR does conclude that the Project site does contain potential habitat for many special status species in the area. (*Id.*) Instead of including contingencies for if special status species are found on the project site, the DEIR only plans to alert CDFW if special status species are found in a survey conducted immediately before construction is set to start. (*Id.*) This leaves little room for changes to the plan should special status species be discovered and includes no plan for replacing lost habitat or plant-life. This is particularly concerning since the DEIR's findings are based on only two surveys of the property from the last five years and all the other surveys were conducted over five years ago. (*See* DEIR at 3.3-14.) Since both these surveys were conducted within two months of each other in 2018, it is likely special status species may be discovered on the property during the construction period that were simply not present over this short period. (*Id.*) The FEIR must provide more detail elaborating on how mitigation will be conducted should special status plant or animal species be discovered during construction.

O3-47 cont.

ii. The DEIR fails to include sufficient mitigation ratios for wetlands.

The biological resources mitigation measures are insufficient to avoid impacts on wetlands harmed by the project. Instead of including specific plans for the Project's impact on wetlands, the DEIR simply indicates it will "comply with all permit minimization and mitigation measures" and goes on to note that impacts on waters of the United States "would require a minimum mitigation ration of 1:1 . . ." (MM 3.3-a.) However, this is an entirely insufficient mitigation ratio. A higher mitigation ratio should be required for new wetland habitat since it is likely not to provide the same quality of habitat for species as naturally occurring wetland habitat. Moreover, this measure includes no provisions for how the Project will move forward if mitigation fails or unexpected mitigation is needed, failing to comply with CEQA's mandate that the EIR provide the public with an understanding of what impact the project will have ahead of construction. (*See id.*; CEQA Guidelines § 21003. [requiring that environmental review documents provide information about the planned project in a way that provides the public and decisionmakers a meaningful understanding of how the project will be carried out].) This mitigation measure provides neither sufficient protections to ensure mitigation succeeds nor sufficient information to the public about how mitigation would be carried out if necessary.

O3-48

B. The DEIR does not properly avoid or mitigate the Project's impacts on wildlife movement and stream habitats

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

O3-49

shifts and species migrations as climate changes. (Heller and Zavaleta 2009, Cushman et al. 2013). Lack of wildlife connectivity results in decreased biodiversity and degraded ecosystems.

O3-49 cont.

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 salt marshes), and reservoirs throughout the County support numerous special-status flora and fauna, including steelhead trout, Chinook salmon, California freshwater shrimp (*Syncaris pacifica*), 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 and West 1998). 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; Jennings & Lewison, 2013; Jennings & Zeller, 2017). 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). Thus, to preserve the County's valuable biodiversity in these habitats, it is important to develop and implement effective buffer widths informed by the best available science.

O3-50

The DEIR attempts to mitigate the Project's impacts on wildlife movement and riparian by implementing limited setbacks and small wildlife corridors. These measures are too insignificant to properly mitigate the Project's effects. First, the watercourse setbacks for Elder Creek and the unnamed pond on the property are insufficient to protect important natural resources and habitat. The DEIR describes adopting setbacks of 35-150 feet based on slope around County designated streams and 50-foot setbacks around other waters. (*See* DEIR 3.3-63; DEIR Appdx. A at A-11.) Although the DEIR bills the second group of setbacks as providing 50-foot buffers, they only provide 26-foot buffers, and allow the remaining 24 feet to include vegetated vineyard, which does not provide the same benefits. (*Id.*) These setbacks are insufficient to preserve habitat for riparian species, many of which are likely to use habitat far from the actual water source. For example, the DEIR explicitly acknowledges that Western Pond Turtles nest in places up to 492 feet from streams. (DEIR at 3.3-23.) The limited buffers as planned do not leave sufficient habitat for turtles and other species living in Elder Creek and other water bodies on the Project property to thrive.

O3-51

Second, the wildlife corridors described in the DEIR are not adequate to ensure wildlife connectivity. Buffer zones of 50-150 feet along streams and wetlands may be locally adequate to alleviate water quality concerns in the short-term, they are often insufficient for wildlife protection. (Kilgo et al., 1998; Fischer et al. 2000; Semlitsch & Bodie, 2003). A literature review found that recommended buffers for wildlife often far exceeded 325 feet, well beyond the largest buffers implemented in practice (Fischer et al., 2000, Robins 2002). For example, Kilgo et al. (1998) recommend more than 1,600 feet of riparian buffer to sustain bird diversity. In addition, amphibians, iconic critters that are considered environmental health indicators, have been found to migrate over 1,000 feet between aquatic and terrestrial habitats through multiple life stages

O3-52

(Samual A. Cushman, 2006; Fellers & Kleeman, 2007; Semlitsch & Bodie, 2003; Trenham & Shaffer, 2005). Specifically, the California red-legged frog, a threatened species that occurs and has designated critical habitat within Napa County, was found to migrate about 600 feet between breeding ponds and non-breeding upland habitat and streams, with some individuals roaming over 4,500 feet from the water (Fellers and Kleeman 2007). Other sensitive species known to occur in Napa County, such as western pond turtles (*Actinemys marmorata*), a candidate species under the Endangered Species Act) and California newts (*Taricha torosa*), have been found to migrate over 1,300 feet and 10,000 feet respectively from breeding ponds and streams (Trenham 1998; Semlitsch and Bodie 2003).

O3-52 cont.

Accommodating the more long-range dispersers is vital for continued survival of species populations and/or recolonization following a local extinction (Semlitsch and Bodie 2003, Cushman 2006). In addition, more extensive buffers provide resiliency in the fact of climate change-driven alterations to these habitats, which will cause shifts in species ranges and distributions (Cushman et al., 2013; Heller & Zavaleta, 2009; Warren et al., 2011). This emphasizes the need for sizeable riparian and upland buffers around streams and wetlands in Napa County, as well as connectivity corridors between heterogeneous habitats. While the Project site may not currently have the above species present, the DEIR should consider the steps that need to be taken to protect potential habitat, while supporting the regional biodiversity by minimizing its impact on crucial riparian habitats and adjacent terrestrial habitats.

O3-53

C. The layout of the vineyard blocks creates unnecessary habitat fragmentation and edge effects

As shown in the DEIR, the layout of the vineyard blocks includes several far-flung vineyard blocks on the property that unnecessarily introduce human presence into parts of the property that otherwise would provide useable, continuous habitat. Specifically, vineyard blocks 12, 13a, 13b, 14, 15a, 15b, 16, 18b, 18a, 29a, 29b, and 32 are all located a substantial distance from other vineyard blocks. (DEIR Fig. 3.3-5.) While these blocks make up for small portions of the overall vineyard acreage, their location creates breaks and edge effects in otherwise viable habitat. As discussed in the above section, human presence can have a significant disruptive effect that renders nearby habitat unusable and alters its quality. Removing these far-flung blocks would make the blocks and surrounding areas far more suitable habitat and provide improved passageways for local species.

O3-54

D. The DEIR's Analysis of, and Mitigation for, Impacts from Pesticide, Herbicide, and Fertilizer Use Associated with the Project Are Inadequate

The DEIR does not adequately analyze or mitigate the harmful effects of pesticides, herbicides, or fertilizers on wildlife, habitat, and water quality.

O3-55

Over 27 million pounds of pesticides were used on wine grapes in 2016 in California. (California Department of Pesticide Regulation, 2018, pp. 402-412.) 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 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), chlorpyrifos, paraquat dichloride, simazine and imidacloprid. (California Department of Pesticide Regulation, April 2018, pp. 402-412.) 1,3-D is classified by the U.S. Environmental Protection Agency ("U.S. EPA") as "very highly toxic" to aquatic invertebrates (U.S. Environmental Protection Agency, 1998, p. 69) and is listed by the California Office of Environmental Health Hazard Assessment ("California OEHHA") under California's Proposition 65 as causing cancer in humans.[4] In its 2017 final biological evaluations of the impacts of chlorpyrifos on Endangered Species, the U.S. EPA found that 1778 out of 1835 endangered and threatened species in the U.S. were likely to be adversely affected by the continuing use of chlorpyrifos. (U.S. Environmental Protection Agency, 2017.) Potential modification of critical habitat was also identified for 780 out of 794 species by the continuing use of chlorpyrifos. Chlorpyrifos is considered "very highly toxic" to fish and aquatic invertebrates by the U.S. EPA. (U.S. Environmental Protection Agency, 2002, p. 47.) Chlorpyrifos is listed by California OEHHA under California's Proposition 65 as causing developmental toxicity in humans[5] and has been proposed as a 'toxic air contaminant' in the state by the California Department of Pesticide Regulation. (California Department of Pesticide Regulation, September 2018.) Paraquat is one of the most acutely lethal pesticides still in use today. One sip can be lethal to a full grown adult. 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.[6]

O3-55 cont.

Despite its inadequate analysis of the Project's impact to wildlife and habitat from pesticides, herbicides, and fertilizers, the DEIR acknowledges that the Project's use of pesticides could result in a significant environmental impact without mitigation. (DEIR 3.6-7.) Yet the DEIR improperly relies on integrated pest management ("IPM") guidelines to mitigate the Project's pesticide-related impacts to a less-than-significant level and concludes no additional mitigation is necessary. (DEIR 3.6-10.)

O3-56

CEQA requires that an EIR describe feasible measures that could minimize a project's significant adverse impacts. (CEQA Guidelines § 15126.4(a)(1).) Such measures must be "fully enforceable through permit conditions, agreements, or other legally-binding instruments." (CEQA Guidelines § 15126.4(a)(2).) This is in order to ensure "that feasible mitigation measures will actually be implemented as a condition of development." (*Federation of Hillside & Canyon Ass'ns v. City of Los Angeles* (2000) 83 Cal.App.4th 1252, 1261.)

O3-57

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

[5] California OEHHA. Chemicals. Chlorpyrifos. Available at: https://oehha.ca.gov/chemicals/chlorpyrifos.

[6] 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-their-chlorometabolites-dact-dea-and-dia-0.

The Applicant's adherence to IPM practices appears to be entirely voluntary and involves no binding or enforceable commitments, and thus fails to meet CEQA's requirements for mitigation. The DEIR states merely that "Integrated pest management (IPM) techniques would be used to manage pest damage by the most economical means, with the least possible hazard to people, property, and the environment." (DEIR at 3.6-7.) The DEIR includes a two-page IPM description as Appendix I that fails to impose binding, enforceable obligations on the Applicant. (DEIR Appdx. L.) The IPM does not, for example, identify chemicals are and are not covered under the IPM and approved (or restricted) from use. Instead, the IPM only outlines an expectation that only low toxicity chemicals will be used without any commitment. (*Id.*) The DEIR may not rely on this illusory mitigation measure to reduce harm to water quality and wildlife on or near the Project area. O3-58

In fact, the DEIR implicitly acknowledges that integrated pest management practices implemented in the County have not prevented the migration of pesticides and herbicides into the County's waters. The DEIR states that "the [Safe Drinking Water Information System] indicates a recent uptick in various pesticides and herbicides within Lake Hennessey; however, no maximum containment levels have been set for these particular chemicals." (DEIR at 3.7-25.) Yet the DEIR states merely that "certain contaminants commonly associated with vineyard land uses, such as turbidity, are below set maximum containment level ranges." (*Id*.) Then the DEIR concludes that because the "guidelines" set forth in the IPM "limit the use of pesticides, herbicides, and fertilizers," the Project would not have a significant impact on turbidity, sulfate, iron, or manganese levels in Lake Hennessey. This is simply untrue. Neither the IPM nor the DEIR places 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 DEIR has no basis for reaching its conclusion that these impacts would be mitigated to less than significant levels. O3-59

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, 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. O3-60

Thank you for the opportunity to submit comments on the DEIR for the KJS Sorrento ECP. The Center is deeply concerned by the significant environmental and social impacts of the O3-61

proposed Project. The EIR fails to meet CEQA's requirements for thorough, transparent and evidence-based environmental review, and is thus legally deficient. We ask the County to address and correct the deficiencies we have identified above and recirculate an updated Draft EIR for public review and comment.

O3-61 cont.

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.

Sincerely,

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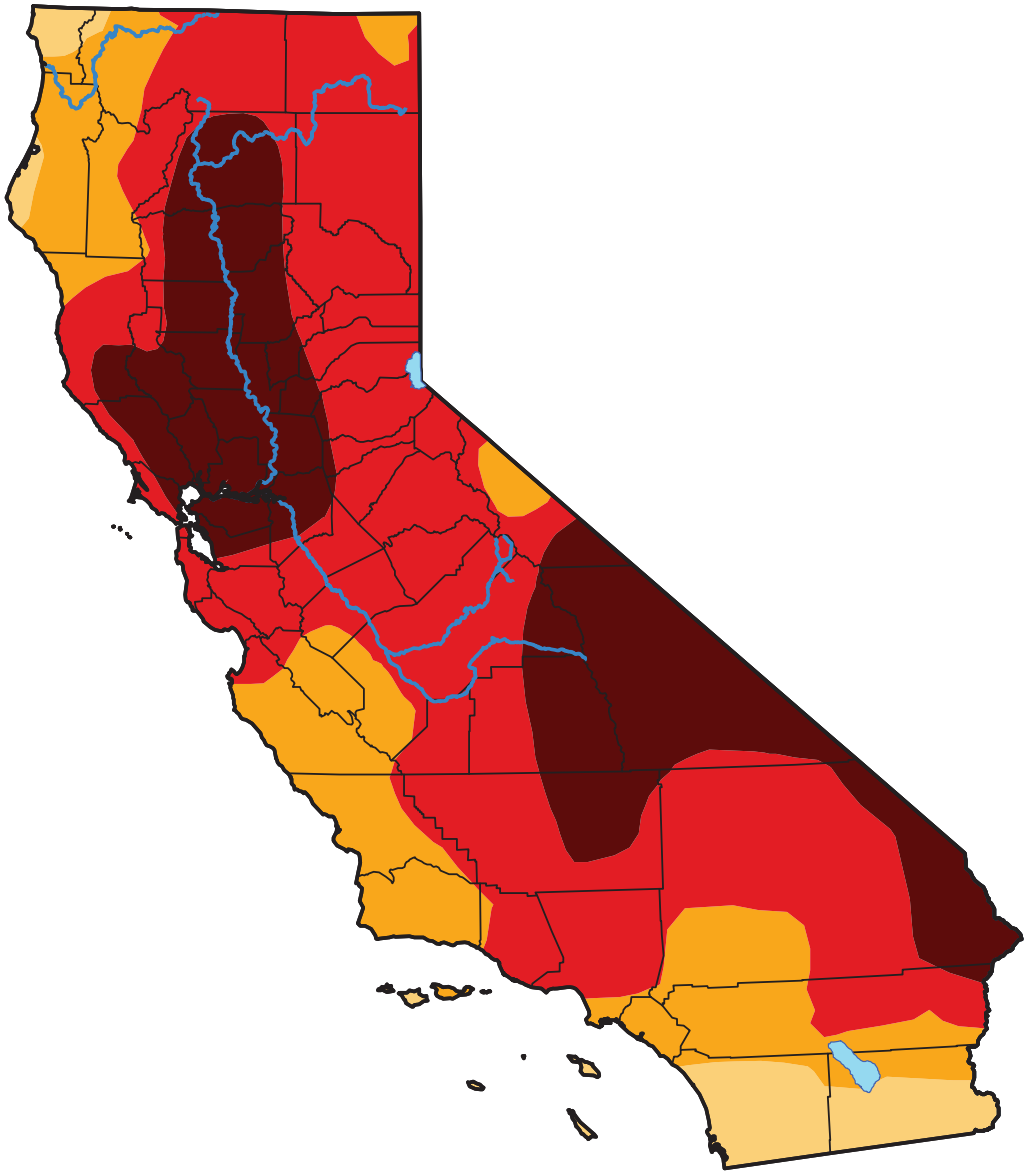
Exhibit

United States Drought Monitor, Current Map California. June 1, 2021.

U.S. Drought Monitor

California



June 1, 2021

(Released Thursday, Jun. 3, 2021)

Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.00	100.00	100.00	94.61	74.46	26.04
Last Week *05-25-2021*	0.00	100.00	100.00	94.61	74.46	26.04
3 Months Ago *03-02-2021*	0.75	99.25	90.89	56.98	29.54	3.75
Start of Calendar Year *12-29-2020*	0.00	100.00	95.17	74.34	33.75	1.19
Start of Water Year *09-29-2020*	15.35	84.65	67.65	35.62	12.74	0.00
One Year Ago *06-02-2020*	41.80	58.20	46.67	20.84	2.97	0.00

Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to https://droughtmonitor.unl.edu/About.aspx

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National Drought Mitigation Center

droughtmonitor.unl.edu

Letter O3 **Ross Middlemiss, Staff Attorney, Center for Biological Diversity**
Response June 9, 2021

O3-1 Napa County thanks the Center for Biological Diversity for the Draft EIR comments provided. The Draft EIR adequately assesses and discloses the potential environmental impacts of the proposed project in accordance with CEQA (California Public Resources Code Section 21000 et seq.), the State CEQA Guidelines (California Code of Regulations Title 14, Section 15000 et seq.), and *Napa County's Local Procedures for Implementing the California Environmental Quality Act* (Napa County 2015). See Responses to Comments O3-9 through O3-34 and O3-45 through O3-59 for specific responses regarding potentially significant impacts on biological resources, greenhouse gas (GHG) emissions, water supply, and water quality in response to the comments provided.

O3-2 The comment describes the Center for Biological Diversity and its work in Napa County protecting imperiled plants and wildlife, open space, air and water quality, and overall quality of life.

O3-3 The comment states that the Draft EIR fails to comply with CEQA and the State CEQA Guidelines. As stated in Response to Comment O3-1, the Draft EIR adequately assesses and discloses the potential environmental impacts of the proposed project in accordance with CEQA (California Public Resources Code Section 21000 et seq.), the State CEQA Guidelines (California Code of Regulations Title 14, Section 15000 et seq.), and *Napa County's Local Procedures for Implementing the California Environmental Quality Act* (Napa County 2015). See Responses to Comments O3-4 through O3-59 for additional detail.

O3-4 The comment provides information about the definition of a "project" under CEQA and related CEQA court cases. The comment is noted.

O3-5 The Draft EIR evaluates the impacts of implementing the KJS and Sorrento Vineyard Conversion Erosion Control Plan Application Project (#P17-00432-ECPA) (proposed project), as described in Draft EIR Chapter 2, *Project Description*. As stated in Draft EIR Section 2.4, *Description of the Proposed Project*, page 2-7, Erosion Control Plan Application (ECPA) #P17-00432-ECPA was filed with Napa County on December 14, 2017, for the proposed vegetation removal and earth-moving activities on slopes steeper than 5 percent in connection with the development of approximately 111.5 net acres of new vineyard within 156.8 gross acres (referred to in the EIR as the "project area" or "development area") on the project site. Construction and operation of the proposed vineyard and other features of the ECPA in the development area are evaluated in the Draft EIR.

Should the County certify the EIR and make a determination to approve the proposed project as mitigated, all mitigation measures and conditions of approval described in the Draft EIR would apply to the proposed project. The mitigation measures are summarized in Draft EIR Table ES-2, and Table 3.3-5, *Project Impacts by Biological Community*, shows the mitigated proposed project acreage with implementation of the biological resources and geology and soils mitigation measures identified in the Draft EIR (the only mitigation measures that would reduce the vineyard acreage). Note that in Response to Comment O2-2, Chapter 2, *Revisions to the Draft EIR,* includes updated Impacts 3.5-2 and 3.5-5 to allow development in proposed vineyard Blocks 16, 24G, 25, and 27, with ripping in the area of mapped landslide deposits limited to a depth of 24 inches. Alternatively, instead of approving the mitigated proposed project, the County may make a determination to approve one of the alternatives described in Draft EIR Chapter 5, *Alternatives Analysis*. Both the Reduced Intensity and Increased Stream and Wetland (Aquatic Resource) Setbacks Alternative and the Reduced Vegetation Removal/Grading and Road Use Alternative include the implementation of all mitigation measures identified in the Draft EIR for the proposed project.

O3-6 The CEQA alternatives analysis presented in Draft EIR Chapter 5 includes consideration and discussion of alternatives to the proposed project, consistent with State CEQA Guidelines Section 15126.6. As stated in Response to Comment O3-5, both the Reduced Intensity and Increased Stream and Wetland (Aquatic Resource) Setbacks Alternative and the Reduced Vegetation Removal/Grading and Road Use Alternative include the implementation of all mitigation measures identified in the Draft EIR for the proposed project, in addition to other avoidance areas identified for each alternative to further reduce impacts on biological communities.

O3-7 The Draft EIR project objectives include the vineyard acreage proposed in the application. All of the alternatives considered in the Draft EIR reduced the project footprint compared to the proposed project. Draft EIR Chapter 5, *Alternatives Analysis*, considers the No Project Alternative (with no new vineyard acreage proposed), the Reduced Intensity and Increased Stream and Wetland (Aquatic Resource) Setbacks Alternative (which reduced the development acreage by about 23 acres compared to the proposed project), and the Reduced Vegetation Removal/Grading and Road Use Alternative (which reduced the development acreage by about 45 acres compared to the proposed project). These alternatives would reduce the severity of some environmental impacts compared to the proposed project, as indicated in Draft EIR Table 5-5. The Draft EIR provides an adequate evaluation of CEQA alternatives compared to the proposed project, consistent with State CEQA Guidelines Section 15126.6, and the County is considering all information in the EIR, including the alternatives, before making a determination to approve the proposed project (either as mitigated or as described in one of the alternatives). The reduced acre alternatives were not considered infeasible, as stated in the comment. See also Response to Comment O3-39.

O3-8 The Draft EIR evaluates the impacts of implementing the proposed project, as described in Draft EIR Chapter 2, *Project Description*. The Draft EIR does not evaluate multiple versions of the project as stated in the comment. As stated in Responses to Comments O3-5 and O3-6, mitigation is identified in the Draft EIR to reduce or avoid environmental impacts of the proposed project, and the evaluation of CEQA alternatives compares the alternatives to the proposed project, consistent with State CEQA Guidelines Section 15126.6, not to the mitigated proposed project. See Draft EIR Section 1.3.6, *Approval Process*, and Response to Comment O3-5 regarding the County's approval process for ECPA projects.

O3-9 The analysis in the Draft EIR of the proposed project's GHG emissions is not inadequate, as stated in the comment. Further, the Draft EIR fully analyzes and attempts to mitigate all potentially significant direct and indirect effects of the project, contrary to the statement in the comment. The Draft EIR evaluates emissions from both the construction and operational phases of the proposed project, including the change in the project site's carbon storage and carbon sequestration potential with the change from existing wildland to a vineyard. The methodology and assumptions used for the analysis are consistent with those recommended by the Bay Area Air Quality Management District (BAAQMD). The Draft EIR analysis recognizes that there would be an increase in GHG emissions with development of the proposed project; however, this increase would be considered less than significant when compared to BAAQMD's thresholds. See also Responses to Comments O3-10 through O3-15.

Further, in light of the Court of Appeal's decision on the Walt Ranch ECPA (#P11-00205: *Living Rivers Council v. County Of Napa*: 2019 WL 4746753), as it pertains to offsetting potential GHG sequestration loss as s result of the project, Mitigation Measure 3.3-5a has been modified to require half of the 61.24-acres of oak woodland that will be preserved to be situated on lands that are considered developable (i.e., on land with slopes <30% and located outside of aquatic resource setbacks pursuant to NCC Sections 18.108.025 and 18.108.026). This provision would result in an equal amount of developable woodlands being preserved as that removed (i.e., a 1:1 ratio) to offset the loss in carbon sequestration from woodland removal see Chapter 2, *Revisions to the Draft EIR*.

Based on County GIS mapping, approximately 154 acres of the projects site's ±539 acres of oak woodlands are situated on developable lands (see Draft EIR Figure 3.3-7 in Chapter 2. Therefore, there is an adequate amount of developable woodlands on the project site to meet this provision. Considering project oak woodland removal (±30.6-acres), there would be approximately 123 acres of developable woodland available on the project site for permeant preservation.

O3-10 The conclusion in the Draft EIR that GHG impacts would be less than significant is supported by substantial evidence, as explained in Impact 3.2-5 and Draft EIR

Appendix D. The carbon sequestration analysis uses factors consistent with the Napa County Revised Draft Climate Action Plan (Napa County 2018). Although the Revised 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 Revised Draft Climate Action Plan cites the published data sources used. These sources have also been included in Draft EIR Appendix D. The carbon storage factor attributed to vineyards in the Draft EIR is based on published data by Williams et al. (2011) and is not unsupported as stated by the commenter. 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.

O3-11 As noted in Response to Comment O3-10 above, the County acknowledges the availability of other data sources that provide carbon storage and sequestration factors. Based on an updated literature review conducted in response to comments received on the Draft EIR, the County has found it adequate to update the carbon storage factor for the "Scrub Interior Live Oak – Scrub Oak Mesic East County NFD Super Alliance" land cover type to reflect oak woodland habitat rather than shrubland. The analysis in the Draft EIR previously categorized this Live Oak Alliance as shrubland and used a carbon storage factor from the Revised Draft Climate Action Plan of 12.8 metric tons (MT) of carbon per acre. However, because vegetation on-site is a mix of oak woodland types, the analysis has been updated to use a carbon storage factor of 34.9 MT carbon per year, also from the Revised Draft Climate Action Plan. This updated carbon storage factor better reflects the higher carbon storage in oak woodlands. The sources for both factors are cited in the Revised Draft Climate Action Plan and Draft EIR Appendix D.

Tables 3.2-8 and 3.2-9 in the Draft EIR have been updated as indicated below; see Chapter 2, *Revisions to the Draft EIR*. The tables below show revised estimates for the original proposed project as well as the revised mitigated proposed project as described in Response to Comment O2-2; the revised mitigated proposed project includes implementation of Mitigation Measures 3.3-1a, 3.3-1i, and 3.3-2a, as detailed in Section 3.3, *Biological Resources*. The memorandum on the carbon stock and sequestration in Draft EIR Appendix D was also updated. These updates do not change the significance conclusions in the Draft EIR, and Impact 3.2-5 would remain less than significant. The carbon storage factor attributed to grasslands in the Draft EIR is derived from the Napa County Revised Draft Climate Action Plan, which cites the published data used. Both shrublands and grasslands have therefore been accounted for in the carbon sequestration analysis, acknowledging them as important carbon sinks.

TABLE 3.2-8
ESTIMATED CHANGE IN GREENHOUSE GAS EMISSIONS FROM CARBON STOCKS AND SEQUESTRATION

Vegetation/Land Use Type	Total Project MT CO_2e	Total Mitigated Project MT CO_2e
Carbon Loss—Existing Land Use Removal		
Carbon Storage	8,059~~7,697~~	7,303
Carbon Sequestration (annual)	281~~248~~	254
30-Year Lifetime Emissions	16,475~~15,148~~	14,933
Carbon Gains—New Land Use Types [a]		
Carbon Storage	-14,411	-12,626
Carbon Sequestration (annual)	-7	-6
30-Year Lifetime Emissions	-14,607	-12,798
Total Project Lifetime Emissions	**1,868~~541~~**	**2,135**
Total Project Annual Emissions	**62~~18~~**	**71**

NOTES:

MT CO_2e = metric tons of carbon dioxide equivalents

[a] Emissions are reported as negative because they represent a greenhouse gas emissions sink.

SOURCE: Data compiled by Environmental Science Associates in 2022~~2018/2019~~

TABLE 3.2-9
ESTIMATED ANNUAL GREENHOUSE GAS EMISSIONS FROM PROJECT OPERATION

Source	CO_2e Project (metric tons per year)	CO_2e Mitigated Project (metric tons per year)
Mobile Sources	24	24
Water Pumping	6	6
Amortized Construction	72	72
Carbon Sequestration	62~~18~~	71
Total	**164~~120~~**	**173**

NOTE: CO_2e = carbon dioxide equivalents

SOURCE: Data compiled by Environmental Science Associates in 2022~~1~~ (see **Appendix D**)

Because the carbon sequestration and storage factors are lower for grassland than vineyard, the updated tables show minor increases in project emissions when mitigation is applied, because less of the grassland would be converted to vineyards. While less carbon is lost under the mitigated scenario, the loss of carbon gains from not having vineyards in that reduced area is higher. In other words, the grassland vegetation types found at the project site store and sequester less carbon per acre than the proposed vineyards would. Therefore, replacing less of the original (unmitigated) development area with vineyards (as under the mitigated project) would result in less carbon storage overall and less sequestration on an annual basis compared to the proposed project, resulting in slightly higher emissions compared to the proposed project. Consistent with the original conclusion, and as noted above, these updates do not change the

significance conclusions in the Draft EIR, and Impact 3.2-5 would remain less than significant.

O3-12 The comment notes the impact of climate change on the ability of trees to effectively sequester carbon, and emphasizes the importance of using other measures that reduce emissions and store carbon to supplement the capacity of trees and forests and increase the chances to limit global warming; the comment is noted.

O3-13 The comment notes the importance of grasslands and shrublands as more reliable carbon sinks than trees and forests with an adaptive capacity to drought and wildfire; the comment is noted. The comment, however, does not provide any alternative carbon storage factors for grasslands.

O3-14 The comment questions the use of the carbon storage factor used for grasslands from the County's Revised Draft Climate Action Plan. As explained in Response to Comment O3-10, the fact that the Revised Draft Climate Action Plan was not adopted does not discredit the data sources cited in the plan, which are peer-reviewed and published and are considered credible and scientifically valid. Draft EIR Appendix D has been revised to address any notes and questions; see Chapter 2, *Revisions to the Draft EIR*.

O3-15 The analysis in the Draft EIR was conducted using scientifically credible published data for carbon storage and sequestration factors for different vegetation types. See also Responses to Comments O3-10 through O3-14.

O3-16 Impact 3.7-4 in Draft EIR Chapter 3.7, *Hydrology and Water Quality*, starting on Draft EIR page 3.7-34, provides an assessment of the water supply changes that would occur with the proposed project, and the methods of analysis for Impact 3.7-4 and the Draft EIR Appendix J Hydrologic Analysis for Diversion are summarized on Draft EIR pages 3.7-20 and 3.7-21. As stated on Draft EIR page 3.7-17, the assessment used the significance criteria established by the State Water Resources Control Board (State Water Board), and the Draft EIR Appendix J Hydrologic Analysis for Diversion prepared by Wagner & Bonsignore Consulting Civil Engineers in support of the petitions was prepared consistent with requirements from the State Water Board for an analysis of incremental impacts on unimpaired flow attributable to the proposed project after considering impacts on unimpaired flow attributable to existing diversions (i.e., baseline condition). See Responses to Comments L1-3 through L1-5 regarding drought and water restrictions.

O3-17 Surface water use in the development area would be limited to the amounts allowed under Water Right License 9125 and Water Right Permit 18459 within the authorized corresponding place of use, as stated in the vineyard irrigation conditions of approval in Impact 3.7-4, which is the reason for the focus on the water rights for the project in the Draft EIR.

Approximately 104 acres of vineyard exist on the project site and the existing vineyard water demand is 22.1 acre-feet per year on average (see Response to Comment L1-5 for additional detail).

During the vineyard establishment period for the proposed project, typically the first three years, the total expected water demand would be approximately 63.3 acre-feet per year for 111.5 net vine acres as proposed in the ECP; however, this would be spread out over three years/phases as described on Draft EIR page 2-15. After establishment, the water demand for the vines would decrease significantly to approximately 9.9 acre-feet per year for the 111.5 net acre vineyard; this is further explained in Response to Comment L1-5 and was added to Chapter 2, *Revisions to the Draft EIR*.

As discussed in Response to Comment O2-2, the biological resources mitigation measures would reduce the final vineyard footprint and therefore the proposed water demand. The water demand for the revised mitigated proposed project acreage (141.72 gross acres, 97.69 net acres) would be approximately 54.7 acre-feet per year in the establishment years and approximately 8.8 acre-feet per year long-term (this is further explained in Response to Comment L1-5).

O3-18 As state in Response to Comment O3-17 and further detailed in Response to Comment L1-5, the proposed project (111.5 net acres) would require approximately 63.3 acre-feet per year, spread out over multiple years/phases in the short term, and approximately 9.9 acre-feet per year in the long term (after established, about three years from planting). The biological resources mitigation measures would reduce the final vineyard footprint and therefore the proposed water demand. The water demand for the revised mitigated proposed project acreage (141.72 gross acres, 97.69 net acres) would be approximately 54.7 acre-feet per year (or 0.56 acre-feet per acre per year) during the first five years of vineyard establishment. Water demand would be approximately 31.8 acre-feet per year in Year 6 (or 0.33 acre-feet per acre per year) with half of the vineyard established and half still maturing. Long-term water demand (with all vineyard established) for the revised mitigated proposed project acreage would be approximately 8.8 acre-feet per year (or 0.09 acre-feet per acre per year) based on the same gallons per plant per year estimates used for the proposed project (see Response to Comment L1-5).

As stated in Draft EIR Section 2.4.1, *Features of Erosion Control Plan Application #P17-00432-ECPA*, the proposed vineyard would be irrigated entirely by surface water. Draft EIR Section 2.4.2, *Water Right License, Permits, and Statements*, describes Water Right License 9125 (Application 13943) and Water Right Permit 18459 (Application 26165) that are on file with the State Water Resources Control Board and would supply irrigation water to the proposed project. See Draft EIR Impact 3.7-4 for an assessment of the water supply changes that would occur with the proposed project.

Unlike the *Vineyard Area Citizens v. Rancho Cordova* (2007) case referenced in the comment, the proposed project would use water under these existing rights. The proposed project would be phased during construction and managed pursuant to conditions so that the new vineyard would not use water if no surface water under the water rights is available (i.e., the proposed project would not irrigate when no water is available). Further, the proposed project is an agricultural project and not a residential project as was the situation with the *Vineyard Area Citizens v. Rancho Cordova* (2007) case. As such, Senate Bill 610 requirements for residential projects does not apply and any impacts an agricultural crop suffers due to dry-farming is outside the scope of CEQA because common sense indicates that *not* irrigating a commercial crop does not cause an environmental impact. (**Appendix C**; Buchalter 2022)

Given recent drought conditions experienced in California, a review of the applicability of the adjusted historical streamflow gage data used in Draft EIR Appendix J Hydrologic Analysis for Diversion (KJS Investment Properties LLC and Sorrento Inc. Hydrologic Analysis for Petitions for Change and Extension of Time for Permit 18459 [Application 26165], Napa County; Wagner & Bonsignore 2020) for a gaging station on Conn Creek below Conn Dam was conducted. In the Draft EIR Appendix J 2020 analysis, a 16-year period of gage data for Water Years 1930 to1945 was selected for the analysis because it predated the existence of Conn Dam and therefore was representative of natural, unimpaired flow for a range of water year types. This unimpaired flow data set was then used as the basis to evaluate water availability for the project, i.e., yield, after considering the effects of all senior diverters of record within the portion of the Sage Creek watershed analyzed. The State Water Resources Control Board, Division of Water Rights reviewed the 2020 analysis prior to circulating the Draft EIR and did not have any objections or request any revisions to the analysis.

The 16-year study period used in the Draft EIR Appendix J analysis is similar to the long-term average based on the monthly precipitation records for the Napa State Hospital (NSH) station and is representative of the pattern of regional rainfall for Napa County. This is based on historical precipitation records which give monthly precipitation data from 1893 through January 2023. Although precipitation amounts can vary from year to year, drought and wet year cycles are common for California and data supports the conclusion that historical hydrologic conditions are similar to recent hydrologic conditions and that there is sufficient water supply reliability to support the proposed project (see **Appendix D**; Wagner and Bonsignore 2022 and 2023).

According to Vineyard Irrigation—Conditions of Approval in Impact 3.7-4 in Draft EIR Section 3.7, *Hydrology and Water Quality*, the owner/permittee shall provide documentation to Napa County showing or otherwise demonstrating that all portions of the proposed development area are located within the place of use prescribed in Water Right License 9125 and Permit 18459. Further, the vineyard irrigation conditions of approval state that no other irrigation source, including but not limited to wells, imported

water, new or existing ponds/reservoir(s) or other surface water impoundments shall be used to serve the vineyard without additional environmental review, if necessary, and modification to the ECPA. Text was added to these vineyard irrigation conditions of approval on Draft EIR page 3.5-35 to ensure there is surface water in storage for planting the first and second phases (before vegetation clearing and earth-disturbing activities) (see Chapter 2, *Revisions to the Draft EIR*).

O3-19 In the Draft EIR Appendix J Hydrologic Analysis for Diversion, Section 9, *Estimated Project Yield,* Tables 7 through 9 describe the estimated annual yield amounts from Point of Diversion 1 of Permit 18459, Point of Diversion 2 of Permit 18459, and the total annual yield from both points of diversion combined, respectively. For the 16-year study period, the total annual yield averaged 28.4 acre-feet. The maximum amount of water allowed under Permit 18459 (48 acre-feet) was obtainable in 5 of the 16 years. These yield results include the minimum bypass flow and rate of diversion limitations that were indicated to be potential protest dismissal conditions in the CDFW's protest of the Petition for Change and are included in the proposed project. See Responses to Comments L1-4 and L1-5 regarding the baseline condition and water use for the existing vineyard, respectively.

O3-20 See Responses to Comments L1-4 and L1-6 regarding the significance of the cumulative downstream water supply reduction, including the City of Napa water users.

O3-21 As described in Draft EIR Impact 3.7-1 in Section 3.7, *Hydrology and Water Quality*, construction and operation of the proposed project would have a less-than-significant impact on sediment loading, would not impair water quality entering waterways or groundwater, and would not result in water temperature changes. Further, as discussed in Impact 3.7-2, an overall decrease in the volume and rate of runoff from the Elder Creek watershed would occur during post-project conditions. As a result, the proposed project would not violate water quality standards or waste discharge requirements or otherwise substantially degrade water quality.

O3-22 Rigorous site review, modeling, and analyses were conducted during the preparation of the ECP, which were then peer-reviewed and found to be technically adequate by Napa County Engineering Division staff. Summaries of the results of these analyses are presented in Draft EIR Sections 3.5, *Geology and Soils*, and 3.7, *Hydrology and Water Quality*, and the entire hydrologic analysis and soil loss analysis reports are included as Appendix J and Appendix K, respectively. This is consistent with CEQA Guidelines Section 15147, which provides that an EIR include the technical details in appendices and summarize 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. Appendices to the EIR may be prepared in volumes separate from the basic EIR document, but shall be readily available for public examination and shall be submitted to all clearinghouses which assist in public review.

As described in the PPI Engineering Hydrologic Analysis (Appendix J to the Draft EIR) and Soil Loss Analysis (Appendix K), computer modeling software was utilized to analyze pre- and post-project development conditions. Although computer modeling was used, as is industry standard, the model inputs were based on existing conditions that were ground-truthed by PPI Engineering and Napa County Engineering Division staff. Relevant conditions for estimating a site's runoff and soil loss conditions include: 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 flown for this property, and then adjusted as needed to account for existing or proposed infrastructure that was surveyed by PPI Engineering. Existing vegetation and land uses were first delineated via recent aerial photography and then adjusted based on extensive field review. Therefore, the existing conditions were documented and the Draft EIR describes the environmental baseline conditions of the property as documented, modeled, and disclosed based on surveys of the property performed in 2017.

O3-23 Existing vegetation and land uses affect the runoff characteristics of a site. As an example of vegetation effects, runoff in an undisturbed environment moves differently over an area that has heavy tree canopy as compared to grassland. Land use is relevant because a grassy area that has been used for livestock grazing will have different runoff characteristics than an area that is native, untouched grassland. As stated in Draft EIR Appendix J and Appendix K, these existing conditions were documented through field visits to the property throughout 2017, and then were confirmed with a follow-up site visit with Napa County. See also Response to Comment O3-22.

O3-24 See Response to Comment O3-22. As described in the PPI Engineering Hydrologic Analysis (Appendix J to the Draft EIR) and Soil Loss Analysis (Appendix K), model inputs for the computer modeling software utilized to analyze pre- and post-project development conditions were based on existing conditions that were ground-truthed by PPI Engineering and Napa County Engineering Division staff.

O3-25 The hydrologic setting information summarized from the PPI Engineering Hydrologic Analysis presented in Draft EIR Appendix J is included on Draft EIR pages 3.7-2 through 3.7-7, the methodology for the analysis is described on Draft EIR pages 3.7-18 through 3.7-20, and Draft EIR Impact 3.7-2 summarizes the findings of the PPI Engineering

Hydrologic Analysis presented in Draft EIR Appendix J. Based on this analysis and as stated in the Impact Conclusion on Draft EIR page 3.7-33, the proposed project would not increase runoff rates or volume.

O3-26 See Responses to Comments O3-22 and O3-23 regarding the model inputs used based on documented existing conditions for the computer modeling software utilized to analyze pre- and post-project development conditions. As determined by the Universal Soil Loss Equation calculations discussed in Draft EIR Section 3.5, *Geology and Soils*, Impact 3.5-3, with the proposed project and the erosion and runoff control measures proposed in the erosion control plan, sediment yield would decrease by approximately 376.61 tons per year (43.17 percent) relative to existing conditions; see also Response to Comment O3-44. As discussed in Impact 3.7-2, an overall decrease in the volume and rate of runoff from the Elder Creek watershed would occur during post-project conditions; see also Response to Comment O3-21.

O3-27 See Responses to Comments O3-22 and O3-23 regarding the model inputs used based on documented existing conditions for the computer modeling software utilized to analyze pre- and post-project development conditions.

Decreases in runoff are attributed to a reduction in the runoff curve number after development and an increased time of concentration (Draft EIR pages 3.2-27 and 3.2-28 and PPI Engineering Hydrologic Analysis in Draft EIR Appendix J). Curve numbers depend on the type of vegetation, amount and condition of cover, and land use practice (Draft EIR page 3.7-18).

Sediment yield would decrease relative to existing conditions with the proposed project (see also Response to Comment O3-44), and potential soil loss and sedimentation caused by the proposed project would be controlled primarily by using a no-till cover crop with vegetative cover densities ranging from 75 to 90 percent (see Appendix B of the Erosion Control Plan in Draft EIR Appendix A for a block-by-block breakdown of proposed cover crop densities). Vineyard avenues would also include vegetative cover at densities consistent with the erosion control plan. A cover crop can trap eroded soils on-site, thereby reducing soil loss and the potential for sedimentation. Hydrologic conditions after development of the proposed project are anticipated to be rated as good, based on the positive effects of soil ripping on certain soil types, and assuming that the project achieves and maintains the proposed vegetative cover specifications (Draft EIR page 3.5-25).

The permanent cover crop would be seeded according to the erosion control plan, as stated on Draft EIR pages 2-16 and 2-17. From page EC-5 of the erosion control plan, the permanent cover crop would be generated the first year by seeding the following mix: 40 percent barley, 40 percent rye grass, 10 percent crimson clover, and 10 percent

blando brome at a minimum of 70 pounds per acre. A pre-approved alternative seed mix may be allowed.

The City of Napa submitted a Draft EIR comment letter regarding the proposed project (Comment Letter L1). The letter does not question the efficacy of the erosion control plan for the proposed project or cast doubt on modeling that shows vineyard development will reduce runoff and result in less-than-significant impacts on water quality. See Response to Comment L1-11 regarding water quality monitoring.

O3-28 See Chapter 2, *Revisions to the Draft EIR*, for text that was added to Draft EIR Section 3.1, *Introduction to the Analysis*, to note that the 2020 LNU Fire Complex burned the property. Comment Letter O5 submitted by PPI Engineering also provided a photograph of conditions on the property after the 2020 fire.

Conducting the assessment of environmental impacts based on the physical environmental conditions that existed at the time the Notice of Preparation (NOP) was published allows for the most conservative assessment of impacts. For example, the calculated percent reduction in soil loss and net decrease in peak flow rates would be greater if the analysis were based on conversion from burned ground cover to vineyard with a cover crop.

O3-29 See Responses to Comments O3-22 and O3-28. Further, as noted in Response to Comment O3-44, the owner/permittee will need to provide the County with updated soil loss and runoff modeling for any and all development areas modified by mitigation and project alternatives prior to construction to demonstrate compliance with the County's no net increase policies as a result of project changes.

O3-30 See Response to Comment L1-11, Chapter 2, *Revisions to the Draft EIR,* and **Appendix C** regarding the condition of approval has been added to address the water quality of source water for municipal drinking supplies.

O3-31 See Responses to Comments O3-16 and L1-3 through L1-5. As stated on Draft EIR page 3.7-21, Points of Interest 1–6 assessed in the Draft EIR Appendix J Hydrologic Analysis for Diversion are located upstream of Lake Hennessey within the Sage Creek watershed (see Plate I in Draft EIR Appendix J Hydrologic Analysis for Diversion), as follows:

- *Point of Interest 1:* The point on Elder Creek immediately below proposed Point of Diversion 1 of Permit 18459.
- *Point of Interest 2:* The point on Elder Creek immediately below the requested location of Point of Diversion 2 of Permit 18459, which is also the point of diversion named in License 9125, Permit 18282, and Statement S015232.

- *Point of Interest 3:* The point on Elder Creek immediately above the confluence with Sage Creek.
- *Point of Interest 4:* The point on Sage Creek immediately below the confluence with Elder Creek.
- *Point of Interest 5:* The point on Sage Creek immediately above the confluence with Clear Creek.
- *Point of Interest 6:* The point on Sage Creek immediately below the confluence with Clear Creek.

As summarized on Draft EIR page 3.7-36 and in Table 3.7-5, *Average Annual Impaired Flow*, for Points of Interest 2–4, the average annual impairment from senior diversions (baseline condition) is above 10 percent without considering the effects of the diversion from the proposed project. The average annual impairment values, including the effects of the proposed project, are incrementally higher at these points of interest; however, they are relatively small, ranging from about 1.4 percent to about 4.4 percent. The percentage impairment from senior diversions at Points of Interest 1, 5, and 6 are less than 10 percent. When diversion from the proposed project is included, impairment at these points of interest increases, but it does not exceed 10 percent. Additionally, the proposed project includes limitations on the maximum rate of diversion to offstream storage that would be allowed under Permit 18459, as well as minimum bypass flows before diversions are allowed to maintain aquatic habitat, fish, and wildlife downstream of the points of diversion.

As explained in Response to Comment L1-6, per the State Water Board's direction for these types of impairment analyses, the Draft EIR Appendix J Hydrologic Analysis for Diversion assumes that all reservoirs are empty at the start of the diversion season and that all water rights evaluated divert at the full face value amount of the right if water is available. These are conservative assumptions, as most agricultural reservoir owners do not empty their reservoirs every year; some water is typically carried over in storage at the end of the irrigation season. This means that less than the face value amount of water is diverted in the ensuing wet season to fill the reservoir. Further, water would be diverted in Elder Creek when flows are higher, which would reduce the potential effect that the project's diversion would have on water quality and aquatic invertebrates.

O3-32 As stated on Draft EIR page 3.7-35, the minimum bypass flow was identified by CDFW through the State Water Board's water rights petition process to maintain aquatic habitat, fish, and wildlife downstream of the points of diversion. See also Responses to Comments O3-16, O3-31, L1-4, and L1-6.

As described in Draft EIR Section 3.7, *Hydrology and Water Quality*, the change in land use is not expected to significantly affect water quality in receiving waters, including waterways farther downstream of the project area such as Sage Creek. An erosion

control plan (Draft EIR Appendix A) would function to control erosion on the project site, rather than attempting to capture soil after it has been displaced. Additionally, as described in the erosion control plan, a permanent vegetative cover crop would be in place; the cover crop would be mowed and not disked to help prevent the concentration of erosion and prevent loosening of soil that would be susceptible to erosion. Furthermore, the proposed project would be subject to performance standards for nutrient and pesticide discharges, pursuant to the Regional Water Board's waste discharge requirements, further minimizing the potential for the project to result in water quality impacts farther downstream.

O3-33 As stated on Draft EIR pages 3.6-7 and 3.6-8, the proposed fertilizers (including 15-15-15, boran, and zinc), and herbicides (including Lifeline® for weed control) may be applied to the vineyard up to two times per year. Mildewcides (including Sulfur® DF and Luna® Experience) to protect against mildew may be applied up to four times per year. No pre-emergent herbicides would be used for weed management. Weed control and mowing would occur between April and August. Mowing would reduce habitat for invasive insects, potentially reducing the need to use pesticides that would otherwise be used to control insects.

The proposed project would comply with federal and state laws enforced by the U.S. Environmental Protection Agency (EPA) and the California Department of Pesticide Regulation. The project also must achieve performance standards for the discharge of nutrients and pesticides established by the San Francisco Bay Regional Water Quality Control Board's waste discharge requirements for vineyards 5 acres or larger that are located in the Napa River watershed. Discharge performance standards pertain to soil erosion rates in the farm area, sediment delivery from existing unpaved roads and new roads, storm runoff from existing or new Hillslope Vineyards, pesticide management, and nutrient management (San Francisco Bay Regional Water Board 2017).

Elder Creek and tributaries in the development area that meet the County's definition of a stream (Napa County Code Section 18.108.030) have required setbacks of 35–150 feet depending on slope, as outlined in Napa County Code Section 18.108.025 and discussed in Draft EIR Impact 3.7-1. All waters of the United States not requiring a County stream setback, and all wetlands, would be avoided and afforded a 50-foot buffer, consisting of a 26-foot undisturbed area and a 24-foot vegetated vineyard avenue. The NRCS (2000) and the University of California, Division of Agricultural and Natural Resources (UC DANR 2006) recommend 50-foot-wide vegetated buffers for protection of streams and wetlands. As discussed in Impact 3.6-1, under most conditions, this buffer width is generally adequate to provide enough vegetation to entrap sediments and soils, and to filter chemicals adequately by facilitating degradation within buffer soils and vegetation. These buffer areas serve as filter strips and have the potential to trap as much as 75–100 percent of sediment, capture nutrients and

herbicides, and remove more than 60 percent of certain pathogens from runoff (Grismer et al. 2006).

O3-34 As stated in Response to Comment O3-33, the proposed project would be required to conform with federal and state laws enforced by the EPA and the California Department of Pesticide Regulation. The project also must achieve performance standards for the discharge of nutrients and pesticides established by the San Francisco Bay Regional Water Quality Control Board's waste discharge requirements for vineyards 5 acres or larger that are located in the Napa River watershed. See also Response to Comment L1-11 regarding water quality monitoring.

O3-35 Information in the comment about CEQA's requirements for the alternatives analysis is noted. The Draft EIR provides an adequate evaluation of CEQA alternatives compared to the proposed project, consistent with State CEQA Guidelines Section 15126.6. See also Responses to Comments O3-36 through O3-44.

O3-36 Project objectives were not formulated to reject "environmentally superior alternatives," as stated in the comment. As stated on page 5-1 of Draft EIR Chapter 5, *Alternatives Analysis*, CEQA requires an analysis of alternatives selected because they minimize or eliminate significant impacts identified for the proposed project. Sometimes these alternatives can result in new or more severe impacts even if they reduce others. The Applicant's project objectives provided to the County included development of 111.5 net acres of new vineyard within a 156.8-acre development area, as proposed in the ECPA. The acreage objective in the Draft EIR project objectives (*Executive Summary*, page ES-1, and Chapter 2, *Project Description*, page 2-6) phrases the objective as developing *up to* 111.5 net acres of vineyard to account for acreage reductions that would result with implementation of the mitigation measures identified in the Draft EIR (Table 3.3-5) or project alternatives. See also Response to Comment O3-5.

O3-37 The information on CEQA and National Environmental Policy Act (NEPA) project objectives is noted.

O3-38 As stated in Response to Comment O3-36, the Applicant's project objectives provided to the County included development of approximately 111.5 net acres of new vineyard within a 156.8-acre development area, as proposed in the ECPA. The acreage objective in the Draft EIR project objectives phrases the objective as developing *up to* 111.5 net acres of vineyard to account for acreage reductions that would result with implementation of the mitigation measures identified in the Draft EIR or project alternatives.

As stated in Draft EIR Section 5.1, *Introduction*, on page 5-1, State CEQA Guidelines Section 15126.6 requires that an EIR evaluate a range of reasonable alternatives to the project that would feasibly attain most of the basic project objectives but would avoid or substantially lessen any of the significant effects. Vineyard development is a key basic objective of the proposed project.

O3-39 The County is considering all information in the EIR, including the alternatives, before making a determination to approve the proposed project (either as mitigated or as described in one of the alternatives). The County did not refuse to analyze a range of reduced project size alternatives as stated in the comment. All of the alternatives considered in the Draft EIR reduced the footprint compared to the proposed project. Draft EIR Chapter 5, *Alternatives Analysis*, considers the No Project Alternative (with no new vineyard acreage proposed), the Reduced Intensity and Increased Stream and Wetland (Aquatic Resource) Setbacks Alternative (which reduced the development acreage by about 23 acres compared to the proposed project), and the Reduced Vegetation Removal/Grading and Road Use Alternative (which reduced the development acreage by about 45 acres compared to the proposed project). These alternatives would reduce the severity of some environmental impacts compared to the proposed project, as indicated in Draft EIR Table 5-5. The Draft EIR provides an adequate evaluation of CEQA alternatives compared to the proposed project, consistent with State CEQA Guidelines Section 15126.6, and the County is considering all information in the EIR, including the alternatives, before making a determination to approve the proposed project (either as mitigated or as described in one of the alternatives). See also Response to Comment O3-7.

O3-40 Draft EIR Section 5.4, *Environmentally Superior Alternative*, identifies the Reduced Vegetation Removal/Grading and Road Use Alternative as the environmentally superior alternative, which is identified consistent with State CEQA Guidelines Section 15126.6(e)(2). The Draft EIR does not "reject" both the Reduced Intensity and Increased Stream and Wetland (Aquatic Resource) Setbacks Alternative and the Reduced Vegetation Removal/Grading and Road Use Alternative, as stated in the comment. See Response to Comment O3-5 regarding the County's approval process for ECPA projects and Response to Comment O3-38 regarding the project objectives relative to the reasonable range of alternatives considered in the Draft EIR. Draft EIR Chapter 5, *Alternatives Analysis*, includes a comparison of each alternative's environmental effects to the effects of the proposed project and a discussion of the ability of the alternatives to achieve the proposed project objectives. As required under State CEQA Guidelines Section 15126.6(e)(2), an identified environmentally superior alternative was identified in Section 5.4. The County is considering all information in the EIR, including the alternatives, before making a determination to approve the proposed project (either as mitigated or as described in one of the alternatives).

O3-41 As stated in Response to Comment O3-38, the language about the net vineyard acreage in the Draft EIR project objectives includes the acreage proposed in the application and reduced acreage that would result with implementation of the mitigation measures identified in the Draft EIR (Table 3.3-5).

The Draft EIR identifies applicable and feasible mitigation measures to reduce the magnitude of or avoid the identified environmental impacts, and these mitigation

measures were carried over to the alternatives analyzed in Draft EIR Chapter 5, *Alternatives Analysis*. The mitigation measures are summarized in Draft EIR Table ES-2, and the updated mitigation measures are summarized in Chapter 4, *Mitigation Monitoring and Reporting Program*, to reflect revisions made in response to the Draft EIR comments. See also Responses to Comments O3-5 and O3-40.

With respect to number of vineyard workers and economic development, while the commenter is correct that statements in Draft EIR pages 5-5 and 5-17 that the Reduced Intensity and Increased Stream and Wetland (Aquatic Resource) Setbacks Alternative and the Reduced Vegetation Removal/Grading and Road Use Alternative, respectively, would potentially result in reduced opportunities for vineyard employment and economic development, the Draft EIR does not attempt to convey or otherwise disclose that a reduction in employment potential would be significant, as the commenter asserts. In fact, the statement on Draft EIR page 5-5 reads as follows: "*This would in turn **slightly** reduce the opportunities for vineyard employment and economic development in Napa County."* [Emphasis added]. Furthermore, nowhere in the Draft EIR is it disclosed or otherwise analyzed that the potential reduction in employment or economic development opportunities due to implementation of mitigation measures and/or either alternative would result in a significant economic impact, warranting rejection of mitigation and/or consideration of a statement of overriding consideration specific to economic development or employment growth. No further response is necessary.

O3-42 As stated in Response to Comment O3-40, the Draft EIR does not "reject" both the Reduced Intensity and Increased Stream and Wetland (Aquatic Resource) Setbacks Alternative and the Reduced Vegetation Removal/Grading and Road Use Alternative, as stated in the comment. See Response to Comment O3-5 regarding the County's approval process for ECPA projects and Response to Comment O3-38 regarding the project objectives relative to the reasonable range of alternatives considered in the Draft EIR. Draft EIR Chapter 5, *Alternatives Analysis*, includes a comparison of each alternative's environmental effects to the effects of the proposed project and a discussion of the ability of the alternatives to achieve the proposed project objectives. As required under State CEQA Guidelines Section 15126.6(e)(2), an identified environmentally superior alternative was identified in Section 5.4. The County is considering all information in the EIR, including the alternatives, before making a determination to approve the proposed project (either as mitigated or as described in one of the alternatives).

O3-43 The comment is noted. See Responses to Comments O3-5, O3-39, and O3-40.

O3-44 As determined by the Universal Soil Loss Equation calculations discussed in Draft EIR Section 3.5, *Geology and Soils*, Impact 3.5-3, with the proposed project and the erosion and runoff control measures proposed in the erosion control plan, sediment yield would decrease by approximately 376.61 tons per year (43.17 percent) relative to existing

conditions. Potential soil loss and sedimentation caused by the proposed project would be controlled primarily by using a no-till cover crop with vegetative cover densities ranging from 75 to 90 percent. Vineyard avenues would also include vegetative cover at densities consistent with the erosion control plan. A cover crop can trap eroded soils on-site, thereby reducing soil loss and the potential for sedimentation. Hydrologic conditions after development of the proposed project are anticipated to be rated as good, based on the positive effects of soil ripping on certain soil types, and assuming that the project achieves and maintains the proposed vegetative cover specifications (Draft EIR page 3.5-25).

The statement that the reduction in annual soil loss would likely be less with the Reduced Intensity and Increased Stream and Wetland (Aquatic Resource) Setbacks Alternative and the Reduced Vegetation Removal/Grading and Road Use Alternative than under the proposed project (because the alternatives would include less acreage than the proposed project) was based on the findings in Draft EIR Table 3.5-4, *Pre- and Post-Project Soil Loss (Universal Soil Loss Equation) Calculations by Vineyard Block*, on pages 3.5-26 and 3.5-27. The table indicates pre-project and post-project soil loss by block. With the removal of areas in and near proposed vineyard Blocks 5D, 16, 24G, 25, and 27 with the Reduced Intensity and Increased Stream and Wetland (Aquatic Resource) Setbacks Alternative, it was anticipated that post-project soil loss would not result in the same net decreases as the proposed project. Similarly, with the removal of areas in and near proposed vineyard Blocks 5E, 6, 8, 9H, 10, 11, 13A, 14, 15A, 15B, 18A, 18B, 20B, 23D, 24D, 28, 29A, 29B, 30, 31, 32, and 33B with the Reduced Vegetation Removal/Grading and Road Use Alternative, it was anticipated that post-project soil loss would not result in the same net decreases as the proposed project. The proposed erosion control measures listed on Draft EIR pages 2-17 and 2-18 and in the erosion control plan that would achieve the reduced post-project soil loss (and which would not be included with the removed blocks) include:

- The proposed drainage systems (diversion ditches, drop inlets, drainage pipelines, rock and pipe level spreaders, rock aprons, and rock energy dissipaters) that would route and disperse water and reduce concentrated flow.
- The features of the vegetative erosion control measures that would reduce erosion (seed, mulch, fertilizer, and irrigation; timing and methods of planting, mulching, and maintenance of plant material and slopes until a specified percentage of plant coverage is uniformly established).

Furthermore, the owner/permittee will need to provide the County with updated soil loss and runoff modeling for any and all development areas modified by mitigation and project alternatives prior to construction to demonstrate compliance with the County's no net increase policies as a result of project changes.

O3-45 All special-status species with the potential to occur were considered in the Draft EIR. This assessment was made based on extensive field visits to the site, informed by

background biological data such as the CNDDB, agency lists, and Napa County Baseline Data Report results, as summarized on Draft EIR pages 3.3-1 and 3.3-2 and Draft EIR Appendix E. The comment does not identify any specific species it considers inadequately analyzed. See Responses to Comments O3-46 through O3-54 for species-specific responses.

O3-46 Draft EIR Section 3.3.3, *Impacts and Mitigation Measures*, identifies detailed mitigation measures to address potentially significant impacts on special-status species. Some of these mitigation measures have been revised based on specific Draft EIR comments and recommendations from CDFW. See Responses to Comments S1-3 through S1-5 and Chapter 2, *Revisions to the Draft EIR*.

O3-47 The list of species identified in the Draft EIR with a potential to occur within the project site was based on over 100 hours of field surveys (see Draft EIR Appendix E). As detailed in Mitigation Measures 3.3-1c, 3.3-1d, 3.3-1f, 3.3-1g, 3.3-1h, and 3.3-1k, if additional species are encountered during preconstruction surveys or during construction, the relevant agencies will be contacted to determine if additional mitigation measures are necessary.

O3-48 Mitigation Measure 3.3-3a states that impacts on waters of the United States would require a minimum mitigation ratio of 1:1. The mitigation measure does not preclude other regulatory agencies from requiring a higher than 1:1 mitigation ratio as part of conditions of approval for issuance of their respective permits and/or permissions. Furthermore, it is a simplification to categorically assume that existing occurring wetland habitat provides higher quality habitat for species than new wetland habitat. New wetland habitat would have to meet stringent performance criteria to be approved for use in any mitigation efforts; existing aquatic features may be “naturally occurring” but provide poor quality habitat for the County’s native wildlife species if it is, for example, overgrown by non-native weeds, contains poor water quality, or contains non-native predators like American bullfrogs. As such, no change in the mitigation ratio described in Mitigation Measures 3.3-3a was made in response to this comment.

O3-49 The comment is noted. The comment is solely limited to describing the importance of habitat connectivity for wildlife movement and conservation. The comment does not specifically provide any direction regarding inadequacy of the Draft EIR analysis or request for further analysis.

O3-50 The comment is noted. As stated in the Wildlife Movement Corridors setting discussion on Draft EIR page 3.3-30, existing vineyards are already as close as 25–50 feet from Elder Creek. As such, the migratory corridor along Elder Creek is already impinged by existing development. For the proposed project, the Draft EIR identified Mitigation Measure 3.3-1a to increase the width of the wildlife corridor for many of the proposed vineyard blocks along Elder Creek. Additionally, as outlined in Mitigation Measure 3.3-4,

specified vineyard blocks would be fenced individually instead of in clusters, and fencing would be placed along the outside edge of vineyard avenues to minimize barriers to local wildlife movement. As such, through the implementation of these mitigation measures, the project would minimize impacts on wildlife corridors to a less-than-significant level (i.e., it would not further degrade existing migratory habitat conditions along Elder Creek). As such, the existing language in the Draft EIR is considered adequate and no text changes were made pursuant to this comment.

O3-51 The project includes the proper County-required setbacks for aquatic features within the project site that meet the County's definition of a stream for purposes of the setback requirements in the Conservation Regulations. No other aquatic features on the project site meet the County's definition of streams and thus do not require a setback; however, they would be avoided with minimum 50-foot buffers, consisting of 26 feet of undisturbed native vegetation and 24 feet of vegetated vineyard avenue, and the avenues would be subject to the same vegetative cover crop requirements as the adjacent vineyard block under the erosion control plan (see also Response to Comment O3-33). Therefore, no County-required setback distance is applicable for the remaining ephemeral drainages on-site.

The information on wildlife buffers for species such as western pond turtle is noted. The existing riparian/wildlife corridors along the smaller aquatic features within the project site are often naturally narrow; therefore, the buffer distances applied to these features under this project are commensurately smaller than for aquatic features with larger riparian corridors. Further, Mitigation Measure 3.3-1c includes conducting preconstruction surveys and requiring a biological monitor to be on-site during construction to ensure that no western pond turtles or western pond turtle nests are destroyed or disturbed by construction activities.

O3-52 The project site has not been identified on the CalWild linkage map as part of a major regional movement corridor, and CDFW does not have established standards for wildlife corridors. All aquatic features on the project site (even those that do not meet the County's definition of streams) would be protected by minimum 50-foot buffers. Although existing vineyards are as close as 25–50 feet from Elder Creek, the project's proposed avoidance buffers along the corridor range from 45 feet to 150 feet wide. Implementing Mitigation Measure 3.3-1a would increase the width of the wildlife corridor by vineyard Blocks 6, 17, 23A, 23B, 23E, 23G, 24B, 24C, 24E, 24G, 29B, 33A, and 33E from 50 feet to 100 feet, thereby minimizing the potential for interference with wildlife movement along Elder Creek. The selection of the 100-foot buffer distance is based on the distance that the species that utilize habitat within and along Elder Creek are most likely to disperse. This distance is meant to be protective of the expected movement range of wildlife, such as western pond turtle, which are typically less than 100 feet away from creeks, not necessarily the maximum potential range.

O3-53 The comment is noted. The project in itself would not be able to support long-range dispersers. As stated in Response to Comment O3-50 and Draft EIR page 3.3-30, existing vineyards are as close as 25–50 feet from Elder Creek; as such, existing conditions already impinge on wildlife movement and dispersal without consideration of the project. Furthermore, the purpose of the project is vineyard development, not establishment of wildlife corridors. Nonetheless, the project would provide buffers around aquatic features of a minimum of 50 feet to help protect wildlife movement conditions. Additionally, Mitigation Measure 3.3-1a would increase the width of the wildlife corridor in certain areas from 50 feet to 100 feet, further minimizing the potential for interference with wildlife movement along Elder Creek. As such, the project would implement key measures to minimize the impact of the vineyard development on riparian habitat and wildlife movement.

O3-54 While the commenter's concerns regarding edge effects is acknowledged, it should also be recognized that the project footprint was reduced to accommodate concerns regarding habitat loss and to minimize soil erosion. The vineyard block placement, layout, and configuration as proposed were intended to minimize the effect of wildlife habitat conversion and minimize potential soil erosion from vineyard development and operation, in a manner that also ensures that the main project purpose of developing new vineyard acres in portions of the site that are suitable for cultivation of high-quality wine grapes is achieved.

Draft EIR Alternative 2, the Reduced Vegetation Removal/Grading and Road Use Alternative, reduces blocks and block configurations as compared to the proposed project to limit vegetation removal/grading and road use, development, maintenance, and upgrades for areas that contain minimal vineyard development. This alternative avoids some of the same blocks mentioned in the comment. As stated in Responses to Comments O3-5 and O3-7, the County is considering all information in the EIR, including the alternatives, before making a determination to approve the proposed project (either as mitigated or as described in one of the alternatives).

O3-55 Impacts related to hazardous materials (including fuels, pesticides, and fertilizers), and measures to avoid or minimize those impacts, are discussed in detail in Draft EIR Section 3.6, *Hazards and Hazardous Materials*. The proposed project would implement integrated pest management techniques, comply with the laws and regulations governing the transportation and management of hazardous materials to reduce potential hazards, and implement the best management practices in the Hazardous Materials Conditions of Approval (Draft EIR pages 3.6-9 and 3.6-10). These measures would ensure that impacts on non-target species would be avoided. See also Response to Comment O3-33. The information about pesticides and their use in California is noted.

O3-56 The Draft EIR does not rely on the integrated pest management guidelines to mitigate the project's pesticide-related impacts to a less-than-significant level, as stated in the

comment. The proposed vineyards would be managed using sustainable farming practices and with integrated pest management, pesticides would be used only after monitoring indicates that they are needed based on established guidelines, and treatments would be made with the goal of removing only the target organism. Nevertheless, the Draft EIR acknowledges that chemical pesticides could be used as needed throughout the development area.

As stated in Impact 3.6-1 on Draft EIR page 3.6-8, the proposed project would be required to comply with numerous hazardous materials and stormwater regulations. Such compliance would help ensure that hazardous materials are transported, used, stored, and disposed of safely to protect worker safety, and would reduce the potential for a release of construction-related fuels or other hazardous materials into the environment, including stormwater and downstream receiving water bodies. Potentially hazardous materials would be contained, stored, and used on-site in accordance with manufacturers' instructions and handled in compliance with applicable standards and regulations. Further, as summarized on Draft EIR page 3.6-10, the best management practices in the Hazardous Materials Conditions of Approval would further avoid and/or reduce potential impacts from the use of hazardous materials during ongoing vineyard operations and maintenance; therefore, the proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, or through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment, and no mitigation was required.

See also Response to Comment O3-33; the stream setbacks incorporated in the project design are generally adequate to provide enough vegetation to entrap sediments and soils, and to filter chemicals adequately by facilitating degradation within buffer soils and vegetation. The proposed project also includes a permanent no-till cover crop for the vineyard blocks that would be maintained at between 75 and 90 percent density (see Draft EIR Appendix A, page EC-5 for the specific vegetative cover by block) and would filter flows during storms.

O3-57 The comment is noted. All mitigation measures for the proposed project are listed in Chapter 4, *Mitigation Monitoring and Reporting Program*, and the conditions of approval are listed in Appendix C. The Draft EIR mitigation measures, conditions of approval, and enforcement of applicable County code sections (see Response to Comment I4-2) would provide adequate oversight and compliance measures for project implementation and ongoing operation. Additionally, no new or additional evidence has been provided demonstrating the potential level of impact that would occur beyond what is identified in the Draft EIR, or that the project or Draft EIR mitigation measures would need to be revised to adequately disclose and address potential compliance matters associated with the project.

O3-58 See Response to Comment O3-56. The Draft EIR does not rely on the integrated pest management guidelines to mitigate the project's pesticide-related impacts to a less-than-significant level. As stated on Draft EIR page 2-18 in Chapter 2, *Project Description*, the integrated pest management program would be implemented as part of the property's sustainable farming practices and is not presented as a mitigation measure.

O3-59 See Response to Comment O3-56. Further, as stated in Response to Comment O3-58, the integrated pest management program is not presented as a mitigation measure but would be implemented as part of the property's sustainable farming practices.

O3-60 The comment is noted. As explained in Responses to Comments O3-5 through O3-59, the Draft EIR adequately assesses and discloses the potential environmental impacts of the proposed project in accordance with CEQA (California Public Resources Code Section 21000 et seq.), the State CEQA Guidelines (California Code of Regulations Title 14, Section 15000 et seq.), and *Napa County's Local Procedures for Implementing the California Environmental Quality Act* (Napa County 2015).

O3-61 The commenter's opposition to the proposed project is noted. As explained in Responses to Comments O3-5 through O3-59, the Draft EIR adequately assesses and discloses the potential environmental impacts of the proposed project in accordance with CEQA (California Public Resources Code Section 21000 et seq.), the State CEQA Guidelines (California Code of Regulations Title 14, Section 15000 et seq.), and *Napa County's Local Procedures for Implementing the California Environmental Quality Act* (Napa County 2015). The commenter's request for a revised and recirculated Draft EIR is noted.

Napa County will provide the Center for Biological Diversity with notification of proposed actions and pending decisions regarding the proposed project. The contact information of the commenter is noted.

LETTER O4

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June 9, 2021

VIA E-MAIL (DONALD.BARRELLA@COUNTYOFNAPA.ORG)

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Re: Hyperion Vineyard Holdings, LLC Erosion Control Plan (#P17-00432-ECPA)
Draft EIR Comment Letter

Dear Mr. Barrella:

Thank you for the opportunity to submit comments on the above-referenced Hyperion Vineyard Holdings, LLC Erosion Control Plan Project Draft Environmental Impact Report ("Draft EIR"). Buchalter represents Sorrento, Inc. ("Sorrento"), one of the two parties that have jointly filed an application for an erosion control plan ("ECP") (#P17-00432-ECPA) for the proposed vineyard project in Napa County (the "County"). Hyperion Vineyard Holdings, LLC is an affiliated entity of Sorrento, Inc., and Sorrento and Hyperion are collectively referred to as, the "Applicant." O4-1

Project Background

As you are aware, the Applicant proposes vegetation removal and earthmoving activities in connection with the development of up to 111.5 net acres of vineyard within 156.8 gross acres on the project site (the "Project"). The Project site is located at 3380 and 3370 Sage Canyon Road in unincorporated Napa County (the "Property"). O4-2

We appreciate the County's thorough evaluation of the Project's potential impacts, as documented in the environmental impact report ("EIR"), under the California Environmental Quality Act (Pub. Res. Code §§ 21000 *et seq*.; Cal. Code Regs. §§ 15000 *et seq*. ("CEQA")). Notwithstanding the comprehensive analysis contained in the Draft EIR, we noted several inaccuracies and overstated impacts that the County identified in the Draft EIR that imply the Project may result in greater impacts than actually will occur. We also noted several concerns about the County's suggestions that the Project design be revised to avoid impacts for which the O4-3

Draft EIR did not include any evidence that the Projects would cause such impacts. Consequently, we offer the following comments for the County's consideration so that staff may revise the EIR to more accurately reflect the true impacts of the Project in the Final EIR.

O4-3 cont.

The EIR's Analysis Represents an Overly-Conservative Assessment of Impacts Given Recent Wildfires.

An EIR must provide a description of the physical environmental conditions in the vicinity of the project. (CEQA Guidelines, § 15125(a).) This constitutes the "baseline physical conditions" by which the lead agency determines the significance of environmental impacts. (*Id.*) While generally the lead agency should describe environmental conditions "as they exist at the time the notice of preparation is published," the description is necessary to the "understanding of the significant effects of the proposed project and its alternatives." (*Id.*; *Cadiz Land Co., Inc. v. Rail Cycle, LP* (2001) 83 Cal.App.4th 74, 86.) Thus, an existing conditions baseline must measure the conditions as they exist on the project site. (*John R. Lawson Rock & Oil, Inc. v State Air Resources Bd.* (2018) 20 Cal.App.5th 77, 106.)

O4-4

The Draft EIR adequately assessed the baseline environmental conditions at the Project site at time that the County issued the Notice of Preparation in 2018. In 2020, however, the entire Property burned during the wildfires that affected the County. Other recent Napa County CEQA documents addressed this change based on-the-ground conditions. This intervening change in the baseline conditions lessens any potential Project impacts compared to the pre-fire conditions of the Property. Accordingly, given the 2020 wildfire's impacts to the Property, Project impacts will be much smaller than the impacts described in the EIR, particularly with respect to potential impacts on biological resources. Thus, this EIR paints a very conservative picture of the Project's impacts, and we request that the Final EIR be revised to include a discussion of the post-fire conditions on the Property, just as the County has included in other CEQA documents.

O4-5

Section 3.2 of the Draft EIR Regarding Greenhouse Gas Emissions and the Air Quality Analysis Overstated Project Impacts.

Pages 3.2-23 through 3.2-29. A threshold of significance for a given environmental effect is the "level at which the lead agency finds the effects of the project to be significant" and "to which the significance of a given environmental effect may be determined." (*Communities for a Better Environment v. Cal. Resources Agency* (2002) 103 Cal.App.4th 98, 110-11.) When considering the significance of impacts, the lead agency considers the extent to which an impact exceeds a threshold of significance. (*Citizens for Responsible Equitable Environmental Development v. City of Chula Vista* (2011) 197 Cal.App.4th 327, 336.) Thus, where an impact does not exceed a threshold, the impact should not be considered significant.

O4-6

The Draft EIR analysis contained in Section 3.2 overestimated the air quality impacts caused by construction activities at the Project site. The analysis of Average Daily Construction

O4-7

Emissions provided in Table 3.2-5 and discussed in Impact 3.2-1 demonstrates that the specified construction emissions would ***not*** exceed any of the BAAQMD thresholds for ROG, NO_x, Exhaust PM_{10}, or Exhaust $PM_{2.5}$. Nonetheless, the Draft EIR concluded on page 3.2-29 that the Project would result in significant construction-related air quality impacts even though the Project would not exceed the applicable levels of significance. The Draft EIR states:

> "As shown in **Table 3.2-6**, the proposed project's operational emissions would be below the BAAQMD significance thresholds. Project construction emissions would also be below the thresholds (**Table 3.2-5**) except for NOx, which would be *at* the significance threshold."

The Draft EIR also based its conclusions on the disturbance of the entire project acreage before mitigation measures included in the Project were applied, thereby overstating Project construction impacts. If an impact does not exceed the threshold of significance, it is not significant. Therefore, Impact 3.2-1 should be revised in the Final EIR to clearly indicate the impact is less than significant.

O4-7 cont.

The Draft EIR Overstates the Project's Impacts to Biological Resources and Recommends Infeasible Mitigation Measures.

Pages 3.3-48 through 3.3-72. The Draft EIR discussion of the Project's impacts on biological resources far overstates the actual direct impact associated with earth disturbance activities under the ECP. We direct the County to the specific comments PPI Engineering has submitted in this regard noting the inaccuracies in the analysis concerning the Project's impacts based on the occurrences of special status species and their habitats on the Project site. Additionally, because the Draft EIR impact analysis is not based on post-fire conditions, impacts to sensitive natural communities appear to be overstated. The following highlights our key concerns for the County's consideration:

O4-8

- **Sensitive Natural Communities** on page 3.3-12 says that "oak trees within… annual grassland" are considered a sensitive habitat type. This is not true, as a single oak tree is not a habitat type. Actively farmed hay fields have been mapped as Annual Grassland and therefore are designated as burrowing owl habitat. Hay fields are not Annual Grassland and are not known as burrowing owl habitat and should be deducted from the habitat calculation.

O4-9

- **Figure 3.3-4** shows a "wildlife movement corridor" through the property along Elder Creek overlapping with existing vineyards and hay fields. A large portion of that area is currently fenced in by deer fencing. Thus, this area is not a wildlife movement corridor as existing fencing prevents wildlife movement on the Project site.

O4-10

- **Impact 3.3-1 for WPT and CRLF**. Page 3.3-23 states that CRLF were not identified and that USFWS was consulted and confirmed that they were unlikely to be present. USFWS required only that a biological monitor be present on-site during construction. The impact discussion conflates the impact and mitigation for both WPT with CRLF. The species are different. Any buffer distances required in the EIR only should apply to WPT, not CRLF, consistent with the USFWS comments. O4-11

- **Impact 3.3-5 and Mitigation 3.3.5.** Pages 3.3-68 through -72 discuss project impacts to oak woodland. The Draft EIR states that the Project would impact 33.52 acres of oak woodland habitat. We request that the Final EIR clarify that this impact appears to be based on pre-fire conditions and would over-state the actual impact that may result with implementation of the ECP. If that is the case, then we request that the mitigation be adjusted to correspond to the actual impacts to oak woodland associated with the Project. O4-12

The Draft EIR Overstates the Project's Impacts to Cultural Resources and Proposes Unnecessary Mitigation.

Pages 3.4-21 through 3.4-22. Impact 3.4-3 states that construction and operation of the Project could cause a substantial adverse change in the significance of a tribal cultural resource as defined in PRC Section 21074. The Draft EIR also states that such resources have not been identified in the area proposed for disturbance under the ECP. Nonetheless, Mitigation Measure 3.4-3 requires that the Applicant enter into a Monitoring Agreement with the Yoche Dehe Wintun Nation. The Applicant agrees to implement standard measures for the treatment of any human remains or cultural resources as it would without a Monitoring Agreement but we are unclear as to the County's rationale for requiring the presence of an on-site monitor and a Monitoring Agreement when such resources have not been identified within the ECP area. O4-13

Geology and Soils Impact 3.5-2 Overstates the Project's Potential Geologic and Soils Impacts and the Mitigation Exceeds Constitutional Nexus Limitations

Page 3.5-22. Impact 3.5-2 in the Draft EIR states that construction and operation of the Project could expose potential substantial adverse effects, including the risk of loss, injury, or death involving landslides. Despite acknowledging that the vineyard blocks are located in the areas of the lowest potential landslide risk, the Draft EIR nonetheless requires that the Applicant revise vineyard blocks proposed for the hillsides in the development area to avoid mapped landslide deposits in proposed vineyard Blocks 16, 24G, 25, and 27, and provide them with a 50-foot buffer. As Mr. Gilpin's letter states, his report does not support the Draft EIR's conclusion that the Project would result in impacts or warrant such extensive redesign of the ECP. The County is required under CEQA to recommend mitigation measures that are roughly proportional to the O4-14

impact caused by the Project in accordance with Constitutional nexus limitations (see CEQA Guidelines section 15126.4; *Dolan v. City of Tigard*, 512 U.S. 374 (1994)). Thus, we request that the County eliminate the recommended mitigation measure on the basis that it does not meet Constitutional nexus requirements.

O4-14 cont.

The Draft EIR Paleontological Mitigation Measures Do Not Relate to the Scope of the Impact and are Unnecessary.

Pages 3.5-29 through 3.5-31. CEQA requires that an EIR to provide a detailed and factual analysis of a project's effect. (*No Oil, Inc. v. City of Los Angeles* (1974) 13 Cal.3d 68, 85.) This factual certainty substitutes for speculation. (*Id.*)

Here, the EIR explains in its analysis of Impact 3.5-5: (i) that ripping will cause no impact, and (ii) that excavations will not occur that will trigger a potentially significant impact. Specifically, the EIR explains that "average depth of ripping would be 2 feet, with maximum ripping depth up to 4 feet." "Deeper grading" may affect fossil resources, resulting in a potentially significant impact. On the one hand, the Draft EIR recognizes that ripping on the Project site will be limited to a depth that would not trigger a significant impact, yet devises mitigation for an impact that it concludes would not occur. Because mitigation measures are not required to minimize or avoid significant impacts, and because ripping will not exceed depths triggering a significant impact according to the Draft EIR analysis, the Final EIR should be revised to clarify that the Project need not implement Mitigation Measure 3.5-5a and -5b. These measures protect against paleontological resources found below the maximum ripping depth for this Project. We request that the County update the EIR to reflect the findings of the technical information prepared for the Project, rather than concluding that the Project would result in impacts that are not supported by the evidence.

O4-15

The Draft EIR Inappropriately Evaluated Infeasible Alternatives that do not Meet the Project's Basic Objectives and Should be Rejected.

Pages 5-1 through 5-28. In addition to the No Project Alternative, Chapter 5 in the Draft EIR identifies two other infeasible alternatives to the Project. We have designed our Project so that the proposed ECP is sensitive to the environment and addresses each and every potential impact up front as part of the Project. Consistent with this objective, the Draft EIR concludes that the Project would not result in significant environmental impacts except for a handful of overstated impacts identified above. The Draft EIR included a review of alternatives for the Project, because EIRs are required to describe a range of reasonable alternatives to a proposed Project. (CEQA Guidelines, § 15126.6.) According to Chapter 5 in the Draft EIR, the alternatives considered in the analysis must: (1) "feasibly attain" most of the basic objectives, and (2) avoid or substantially lessen any of the significant effects of the proposed project. The purpose of an EIR alternatives analysis is to determine whether there is a feasible way (other

O4-16

than the Proposed Project) to achieve the basic objectives of a project while avoiding or substantially lessening the Project's significant environmental impacts. The Draft EIR did not do that.

In light of our understanding of the purpose of an EIR alternatives analysis, we have two primary concerns about the Draft EIR's analysis of alternatives which we highlight for your consideration. First, regarding the Draft EIR's identification of alternatives, we note that the EIR included alternatives which would not achieve most of the basic project objectives. Second, we thought that an EIR is meant to identify alternatives that avoid or substantially lessen significant environmental impacts of the Project. Here, it seems the alternatives are designed to avoid overstated impacts highlighted above that would not actually result from the Project.

O4-16 cont.

We request that the County revise the Final EIR to explain that Alternative 1 - the Reduced Intensity and Increased Stream and Wetland (Aquatic Resource) Setbacks Alternative- and Alternative 2 - Reduced Vegetation Removal/Grading and Road Use Alternative would not actually meet most of the basic project objectives. Moreover, limiting the amount of vineyard development that could occur under either alternative would make the Project infeasible given the significant reduction in acreage converted to vineyard blocks. Because the alternatives considered in the Draft EIR are infeasible, the Project should be considered environmentally superior in accordance with CEQA as it meets the basic project objectives and is designed to avoid and mitigate significant impacts to a less-than-significant level.

Alternative 1- Reduced Intensity and Increased Stream and Wetland (Aquatic Resource) Setbacks Alternative Does Not Meet the Basic Project Objectives and is Infeasible.

Pages 5-4 and 5-5 discuss the Reduced Intensity and Increased Stream and Wetland (Aquatic Resource) Setbacks Alternative. This alternative purports to include the areas from the mitigated proposed project, which reduces the project acreage by 21.73 gross acres (and avoids development of Blocks 5D, 16, 24G, 25, and 27) through avoidance of biological resources and mapped landslides through implementation of Mitigation Measures 3.3-1a, 3.3-1i, 3.3-2a, and 3.5-2, as described in **Section 3.3, *Biological Resources*** and **Section 3.5, *Geology and Soils***. As discussed in the technical comments contained in the letter prepared by Mr. Gilpin and submitted under separate cover, the impacts referenced are not actual impacts caused by the Project. Thus, to eliminate development under the ECP to avoid impacts that the Project will not cause is inconsistent with CEQA's requirements. Moreover, the fundamental purpose of the Project objectives is to plant vineyards. As the Draft EIR states on page 5-5, the Reduced Intensity Alternative will not meet all of the basic project objectives; in fact it will not meet "most of the basic objectives" and should be eliminated on that basis alone.

O4-17

The Reduced Vegetation Removal/Grading and Road Use Alternative is Not an

O4-18

Environmentally Superior Alternative.

A lead agency is required to analyze alternatives that "could avoid or substantially lessen one or more of the significant effects." (CEQA Guidelines, § 15126.6(c).) An alternative that is incapable of reducing environmental impacts need not be considered. (*Mann v. Community Redev. Agency* (1991) 233 Cal.3d 1143.)

Alternative 2 reduces the vineyard development by about one-third of that proposed as part of the Project. As described in the letter from PPI Engineering dated June 8, 2021 and submitted under separate cover, the Reduced Vegetation Removal/Grading and Road Use Alternative incorrectly assumes that the Property would not continue to be used. As the PPI Engineering Letter explains, in this alternative the roadways would continue to be used for any number of allowable land uses on the property, including property maintenance operations, grazing, and fire hazard mitigation. Thus, the lead agency cannot assume that this alternative would actually reduce roadway impacts, when it is possible that the use of the roadway network would continue (and roadway impacts are not even significant). Moreover, Alternative 2 is infeasible because the alternative would substantially reduce vineyard development while maintaining the same level of infrastructure improvements (e.g., road and utilities) needed to serve the ECP. Accordingly, the County cannot conclude that this alternative is the environmentally superior alternative when compared to the Project.

O4-18 cont.

The Requested Revisions do not Trigger Recirculation of the EIR.

CEQA requires that an EIR be recirculated if the lead agency adds any "significant" new information. (Pub. Res. Code, § 21092.1.) The purpose of recirculation is to provide the public with a meaningful opportunity to comment on a substantial adverse environmental effect. (*Spring Lake Valley Assn. v. City of Victorville* (2016) 248 Cal.App.4th 91, 108.) The California Supreme Court has provided four examples of situations in which recirculation is required:

> (1) when new information shows a new substantial environmental impact resulting from the project or from a new mitigation measure proposed to be implemented;
> (2) when new information shows a substantial increase in the severity of an environmental impact unless mitigation measures are adopted that reduce the impact to a level of insignificance;
> (3) when new information shows a feasible project alternative or mitigation measure that clearly would lessen the environmental impacts of the project, but which the project's proponents decline to adopt; or
> (4) when the draft EIR was so fundamentally and basically inadequate and conclusory in nature that public comment on the draft was in effect meaningless.
> (*Laurel Heights Improvement Assn. v. Regents of Univ. of Cal.* (1993) 6 Cal.4th 1112, 1130.) This has since been codified into CEQA Guideline section 15088.5(a).

O4-19

Recirculation is required when there is new information about a project such that the

public should be afforded an opportunity to comment on it. Recirculation is not required if new information merely clarifies, amplifies, or makes insignificant modifications to an adequate EIR. (CEQA Guidelines, § 15088.5(b); *Citizens for Positive Growth & Preservation v. City of Sacramento* (2019) 43 Cal.App.5th 609, 634-35.)

The comments provided in this letter and the technical comment letters submitted by PPI Engineering and Mr. Gilpin do not provide any significant new information that would warrant recirculation. Rather than providing examples of a significant new impact or a substantial increase in the severity of some impact, these comments explain that the Project's impacts are actually *less than* the Project impacts identified in the EIR. These comments merely clarify the findings of the County's environmental review. Further, despite the overstated nature of some of these impacts, the draft EIR was sufficient to apprise the public of the Project and its potential environmental impacts. Accordingly, recirculation of the EIR is not authorized by CEQA.

O4-19 cont.

While we believe the EIR was adequately prepared and need not be recirculated, we believe that our comments and those of the Project consultants indicate that the Draft EIR paints a conservative analysis of the baseline environmental setting and potential Project impacts. Accordingly, the Project will be far less impactful upon the environment than the conclusions set forth in the Draft EIR suggest. We respectfully request that the Final EIR reflect the actual finding regarding the Project's impacts.

Thank you for considering our comments and we look forward to reviewing the revised Final EIR.

O4-20

Sincerely,

BUCHALTER
A Professional Corporation

By

Alicia Guerra
Shareholder

AG:nj

cc: Chris Apallas
Craig Becker
Braeden Mansouri

Letter O4 **Alicia Guerra, Shareholder, Buchalter**
Response June 9, 2021

O4-1 Napa County thanks Buchalter for the Draft EIR comments provided. The comment states that Buchalter represents Sorrento, Inc., one of the two parties that have jointly filed an application for the proposed project. The comment is noted.

O4-2 The comment describes the proposed project and project site. The comment is noted.

O4-3 The comment summarizes concerns that the Draft EIR contains inaccuracies and overstates impacts and, as a result, implies that the project may result in greater impacts than would actually occur; the comment is noted. See Responses to Comments O4-4 through O4-18. The Draft EIR adequately assesses and discloses the potential environmental impacts of the proposed project in accordance with CEQA (California Public Resources Code Section 21000 et seq.), the State CEQA Guidelines (California Code of Regulations Title 14, Section 15000 et seq.), and *Napa County's Local Procedures for Implementing the California Environmental Quality Act* (Napa County 2015).

O4-4 The comment is noted. Consistent with State CEQA Guidelines Section 15125, the physical environmental conditions as they existed at the time the NOP was published (i.e., September 18, 2018) are described in the EIR.

O4-5 See Chapter 2, *Revisions to the Draft EIR*, for text that was added to Draft EIR Section 3.1, *Introduction to the Analysis*, to note that the 2020 LNU Fire Complex burned the property. Conducting the assessment of environmental impacts based on the physical environmental conditions that existed at the time the NOP was published allows for the most conservative assessment of impacts.

O4-6 The comment is noted. Construction emissions estimates were revised for the proposed project (development of 111.5 acres of vineyard within approximately 156.8 acres) using an updated construction schedule (from 2021–2023 to 2022–2024, on Draft EIR page 3.2-24, since the original timeframe has passed). With this update, all criteria pollutant emissions would be less than their respective BAAQMD significance thresholds. This is because emissions factors for criteria air pollutants for future years reduce in the model due to gradual fleet turnover resulting in newer construction equipment and vehicles with lower emissions, retiring of old high polluting equipment and more stringent emission standards for new equipment and vehicles. Though the fleet-wide emissions factor would only change incrementally between 2021-2023 and 2022-2024, that change was enough to reduce NOx emissions to below the BAAQMD's significance threshold (since it was previously at the threshold in the Draft EIR analysis). Based on the revisions, Impact 3.2-1 would be less than significant and Mitigation Measure 3.2-1a is no longer needed; see Chapter 2, *Revisions to the Draft EIR*. Draft EIR Table 3.2-5 has also been updated

with the construction emissions associated with the revised mitigated project (development of approximately 141.72 gross acres [97.69 net acres] of vineyard) as described in Response to Comment O2-2. See also Responses to Comments I1-1 and O5-33.

O4-7 See Response to Comment O4-6 and Chapter 2, *Revisions to the Draft EIR*.

O4-8 The commenter's opinion that the Draft EIR overstates impacts on biological resources is noted; see Responses to Comments O4-9 through O4-12 for responses to the key concerns. See Responses to Comments O4-4 and O4-5 regrading the baseline conditions used in the Draft EIR.

O4-9 Oak trees are commonly interspersed in areas dominated by annual grassland vegetation in the understory. As such, there is often a mosaic of oak woodland and annual grassland mapped within the landscape. The consideration to include "oak trees within the mixed oak woodland and annual grassland" reflects the County's approach to consider mapping of mixed oak woodlands at a more landscape level. See also Response to Comment O5-22.

O4-10 As stated on Draft EIR page 3.3-30, some locations in the development area are adjacent to wildlife exclusion fencing that surrounds existing vineyards on the project site and may impede movement. However, the development area was not known to contain any other barriers that would prevent wildlife from moving throughout the project site. Ultimately, Draft EIR Figure 3.3-4 was included to reflect implementation of Mitigation Measure 3.3-1a to increase the wildlife corridor buffer to 100 feet around Elder Creek.

O4-11 The mitigation language pertaining to California red-legged frogs was included in the Draft EIR in response to consultation with the U.S. Fish and Wildlife Service (USFWS). While USFWS acknowledged that California red-legged frogs are unlikely to be present, they did recommend that a biological monitor be present during construction. The mitigation language pertaining to California red-legged frogs and western pond turtles was combined in the Draft EIR Impact 3.3-1 because the preconstruction surveys would need to be conducted by a qualified biologist familiar with amphibian/reptile species that can be found within the project site (e.g., a herpetologist or general wildlife biologist), and an approximately 500-foot survey distance for California red-legged frogs is appropriate given that vineyard development would occur during the dry season when it is expected that California red-legged frogs would be close to aquatic habitat.

O4-12 As noted in the comment and Response to Comment O4-5, the project site was affected by the recent fires in Napa County. Because the fires burned the vegetation on-site, there was loss of oak tree stands. However, as stated in Response to Comment O4-4, the analysis conservatively used the pre-fire conditions, pursuant to State CEQA Guidelines to use the baseline site conditions as they existed when the NOP was published. Using the pre-fire baseline conditions also accounts for the fact that by the time the project site is developed, on-site vegetation may be different. Fire is a natural

and ongoing process in California's natural ecological life history, and the ecosystem will recover and likely regain all of its pre-fire vegetation regime in areas not converted to vineyard.

O4-13 As stated on Draft EIR page 3.4-7, in Section 3.4, *Cultural and Tribal Cultural Resources*, Yocha Dehe Wintun Nation requested to formally consult on the proposed project with Napa County on April 27, 2018, in accordance with Public Resources Code Section 21080.3.1, and the language in Mitigation Measure 3.4-3 is a result of that consultation.

O4-14 See Response to Comment O2-2. Draft EIR Impacts 3.5-2 and 3.5-4 have been revised to allow development in proposed vineyard Blocks 16, 24G, 25, and 27, with ripping in the area of mapped landslide deposits limited to a depth of 24 inches (see Chapter 2, *Revisions to the Draft EIR* and Chapter 4, *Mitigation Monitoring and Reporting Program*). This changes the mitigated proposed project acreage to 141.72, instead of 135.41 acres as described in Draft EIR Table 3.3-5, *Project Impacts by Biological Community*. Note that buffers to protect biological resources identified in these areas still apply. See also Response to Comment O5-8.

These areas were also added back to the Reduced Intensity and Increased Stream and Wetland (Aquatic Resource) Setbacks Alternative. Block 24G was added back to the Reduced Vegetation Removal/Grading and Road Use Alternative and Blocks 16, 25, and 27 remain excluded from the Reduced Vegetation Removal/Grading and Road Use Alternative due to the isolated/minimal vineyard areas created in those areas when combined with other buffers to protect biological resources.

O4-15 Impact 3.5-5 states that grading or excavation deeper than the average 2-foot ripping has the potential to affect fossil resources, particularly previously undisturbed sediments more than 2 feet deep in areas that are mapped as Great Valley Sequence (KJgvl or Jk), or that exceed 5 feet deep in areas mapped as Quaternary alluvial fan deposits (Qf). Given that the maximum ripping depth would be 4 feet, depending on site conditions, and based on Comment O2-5 from Gilpin Geosciences about their field experience in the project area with paleontological resources, the text of Mitigation Measure 3.5-5b related to monitoring in areas mapped as Quaternary alluvial fan deposits (Qf) was removed. See also Response to Comment O2-5.

O4-16 The alternatives presented in Draft EIR Chapter 5, *Alternatives Analysis*, were not intended to avoid impacts that the comment classifies as overstated in Comments O4-4 through O4-15. As stated on Draft EIR pages 5-4 and 5-5, the Reduced Intensity and Increased Stream and Wetland (Aquatic Resource) Setbacks Alternative includes setbacks from all streams based on slope and 50-foot setbacks from wetlands, in addition to areas avoided from the mitigated proposed project. As stated on Draft EIR page 5-13, the Reduced Vegetation Removal/Grading and Road Use Alternative

reduces blocks and block configurations as compared to the proposed project to limit vegetation removal/grading and road use, development, maintenance, and upgrades for areas that contain minimal vineyard development, in addition to areas avoided from the mitigated proposed project.

Note that Draft EIR Impacts 3.5-2 and 3.5-4 have been revised (with the removal of Mitigation Measures 3.5-2 and 3.5-4) to allow development in proposed vineyard Blocks 16, 24G, 25, and 27, with ripping in the area of mapped landslide deposits limited to a depth of 24 inches (see Chapter 2, *Revisions to the Draft EIR*). See also Responses to Comments O2-2 and O4-14. These areas were also added back to the Reduced Intensity and Increased Stream and Wetland (Aquatic Resource) Setbacks Alternative. Block 24G was added back to the Reduced Vegetation Removal/Grading and Road Use Alternative, and Blocks 16, 25, and 27 remain excluded from the Reduced Vegetation Removal/Grading and Road Use Alternative due to the isolated/minimal vineyard areas created in those areas when combined with other buffers to protect biological resources.

The comment that the alternatives would not achieve most of the basic project objectives is noted. This is discussed under the subheadings "*Ability to the Meet the Project Objectives*" on Draft EIR pages 5-5 and 5-17, and on page 5-27.

O4-17 The comment is noted. See Responses to Comments O2-2, O4-14, and O4-16 regarding the area of mapped landslide deposits being added back into the Reduced Intensity and Increased Stream and Wetland (Aquatic Resource) Setbacks Alternative and the Reduced Vegetation Removal/Grading and Road Use Alternative. The County is considering all information in the EIR, including the alternatives, before making a determination to approve the proposed project (either as mitigated or as described in one of the alternatives).

Regarding infeasibility of the mitigated project or project alternatives, there is no evidence in the record that would support project infeasibility as mitigated or with implementation of either alternative. Furthermore the mitigated project with implementation of either alternative would still allow up to approximately 94.89 net acres of vineyard net acres of vineyard within an approximately 134.16-acre development area in the holding with the Reduced Intensity and Increased Stream and Wetland (Aquatic Resource) Setbacks Alternative or approximately 80.15 net acres within an approximately 111.82-acre development area with the Reduced Vegetation Removal/Grading and Road Use Alternative.

O4-18 The comment is noted. As stated on Draft EIR page 5-13, the Reduced Vegetation Removal/Grading and Road Use Alternative reduces blocks and block configurations as compared to the proposed project to limit vegetation removal and grading and road use, including vegetation removal and grading necessary to improve and upgrade roads for minimal and fragmented vineyard development. The County determined blocks for

avoidance under this alternative based on the remoteness of the proposed blocks and the level of disturbance that would be required to develop and operate vineyard, including necessary access road improvements and ongoing maintenance to effectively develop and operate these blocks, in addition to block and access proximity to aquatic resources.

Further, the Draft EIR does not assume or otherwise disclose that existing legally established agricultural uses on the holding would cease, or that these roads would not continue to be used in their current intensity or frequency as part of the holdings existing and ongoing agricultural operations (grazing and field crop).

The County is considering all information in the EIR, including the alternatives, before making a determination to approve the proposed project (either as mitigated or as described in one of the alternatives). See also Responses to Comments O4-17, O5-11, O5-12 and O5-36.

O4-19 The comment that the conditions requiring recirculation of the Draft EIR (pursuant to Public Resources Code Section 21092.1 and State CEQA Guidelines Section 15088.5) have not been met is noted.

O4-20 Napa County thanks Buchalter for the Draft EIR comments provided. Responses to these comments are provided in Responses to Comments O4-3 through O4-19.

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LETTER O5

June 9, 2021

Donald Barrella
Napa County Planning, Building & Environmental Services
1195 Third Street, Room 210
Napa, CA 94559

Via email: Donald.Barrella@CountyofNapa.org

RE: Draft Environmental Impact Report (EIR) for KJS & Sorrento Erosion Control Plan (ECP) #P17-00432-ECPA

Dear Don,

As the Civil Engineers and Project Manager who prepared the Erosion Control Plan (ECP) for the KJS & Sorrento Vineyard Project (#P17-00432-ECPA), we respectfully submit the following comments as they pertain to the Draft EIR prepared for the project. O5-1

1. Baseline Conditions on Property

Nearly the entire property burned in the 2020 LNU Fire Complex. The Draft EIR relies on a CEQA baseline date of September 18, 2018 when the County circulated the Notice of Preparation. This is supported by CEQA *Guidelines* § 15125, and we understand the County believes this presents a more conservative analysis in the Draft EIR. While we agree that the Draft EIR baseline analysis complies with CEQA, we believe it is important to account for post-fire conditions reflecting the fact that the property burned, as the resources that the Draft EIR assumes are present on the property may not still exist, and the conditions that the Draft EIR assumes will occur (for instance release of carbon dioxide through vegetation clearing) may have already occurred. Please see Photo 1 below for an example of the current conditions on the property after the 2020 LNU Fire Complex. Acknowledging the current status of a property post-fire has been common practice in recent Napa County CEQA documents,[1] and we request this be added to the KJS & Sorrento Draft EIR as well. O5-2

[1] See: Bloodlines Vineyard #P16-00323-ECPA Draft EIR (page 2-2); Stagecoach North Vineyard Conversion #P18-00446-ECPA Draft EIR (page 3-2)

Photo 1: Representative Conditions on the property after the 2020 LNU Fire Complex

2. Avoidance in Certain Areas is Infeasible or Results in Worsening Environmental Conditions

The Mitigated Project layout in Figure 3.3-6 did not take into account the infrastructure proposed in the ECP to ensure the Project's compliance with the County's policies requiring no-net-increase in runoff. The Draft EIR states that the Mitigated Project would remove only 21.73 gross acres from the project; this overstates the potential plantable area because the infrastructure that was impacted by the avoidance areas would need to be relocated within the remaining areas allowed to be developed or, if alternative locations could not be found, then entire blocks could not be developed. The Mitigated Project layout requires avoidance of areas that contained multiple proposed pipelines, ditches, infield diversions, and headcut repairs. The potential ramifications of these omissions are discussed in more detail below.

O5-3

2.1 Headcut Repairs

There are locations marked as "pipe outfalls/headcut repair" throughout the ECP that were engineered and included in the Hydrologic Analysis as appropriate, that have been removed from the project footprint in the Mitigated Project layout or one or both alternatives. Removing these headcut repairs from the project is shortsighted and does not actually mitigate for a project impact. In fact, removing the headcut repair as the EIR proposes in the Mitigated Project layout will allow an existing environmental problem to continue and, in some cases, could exacerbate or cause further problems to water quality and wildlife habitat.

O5-4

The locations marked as headcuts in the ECP are erosional gullies that have formed, often where swales without bed and banks convey water to a mapped stream. In those locations, most of them directly adjacent to Elder Creek, these natural headcuts are contributing to existing natural or background erosion on the property (see Photo 2 below). Runoff is already flowing to these locations and will continue to do so after implementation of the proposed vineyards. If these gullies are not repaired via the engineered solutions proposed in the ECP, then the erosion will continue. The proposed solution in the ECP is to repair and stabilize these headcuts through regrading and rock armoring. The stabilized headcuts will also be used as outlet locations for proposed stormwater pipelines since runoff is already concentrating naturally in these areas (refer to Sheets 16 – 18 of the ECP). If the headcut repairs / pipe outlets cannot be built, the following proposed blocks will be impacted and may not be feasible to construct: 23A, 23B, 23E, 24A, 24B, 24E, 24F, 33A, 33B, 33C, and 33D.

O5-4 cont.

Photo 2: Example of an existing erosional gully (headcut) that would not be repaired due to Draft EIR mitigations

Where these headcut locations fall within 100 feet of Elder Creek they are required to be avoided to provide for western pond turtle habitat. Mitigation Measure 3.3-1a includes a blanket recommendation for 100-foot setbacks from western pond turtle habitat without considering the type of project work in that location. Fortunately, the pipe outfalls and headcut repairs can occur with minimal disturbance and without direct impacts to western pond turtle or permanent impacts to its habitat, and the ECP could be revised to pull back the vineyard blocks and maintain the 100-foot setback to be in compliance with the presumed intent of this mitigation measure. Mitigation Measure 3.3-1a and Figure 3.3-6 should be revised to allow for the proposed pipeline installations and a small amount of working room for the headcut repairs, while prohibiting vineyards to be planted within the setback. The biological education, preconstruction survey, and monitoring requirements in Mitigation Measures 3.3-1b through 3.3-

O5-5

1d would still be required to ensure no direct impact to western pond turtle when work is occurring within its potential habitat, and repairing these headcuts would improve water quality over the long term thereby improving their habitat.

While in some instances (but not all) it might be feasible to move an outlet outside of the 100-foot setback area required by the Draft EIR mitigation, the runoff would then be conveyed through the same natural swales and ultimately flow to the same eroding headcuts. If the headcuts cannot be repaired and the proposed pipelines cannot be discharged in the proposed locations, large portions of the project (potentially greater than half the remaining acreage) may become infeasible, potentially rendering the entire project infeasible.

O5-5 cont.

2.2 Removed Access to Existing Pond

There is an existing pond located in the northwestern portion of the property near Blocks 29A and 29B that is currently used for stock watering. The ECP proposed modifications to the existing pond outlet structure to attenuate potential increases in runoff (refer to Sheets 11 and 19 in the ECP). As originally proposed, a network of pipes convey water from a series of existing and proposed ditches to the pond via rock aprons that would disperse concentrated flow and minimize erosion. Because some of these pipes are connected to existing roadside ditches, they are hydrologically connected to portions of Blocks 30 and 31. Mitigation Measure 3.3-1a requires avoidance of a 100-foot buffer around the pond for the protection of western pond turtle. However, restricting access to the existing pond prevents the construction of any of the proposed infrastructure in the vicinity (pipes, rock apron outlets, or upgraded outlet structure) and therefore would likely make Blocks 29A, 29B, and portions of Blocks 30 and 31 infeasible to develop. Similar to the discussion of the headcut repairs in Section 2.1 above, the mitigation measure should be rewritten to allow infrastructure items to be constructed under biological supervision to ensure that no impacts to western pond turtle occur.

O5-6

2.3 Avenue between Blocks 5C and 6

Figure 3.3-6 in the Draft EIR requires avoidance of a 30” diameter-at-breast-height (DBH) tree located in the access avenue between Blocks 5C and 6. The Draft EIR figure shows a new avenue routed south and curved around this tree to provide access to Block 6. However, constructing the avenue as shown in the Draft EIR would result in a curved alignment going across the hill and therefore significantly more grading than the original access sited straight up and down the hill as shown in the ECP The access avenue should be shifted north a few feet to preserve the tree, maintain a straight up-and-downhill avenue, and prevent the additional land disturbance and grading required by the route proposed in Figure 3.3-6.

O5-7

3. Mischaracterization of Geotechnical Evaluation and Recommendations

Impact 3.5-2 assesses whether the proposed vineyard ECP could cause substantial adverse effects due to landslides. The foundational analysis for this discussion is presented in the Engineering Geologic Investigation Report prepared by Gilpin Geosciences (2018) and included as Appendix H to the Draft EIR. Mr. Gilpin has been conducting geotechnical evaluations for

O5-8

vineyard development on this particular property for the past decade and throughout Napa County for multiple decades, and is familiar with the geology of the site and the potential impacts of vineyard development. To supplement the KJS & Sorrento ECP and at the guidance of Napa County (see Completeness Determination letter dated January 12, 2018), Mr. Gilpin evaluated the geology of the site through a combination of subsurface exploration through evaluation of test pits, geological reconnaissance mapping, and aerial photo review. He provided specific recommendations in his report which were then incorporated into the ECP:

> ***We have considered the activity of landslide deposits*** *mapped on the site during our aerial photograph review, reconnaissance mapping and landform analysis. Based on our multiple year aerial photograph review spanning 1968 to 1999 combined with our search for any indications of recent ground surface movement associated with the landslides on the site, we believe* ***the landslides are not active, and will not be adversely impacted by the proposed vineyard development****; nor will the vineyard development be impacted by the dormant landslides. Surface runoff should not be concentrated and should outlet outside of the mapped landslide onto erosion-resistant surfaces. No grading should be attempted on the landslide deposits.* ***Ripping of the vineyard blocks is acceptable for all areas except the landslide deposits where it should be limited to a depth of 24 inches.*** (emphasis added)

O5-8 cont.

Please refer to page EC-1 of the ECP for the following limitation on ripping depths to account for the recommendations provided by the expert geologist:

> d) Ripping will not occur outside of the clearing limits. The average depth of ripping will be 24" with maximum ripping depths up to 48" depending on site conditions. Ripping in Blocks 16, 19, 24G, 25 & 27 shall not exceed 24" per the Engineering Geologic Investigation.

There is a significant difference between grading, which typically involves deep excavation or recontouring of the land, and ripping, which is an agricultural practice that tills the soil to reduce compaction and generate a uniform planting medium. In Napa County, a grading permit is triggered by several different actions, including excavation resulting in a cut bank of 8 feet or fill depths exceeding 5 feet. As stated in the ECP, ripping depths will be an average of 24 inches (2 feet) deep and maximum of 48 inches (4 feet). In the blocks containing landslides, the ripping depths will be limited to 24 inches as specifically called out by Mr. Gilpin. Therefore, it is unclear how the Draft EIR comes to the conclusion that no vineyard can be planted on top of the dormant landslides, in direct contradiction to the geological expert. The geotechnical evaluation found that no grading should occur over the landslides; none is proposed. The geotechnical evaluation found that ripping must be limited to 24 inches above the dormant landslides; this is incorporated on the very first page of the ECP.

O5-9

There is no significant impact and therefore there is no reason for Mitigation Measure 3.5-2 that requires avoidance of Blocks 16, 24G, 25, and 27. The Draft EIR is requiring a mitigation measure for an impact that the Project does not actually cause. The County's proposed

mitigation measure is inconsistent with CEQA *Guidelines* § 15126.4 which states that a mitigation measure must be "consistent with all applicable constitutional requirements, including… there must be an essential nexus… and the mitigation measure must be 'roughly proportional.'" Mitigation Measure 3.5-2 meets neither criteria. These blocks should be added back into the Project and Figure 3.3-6 depicting the Mitigated Project should be adjusted accordingly.

O5-9 cont.

The Erosion and Runoff Control Condition of Approval on page 3.5-23 further incorporates the recommendations from the Geotechnical Report and states that the ECP must be revised to include them. Please note that this has already occurred and therefore this Condition of Approval is redundant and unnecessary.

O5-10

4. "Environmentally Superior Alternative" is not Superior

The Draft EIR incorrectly finds that the Alternative 2 – Reduced Vegetation Removal/Grading and Road Use Alternative is Environmentally Superior. If the totality of the allowable land uses on the property and the true ramifications of the avoidance required by Alternative 2 were disclosed, the Draft EIR would not have found Alternative 2 to be environmentally superior.

The Draft EIR discussion states this alternative will result in reduced road use, which might be true if the property were currently undeveloped but is simply not the case here. On a developed property with numerous other ongoing land uses, fewer new vineyards do not necessarily mean less road use. The existing road network on the property is legally maintained for multiple allowed land uses as well as for wildfire or other emergency access and there is no reason to suppose that these other land uses on the property would cease if this alternative were adopted as these uses are allowed under existing conditions. The entire property is grazed as stated on page 2-1 and 2-9 of the Draft EIR. The roads would continue to be used as part of the ongoing grazing operations, an allowable land use for the property's Agricultural Watershed zoning designation. The roads provide access to the existing hayfields (discussed further in Section 5.1), another allowable agricultural land use for this property zoned as Agricultural Watershed. The roads also provide critical access for CAL FIRE and local volunteer firefighters during increasingly common wildfire events. This would not change if Alternative 2 were adopted.

O5-11

Alternative 2 would also prevent the headcut repairs discussed in Section 2.1 of this letter, which would allow existing sediment discharges on the property to continue. Alternative 2 would remove the entirety of Block 15B from the project, meaning that the relocation of the existing road outside of an eroded gully would not occur. Given that the road use would continue as previously discussed, not fixing the road because this vineyard block was removed from the project would worsen existing erosion on the property. The location of this road is shown on Sheet 5 of the ECP and the proposed repair is shown on Sheet 12. It is unclear how the County chose the blocks for avoidance for this alternative given that they will not reduce road use and do not appear to minimize environmental impacts. In light of this, Alternative 1 (Reduced Intensity and Increased Setbacks) should be designated the Environmentally Superior Alternative once the issue of allowing the headcut repairs within the setback has been resolved.

O5-12

5. Deficiencies in Biological Resources Analysis

5.1 Issues with Habitat Mapping

Incorrect Mapping of Agricultural Hayfields

The biological mapping conducted for the property has not accurately characterized the active agriculture on the property. Figure 3.3-1, Figure 3.3-2, and Table 3.3-2 all mischaracterize active hayfields as "Upland Annual Grasslands and Forbs Formation". In reality, large portions of what has been mapped as grassland in Blocks 24A, 24C, and 24E are actively-farmed hayfields that are harvested annually and disked and reseeded as needed, typically every 2 – 3 years. This is acknowledged in the discussion of the Grassland habitat type on page 3.3-10 of the Draft EIR, which states that "most of the upland annual grassland in the northern portion of the development area is densely vegetated and is cultivated." These areas would be better classified as developed or agricultural lands given their highly disturbed nature. Please refer to the updated Habitat Mapping figure included with this letter and updated impact calculations provided in the table below.

O5-13

The mischaracterization of grassland habitat types is particularly relevant given that Draft EIR Table 3.3-3 and the discussion on page 3.3-27 state that burrowing owls nest in grasslands in old ground squirrel or badger burrows and that, while never observed on the property and not occurring in a 5-mile radius, all annual grassland could be habitat. The farming activities conducted in those hayfields would preclude any burrows from forming and therefore they are not burrowing owl habitat. Additional discussion of the issues around the burrowing owl analysis in the Draft EIR is presented in Section 5.2 below. Revising this mapping to reflect on-the-ground conditions would provide a more accurate discussion of biological impacts as it relates to biological communities and potential special status species' habitat.

UPDATED TABLE 3.3-5 FROM DRAFT EIR:
PROJECT IMPACTS BY BIOLOGICAL COMMUNITY

Biological Communities	Direct Impact in the Development Area (acres[1])	Total Acreage on the Project Site[2]	Percent of Total Affected on the Project Site	Direct Impact in the Development Area after Mitigation (acres[1])[3]
Upland Annual Grasslands and Forbs Formation	~~116.22~~ 90.21	~~153.2~~ 131.52	~~75.86~~ 68.75	~~99.1~~ 73.28
Purple Needlegrass Grassland	0.19	Not quantified	N/A	0
Beardless Wildrye Grassland	0.05	Not quantified	N/A	0
Blue Wildrye Grassland	0.08	Not quantified	N/A	0
Agriculture / Hayfields	27.11	145.65	18.61	27
Blue Oak Alliance	5.56	~~35.27~~ 35.43	~~15.76~~ 15.69	5.56
(Bulrush - Cattail) Fresh Water Marsh NFD Super Alliance	0.00	11.11	0.00	0.00
Chamise Alliance	0.00	85.23	0.00	0.00
Coast Live Oak–Blue Oak (Foothill Pine) NFD Association	6.54	~~165.37~~ 166.81	~~3.95~~ 3.92	5.80
Interior Live Oak–Blue Oak (Foothill Pine) NFD Association	~~20.71~~ 20.79	~~251.89~~ 253.03	~~8.17~~ 8.22	~~17.81~~ 17.89
Mixed Oak Alliance	0.71	68.77	1.03	0.71
Mixed Willow Super Alliance	0.01	4.97	0.20	0.00
Scrub Interior Live Oak– Scrub Oak (California Bay– Flowering Ash–Birch Leaf Mountain Mahogany– Toyon-California Buckeye) Mesic East County NFD Super Alliance	4.35	~~23.51~~ 23.52	~~18.5~~ 18.49	3.71
Valley Oak–(California Bay–Coast Live Oak–Walnut-Ash) Riparian Forest NFD Association	0.06	17.81	0.34	0.06
Valley Oak Alliance	0.00	0.44	0.00	0.00
Urban or Built-Up	2.64	2.64	100	2.64
Riverine	0.02	0.02	100	0.02
Water	0.00	4.95	0	0.00
Unnamed Pond	0.005	Not quantified	N/A	0
Total	**~~157.14~~**	**~~718.48~~**	**–**	**~~135.41~~**
Total	**158.09**	**951.90**		**130.87**

Notes specific to PPI Updates:

- The original Table 3.3-5 in the Draft EIR includes columns for the total acreage of each habitat type in Napa County and the percent of the total acreage in Napa County that would be impacted. We did not attempt to update these columns as we were not provided this source data from ESA.
- The original Table 3.3-5 in the Draft EIR did not include the habitat types that are not located within the clearing limits as they would not be impacted. However, in order to ensure that no data was missing and provide increased transparency for this letter, those habitat types have been added to the updated table above.

Please note that in updating Table 3.3-5 from the Draft EIR, we found numerous errors in the habitat mapping shapefiles provided by ESA. Two shapefiles were provided, one that represented the habitat mapping on the entire property as shown in Figure 3.3-1 and one that showed only the habitat types within the clearing limits as shown in Figure 3.3-2. The two shapefiles should have matched exactly everywhere inside the clearing limits, as one should have been generated by clipping from the other, and yet we found and corrected inconsistencies in the following locations: O5-14

- There is an area in Blocks 24A and 24B where interior live oak transitions to grassland habitat. There is overlap between the two shapefiles where one maps it as grassland and the other calls the same area oak woodland; the overlapping area cannot and should not be mapped as two different habitats. Based on the aerial photo showing trees in the area

in question and to be more conservative, we corrected the mapping to show it as oak woodland.

- In Block 15A, there is a small pocket where the clipping of the entire property mapping cut out a corner of interior live oak woodland, likely an issue with the computer program. We have added this area back into interior live oak woodland so there are no holes in the shapefile.
- There is nothing in the shapefile called Unnamed Pond. It is unclear how ESA generated the measurement of 0.005 acre of impact to unnamed pond in Table 3.3-5 if it is not included in the source data. We have left this in the table without change, but wanted to mention the omission in the shapefile.
- The native grassland populations overlapped with other habitat types and therefore would have been double-counted. We have updated the shapefile so that each area will only display as the correct native grassland habitat type and acreages will not be inadvertently duplicated in Table 3.3-5.
- Please note that there were several locations where an existing gravel road was incorrectly included in the impact acreage as annual grassland. While the clarifications are minimal, it should be noted that a gravel roadway is not an annual grassland and does not provide habitat as such.

O5-14 cont.

O5-15

O5-16

O5-17

O5-18

Incomplete Mapping of Native Grassland Habitats on the Property

Table 3.3-2 and Table 3.3-5 from the Draft EIR, an updated version of which is presented above, has a column titled "Acreage on the Project Site." For the three native grassland habitat types, the amount of native grasslands across the entire property is not disclosed and instead states "Not quantified." The explanation for this lack of mapping appears to be that significant areas were "mowed or grazed before the June 2018 surveys" and native grasslands were therefore unidentifiable (see page 3.3-10 of the Draft EIR). This begs the question of how were the native grasslands mapped inside of the clearing limits but were unidentifiable outside of them, given that mowing and grazing could not and did not coincide with the boundaries of the proposed vineyard blocks? Partially mapping the resources on the property implies that the level of impact to native grasslands is very high, when in reality there are likely numerous native grasslands outside of the clearing limits that the biologists did not map.

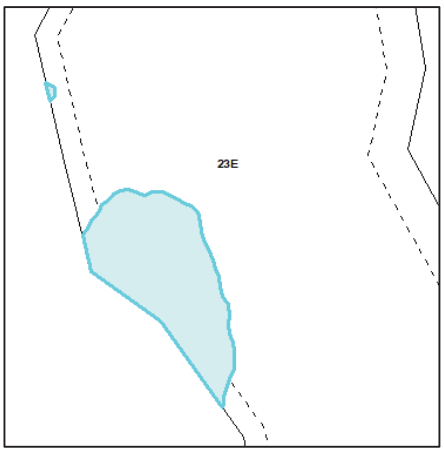
O5-19

Biological surveys were conducted on the property by numerous qualified biologists prior to the surveys conducted by ESA as part of the Draft EIR preparation. When the ECP was initially submitted to Napa County on December 14, 2017, a draft Biological Resources Assessment was submitted at that time. This draft Biological Resources Assessment included six populations of purple needlegrass on the property, several of which were located outside of the proposed clearing limits.[2] The GIS data from the draft report showing those populations of native grasslands was sent to ESA on April 2, 2018. Portions of the mapping within the clearing limits are displayed in the Draft EIR; the rest of those populations are absent from the Draft EIR discussion.

O5-20

[2] Refer to Figure 5 from the Draft Biological Resources Assessment for the KJS Investment Properties & Sorrento Inc. dated December 2017 prepared by Vinnedge Environmental Consulting.

The scale of the Draft EIR maps makes it difficult to identify where native grasslands were mapped, many of the populations being less than one one-hundredth acre in size. With the GIS shapefile data, it is possible to zoom in on the mapped native grasslands which shows they have been mapped ending at exactly the clearing limits (see snips below). It is unclear if the survey stopped at the edge of the clearing limits or if the GIS data was clipped to the clearing limits. The mapping does not appear to provide an accurate depiction of the baseline conditions on the property as they relate to the existing native grassland populations given that habitat populations typically do not end abruptly in a straight line at the edge of the project area. We request that the County revise Mitigation Measure 3.3-2a regarding 100% avoidance as further discussed in Section 5.3 below. O5-21



Beardless Wildrye Grassland (blue) stopping at the exact edge of Block 23E

Purple needlegrass (purple) clipped to the edge of Blocks 5D and 5E

Isolated Trees Are Definitionally not a Habitat Community

The Sensitive Natural Communities discussion in the Draft EIR (page 3.3-12) incorrectly notes that "oak trees within the… annual grassland" are considered a sensitive natural community. The introduction to the biological communities mapping on page 3.3-6 of the Draft EIR correctly defines a natural community as follows: O5-22

> Natural communities are assemblages of plant species that occur together in the same area and are defined by species composition and relative abundance.

These isolated oak trees are described in the Grasslands habitat types section and do not have their own section called "Isolated Oak Trees," because a single plant cannot definitionally be called a community. While these trees may provide other benefits, for instance one is noted on page 3.3-10 to be a granary tree for bird species, they are not a "sensitive natural community" in and of themselves. This is relevant because sensitive natural communities receive specific

protections by the California Department of Fish and Wildlife (CDFW) and Napa County General Plan policies.

O5-22 cont.

5.2 Special-Status Wildlife Measures are Unclear or Inappropriate

California Red-Legged Frogs

As disclosed in the species description for California red-legged frog (CRLF) that begins on page 3.3-23, focused protocol-level surveys were conducted for this species and consultation occurred with the U.S. Fish and Wildlife Service (USFWS) in 2015. As stated in the Draft EIR:

> No California red-legged frog tadpoles or adults were heard or seen during the daytime and nighttime visual encounter surveys, nor were any observed while dipnetting. USFWS concurred with the negative findings in an email dated September 9, 2015, and in a subsequent email dated February 14, 2019, and recommended that a biological monitor be present during construction activities (Appendix E).
>
> The development area provides marginal habitat within Elder Creek, given the highly scoured banks that either lack vegetation or are densely vegetated with Himalayan blackberry. However, the development area lies outside of the known geographic range for this species and protocol-level surveys resulted in negative findings. This species is unlikely to be present in the development area.

O5-23

The USFWS concurred that CRLF are unlikely to be present on the property but, out of an abundance of caution, requested that a biological monitor be present during construction activities. Mitigation Measure 3.3-1b (worker awareness training) and Mitigation Measure 3.3-1c (biological monitoring during construction) are appropriate for and in concurrence with the recommendations of the USFWS. The Draft EIR also reached the same conclusion and stated that the species is unlikely to be present in the development area. However, the Draft EIR then inappropriately claims impacts to CRLF habitat loss would be significant and lumps the discussion of CRLF into the discussion of western pond turtle habitat. The Draft EIR states that CRLF is unlikely to be on the property but then indicates this impact could be potentially significant in Impact 3.3-1. We believe the EIR may have incorrectly treated CRLF and pond turtle in one discussion.

Burrowing Owls

As discussed in Section 5.1 above, several areas mapped as annual grasslands in Blocks 24A, 24C, and 24E are actually active hayfields that are actively farmed each year, which would preclude any burrows from forming. Burrowing owls have never been observed on the property or in a 5-mile radius around the property and it is highly unlikely they would be present, but in an abundance of caution the Draft EIR recommends Mitigation Measure 3.3-1g to require preconstruction surveys of suitable habitat prior to construction.

O5-24

First, the habitat mapping needs to be clearly defined either through reclassifying the hayfields as agricultural land and therefore not annual grasslands that might provide burrowing owl habitat,

or a new figure needs to be included that identifies which areas are the potential marginal burrowing owl habitat (and the hayfields should be excluded). O5-24 cont.

Second, Mitigation Measure 3.3-1g requires clarification because it unnecessarily references CDFW's 2012 *Staff Report on Burrowing Owl Mitigation* for take-avoidance surveys. Take-avoidance surveys are required when owls are known to be present or there is potential habitat. The Draft EIR admits burrowing owls are not present and further describes the potential habitat as "marginal". Mitigation Measure 3.3-1g states that a take-avoidance survey shall occur, implying one singular survey, and then references the 2012 *Staff Report* that requires four separate surveys conducted at specific times of the year: *1) at least one site visit between 15 February and 15 April, and 2) a minimum of three survey visits, at least three weeks apart, between 15 April and 15 July, with at least one visit after 15 June*.[3] If burrowing owls had been observed or habitat was better than marginal, then a four-survey take-avoidance methodology would be warranted. This measure is extremely onerous in that it will shorten each construction window that should begin on April 1 to later than June 15 when the final survey can occur when it should not apply in the first instance. The 2012 *Staff Report* also does not require or recommend surveys be conducted 500 feet outside of the owl's habitat as written in Mitigation Measure 3.3-1g. Mitigation Measure 3.3-1g is internally inconsistent in that it requests both a singular preconstruction survey and references a guidance document that recommends four separate surveys. In this particular circumstance, given the lack of habitat and lack of owl occurrences within 5 miles, simple presence/absence preconstruction surveys should suffice as they do for nesting birds (reference Mitigation Measure 3.3-1h). O5-25

Special Status Bats

The species' descriptions on page 3.3-29 of the Draft EIR states that the bats require specific structural characteristics in order to roost in trees. Per the Draft EIR, "Roost sites consist of maternity (nursery colonies), bachelor, day, night, and feeding sites within caves, mines, cliffs, rock crevices, **tree hollows**, **stumps**, foliage, **under exfoliating bark**, and in man-made structures including buildings and bridges" (emphasis added). The Draft EIR describes the exfoliating bark and/or cavities that are required for a bat to utilize a tree as a roost, and then assumes that any tree within clearing limits that is greater than 30" diameter at breast height (DBH) must be a bat habitat tree. The Draft EIR states that "given the limited number of trees present in the annual grassland, individual trees 30 inches or greater dbh are considered suitable roosting trees for bats." We are unclear as to the basis for this conclusion. O5-26

First, a tree's size alone does not determine whether it is suitable – it requires those previously-mentioned structural characteristics. Second, there are oak woodlands throughout the property and there are likely numerous trees in those oak woodlands that might provide bat habitat. By contrast, the EIR implies that only the trees within the grasslands are potential habitat. It appears that the biologists who conducted surveys of the property for the Draft EIR did not attempt to measure the trees sizes outside of the clearing limits or check any of the trees for potential bat

[3] CDFG. 2012. *Staff Report on Burrowing Owl Mitigation*. Available online at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83843

habitat. The avoidance of the trees shown in Figure 3.3-6 for potential bat habitat should not be required as they are not known to actually provide bat habitat. Instead, the Draft EIR is requiring a mitigation measure for an impact that is not actually occurring, in violation of CEQA *Guidelines* § 15126.4 which states that a mitigation measure must be "consistent with all applicable constitutional requirements, including… there must be an essential nexus… and the mitigation measure must be 'roughly proportional.'" Without conducting a bat habitat assessment, Mitigation Measure 3.3-1i meets neither criteria.

O5-26 cont.

We request that, consistent with other recent project approvals in Napa County and elsewhere, the following CDFW-approved mitigation measure for bat habitat preconstruction surveys be adopted instead of what is currently proposed in Mitigation Measure 3.3-1i, and further request that Measure 3.3-1k is deleted entirely as it is irrelevant with the inclusion of the language below:

> **Mitigation Measure 3.3-1i:** A Qualified Biologist (defined as having demonstrable qualifications and experience with the particular species for which they are surveying) shall conduct a habitat assessment in order to identify suitable bat habitat trees within the project area(s), no more than 6 months and no less than 14 days in advance of the planned tree removal. If the habitat assessment determines that trees proposed for removal contain suitable bat habitat, the following shall apply to potential bat habitat trees:
>
> i. Tree trimming and/or tree removal shall only be conducted during seasonal periods of bat activity (August 31 through October 15, when young would be self-sufficiently volant and prior to hibernation, and March 1 to April 15 to avoid hibernating bats and prior to formation of maternity colonies), under supervision of a qualified biologist, unless Subsection ii below is implemented. Note that these windows may shift with atypical temperatures or rainfall if a qualified biologist determines that bats are likely to still be active based on seasonal conditions. Trees shall be trimmed and/or removed in a two-phased removal system conducted over two consecutive days. The first day (in the afternoon), limbs and branches shall be removed by a tree cutter using chainsaws only, under supervision of a qualified biologist. Limbs with cavities, crevices and deep bark fissures will be avoided, and only branches or limbs without those features shall be removed. On the second day, the entire tree shall be removed.
> ii. If removal of bat habitat trees must occur outside the seasonal activities identified above (i.e., between October 16 and February 28/29 of the following year or between April 16 and August 30), a qualified biologist shall conduct a pre-construction survey of all potential bat habitat trees within the project areas within 14 days of project initiation and/or tree removal to determine absence/presence of special-status bat species. Survey methods, timing, duration, and species shall be provided for review and approval by Napa County prior to conducting pre-

O5-27

> construction surveys. A copy of the survey results shall be provided to the County Planning Division and CDFW prior to commencement of work. If bats are not present, removal can proceed without using the two-phased removal method. If bats are found to be present, the qualified biologist shall determine if a maternity colony or winter torpor bats are present. If roosting bats are present but there are no maternity colonies or winter torpor bats, the tree shall be removed using the two-phased removal method outlined in Subsection i above. If the qualified biologist determines that maternity colonies or winter torpor bats are present, or they cannot confidently determine absence of maternity colonies or winter torpor bats, then tree removal shall be delayed until during the seasonal periods of bat activity outlined in Subsection i.

O5-27 cont.

Mitigation Measure 3.3-1j then requires that the ECP be revised prior to approval to show the location of 1 bat roost that must be installed for every 5 acres of oak woodland habitat that is removed. This now implies that oak woodlands themselves are bat habitat, which once again is not explained elsewhere in the Draft EIR and is not supported by the literature. Mitigation Measure 3.3-1j states that the bat roost box locations shall be mapped "near the habitat trees proposed for removal." However, as discussed above, 100% of the trees that have been incorrectly identified as bat habitat trees by virtue of their size alone are required to be avoided. Therefore, if 100% avoidance of those trees is required but we must place boxes near the removed trees, where are the bat boxes supposed to go? The Final EIR should clarify the scope and extent of this mitigation measure.

O5-28

5.3 Avoidance of Native Grasslands is not Justified

There are three native grassland types that have been identified on the property: beardless wildrye (0.05 acre), blue wildrye (0.08 acre), and purple needlegrass grassland (0.19 acre). Table 3.3-2 and Table 3.3-5 in the Draft EIR imply that the proposed project would impact the entirety of these habitat types on the property, but as discussed in Section 5.1 above the biological mapping understates the amount of native grasslands that occur on the property outside of the clearing limits. Once the habitat mapping is corrected, less than 100% of the native grasslands on the property will be impacted. Of particular note is this Draft EIR cites Napa County General Plan Policy CON-17 to justify avoidance of 100% of the native grasslands on the property. Policy CON-17 applies to native grasslands, serpentine grasslands, mixed serpentine chaparral, and other sensitive biotic communities and habitats of limited distribution, and subsection (d) requires "no net loss of sensitive biotic communities and habitats of limited distribution through avoidance, restoration, or replacement where feasible. Where avoidance, restoration, or replacement is not feasible, preserve like habitat at a 2:1 ratio or greater within Napa County to avoid significant cumulative loss of valuable habitats."

O5-29

General Plan Policy CON-17 does not require 100% avoidance and this may be the first time we have seen it applied in this manner to a project in Napa County. A combination of avoidance, restoration, and preservation at a 2:1 ratio is specifically authorized by this policy. While the list below is not comprehensive of every recent CEQA document prepared by the County, it shows

the relative consistency in which Policy CON-17 has been applied and begs the question, why has it been interpreted differently for the KJS & Sorrento Draft EIR?

- Stagecoach North Draft EIR (#P18-00446-ECPA). Impacts 3.3-1 and 3.3-2 cited Policy CON-17 and allowed for a combination of avoidance, preservation, and replanting to special-status plants and a sensitive biotic community.
- Bloodlines EIR (#P16-00323-ECPA). Impacts 4.2-1 and 4.2-5 cited Policy CON-17 and allowed for a combination of avoidance, preservation, and replanting for several sensitive resources.
- Walt Ranch EIR (#P11-00205-ECPA). Impacts 4.2-1, 4.2-3, 4.2-7, 4.2-8, and 4.2-16 cited Policy CON-17 and allowed for a combination of avoidance, preservation, and replanting for several sensitive resources. Of particular note here is Impact 4.2-1 which specifically analyzed native grasslands and interpreted General Plan Policy CON-17 to allow a combination of avoidance of existing native grasslands and enhancement of the remaining native grasslands to offset the amount impacted.
- Circle S EIR (#P06-01508-ECPA). Impacts 4.2-1, 4.2-4, and 4.2-19 cited Policy CON-17. Impact 4.2-1 was specific to grassland protection and did not require any avoidance, rather it required grazing management to enhance existing levels of biodiversity. Of all the ECP projects cited herein, this one most embodies the flexibility and discretion of the County to utilize this General Plan policy on a site-by-site basis.
- Suscol Mountain EIR (#P09-00176-ECPA). Impacts 4.2-1 and 4.2-4 cited Policy CON-17 and specifically called out the combination of avoidance and preservation at a 2:1 ratio allowed by this General Plan policy.
- Metamorphosis Wines LLC Initial Study (#P18-00275-ECPA). Mitigation Measure BR-1 requires avoidance and preservation of 68% (a 2:1 ratio) of the special status species' habitat, specifically citing Policy CON-17.

O5-29 cont.

We request that the County revise Impact 3.3-2 for native grasslands, first by revising the mapping to provide an accurate depiction of the resources occurring on the property. Then, the discussion should explain that Policy CON-17 allows for a combination of avoidance, restoration, replacement, or preservation at a 2:1 ratio to offset impacts. To comply with Policy CON-17, 33% of the native grasslands can be impacted and 67% must be preserved or enhanced. Policy CON-17 has never before been cited to require 100% avoidance and no evidence has been provided in the Draft EIR to say why it is being applied differently here. Furthermore, Mitigation Measure 3.3-2a requires that a 50-foot buffer be applied around all avoided populations of native grasslands. Once the mitigation is updated to allow some combination of impact and avoidance, the buffer should also be reduced for the avoided populations from 50 feet to 10 feet. A buffer of 10 feet was required in Mitigation Measure 4.2-1 of the Walt Ranch EIR and is known to be sufficient for these native grasses that are used to and tolerant of disturbance. Native grass species are often used in landscaping and in bioswales due to their ability to tolerate disturbance and provide filtration benefits. Nothing has been provided in the KJS & Sorrento Draft EIR to explain why a larger buffer is necessary for these populations; if no such justification exists, the buffer should be reduced to 10 feet to be consistent with other recent EIRs in the County.

O5-30

5.4 High Visibility Construction Fence is Wasteful and Unnecessary

The installation of high-visibility construction fencing is inappropriately referenced in several mitigation measures in the Draft EIR: Mitigation Measure 3.3-1f (Swainson's hawk), 3.3-1i (bat habitat trees), 3.3-1k (bat habitat trees), 3.3-2a (native grasslands), and 3.3-3b (waters of the U.S.). High-visibility construction fencing refers to the orange plastic netted fencing often seen around highway or building construction sites. It has not been required by Napa County or used on any of our agricultural projects due to the wastefulness of installing such a large amount of single-use plastic.

For background, when an ECP is approved in Napa County the engineering firm is required to stake the outer boundaries of the vineyard ECP prior to construction. Wooden lath with brightly colored flagging tied to each lath is used to demarcate the clearing limits. Where there are sensitive resources present or the County explicitly requires it, often for the protection of stream setbacks or driplines of protected trees, the wooden lath is placed closer together and the flagging is strung between the lath to create a barrier. The County inspects the flagging prior to the commencement of construction. This is standard operating procedure for the County, for PPI Engineering, and for local agricultural contractors, so why is the KJS & Sorrento Draft EIR requiring something different? The difference between one thin line of plastic flagging and a waist-high, thick plastic orange fence is an immense increase in the amount of plastic required for a temporary use. No evidence has been provided in the Draft EIR signifying why the common practice protocols will be insufficient for this property. The specific references to high-visibility construction fencing should be updated in the Final EIR to "construction flagging or other methods acceptable to Napa County." O5-31

5.5 Wildlife Entrapment Risk

Numerous measures in the Draft EIR require avoidance of all or portions of vineyard blocks, and Figure 3.3-6 in the Draft EIR includes a mitigated deer fence layout around the Mitigated Project footprint. The total length of the mitigated deer fence is ±78,800 feet whereas the original proposed deer fence was ±19,500 feet, representing a four-times increase in the amount of fencing that would be required. This large increase in the amount of fencing greatly increases the cost of project construction, but more importantly the mitigated deer fence required by Mitigation Measure 3.3-4 creates wildlife entrapment risk and undermines the County's goal of improving wildlife movement corridors. O5-32

Figure 3.3-6 does not depict the existing deer fence in the vicinity and therefore does not accurately portray existing or proposed site conditions. There are several existing deer fences that surround the existing vineyard blocks and bisect the property that are not shown and make it such that there is no existing wildlife movement corridor as depicted on Figure 3.3-4. As mentioned above, Figure 3.3-6 does not show this existing fence, creating the impression that a wildlife corridor is present that does not actually exist.

There are several locations where the mitigated deer fence does not meet its goal of creating a usable wildlife corridor. PPI Engineering has included with this letter an alternative mitigated deer fence layout that includes blocks fenced individually and in clusters, and we believe minimizes the potential impact to wildlife movement to less-than-significant levels while balancing the total amount of fencing required. Wildlife corridors are important to create linkages between open space for wildlife to move through the landscape. Shown on this figure are several areas where the Draft EIR mitigated fence layout creates dead-end corridors that increase the risk of wildlife entrapment. Of particular note are the corridors on the west side of Blocks 24C, 24D, 24E, and 24F. The mitigated fencing layout creates narrow corridors that would funnel animals up to a dead end and then force animals to completely turn around to get out of these corridors. There are similar problems between Blocks 23E and 23F, Blocks 20A and 20B, and Blocks 9C and 9D and an existing fence. The alternative proposal included with this letter still creates linkages between open space throughout the property to minimize potential impacts to wildlife movement, while minimizing entrapment risk and the total amount of fencing required.

O5-32 cont.

6. Unwarranted Air Quality Mitigation

Impact 3.2-1 measures the potential for the project to exceed the Bay Area Air Quality Management District (BAAQMD)'s significance threshold for construction emissions. As discussed in the Draft EIR, the BAAQMD provides emissions thresholds for projects falling within this air quality basin. The BAAQMD provides a significance threshold for construction emissions of nitrous oxides (NOx) of 54 lbs/day; if a project exceeds this, it would be a significant impact requiring mitigation. The air quality modeling for the proposed project estimated that construction emissions would be 54 lbs/day of NOx; as shown in Table 3.2-5 of the Draft EIR, the project does not exceed the significance threshold. It is unclear why the Draft EIR then finds this to be a significant impact requiring Mitigation Measure 3.2-1a.

O5-33

The air quality modeling was conducted for the entire 156.8-gross acre clearing limits. After other mitigation measures in the Draft EIR require a reduction of the clearing limits, it is likely that the runtime of the estimated construction equipment may decrease thereby decreasing the projected emissions below the significance threshold. Tier 3 construction equipment will be used for the project and is not anticipated to be problematic, however Mitigation Measure 3.2-1a requires a written list of construction equipment be submitted to the County before construction can begin, and waiting on approval could delay construction which is not warranted based on the outcome of the air quality modeling. The modeling did not show an exceedance of BAAQMD's significance threshold and therefore this is not a significant impact. Similar to the issues with Mitigation Measure 3.5-2 (geologic stability) and Mitigation Measure 3.3-1i (special-status bats), Mitigation Measure 3.2-1a is not mitigating for an impact that has been found to be significant. This violates CEQA *Guidelines* § 15126.4 which states that a mitigation measure must be "consistent with all applicable constitutional requirements, including… there must be an essential nexus… and the mitigation measure must be 'roughly proportional.'" Mitigation Measure 3.2-1a should be removed from the Final EIR.

O5-34

7. Overstated Development Assumptions in the Cumulative Environment

CEQA *Guidelines* states that the "following elements are necessary to an adequate discussion of significant cumulative impacts: 1) Either a list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency, or B) A summary of projections contained in an adopted local, regional or statewide plan…" (CEQA *Guidelines* § 15130(b)). The list of past, present, and reasonably foreseeable future projects is the foundation for an accurate cumulative analysis, as it enables the lead agency to measure a project's incremental contribution to a cumulative impact against the backdrop of the size and scope of the other projects in the cumulative environment.

To that end, the list of cumulative ECP projects presented in Table 4-1 of the Draft EIR overstates and inaccurately portrays the Erosion Control Plans in a three-mile radius. Several of the plans listed in Table 4-1 are actually vineyard replant ECPs and do not reflect new vineyard development. Some of the ECPs are duplicated, and others had acreages that did not match with what was approved in the ECP we found in the County database. Therefore, the total acreage of development in Table 4-1, which is then used to extrapolate the future probable vineyard development acreage for the cumulative environment, overstates the actual level of impact in the area. O5-35

Below please find an updated Table 4-1 intended to correct the discussion of the cumulative environment. In order to present a more conservative analysis, we only updated Table 4-1 to remove an ECP if we could find definitive evidence that it was a replant or duplicate plan on the County's document database. If we could find no evidence or the documents were not available electronically (which occurred more often for older plans), then we assumed that it was a new vineyard and left the acreage in the calculation. Some ECPs included replant and new vineyard in the same plan, and for those we updated the table below to only reflect the new vineyard. New text is shown in underline and deleted text is shown in ~~strikethrough~~.

TABLE 4-1
CUMULATIVE EROSION CONTROL PLAN PROJECTS LIST WITHIN 3 MILES OF THE PROPOSED PROJECT (1993-2020)

Number	Date Approved	Applicant Name	Vineyard Development Acres	Number	Date Approved	Applicant Name	Vineyard Development Acres
1993403	March 25, 1994	James Bushey	~~42~~ 44	200900161	July 6, 2009	Mary Ann Gilson – Replant ECP	~~11~~ 0.0
1994295	May 18, 1995	Napa Valley Vineyard Engineering – Replant ECP	~~12.4~~ 0.0	201100114	March 31, 2011	Stagecoach Vineyards – Replant ECP	~~106.8~~ 0.0
1995126	October 14, 1995	Christina Vineyards – Replant ECP	~~13~~ 0.0	201100454	February 14, 2012	Sorrento Inc. – Replant ECP	~~23.9~~ 0.0
1996512	March 25, 1997	Patrick Kuleto	22	201200116	April 12, 2012	Somerston Vineyards – Replant ECP	~~8.5~~ 0.0

Number	Date Approved	Applicant Name	Vineyard Development Acres	Number	Date Approved	Applicant Name	Vineyard Development Acres
1997157	October 20, 1997	Jeffrey Gwinn	28	201300021	June 6, 2013	Fingerman	3
1997600	August 7, 1998	Priest Ranch–Orion Vineyards	~~20.56~~ 21.6	201500132	May 4, 2015	Sorrento Inc. & KJS Investment Properties LLC – Replant ECP	~~30.6~~ 0.0
1996586	November 9, 1998	Stagecoach Vineyards	116	201500131	May 4, 2015	Sorrento Inc. & KJS Investment Properties LLC – Replant ECP	~~30.3~~ 0.0
1997544	March 5, 1999	Patrick Kuleto – Master ECP	~~19.29~~ 0.0	201500256	September 2, 2015	Somerston Vineyards – Replant ECP	~~31.1~~ 0.0
2000078	August 18, 2000	Chappellet Vineyard – Replant ECP	~~53~~ 0.0	201500132	May 4, 2015	Sorrento Inc. & KJS Investment Properties LLC – Duplicate on List	~~30.6~~ 0.0
1998240	August 3, 2001	Montesole/Priest	12.21	201500227	February 22, 2016	Phillip Sunseri	3.78
2001147	December 10, 2001	Lynch Ranch LLC – Replant ECP	~~15.01~~ 0.0	201600185	June 10, 2016	Somerston Vineyards – Replant ECP	~~2.9~~ 0.0
2002152	May 29, 2002	Barbour Vineyards – Replant ECP	~~39.29~~ 0.0	201700257	July 19, 2017	Sage Creek Vineyard ECP **Replant II**	~~37.35~~ 0.0
01126	August 23, 2002	Greg Mountain Ranch LLC	~~3.3~~ 5.7	201700285	August 3, 2017	Sage Canyon **Track II Replant**	~~11.9~~ 0.0
2003490	August 23, 2005	Don DeCristo	1.4	201700242	August 15, 2017	Capra Company Track I **Replant**	~~71.84~~ 0.0
20050359	May 5, 2006	Priest Ranch	12.3	201600337	September 27, 2018	Phelan Ranch	18.6
2000399	June 23, 2006	George Noble – Replant ECP	~~5.06~~ 0.0	201900063	March 25, 2019	Gallo/Stagecoach Vineyards – Replant ECP	~~10.6~~ 0.0
200601143	August 11. 2006	Kuleto Estates – Modification to #97544 (above)	~~6.5~~ 0.0	201900500	January 27, 2020	Somerston Vineyards – Replant ECP	~~15.9~~ 0.0
2003522	March 8, 2007	Jacquelyn Joy Cordes	24	201800446	Pending	Gallo Stagecoach North	116.2
200700394	July 17, 2007	Somerston Vineyard – Replant ECP	~~28.9~~ 0.0	202000220	Pending	Prince Track I **Replant**	~~41.3~~ 0.0
200700030	June 4, 2008	De Cristo Vineyard	0	**Total: 429.0**			

8. The Requested Revisions do not Trigger EIR Recirculation

In this letter, we have pointed out numerous subjects requiring minor revisions and clarification in the Final EIR. As discussed above, the Draft EIR overstated several impact conclusions and mitigation was provided that was not necessary to minimize a significant impact (refer to Section 3, Section 5.2, Section 5.3, and Section 6 of this letter). In this instance, the majority of the comments presented in this letter show that the impacts in the Draft EIR were actually less significant than initially stated, not more significant (see impact assessment for geologic stability

O5-36

and air quality). Although several locations of avoidance may be infeasible or impractical (see the headcut repairs discussion above), the project proponent is agreeing to the mitigation with certain minor revisions. Once the totality of the native grasslands are mapped and displayed on the property the proportional impacts will be reduced, not increased. None of the requested revisions or clarifications would require recirculation because the Project impacts will remain less than significant.

O5-36 cont.

We strongly encourage the County as Lead Agency to update this EIR through its response to comments procedure, and look forward to reviewing the final EIR.

O5-37

Thank you for your consideration of, and attention to, the above matters.

Sincerely,

James R. Bushey, P.E.
President

Matthew S. Bueno, P.E.
Engineering Manager

Annalee Sanborn
Project Manager

Attachments:

Updated Habitat Map (and shapefiles)
Deer Fence Figure (and shapefiles)

N
W E
S

Feet
0 450 900 1,800

Legend

- Project Site
- Proposed Clearing Limits
- Proposed Block Boundaries

Habitat Type

- (Bulrush - Cattail) Fresh Water Marsh NFD Super Alliance
- Agriculture
- Blue Oak Alliance
- Interior Live Oak - Blue Oak - (Foothill Pine) NFD Association
- Mixed Oak Alliance
- Upland Annual Grasslands & Forbs Formation
- Beardless Wildrye
- Blue Wildrye Grassland
- Purple Needlegrass Grassland
- Chamise Alliance
- Coast Live Oak - Blue Oak - (Foothill Pine) NFD Association
- Mixed Willow Super Alliance
- Riverine
- Scrub Interior Live Oak - Scrub Oak - (California Bay - Flowering Ash - Birch Leaf Mountain Mahogany - Toyon - California Buckeye) Mesic East County NFD Super Alliance
- Urban or Built-up
- Valley Oak - (California Bay - Coast Live Oak - Walnut - Ash) Riparian Forest NFD Association
- Water

2018 Napa County Aerial Photo

PPI ENGINEERING
2800 Jefferson Street
Napa, CA 94558
(707) 253-1806

KJS Investment Properties & Sorrento Inc.
Habitat Map

June 2021

N
W E
S

0 350 700 1,400 Feet

Legend

- Dead End Corridors
- Draft EIR Wildlife Exclusion Fence (78,791.3 ft)
- PPI Proposed Mitigated Deer Fence (57,445.1 ft)
- Existing Deer Fence (Approximate Location)
- Migated Block Boundaries
- Mitigated Clearing Limits
- Areas Removed from Project
- Approximate Property Line

2018 Napa County Aerial Photo

Fence not needed

Fence not needed

Note: Additional existing deer fence is not displayed on this map but may be in the vicinity.

Source: Esri, Maxar, GeoEye, E
and the GIS User Community

PPI ENGINEERING
2800 Jefferson Street
Napa, CA 94558
(707) 253-1806

KJS Investment Properties & Sorrento Inc.
Deer Fence Map

June 2021

8:37:50 AM 6/2/2021 P:\SOMERS\Images\DEIR\Deer Fence Map.mxd

Letter O5	**James R. Bushey, P.E., President; Matthew S. Bueno, P.E., Engineering Manager; Annalee Sanborn, Project Manager, PPI Engineering**
Response	June 9, 2021

O5-1 Napa County thanks PPI Engineering for the Draft EIR comments provided.

O5-2 See Chapter 2, *Revisions to the Draft EIR*, for text that was added to Draft EIR Section 3.1, *Introduction to the Analysis*, to note that the 2020 LNU Fire Complex burned the property. No change in the baseline date for conducting the assessment of environmental impacts was made in response to the comment.

O5-3 The only infrastructure and earth-moving activities permitted outside mitigated project boundaries would be those associated with repairs to existing features that are sediment sources and/or threats to water quality[6]. Infrastructure necessary for the proposed blocks/project to meet the no net increase in runoff consistent with General Plan Policy CON-48, should be located within the mitigated proposed project footprint. Mitigation Measure 3.3-1d states that a qualified biological monitor shall directly supervise all vegetation clearing, earth-disturbing activities and infrastructure installation occurring within 492 feet of suitable aquatic habitat for western pond turtle, California red-legged frog, and foothill yellow-legged frog (see Chapter 2, *Revisions to the Draft EIR* and Chapter 4, *Mitigation Monitoring and Reporting Program*).

O5-4 As stated in Response to Comment O5-3, repairs to existing features that are sediment sources and/or threats to water quality, such as the headcut repairs referenced in the comment, would be allowed under the project.

O5-5 Mitigation Measure 3.3-1a states that Erosion Control Plan #P17-00432-ECPA shall be revised before approval to reduce the footprint of the proposed vineyard blocks surrounding Elder Creek and the unnamed pond. As stated in Response to Comment O5-3, repairs to existing features that are sediment sources and/or threats to water quality, such as the headcut repairs referenced in the comment, would be allowed under the project.

O5-6 See Response to Comment O5-3. To the extent the infrastructure would repair existing features that are sediment sources and/or threats to water quality, they would be allowed under the project. Mitigation Measure 3.3-1d states that a qualified biological monitor shall directly supervise all vegetation clearing, earth-disturbing activities and infrastructure installation occurring within 492 feet of suitable aquatic habitat for western pond turtle, California red-legged frog, and foothill yellow-legged frog (see Chapters 2 and 4).

6 NCC Section 8.108.120 - Existing erosion control. No person shall cause or allow the continued existence of a condition on any site that is causing substantial erosion or runoff due to human-induced alteration of the vegetation, land surface, topography, or runoff pattern.

O5-7 A southern alternative route between proposed Blocks 5C and 6 was suggested due to the large number of trees to the north of the original access avenue, as shown on the aerial in Draft EIR Figure 3.3-6. The County is amenable to shifting the avenue and a new straight southern alternative route is shown in revised Figure 3.3-6; see Chapter 2, *Revisions to the Draft EIR*. The location and configuration of this access avenue avoids the 30 inch oak tree, and avoids or minimizes any encroachment into the tree's dripline to the maximum extent practical.

O5-8 See Response to Comment O2-2. Draft EIR Impacts 3.5-2 and 3.5-4 have been revised to allow development in proposed vineyard Blocks 16, 24G, 25, and 27, with ripping in the area of mapped landslide deposits limited to a depth of 24 inches (see Chapter 2, *Revisions to the Draft EIR*). This changes the mitigated proposed project acreage to 141.72, instead of 135.41 acres as described in Draft EIR Table 3.3-5, *Project Impacts by Biological Community*. Note that buffers to protect biological resources identified in these areas still apply. See also Response to Comment O4-14.

These areas were also added back to the Reduced Intensity and Increased Stream and Wetland (Aquatic Resource) Setbacks Alternative. Block 24G was added back to the Reduced Vegetation Removal/Grading and Road Use Alternative, and Blocks 16, 25, and 27 remain excluded from the Reduced Vegetation Removal/Grading and Road Use Alternative due to the isolated/minimal vineyard areas created in those areas when combined with other buffers to protect biological resources.

O5-9 See Response to Comment O5-8.

O5-10 The Erosion and Runoff Control Conditions of Approval listed on Draft EIR page 3.5-23 were removed as they are listed in the erosion control plan, as stated in the comment. See Chapter 2, *Revisions to the Draft EIR*.

O5-11 As stated on Draft EIR page 5-13, the Reduced Vegetation Removal/Grading and Road Use Alternative reduces blocks and block configurations as compared to the proposed project to limit vegetation removal and grading, including vegetation removal and grading necessary to improve and upgrade roads for areas that contain minimal vineyard development. Because this alternative would reduce the proposed increase in intensity and frequency of use placed on existing roads that are utilized for the proposed project, as compared to grazing and field crop operations, increased vegetation removal and grading necessary to upgrade these roads to effectively develop and operate these vineyard areas would be reduced, as compared to the proposed project.

Further, the Draft EIR does not assume or otherwise disclose that existing legally established agricultural uses on the holding would cease, or that these roads would not continue to be used in their current intensity and frequency as part of existing and ongoing agricultural operations (grazing and field crop).

The County is considering all information in the EIR, including the alternatives, before making a determination to approve the proposed project (either as mitigated or as described in one of the alternatives). See also Responses to Comments O4-18 and O5-12.

O5-12 The comment is noted. As stated in Response to Comment O5-3, repairs to existing features that are sediment sources and/or threats to water quality would be allowed under the project. The County determined blocks for avoidance under this alternative based on the remoteness of the proposed blocks and the level of disturbance that would be required to develop and operate vineyard, including necessary access road improvements and ongoing maintenance to effectively develop and operate these blocks, in addition to block and access proximity to aquatic resources for minimal and fragmented vineyard development.

Further, adoption of this alternative would not prevent the headcut repairs discussed in Section 2.1 of this comment letter. Pursuant to NCC Section 18.108.120 (Existing erosion control), '*No person shall cause or allow the continued existence of a condition on any site that is causing substantial erosion or runoff due to human-induced alteration of the vegetation, land surface, topography or runoff pattern*'; therefore, this headcut would ultimately need to be addressed regardless of the proposed project, or approval or denial thereof.

O5-13 The landcover/biological community mapping presented in the Draft EIR was based on extensive botanical surveys conducted in April and June 2018. The determination of the classification of areas as Upland Annual Grasslands and Forbs Formation was made based on the observation of dominant vegetative cover by nonnative annual grassland forbs. Some areas of the development area were mowed or heavily grazed prior the June 2018 surveys to the extent that the majority of the herbaceous species were unidentifiable.

The comment states that large portions of what was mapped as grassland in proposed vineyard Blocks 24A, 24C and 24 E are actively farmed hayfields and states that a mischaracterization of hayfields as annual grassland may overstate the potential for burrowing owls to be present. Burrowing owls could be present in both actively farmed hayfields and annual grassland areas because California ground squirrels can dig burrows within or along the margins of such areas, which opens the opportunity for burrowing owls to be present. As such, whether or not certain polygons were mapped as upland annual grassland or agricultural-hayfields would not substantively change the Draft EIR analysis regarding the project's anticipated effects on burrowing owls or Mitigation Measure 3.3-1g.

O5-14 The data sources of the habitat mapping for Draft EIR Figures 3.3-1 and Figure 3.3-2 are different and therefore the two shapefiles should not match exactly within the clearing limits, as stated in the comment. Figure 3.3-1 was generated based on Napa County's

county-wide vegetation mapping classifications used to assess vegetation types within the evaluation area as compared to county-wide numbers. Figure 3.3-2 was generated based on landscape-level mapping enhanced with fine-scale mapping based on the biological resources field surveys, other source data for sensitive resources (e.g., waters and sensitive plants), and aerial imagery reviewed by the biologist. As such, some discrepancies are expected between the mapping provided in Draft EIR Figures 3.3-1 and 3.3-2 as they were developed for different purposes.

O5-15 The comment is noted. The GIS layers used to develop the figures for the Draft EIR were reviewed and no clipping error as noted in the comment was found.

O5-16 The GIS layers used to develop Draft EIR Figure 3.3-2 show the pond features mapped within the project site. The unnamed pond feature referenced in the comment totals approximately 0.43 acre in the GIS files. The estimated less than 0.005 acre (approximately 218 square feet) of impact area in the unnamed pond for construction of a spillway berm and overflow structure was approximated from Details 1 and 2 in Sheet 19 of the erosion control plan (Draft EIR Appendix A). Further, the estimated 0.005 acre area was identified and disclosed on pages 3-8 and 4-3, and Table 2 (Project Impacts by Biological Community) of the project's Biological Resources Reconnaissance Survey Report (Appendix E of the Draft EIR).

O5-17 The comment is noted. The GIS layers were carefully examined based on the comment, and it was determined that no "double counting" of native grasslands occurred. The mapping of these native grassland areas was kept separate from the general grassland layer. The totals provided in Draft EIR Table 3.3-5, *Project Impacts by Biological Community*, regarding Direct Impact in the development area were checked by re-clipping the data in the GIS program, and the numbers matched. Therefore, no revisions in the acreage values in the table were deemed necessary.

O5-18 The comment is noted. The areas within the development area were mapped at a landscape level, except for instances when sensitive natural communities and/or special-status species were identified during the biological field surveys. However, fine-scale mapping of roads would not contribute to changes in the mitigation measures or CEQA impact analysis for biological resources in the Draft EIR.

O5-19 The focus on mapping of native grasslands was limited to the areas of the project site that would be developed with the proposed project, since this is the area of focus for the Draft EIR's impact analysis. The equivalent effort was not conducted to identify native grasslands for areas within the rest of the project site that were not planned for development. Footnote 2 in Draft EIR Tables 3.3-2 and 3.3-5 acknowledges that the project site outside of the development area contains other communities that are not included in the tables. Mapping out each population of annual grassland within the project site in areas that would be avoided would not change the impact analysis or

affect the mitigation measures in the Draft EIR, so the existing analysis is considered to be adequate.

O5-20 The focus of the biological resources mapping for the Draft EIR was on areas of the project site that would be developed with the proposed project. Purple needlegrass on the project site outside of the development area would not be affected by the proposed project and would not change the impact analysis or affect the mitigation measures in the Draft EIR, so the existing analysis is considered to be adequate.

O5-21 The habitat layer in the Draft EIR was clipped to the clearing limits layer (i.e., development area) as comprehensive mapping of annual grasslands in areas of the project site outside the clearing limits did not occur, and the mapping of native grasslands was limited to within the clearing limits, as is observed in the comment. See also Response to Comment O5-19. See Response to Comment O5-30 regarding Mitigation Measure 3.3-2a.

O5-22 Oak trees are commonly interspersed in areas dominated by annual grassland vegetation in the understory. As such, a mosaic of oak woodland and annual grassland is often mapped within the landscape. The consideration to include “oak trees within the mixed oak woodland and annual grassland” reflects the County’s approach to consider mapping of mixed oak woodlands at a more landscape level. See also Response to Comment O4-9.

O5-23 The determination that impacts on California red-legged frogs were significant prior to mitigation is because of the mitigation recommended in response to USFWS consultation on the proposed project. Mitigation measures under CEQA are developed to address impacts determined to be significant or potentially significant (before implementation of any mitigation measures). A determination concluding that the impact on California red-legged frogs without any mitigation would be less than significant would mean that there would be no need for any further mitigation required for protection of California red-legged frogs based on the CEQA analysis. As stated in Response to Comment O4-11, while USFWS acknowledged that California red-legged frogs are unlikely to be present, they did recommend that a biological monitor be present during construction. The mitigation language pertaining to California red-legged frogs and western pond turtles was combined in the Draft EIR Impact 3.3-1 because the preconstruction surveys would need to be conducted by a qualified biologist familiar with amphibian/reptile species that can be found within the project site (e.g., a herpetologist or general wildlife biologist), and an approximately 500-foot survey distance for California red-legged frogs is appropriate.

O5-24 The areas that are mapped as annual grasslands do encompass areas that are cultivated, as described on Draft EIR page 3.3-10, especially those areas that are located in the northern portion of the development area. The Draft EIR text acknowledges that cultivated areas are generally less suitable as burrowing owl habitat.

However, areas managed as agricultural land do provide habitat for burrowing owl, as in some areas, agricultural areas are the places where burrowing owls are most commonly observed; see also Response to Comment O5-13. As such, the existing analysis regarding burrowing owl is adequate.

O5-25 Mitigation Measure 3.3-1g has been updated. See also Response to Comment S1-3 and Chapter 2, *Revisions to the Draft EIR* and Chapter 4, *Mitigation Monitoring and Reporting Program*.

O5-26 No changes were made to Mitigation Measure 3.3-1i in response to the comment; however, Mitigation Measure 3.3-1k has been updated. As documented on Draft EIR page 3.3-11, trees greater than 30 inches diameter at breast height (dbh) provide high quality habitat for wildlife species and often provide the structural components conducive to utilization by roosting bats including exfoliating bark, crevices, and cavities. See also Response to Comment S1-4 and Chapters 2 and 4.

O5-27 Mitigation Measure 3.3-1k, preconstruction surveys for bats, has been updated. See Response to Comment S1-4 and Chapters 2 and 4.

O5-28 Potential bat roosting habitat would be removed as a result of oak woodland conversion, as described on Draft EIR page 3.3-60. The roost boxes referenced in Mitigation Measure 3.3-1j would be placed in areas where potential bat roosting trees would be removed. This mitigation measure would be implemented to address the loss of potential bat habitat trees (i.e., trees that could be utilized by bats) and is independent of whether those trees are actually being used by bats for roosting, which is addressed in Mitigation Measure 3.3-1k.

O5-29 The comment is noted. General Plan Policy CON-17 requires no net loss of sensitive biotic communities and habitats of limited distribution through avoidance, restoration, or replacement where feasible (Draft EIR page 3.3-38). The County, in its discretion, may require mitigation that results in avoiding the removal or disturbance of sensitive natural plant communities that contain special-status plant species, and mitigation is allowable where avoidance is infeasible. Given the overall limited distribution of the native grasslands, the existing approach outlined in the Draft EIR is considered appropriate in order to protect the small pockets of native grasslands and remain in compliance of General Plan Policy CON-17. The commenter also has not identified why complete avoidance is infeasible.

O5-30 See Responses to Comments O5-13, O5-17, and O5-19 regarding the mapping of grasslands on the project site. See Response to Comment O5-29 regarding General Plan Policy CON-17. The 50-foot buffer was identified in Mitigation Measure 3.3-2a to ensure that the native grasslands are fully avoided. No information has been provided to indicate that the 50-foot buffer as proposed would be infeasible to implement. As such, no change to the grassland buffer distance listed in Mitigation Measure 3.3-2a was made.

O5-31 The County will require the installation of high visibility demarcation fencing around aquatic and biological resources (e.g., Swainson's hawk nests, potential bat roost tree to be avoided, around native grasslands, and around jurisdictional water features and riparian areas proposed for avoidance), and mitigation areas, as described in Mitigation Measures 3.3-1f, 3.3-1i, 3.3-2a, and 3.3-3b. Such fencing will be inspected by the County prior to any commencement of vegetation removal and earth-disturbing activities as described in the mitigation measures; see also Response to Comment I4-2.

In other areas, other forms of demarcation may be installed (e.g., stakes, flagging, etc.) as deemed appropriate by the County.

With respect to Mitigation Measure 3.3-1k, as discussed in Response to Comment S1-4, this mitigation measure has been revised as a result of CDFW's comment and recommended language, which resulting in fencing no longer included in Mitigation Measure 3.3-1k. See Chapter 2, *Revisions to the Draft EIR* and Chapter 4, *Mitigation Monitoring and Reporting Program*.

O5-32 Draft EIR Figure 3.3-6 has been amended to incorporate the suggested changes to wildlife exclusion fencing configuration to minimize the potential impact on wildlife movement conditions. See Chapter 2, *Revisions to the Draft EIR.*

O5-33 Construction emissions estimates were revised for the proposed project (development of 111.5 acres of vineyard within approximately 156.8 acres) using an updated construction schedule (from 2021–2023 to 2022–2024, on Draft EIR page 3.2-24, since the original timeframe has passed). With this update, all criteria pollutant emissions would be less than their respective BAAQMD significance thresholds. This is because emissions factors for criteria air pollutants for future years reduce in the model due to gradual fleet turnover resulting in newer construction equipment and vehicles with lower emissions, retiring of old high polluting equipment and more stringent emission standards for new equipment and vehicles. Though the fleet-wide emissions factor would only change incrementally between 2021-2023 and 2022-2024, that change was enough to reduce NOx emissions to below the BAAQMD's significance threshold (since it was previously at the threshold in the Draft EIR analysis). Based on the revisions, Impact 3.2-1 would be less than significant and Mitigation Measure 3.2-1a is no longer needed; see Chapter 2, *Revisions to the Draft EIR*. Draft EIR Table 3.2-5 has also been updated with the construction emissions associated with the revised mitigated project (development of approximately 141.72 gross acres [97.69 net acres] of vineyard), as described in Response to Comment O2-2. See also Responses to Comments O4-6 and I1-1.

O5-34 See Response to Comment O5-33 above. Draft EIR Table 3.2-5 has been updated with the construction emissions associated with the revised mitigated project (development of approximately 141.72 gross acres [97.69 net acres] of vineyard) as described in Response to Comment O2-2. See also Responses to Comments O4-6 and I1-1.

O5-35 The data provided in Table 4-1 in Draft EIR Section 4.1, *Cumulative Impacts*, to disclose new vineyard development in the cumulative environment included replanting plans and modifications to ECPAs that added no new vineyard acreage. These replanting plans and modifications were inadvertently not removed from the cumulative environment accounting; this resulted in an overly conservative total of vineyard development in the cumulative environment. The table has been revised in Chapter 2, *Revisions to the Draft EIR*, to exclude replanting plans and ECPA modifications that did not add new vineyard, providing a more accurate account of new vineyard development post-1993; these data and associated corrections were corroborated in conjunction with Napa County GIS Division analysis.

O5-36 The comment is noted. See also Response to Comment O4-18.

O5-37 Napa County thanks PPI Engineering for the Draft EIR comments provided.

Barrella, Donald

From: ruralangwin <kelliegato@gmail.com>
Sent: Tuesday, June 8, 2021 12:12 PM
To: Barrella, Donald
Cc: Morrison, David
Subject: Hyperion Vineyard DEIR P17-00432- ECPA

[External Email - Use Caution]

to me

Dear Mr. Barrella,

Please accept my comment on the Hyperion Vineyard DEIR #17-00432- ECPA included in this email.

The Mitigation offered to reduce emissions during construction from vehicle and equipment tail pipes to a **level of less than significant are infeasible.** Table ES-2 lists a summary of impacts and mitigation measures. Yet the mitigations offered in Table ES-2 to reduce the impacts to less than significant are **demonstrated by active vineyard development to be infeasible, are not occuring and/or are not being enforced by County Staff**: I1-1

1. *All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition before operation.* I1-2
(How is this verified by staff over the course of the project? What is a Certified Mechanic?)

2. *Construction equipment used in project construction shall meet Tier 3 Final standards to reduce emissions of NOX. Before initiation of vegetation removal, grading and earth-disturbing activities associated with any project phase, the owner/permittee shall submit to Napa County a construction equipment list that includes equipment Tier level to demonstrate and document that all construction equipment meets or exceed Tier 3 standards.* I1-3
(How is this being enforced at current vineyard development projects? How is this monitored when various subcontractors move equipment on and off project site? How is verification of compliance with this proposed mitigation assured with rental equipment moved on to site?)

3. *Idling times shall be minimized either by shutting equipment off when not in use or by reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure, 13 CCR Section 2485). Clear signage shall be provided for construction workers at all access points.* I1-4
(How is this being enforced? I have not seen any signage at Frostfire, Heiser, Ciminelli, Steinschriber. Please provide reasonable evidence to verify mitigation measures are feasible to be implemented.)

The DEIR fails to explain how vineyard development proposed under the pending Stagecoach Vineyard North Vineyard Conversion Erosion Control Plan Application #P18-00446-ECPA development plan which includes a I1-5

comment letter by Gallo Family objecting to the requirement of Tier 4 Equipment **as no such equipment is available to vineyard developers in Napa County.**

https://pbes.cloud/index.php/apps/epubreader/?file=%2Findex.php%2Fs%2Femaii8HkexDbyJM%2Fdownload%3Ffiles%3DEJ%2520Gallo_CmtLtr_Stagecoach%2520North%2520EIR_3-29-21.pdf%26path%3D%252FDEIR%2520Comments%2520Stagecoach%2520P18-00446-ECPA&type=application%2Fpdf

I1-5 cont.

Without access to Tier 3 & 4 equipment the proposed mitigation measures to reduce Air Quality and GreenHouse Gas Emissions are infeasible and will not reduce the impact to a level of less than significant.

Due to technology limitations following the Glass Fire please accept this comment via email. Please verify receipt of this email.

I1-6

Kellie Anderson
Angwin

Sincerely

Letter I1 **Kellie Anderson**
Response June 8, 2021

I1-1 The commenter's opinion that air quality mitigation in the Draft EIR is infeasible is noted. Construction emissions estimates were revised for the proposed project (development of 111.5 acres of vineyard within approximately 156.8 acres) using an updated construction schedule (from 2021–2023 to 2022–2024, on Draft EIR page 3.2-24, since the original timeframe has passed). With this update, all criteria pollutant emissions would be less than their respective BAAQMD significance thresholds. This is because emissions factors for criteria air pollutants for future years reduce in the model due to gradual fleet turnover resulting in newer construction equipment and vehicles with lower emissions, retiring of old high polluting equipment and more stringent emission standards for new equipment and vehicles. Though the fleet-wide emissions factor would only change incrementally between 2021-2023 and 2022-2024, that change was enough to reduce NOx emissions to below the BAAQMD's significance threshold (since it was previously at the threshold in the Draft EIR analysis). Therefore, Impact 3.2-1 would be less than significant and Mitigation Measure 3.2-1a is no longer needed. Table 3.2-5 of the Draft EIR has been updated as indicated below; see Chapter 2, *Revisions to the Draft EIR*. The table also shows construction emissions associated with the revised mitigated project (development of approximately 141.72 gross acres [97.69 net acres] of vineyard) as described in Response to Comment O2-2. See also Reponses to Comments O4-6 and O5-33.

TABLE 3.2-5
AVERAGE DAILY CONSTRUCTION EMISSIONS

	Construction Emissions (pounds/day)			
	ROG	**NO_X**	**Exhaust PM_{10}**	**Exhaust $PM_{2.5}$**
Unmitigated Emissions				
Project Average	5.3 ~~5.8~~	46.8 ~~54~~	2.0 ~~2.3~~	1.8 ~~2.3~~
Mitigated Emissions				
Mitigated Project Average	4.7 ~~2.8~~	41.0 ~~50.7~~	1.7 ~~0.3~~	1.6 ~~0.3~~
BAAQMD Threshold	54	54	82	54
Exceed Threshold?	**No**	**No**	**No**	**No**

NOTES:

BAAQMD = Bay Area Air Quality Management District; NO_X = oxides of nitrogen; $PM_{2.5}$ = particulate matter measuring 2.5 microns or less in diameter; PM_{10} = particulate matter measuring 10 microns or less in diameter; ROG = reactive organic gases

SOURCE: Data compiled by Environmental Science Associates in 2022~~1~~ (see **Appendix D**)

I1-2 The commenter refers to the requirement to ensure that all construction equipment be maintained and properly tuned in accordance with manufacturer's specifications and be checked by a certified mechanic and determined to be running in proper condition before operation, included as part of Mitigation Measure 3.2-1b. Mitigation Measure 3.2-1b lists the basic control measures required by BAAQMD irrespective of size and whether they exceed the thresholds or not. These measures for the most part are best management practices that BAAQMD has found to reduce fugitive and exhaust emissions during construction. These measures will be implemented through the Mitigation Monitoring and Reporting Program for the project (included in Mitigation Measure 3.2-1b) and will be included as part of contract documents with construction contractors. A certified mechanic is someone who has gone through a certification process including coursework and training through a certifying organization.

I1-3 See Response to Comment I1-1 above. Based on revised construction emissions estimates using updated construction years, Mitigation Measure 3.2-1a is no longer needed.

I1-4 Compliance with the California Airborne Toxic Control Measure, 13 CCR Section 2485, is required to be implemented through the Mitigation Monitoring and Reporting Program for the project (included in Mitigation Measure 3.2-1b) and is required to be included as part of contract specifications with construction contractors. As required by Mitigation Measure 3.2-1b, clear signage is required to be provided at all access points.

I1-5 See Response to Comment I1-1. Based on revised construction emissions estimates using updated construction years, Mitigation Measure 3.2-1a is no longer needed.

I1-6 Napa County thanks the commenter for the Draft EIR comments provided and confirms receipt of emailed comments.

LETTER I2

Barrella, Donald

From: ruralangwin <kelliegato@gmail.com>
Sent: Tuesday, June 8, 2021 2:30 PM
To: Barrella, Donald
Cc: Morrison, David
Subject: Comment Hyperion DEIR & Erosion Control Plan #P17-00432- ECPA

[External Email - Use Caution]

Dear Mr. Barrella,

Please accept this comment letter on the Hyperion Vineyard DEIR & Erosion Control Plan #P17-00432-ECPA via email.

The environmental impact of the potential of increased wildland fires including the risk of loss, injury and death is noted and summarily dismissed without justification. The DEIR attempts to draw attention to lessened fire risk after vineyard development as compared to fire risk in existing vegetation. Nonetheless the extreme risk of fire during vegetation clearing and deep ripping and land preparation can not be ignored. I2-1

3.6-2:Construction and operation of the proposed project could expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.

The risk of wildland fire by equipment used in the clearing and deep ripping and land preparation for the Hyperion Vineyard is not adequately evaluated and the less than significant conclusion is not supported by fact. It is estimated that up to 95% of Wildland fires in California are caused by human activity. I2-2

https://www.pbs.org/newshour/science/californias-catastrophic-wildfires-in-3-charts

While investigation into the Glass Fire is yet to be completed, it is suspected it may have been started by an electrified fence and or gate surrounding a remote vineyard. Routine vineyard activities including weed wacking, mowing and movement of equipment, and workers parking vehicles in grass and preparing meals also propose fire risk. The DEIR may not disregard an environmental impact simply because it is inconvenient and unmitigable.

Impact 3.6-2:Constructionand operation of the proposed project could expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.The project site is an area designated by CAL FIRE as "moderate" for fire hazard severity. In general,the risk of fire in vineyards is relatively low because of the limited amounts of fuel, combustibles, and ignition sources present. Vineyards are irrigated and cover crops are typically mowed between Apriland August,thereby reducing the vineyard's fuel loads. The proposed project would remove pasture, hayfield, grassland, brush/shrubland, and trees and woodland within the proposed clearing limits.In addition, no structures are I2-3

proposed as part of the project.Impact ConclusionAlthough the project site is in an area classified as moderate risk for fire hazard severity, the proposed project would involve the removal of existing vegetation (grasses, brush, and trees) and the management of a vineyard,thereby resulting in an overall reduction of fuel load in the vineyard compared to existing conditions. Given the reduction of fuel load and the rural nature of the project site, the proposed project also is not likely to expose occupants to pollutant concentrations from a wildfire or uncontrolled spread of a wildfire. Therefore, the proposed project would not exacerbate wildfire risks or expose people or structures to a significant risk related to wildland fires, and this impact would be less than significant. Mitigation Measure:None required.

I2-3 cont.

The conclusion of less than significant wildland fire is not supported. The DEIR must provide adequate discussion of the increased fire risk and offer mitigation measures to reduce the risk. Staff must realistically consider the increased hazard of wildland fire from this project and deny the project if wildland fire risks can not be sufficiently mitigated.

Sincerely,

Kellie Anderson
445 Lloyd Ln. Angwin CA 94508

Letter I2 **Kellie Anderson**
Response June 8, 2021

I2-1 Napa County thanks the commenter for the Draft EIR comments, and the commenter's concerns about fire risk during vegetation clearing and land preparation are noted; see also Response to Comment I2-2.

I2-2 In consultation with and at the recommendation of the California Department of Forestry and Fire Protection (CAL FIRE), the Applicant maintains numerous fire breaks throughout the project site. These fire breaks are intended to protect the on-site residences, winery, and vineyard from an off-site fire, but they also function to protect any off-site areas from a fire that may originate on the project site. CAL FIRE reviewed these fire breaks on July 30, 2021, and provided additional training and guidance to the on-site personnel related to fire protection, best management practices, maintaining the fire breaks, and preventing incidents. CAL FIRE recommendations are incorporated into the project site's Emergency Action Plan (**Appendix A**). The Emergency Action Plan would remain in place for the proposed project.

As stated on Draft EIR page 2-16, removed vegetation would be burned in accordance with BAAQMD permits and/or authorization, and burning would occur only on approved burn days and according to CAL FIRE standards.

Employees are trained in the use of available fire equipment as well as best fire prevention practices. This training occurs at onboarding and annually thereafter. In addition, firefighting equipment is available on-site. To prevent fires during the ongoing maintenance of existing vineyards, equipment, fuels, and chemicals are stored in appropriate receptacles and areas. All equipment operators are trained professional operators. Equipment is refueled after breaks to allow for cooling. These procedures and practices would be implemented during both construction and operation of the proposed project.

I2-3 Construction of the proposed project would include the use of heavy equipment and other activities within areas that could be subject to wildfires (stated on Initial Study page 22). However, as stated in Impact 3.6-2, the proposed project would involve the removal of existing vegetation and the management of a vineyard, thereby resulting in an overall reduction of fuel load in the vineyard compared to existing conditions. Response to Comment I2-2 notes that there is an active Emergency Action Plan for the project site and this Plan would remain in place for the proposed project. Employees are trained in the use of available fire equipment as well as best fire prevention practices, and all equipment operators are trained professional operators. Firefighting equipment is also available on-site, and equipment, fuels, and chemicals are stored in appropriate receptacles and areas. These procedures and practices would be implemented during

both construction and operation of the proposed project. Therefore, the proposed project would not exacerbate wildfire risks or expose people or structures to a significant risk related to wildland fires.

LETTER I3

From:	ruralangwin
To:	Barrella, Donald
Cc:	Morrison, David; Amber Manfree; Ross Middlemiss
Subject:	Hyperion Vineyard DEIR #P17-00432- ECPA comment letter
Date:	Wednesday, June 9, 2021 10:49:31 AM

[External Email - Use Caution]

Don Barrella,

Please accept this comment on the Hyperion Vineyard DEIR & Erosion Control Plan #P17-00432-ECPA via e-mail .

The Hyperion Vineyard project proposes to develop approximately 159.8 acres for a vineyard development. Access to housing in Napa County is at crisis levels and the project would develop new jobs both during development and during the long term operation of the vineyard. UA

Section 4 of the DEIR Other CEQA Considerations ignores the need for housing generated by this project to accommodate the additional workers who will be commuting long distances from housing centers to this remote vineyard. Given the Hyperion Vineyard is just one of many known vineyard development projects in the area the DIER must address the cumulative impacts of additional workers and the need for housing. Table 4-1 details the vineyard development within a three mile radius of the project. However 4-1 does not include winery development in the area and as a result under represents the need for housing cumulatively. The DEIR can not simply ignore the impact of additional worker housing needs. Acute shortages of housing are widely noted and the County of Napa continues to struggle to meet its RHNA mandates. Additionally, development proposed in the Lake Berryessa Resort area must be analyzed along with the jobs /housing imbalance created by this project.

This DEIR does not address the baseline housing situation in Napa County and simply avoids discussion of the impact of additional workers commuting into this location.

I3-1

Sincerely,

Kellie Anderson
445 Lloyd Ln
Angwin CA 94508

Letter I3 **Kellie Anderson**
Response June 9, 2021

I3-1 Population and housing was one of the resource topics evaluated in the Initial Study that was circulated with the NOP for the proposed project (Draft EIR Appendix B). As summarized on Draft EIR page 1-7 in Chapter 1, *Introduction*, the proposed project would not necessitate the construction of housing. A maximum of approximately 30 workers would be needed during harvest, which is the most labor-intensive period for vineyards (Draft EIR Table 2-4, *Annual Operations Schedule*, on Draft EIR page 2-18). Existing employees live in either the City of Fairfield or City of Napa, and the Applicant assumes that any new workers required for the proposed project would live in similar areas. It is estimated that half the trips would come from the west (shortest route from City of Napa) and half the trips would come from the east (shortest route from City of Fairfield). The Applicant estimates that the typical commute distance is approximately 25 miles, although employees are encouraged to carpool in an existing 15-passenger van. Draft EIR Section 3.10, *Transportation*, Impact 3.10-2 assesses vehicle miles traveled for construction and operation of the proposed project.

LETTER I4

RE: KJS and Sorrento Vineyard Conversion Erosion Control Plan Application #P17-00432-ECPA Draft Environmental Impact Report, SCH No. 2018092042, Napa County, State Clearinghouse # 2018092042

RECEIVED
JUN 09 2021
Napa County Planning, Building & Environmental Services

June 7, 2010

Donald Barrella, Planner III
1195 Third Street
Napa CA 94559

The Hyperion Vineyard Draft Environmental Impact Report and Erosion Control Plan #P17—00432-ECPA is wholly inadequate to address multiple, significant environmental impacts resulting from the proposed project. Mitigation measures offered in the DEIR cannot be feasibly implemented with Napa County acting as the Lead Agency. Napa County has a documented pattern and practice of failing to assure implementation of required mitigation measures. From the smallest of vineyard replants projects to large multi-year vineyard developments, Napa County (including Planning Staff and Code Enforcement) have repeatedly failed to reasonably monitor vineyard development projects and respond to obvious and serious project violations. There is an established pattern of County Planning Staff failing to conduct required initial pre-development tree & habitat protection inspections, failure to conduct milestone infrastructure installation inspections, failure to conduct required ongoing post development biological inspections, and failure to monitor and ensure long term efficacy of mitigation measures for the life of the vineyard. Additionally, the use of consultants for preparation of all DEIR documents, reports and studies with no work being prepared in-house, is an indication of lack of technical ability on the part of PBES staff.

I4-1

The remote location of this vineyard project guarantees this development will be a virtual environmental blood bath. Predictably Napa Country Planning Staff will simply close the books following this project approval, unable and/or unwilling to conduct necessary in field milestone inspections during project development, fruitlessly relying on *post development* winterization inspection by Napa County Resource Conservation District staff. RCD staff however, **lack any enforcement authority** and there is no defined/established communication process between Planning Staff and RCD Staff to insure that impacts (water resource and use, deep ripping, grading, vegetation clearing, drain pipe installation, sediment pond and level spreaders installation, wildlife fencing, avoidance of habitat and sensitive areas etc.) are monitored for compliance with approved project engineering details and required mitigations are implemented. Rather, this project's proposed mitigation measures are left entirely up to the applicant to implement, and applicant knows full well that County Planning Staff has *checked out* and moved on to the next vineyard development approval. In this case the project applicant, assured of no enforcement of County Conservation regulations and cocksure of no repercussions from ongoing illegal vineyard development activity, brazenly begins their project scope by stating they have already **illegally developed a 43 acre vineyard** on project site in **violation of Napa County Consrevation Regulations**.

I4-2

Not surprisingly, Don Barrella (Planner III Napa County Planning Building and Environmental Services) begins the routine walk down the pathway of failure to protect Public Trust resources by acknowledging that Staff was **aware of illegal vineyard development** on site since 2017 yet took no actions to initiate Code Enforcement or compliance steps. From the DEIR:

"The project also includes the ongoing maintenance of erosion control measures and operations of approximately 4.3 acres of existing vineyard, converted from grassland in 2015 without benefit of an ECPA. " (Page 9 ESA Initial Study).

I4-2 cont.

The following e mail is Mr. Barrella's response to public inquiry regarding County Planning Staffs' knowledge and follow-up actions related to the unpermitted 4.3 acre vineyard block developed without required ECPA as follows:

From: ruralangwin <kelliegato@gmail.com>
Sent: Thursday, June 3, 2021 3:23 PM
To: Barrella, Donald <Donald.BARRELLA@countyofnapa.org>
Cc: Morrison, David <David.Morrison@countyofnapa.org>; Ross Middlemiss <RMiddlemiss@biologicaldiversity.org>
Subject: Sorento Vineyard

Don,

I note from the documents on the County of Napa Web site that the KJS Sorento Hyperion Vineyard folk converted land to vineyards in 2015 **without a permit**. From the page ES4-5 of the DEIR:

I4-3

The project also includes the ongoing maintenance of erosion control measures and operation of approximately 4.3 acres of existing vineyard that were converted from grassland/hay pasture in 2015 without an approved agricultural ECPA. This area has been historically and was actively cultivated for hay and straw production before being converted to vineyard. These vineyard areas are located within two larger vineyard blocks totaling 17.4 acres. The slope on these lands within the 17.4 acres of existing vineyard is 5 percent or less (except for the 4.3 acres 4 KJS Investment Properties and Sorrento Inc. is the "Applicant" of the Napa County ECPA, and they are a "Licensee/Petitioner" for the water rights petitions pending with the State Water Board. EXECUTIVE SUMMARY KJS and Sorrento Vineyard Conversion #P17-00432-ECPA ES-5 ESA / D201701261.00 Draft Environmental Impact Report April 2021 located on slopes steeper than 5 percent). Therefore, the portions of this existing vineyard area occurring on slopes less than or equal to 5 percent are not subject to an ECPA pursuant to Napa County Code Section 18.108.070(B). As such, the project includes the vineyard development area that requires coverage by an ECPA under Section 18.108.070(B) will be included in this project.

Please clarify the following:

1 Was the unpermitted conversion to a vineyard 17.4 acres or was it 4.3 acres? 4.3 acres

2 When did Napa County Planning Staff become aware of this unpermitted conversion? Dec 2017 when the application was submitted

3 How did Napa County Planning Staff become aware of this unpermitted conversion? Dec 2017 when the application was submitted

4 Did Napa County Code Enforcement open a case? No Did Code Enforcement visit the site of the unpermitted development? No Was a Notice of Violation issued? No Were Fines issued? No

5. What other conditions of Non Compliance were noted by the Planning Staff? None Were pesticide Use Reports for unpermitted Vineyard submitted to the Agricultural Commissioner's office? You will need to contact the Agricultural Commissioner's office for that information Was this unpermitted vineyard subject to water diversion permitting by SFRWQB? You will need to contact the Division of Water Rights for details on that, but they do have a Water Right (so would subject to DWR permitting), and the area I believe is within the Right's Place of Use, but I would have to look closer to confirm.

I4-3 cont.

Ignoring known vineyard development violations existing at the Hyperion project follows a pattern seen at other non-compliant vineyard projects throughout Napa County. Donald Barrella was also the Planner in charge of the Bremer Family Vineyard development where gross deviations from permitted conditions were blatantly, openly and ongoing with few meaningful actions taken by Napa County to halt violations and reduce damage to Public Trust resources including unnamed streams. Ultimately actions were taken by the State Water Resources Control Board in the Bremer situation which resulted in a Clean Up and Abatement Order being issued for destruction of the stream channel.

https://www.waterboards.ca.gov/rwqcb2/water_issues/hot_topics/Bremer_Family_Winery_Vineyard.html

I4-4

The proposed mitigations included in this DEIR (Chapter 3 Environmental Settings, Impacts and Mitigation Measures) and proposed mitigation monitoring and reporting program are **infeasible** as Planner Barrella has an established pattern of ignoring vineyard development violations, will not monitor required mitigation in the field nor verify ongoing reporting requirements **and is at the heart of the institutionalized culture within the Napa County Planning Building and Environmental Services Department of ignoring known vineyard violations.** Weak to nonexistent enforcement of Conservation Regulations and General Plan Policy by County PBES and spiritless Code Enforcement actions in response to vineyard violations has in fact led the private vineyard development, vineyard management and vineyard engineering industry to understanding that violations of critical environmental regulations will likely go unchallenged. As a the result, thru willful disregard, technical incompetency or other outside influences, the culture of indifference for enforcement of County of Napa Conservation Regulations render the mitigation measures as described under any scenario in this DEIR to be infeasible.

I4-5

Planner Barrella's qualifications to review and evaluate the significance of effects on the environment from the Hyperion Vineyard project and to evaluate the adequacy of the final environmental document and associated technical appendices and reports has not been demonstrated. At minimum, Planner Barrella's verifiable qualifications including engineering training, ethics training, education level, professional licensure, ongoing industry standard updates and continuing education programs completed which may equip him with technical knowledge required to competently review this DEIR should be included in a recirculated DEIR. I4-6

Vineyard failures, code enforcement violations and non-compliance with Napa County Conservation Regulations are well known to Planning Staff. Yet the Hyperion Vineyard very likely will follow a clear pattern of vineyard failures and violations well documented including the following:

- Mondavi Cold Springs Rd Angwin Land Slide, Failure to install erosion control infrastructure as approved
- Hess Pope Valley Replant Failure to protect Oak Trees, encroachment within stream set back
- Cliff Family Ink Grade Rd. Vineyard Failure of Level Spreaders and land slide into Burton Creek
- 1575 Deer Park Rd Vineyard encroachment into stream set back, unpermitted fill of stream, storage of pesticides, fertilizers and fuels within stream set back
- Bremer Family Winery Failure to construct erosion control infrastructure as approved, importation of fill to site in violation of dust control mitigations, destruction of stream channel, herbicide application to cover crop, wildlife exclusion fencing installed incorrectly
- Del Dotto Yount Mil Rd. Yountville illegal soil ripping beyond depth approved in ECPA, failure and landslide
- Abreu Las Posadas Rd. Angwin Violation of ground water use as approved by trucking of well water off site for commercial vineyard development, failure of level spreaders resulting in visible sediment polluting Conn Creek
- Patrick Vineyard Deer Park Rd. Failure of level spreaders
- Ciminelli Vineyard Summit Lake Rd. Angwin Failure to obtain Conservation Easement on undeveloped portion of parcel and failure to implement protections for Western Pond Turtle
- Davis Frost Fire Non-compliance with required tier 3 equipment standards
- Heiser Vineyard Angwin Biological and Northern Owl Surveys

I4-7

The Mitigation Measures proposed in this DEIR cannot be verifiably implemented under the County of Napa's current project review, approval and monitoring procedures as noted by the above referenced vineyard violations and failures. There is rather, the greatest likelihood, based on past, similar vineyard development projects that this project **will cause** significant environmental harm including:

Failure to assure adherence to vegetation clearing and grading limits, unanalyzed impacts from disposal of rock spoils, improper wildlife fence installation, no verification of maintenance of erosion control infrastructure, no documentable insurance of compliance with air quality mitigations, no proof of pre development biological inspections, no proof of collecting and review for accuracy required biological reports, no means to assure presence of on-site biological monitoring staff, no verification of pre clearing biological training for equipment operators and field workers, and a clear pattern of failure to timely respond to complaints regarding violations (including failure to implement approved mitigation measures) as reported by public and other agencies. I4-8

Because no assurance of enforcement and verification of implementation of mitigation measures will occur; because mitigation measures to avoid impacts to wildlife are unenforceable due to lack of in field monitoring, and because Napa County has a pattern and practice of ignoring violations of ECPA Conditions of Approval, and their very own Conservation Regulations the Hyperion Vineyard Project will have significant and unavoidable impacts on the environment and the No Project alternative must be adopted. I4-9

Napa County PBES acting as the very agency tasked with reviewing this project's significant environmental impacts ***and*** determining its ultimate approval or denial, is the same agency that has demonstrably, time and time again, failed to protect Public Trust resources. Without appointing some other more informed, unbiased entity as Lead Agency and recirculating the DIER, this project review is biased and tainted by industry influence and the established pattern of Napa County Planning and Building and Environmental Services of approving vineyard projects with known significant and unavoidable environmental impacts. I4-10

Sincerely,

Kellie Anderson
445 Lloyd Lane
Angwin CA 94508

Re: KJS Sorrento Vineyard Conversion ECPA/DEIR #17-00432-
Hyperion Vyd.

Attn: Donald Barrella
Planner III, Napa Co. PBES
1195 Third St.
Napa Ca 94559

Please address the cumulative impacts to Biological Resources from the below highlighted vineyards*

TABLE 4-1
CUMULATIVE EROSION CONTROL PLAN PROJECTS LIST WITHIN 3 MILES OF THE PROPOSED PROJECT (1993–2020)

File Number	Date Approved	Applicant Name	Vineyard Development Acres	Number	Date Approved	Applicant Name	Vineyard Development Acres
1993403	March 24, 1994	James Bushey	42	200900161	July 6, 2009	Mary Ann Gilson	11
1994295	May 18, 1995	Napa Valley Vineyard Engineering	12.4	201100114	March 31, 2011	Stagecoach Vineyards	106.8
1995126	October 14, 1995	Christina Vineyards	13	201100454	February 14, 2012	Sorrento Inc.	23.9
1996512	March 25, 1997	Patrick Kuleto	22	201200116	April 12, 2012	Somerston Vineyards	8.5
1997157	October 20, 1997	Jeffrey Gwinn	28	201300021	June 6, 2013	Fingerman	3
1997600	August 7, 1998	Priest Ranch–Orion Vineyards	20.56	201500132	May 4, 2015	Sorrento Inc. & KJS Investment Properties LLC	30.6
1996586	November 9, 1998	Stagecoach Vineyards	116	201500131	May 4, 2015	Sorrento Inc. & KJS Investment Properties LLC	30.3
1997544	March 5, 1999	Patrick Kuleto	19.29	201500256	September 2, 2015	Somerston Vineyards	31.1
2000078	August 18, 2000	Chappellet Vineyard	53	201500132	May 4, 2015	Sorrento Inc. & KJS Investment Properties LLC	30.6
1998240	August 3, 2001	Montesole/Priest	12.21	201500227	February 22, 2016	Phillip Sunseri	3.78
2001147	December 10, 2001	Lynch Ranch LLC	15.01	201600185	June 10, 2016	Somerston Vineyards	2.9
2002152	May 29, 2002	Barbour Vineyards	39.42	201700257	July 19, 2017	Sage Creek Vineyard ECP Replant II	37.35
01126	August 23, 2002	Greg Mountain Ranch LLC	3.3	201700285	August 3, 2017	Sage Canyon Track II Replant	11.9
2003490	August 23, 2005	Don DeCristo	1.4	201700242	August 15, 2017	Capra Company Track I Replant	71.84
20050359	May 5, 2006	Priest Ranch	12.3	201600337	November 27, 2017	Phelan Ranch	18.6
2000399	June 23, 2006	George Noble	5.06	201900063	March 25, 2019	Gallo/Stagecoach Vineyards	10.6
200601143	August 11. 2006	Kuleto Estates	6.5	201900500	January 27, 2020	Somerston Vineyards	15.9
2003522	March 8, 2007	Jacquelyn Joy Cordes	24	201800446	Pending	Gallo Stagecoach North	116.2
200700394	July 17, 2007	Somerston Vineyard	28.9	202000220	Pending	Prince Track I Replant	41.3
200700030	June 4, 2008	De Cristo Vineyard	0				

NOTE: ECP = Erosion Control Plan
SOURCE: Data compiled by Napa County in 2020

I4-11

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* These Vineyards appear to be owned and controled by Hyperion Applicant. As presented with out discussion of these elements the Hyperion project is "piecemealing".

4452 Loyd Ln. Angwin
Kellie Adler

Letter I4 **Kellie Anderson**
Response June 9, 2021

I4-1 The commenter's beliefs that the Draft EIR does not adequately analyze impacts and that past vineyard projects in Napa County have not been adequately monitored during development are noted. The Draft EIR adequately assesses and discloses the potential environmental impacts of the proposed project in accordance with CEQA (California Public Resources Code Section 21000 et seq.), the State CEQA Guidelines (California Code of Regulations Title 14, Section 15000 et seq.), and *Napa County's Local Procedures for Implementing the California Environmental Quality Act* (Napa County 2015).

I4-2 This comprehensive response details the inspections, monitoring, security, and compliance provisions to which the project will be subject if the project is approved, so that the project will be developed in compliance with the approved ECPA plan and specifications and project mitigation measures.

The project would be subject to the following standard conditions of approval that require demarcation of the development area and resource protection before project initiation, as well as provisions to replace vegetation outside of the approved project boundaries that is inadvertently removed.

> **Preconstruction meeting:** The owner/permittee shall schedule an on-site preconstruction meeting that includes the project planner, owner or owner's agent, vineyard manager/developer, and any other parties deemed necessary by Planning Division staff, such as but not limited to: County Engineering Division staff, the project biologist, or representatives of any affected responsible or trustee agency. Napa County staff shall be provided a minimum of two weeks' notice for the meeting to provide adequate time to schedule. The purpose of this meeting is to review the development and operation requirements of #P17-00432-ECPA including but not limited to: implementation and compliance with project-specific conditions of approval, timing of development activities and winterization of the site, the details of the approved plan, and the ECPA modification process. All required/necessary protective buffers, including buffer fencing/delineation, shall be installed prior to the preconstruction meeting for inspection by Engineering and Planning Division staff. Development activities associated with #P17-00432-ECPA shall not commence until the owner/permittee has received written clearance from the Engineering and Planning Division indicating that all applicable conditions have been satisfied.
>
> **Tree and Woodland Protection:**
>
> a. Prior to any earth-moving activities, temporary fencing shall be placed at the edge of the dripline of trees to be retained that are located adjacent to the project area (typically within approximately 50 feet of the project area). The precise locations of said fences shall be inspected and approved by the Planning Division prior to the commencement of any earth-moving activities. No disturbance, including grading, placement of fill material, storage of equipment,

etc., shall occur within the designated protection areas for the duration of erosion control plan and vineyard installation.

b. The owner/permittee shall refrain from severely trimming the trees (typically no more than 1/3 of the canopy) and vegetation to be retained adjacent to the vineyard conversion area.

c. In accordance with Napa County Code Section 18.108.100 (Erosion Hazard Areas—Vegetation Preservation and Replacement), any trees inadvertently removed as part of development authorized under #P17-00432-ECPA shall be replaced on-site at a ratio of 2:1 at locations with similar habitat, as approved by the planning director. A replacement plan shall be prepared for County review and approval that includes, at a minimum, the locations of replacement trees, success criteria of at least 80 percent, and monitoring activities for the replacement plants/populations. The replacement plan shall be implemented before vineyard planting activities. Any replaced trees shall be monitored for at least three years to ensure an 80 percent survival rate.

Stream Protection: The owner/permittee shall implement the following measures (as necessary and at the discretion of the Planning Division) to prevent the inadvertent encroachment into specified creek setbacks and associated riparian features during construction and subsequent vineyard operations:

a. The location of creek setbacks shall be clearly demarcated in the field, as necessary, with temporary construction fencing, which shall be placed at the outermost edge of required setbacks shown on the project plans. Prior to any earth-moving activities, temporary fencing shall be installed; the precise locations of said fences shall be inspected and approved by the Planning Division prior to any earth-moving and/or development activities. No disturbance, including grading, placement of fill material, storage of equipment, etc., shall occur within the designated areas for the duration of erosion control plan installation and vineyard installation. The protection fencing shall remain in place for the duration of project implementation.

b. All construction and related traffic will remain on the inside (vineyard block side) of the protective fencing to ensure that the creek, buffer zones, and associated riparian habitat and/or woodland remain undisturbed.

c. In accordance with County Code Section 18.108.100 (Erosion Hazard Areas – Vegetation Preservation and Replacement), trees that are inadvertently removed that are not within the boundary of the project and/or not identified for removal as part of #P17-00432-ECPA shall be replaced on-site with 15-gallon trees at a ratio of 2:1 at locations approved by the planning director. A replacement plan shall be prepared for County review and approval, which includes, at a minimum, the locations where replacement trees will be planted, success criteria of at least 80 percent, and monitoring activities for the replacement trees. The replacement plan shall be implemented before vineyard planting activities. Any replaced trees shall be monitored for at least three years to ensure an 80 percent survival rate.

d. Refrain from disposing of debris, storage of materials, or constructing/operating the vineyard, including vineyard avenues, outside the boundaries of the approved plan, or within required setbacks pursuant to Napa County Code Section 18.108.025 (General Provisions – Intermittent/Perennial Streams). Furthermore, all operational activities that include the use or handling of hazardous materials, such as but not limited to agricultural chemical storage and washing, portable restrooms, vehicular and equipment refueling/maintenance and storage areas, soil amendment storage, and the like, shall occur at least 100 feet from

groundwater wells, watercourses, streams, and any other water resource to avoid the potential risk of surface and groundwater contamination, whether or not such activities have occurred within these areas prior to this ECPA approval.

Because the subject property is located within a Sensitive Domestic Water Supply Drainage (Lake Hennessey), the project, if approved, would also be subject to the security provisions of Napa County Code Section 18.108.140(A) to ensure the proper installation and ongoing maintenance of the required erosion and runoff control measures, implemented through the condition below.

Security (Sensitive Domestic Water Supply Drainage): The owner/permittee shall submit within 10 days of the effective date of this approval or prior to the commencement of earth-moving activities (whichever comes first) the following securities required pursuant to Napa County Code (NCC) Section 18.108.140(A) for the purpose of ensuring the proper installation and ongoing maintenance of the required erosion and runoff control measures in the manner specified in erosion control plan #P17-00432-ECPA. Securities may be posted in one or more of the forms specified in NCC Section 17.38.030.

a. Security in the amount of the estimated cost of original installation of the required erosion control measures.

b. Security in the amount of 25 percent of the estimated costs of original installation of the required erosion control measures.

As specified in Mitigation Measure 3.3-2a, identified resources would be demarcated and protected in the field, and would be subject to inspection by the County before project initiation.

The project, if approved, would also be subject to the standard condition, mitigation measure, and applicable Conservation Regulations provisions identified below, which are associated with ongoing monitoring, inspection, and compliance of an ECPA and vineyard development and operations, including the installation of wildlife exclusion fencing:

Erosion and Runoff Control (i.e., Hydromodification) Installation and Operation: The following conditions shall be incorporated by reference into #P17-00432-ECPA pursuant to NCC Chapter 18.108 (Conservation Regulations):

a) 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 straw wattles, rock-filled avenue/level spreader, rocked crossing, and permanent no-till cover, shall occur by September 1 during the same year that initial vineyard development occurs. These requirements 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 (#P17-00432-ECPA) shall oversee its implementation throughout the duration of the project, and that installation of erosion control measures, sediment retention devices, and hydromodification facilities specified for the vineyard have be installed and are functioning correctly. Prior to the first winter rains after construction begins, and

each year thereafter until the 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.

b) All temporary and permanent erosion control measures shall be free of plastic monofilament netting (e.g., straw wattles wrapped in black plastic mesh) and should generally be composed of biodegradable or compostable materials, and/or utilize biodegradable or compostable materials in their construction, so that reptiles, amphibians, or other animals do not become entangled within them.

c) 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 90 percent within the vineyard and vineyard avenues. The cover crop may be strip sprayed, with a strip no wider than 1 foot (12 inches) wide at the base of vines, with post-emergent herbicides; no pre-emergent sprays shall be used. 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" (Lowe 2004), or as amended.

18.108.135(E) Inspection. Each project requiring an erosion control plan that has not received a final inspection and been found complete by the director shall be inspected by the county or its agent … each winter until the project has been completed and stable for three years. If it is found that the erosion control program implemented is not functioning properly or is ineffective the property owner shall take such remedial measures as the director deems necessary to reduce erosion and related sedimentation to minimal levels. Furthermore, pursuant to NCC Section 18.108.135 (E)(2) five percent of projects that have received a final inspection and been found complete by the director shall be spot checked by the director each year to confirm groundcover condition and the proper operation of other erosion control measures. The director, in cooperation with the Napa County Resource Conservation District (RCD) and other county departments and agencies, will develop a remedial program to address any deficiencies that may be identified as the result of these spot checks. The property owner shall implement this program, which may include re-seeding all or some portions of the site or changing agricultural or management practices.

Regarding the modification of an ECPA, NCC Section 18.108.080(F) would apply:

Field Modifications. Subsequent to approval/confirmation of the erosion control plan, the owner/permittee may request a field adjustment to the plan to address site-specific issues or field conditions which arose after the commencement of the activity. The owner/permittee shall be responsible to contact the director within twenty-four hours of the changed field condition. Changes, as deemed appropriate by the director shall be confirmed in writing and deemed incorporated into the approved plan.

With respect to violations and penalties, the provisions of NCC Section 18.108.140(B) and (C) (below) would apply to the project if approved, and would be initiated and implemented by the County as warranted.

> 18.108.140(B) Violations. Whenever the director determines that a violation of this chapter has occurred, the director shall notify the violator in writing of the violation and require that certain conditions be implemented or adhered to in a reasonable amount of time to correct the erosion problem. Conditions may include applying for approval of an erosion control plan, implementation of remedial erosion control actions, removal of agricultural crops and related infrastructure planted without an approved erosion control plan or use permit, removal of structures constructed in violation of the NPDES [National Pollutant Discharge Elimination System] program, and/or revegetation of disturbed areas. Each failure to comply with the director's notice or meet the deadlines specified therein shall constitute a separate and distinct violation, punishable as set forth in subsection (C) of this section. Moreover, the county and its agents may with the property owner's consent, with a warrant, or in an emergency enter the property and make necessary repairs or corrections, or perform needed maintenance. The property owner shall fully and completely reimburse the county for the costs associated with this remedial work.
>
> 18.108.140(C) Penalties. It is unlawful and a public nuisance for any person to violate any of the provisions of this chapter for any purpose or to cause any other person to do so. Such a violation shall be enforceable as a misdemeanor pursuant to Napa County Code Sections 1.20.150 and 1.20.160. Such a violation may also be abated as a public nuisance by judicial action or by administrative enforcement in accordance with the procedures set forth in Chapter 1.20, commencing with Section 1.20.010, including those pertaining to treble damages for multiple judgments. In addition administrative penalties may be imposed in the manner specified in Chapter 1.28 (Administrative Penalty) of the Napa County Code. In addition, the director may issue a stop work order, report the violator to the appropriate licensing agencies (such as the State Contractor's Licensing Board), report the violator to applicable responsible and trustee agencies, require that the violator apply for and obtain all required permits, refer the matter to the district attorney's office for civil or criminal prosecution and any such other remedies the director deems appropriate.

It should also be noted that since 2015, the County's Engineering Division has reviewed all ECP applications and associated project soil loss and runoff modeling for technical adequacy; the Resource Conservation District has not been involved in project design since that time.

Therefore, it is anticipated that the conditions, mitigation measures, and applicable code sections disclosed above would provide adequate oversight and compliance measures for project implementation and ongoing operation. Additionally, no new or additional evidence has been provided demonstrating that the potential level of impact would occur beyond what is identified in the Draft EIR, or showing that the proposed project or identified mitigation measures would need to be revised to adequately disclose and address potential compliance matters associated with the proposed project.

I4-3 The comment is noted. See Response to Comment I4-2 that details the inspections, monitoring, security, and compliance provisions to which the project will be subject if the project is approved.

I4-4 The comment is noted.

I4-5 The comment is noted. See Response to Comment I4-2 that details the inspections, monitoring, security, and compliance provisions to which the project will be subject if the project is approved.

I4-6 The comment is noted.

I4-7 The comment is noted. See Response to Comment I4-2 that details the inspections, monitoring, security, and compliance provisions to which the project will be subject if the project is approved.

I4-8 The comment is noted. See Response to Comment I4-2 that details the inspections, monitoring, security, and compliance provisions to which the project will be subject if the project is approved.

I4-9 The comment is noted. See Response to Comment I4-2 that details the inspections, monitoring, security, and compliance provisions to which the project will be subject if the project is approved.

I4-10 The comment is noted.

CHAPTER 4
MITIGATION MONITORING AND REPORTING PROGRAM

4.1 INTRODUCTION

Public Resources Code (PRC) Section 21081.6 and Section 15097 of the California Environmental Quality Act (CEQA) Guidelines (State CEQA Guidelines) require public agencies to establish monitoring or reporting programs for projects they approve whenever approval involves adopting either a mitigated negative declaration or specified environmental findings related to environmental impact reports (EIRs).

This Mitigation Monitoring and Reporting Program (MMRP) was developed to ensure that Napa County carries out the adopted measures to mitigate and/or avoid significant environmental impacts associated with the implementation of the KJS and Sorrento Vineyard Conversion Erosion Control Plan Application Project (#P17-00432-ECPA) (proposed project).

Napa County will use this MMRP to ensure compliance with mitigation measures during project implementation. The mitigation measures identified in this MMRP were developed as part of the EIR process for the proposed project. Conditions of approval that were included in the Draft EIR are listed in Final EIR **Appendix F**.

4.2 MMRP COMPONENTS

The components of **Table 4-1**, which contains applicable mitigation measures, are addressed briefly below.

Issue Area: This column lists the impact numbers from the Draft EIR.

Impact: This column summarizes the impact identified in the KJS and Sorrento Vineyard Conversion Erosion Control Plan Application Project (#P17-00432-ECPA) Draft EIR.

Mitigation Measure: All mitigation measures identified in the Draft EIR are presented, as revised in the Final EIR, and numbered accordingly. Note that some of the text for the mitigation measures in Table 4-1 has been edited (relative to the Draft EIR) for clarity/completeness and non-substantive revisions are not reflected in Final EIR Chapter 2.

Responsibility for Implementing: This item identifies the entity that will undertake the required mitigation.

Responsibility for Monitoring: Napa County is primarily responsible for ensuring that mitigation measures are successfully implemented. Napa County may contract out for these services and/or make them part of the construction specifications, and other agencies may also be responsible for monitoring the implementation of mitigation measures. As a result, more than one monitoring party may be identified.

Monitoring and Reporting Actions: For each mitigation measure, one or more actions are described. The actions delineate the means by which the mitigation measures will be implemented and, in some instances, the criteria for determining whether a measure has been successfully implemented. Where mitigation measures are particularly detailed, the action may refer back to the measure.

Timing: Implementation of the action must occur before or during some part of project approval, project design, or construction, or on an ongoing basis. The timing for each measure is identified.

TABLE 4-1
KJS AND SORRENTO VINEYARD CONVERSION #P17-00432-ECPA MITIGATION MONITORING AND REPORTING PROGRAM

Issue Area	Impact	Mitigation Measure	Responsibility for Implementing	Responsibility for Monitoring	Monitoring and Reporting Actions	Timing
3.2 Air Quality and Greenhouse Gas Emissions	**3.2-1:** Construction and operation of the proposed project could conflict with or obstruct implementation of BAAQMD's 2017 Clean Air Plan.	**Mitigation Measure 3.2-1b (proposed project, Reduced Intensity and Increased Stream and Wetland [Aquatic Resource] Setbacks Alternative, and Reduced Vegetation Removal/Grading and Road Use Alternative):** Construction contractors shall be required to implement the following measures consistent with the BAAQMD-recommended basic control measures during construction: 1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day. 2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered. 3. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited. 4. All vehicle speeds on unpaved roads shall be limited to 15 miles per hour. 5. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used. 6. Idling times shall be minimized either by shutting equipment off when not in use or by reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure, 13 CCR Section 2485). Clear signage shall be provided for construction workers at all access points. 7. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition before operation. 8. A publicly visible sign shall be posted with the telephone number and person to contact at Napa County regarding dust complaints. This person shall respond and take corrective action within 48 hours. To ensure compliance with applicable regulations, BAAQMD's phone number shall also be visible.	Construction contractor	Napa County, construction contractor	Implement measures consistent with the BAAQMD-recommended basic control measures.	During construction
	3.2-2: Construction and operation of the proposed project could result in a cumulatively considerable net increase of a criteria air pollutant for which the Bay Area is in nonattainment under an applicable federal or state air quality standard.	**Implement Mitigation Measures 3.2-1a and 3.2-1b (proposed project, Reduced Intensity and Increased Stream and Wetland [Aquatic Resource] Setbacks Alternative, and Reduced Vegetation Removal/Grading and Road Use Alternative)**	See above.	See above.	See above.	See above.
3.3 Biological Resources	**3.3-1:** Construction and operation of the proposed project could have a substantial adverse effect, either directly or through habitat modifications, on a species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS.	**Mitigation Measure 3.3-1a (proposed project, Reduced Intensity and Increased Stream and Wetland [Aquatic Resource] Setbacks Alternative, and Reduced Vegetation Removal/Grading and Road Use Alternative):** Erosion Control Plan #P17-00432-ECPA shall be revised before approval to reduce the footprint of the proposed vineyard blocks surrounding Elder Creek and the unnamed pond by increasing the upland nesting and overland movement buffer from 50 feet to 100 feet in portions of proposed vineyard Blocks 6, 17, 23A, 23B, 23E, 23G, 24B, 24C, 24E, 24G, 29B, 33A, and 33E. The blue dotted lines in Figure 3.3-5 show where the buffer shall be a minimum of 100 feet and Figure 3.3-6 shows the mitigated proposed project. The location of wildlife exclusion fencing in these areas shall also be revised in the ECPA according this mitigation measure and Mitigation Measure 3.3-4 before approval, and shall generally be limited to the outside edge of the vineyard avenues. No barbed wire shall be permitted.	Construction contractor, owner/ permittee	Napa County, CDFW	Revise Erosion Control Plan #P17-00432-ECPA before approval to increase the upland nesting and overland movement buffer to 100 feet in portions of the proposed vineyard Blocks 6, 17, 23A, 23B, 23G, 24B, 24C, 24E, 24G, 29B, 33A, and 33E. Revise Erosion Control Plan #P17-00432-ECPA before approval to be located outside of the 100-foot buffer per this Mitigation Measure and Mitigation Measure 3.3-4.	Before construction

TABLE 4-1
KJS AND SORRENTO VINEYARD CONVERSION #P17-00432-ECPA MITIGATION MONITORING AND REPORTING PROGRAM

Issue Area	Impact	Mitigation Measure	Responsibility for Implementing	Responsibility for Monitoring	Monitoring and Reporting Actions	Timing
3.3 Biological Resources (cont.)	3.3-1 (cont.)	**Mitigation Measure 3.3-1b (proposed project, Reduced Intensity and Increased Stream and Wetland [Aquatic Resource] Setbacks Alternative, and Reduced Vegetation Removal/Grading and Road Use Alternative):** A qualified biologist shall provide a worker education and awareness program to all on-site personnel before the start of materials staging or ground-disturbing activities within 492 feet of Elder Creek or the unnamed pond. (The term "qualified" refers to a biologist or biological monitor who is knowledgeable and experienced in the biology and natural history of local herpetology, mammalian, and avian resources with potential to occur at the project site.) The qualified biologist shall explain to construction workers how best to avoid impacts on western pond turtle, foothill yellow-legged frog, and California red-legged frog. This education program shall include topics related to species identification, life history descriptions, and habitat requirements during various life stages. The program should include handouts, illustrations, photographs, and project maps showing areas where minimization and avoidance measures are in place, and where these species would most likely occur if present. Crew members shall sign a sign-in sheet documenting that they received the training. Documentation that the worker education and awareness program has occurred, including any education program handouts, illustrations, photographs, or project maps shall be submitted to Napa County before project vegetation removal or earth-disturbing activities begin.	Qualified biologist	Napa County, qualified biologist	Prepare and implement a worker education and awareness program prior to staging or ground-disturbing activities within 492 feet of Elder Creek or the unnamed pond. Document any worker education and awareness program that has occurred and submit to Napa County.	Before construction
		Mitigation Measure 3.3-1c (proposed project, Reduced Intensity and Increased Stream and Wetland [Aquatic Resource] Setbacks Alternative, and Reduced Vegetation Removal/Grading and Road Use Alternative): i. A qualified biologist shall conduct a preconstruction survey within 24 hours before the removal of vegetation and initial project grading within 492 feet of suitable aquatic habitat for western pond turtle and California red-legged frog. A preconstruction survey for foothill yellow-legged frog shall also occur and shall be focused on carefully examining the bank no less than 50 feet of the Elder Creek streambed where the water diversion structure will be installed, where appropriate, and at least 500 feet upstream and downstream of the water diversion structure site. During the preconstruction survey, the qualified biologist shall relocate any western pond turtles found within the proposed development area to suitable habitat away from the construction zone, but outside the development area. Should any active western pond turtle nests be observed within the development area, a minimum 50-foot avoidance buffer shall be established. No work shall occur within the buffer. ii. Should any California red-legged frogs be present within the development area during the preconstruction survey, no work shall begin. The qualified biologist shall contact Napa County, USFWS, and CDFW within 24 hours of the observation. Work shall not begin until USFWS has provided authorization and the frog has left on its own accord. If foothill yellow-legged frogs are discovered during the preconstruction survey, the qualified biologist shall contact Napa County and CDFW within 24 hours, and project construction shall not begin until CDFW provides written permission to do so. If foothill yellow-legged frogs are discovered during project construction, all work in the immediate area shall cease until the individual moves out of harm's way, as determined by the on-site biological monitor. iii. A copy of the preconstruction survey results, that includes any find and relocation efforts shall be provided to Napa County and CDFW before project vegetation removal or earth-disturbing activities begin.	Qualified biologist	Napa County, qualified biologist, CDFW	Conduct preconstruction survey for western pond turtle and California red-legged frog within 492 feet of suitable aquatic habitat. If any western pond turtles are found, the qualified biologist will relocate the western pond turtle to suitable habitat outside of the development area. If any western pond turtle nests are found, a 50-foot avoidance buffer will be established. If any California red-legged frogs are found during the preconstruction survey, no work shall occur and USFWS, Napa County and CDFW will be notified. No work will begin until USFWS has provided authorization. Provide USFWS, Napa County and CDFW with a copy of the survey results for review and written acceptance.	Before construction

TABLE 4-1
KJS AND SORRENTO VINEYARD CONVERSION #P17-00432-ECPA MITIGATION MONITORING AND REPORTING PROGRAM

Issue Area	Impact	Mitigation Measure	Responsibility for Implementing	Responsibility for Monitoring	Monitoring and Reporting Actions	Timing
3.3 Biological Resources (cont.)	3.3-1 (cont.)	**Mitigation Measure 3.3-1d (proposed project, Reduced Intensity and Increased Stream and Wetland [Aquatic Resource] Setbacks Alternative, and Reduced Vegetation Removal/Grading and Road Use Alternative):** i. A qualified biological monitor shall directly supervise all vegetation clearing, earth-disturbing activities, and infrastructure installation occurring within 492 feet of suitable aquatic habitat for western pond turtle, California red-legged frog, and foothill yellow-legged frog. Before project vegetation removal or earth-disturbing activities begin, the owner/permittee shall provide documentation to Napa County that a qualified biologist (or biological monitor) is under contract to conduct the supervision, monitoring, and reporting specified by this measure. ii. Should any western pond turtles be detected near the development area during construction, the biological monitor shall relocate any western pond turtles found within the development area to suitable habitat outside the development area, but within the project site. iii. Should any California red-legged frogs be present within the development area during construction, work shall halt. The biological monitor shall contact Napa County, USFWS, and CDFW within 24 hours of the observation. Work shall not resume until the County and USFWS have provided authorization and the frog has left on its own accord. Within 14 days after the final monitoring event, the qualified biological monitor shall submit a letter report to the County summarizing the results of the biological monitoring. iv. If foothill yellow-legged frogs are discovered during project construction, all work in the immediate area shall cease until the individual moves out of harm's way, as determined by the on-site biological monitor.	Qualified biologist	Napa County, qualified biologist, USFWS, CDFW	A qualified biologist will monitor activities within 492 feet of suitable aquatic habitat for western pond turtle, California red-legged frog and foothill yellow-legged frog. Documentation will be provided to Napa County that a qualified biologist (or biological monitor) is under contract. If any western pond turtles are found, the qualified biologist will relocate the western pond turtle to suitable habitat outside of the development area. If any California red-legged frogs are found, no work shall occur and USFWS, Napa County and CDFW will be notified. No work will begin until USFWS has provided authorization. If foothill yellow-legged frogs are found, all work in the immediate area shall cease until the individual moves out of harm's way, as determined by the on-site biological monitor. Qualified biologist will provide Napa County a letter summarizing results of biological monitoring within 14 days of the final monitoring event.	During construction
		Mitigation Measure 3.3-1e (proposed project, Reduced Intensity and Increased Stream and Wetland [Aquatic Resource] Setbacks Alternative, and Reduced Vegetation Removal/Grading and Road Use Alternative): Before tree removal and other earth-disturbing activities begin during the Swainson's hawk nesting season (March 1 through September 15, coinciding with the grading season of April 1 through September 1 [Napa County Code Section 18.108.070.L]), a qualified biologist shall conduct at least one protocol-level preconstruction survey. (A "qualified biologist" is defined as a person knowledgeable and experienced in the biology and natural history of local avian resources with potential to occur at the project site.) The protocol-level preconstruction survey shall be conducted during the recommended survey periods for the nesting season that coincides with the start of construction activities by phase, in accordance with the *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley* (Appendix E; Swainson's Hawk Technical Advisory Committee 2000). For example, if construction will begin on or around April 1, the preconstruction survey shall occur during Survey Period I, which extends from January to March 20. If construction will begin on or around April 15, the preconstruction survey shall occur during Survey Period II, which extends from March 20 to April 5. The qualified biologist shall conduct surveys for nesting Swainson's hawk within 0.25 mile of all project development areas applicable to the proposed phased construction, where legally permitted. If access to adjacent properties is denied, the biologist shall use binoculars to visually determine whether Swainson's hawk nests are present within 0.25 mile of the project development areas slated for that year/ phase. If no active Swainson's hawk nests are identified on or within 0.25 mile of the project development areas, the qualified biologist shall submit a report summarizing the survey results to Napa County within 5 days after the final survey. In this case, no further avoidance and minimization measures for nesting habitat are required for that phase. The same survey protocol shall be conducted before implementation of each project phase.	Qualified biologist	Napa County, qualified biologist	Conduct preconstruction survey for nesting Swainson's hawks within 0.25 mile of the project development area. Provide Napa County a copy of the survey results within 5 days after the final survey.	Before construction

TABLE 4-1
KJS AND SORRENTO VINEYARD CONVERSION #P17-00432-ECPA MITIGATION MONITORING AND REPORTING PROGRAM

Issue Area	Impact	Mitigation Measure	Responsibility for Implementing	Responsibility for Monitoring	Monitoring and Reporting Actions	Timing
3.3 Biological Resources (cont.)	3.3-1 (cont.)	**Mitigation Measure 3.3-1f (proposed project, Reduced Intensity and Increased Stream and Wetland [Aquatic Resource] Setbacks Alternative, and Reduced Vegetation Removal/Grading and Road Use Alternative):** If any active Swainson's hawk nests are found within 0.25 mile of the development areas proposed during that phase of construction, the qualified biologist shall contact Napa County and CDFW via phone call or email within 1 day after the preconstruction survey to report the findings. For this avoidance and minimization requirement, "construction activities" are defined to include operation of heavy equipment for construction (use of bulldozers or excavators, haul trucks, loaders, and tractors) or other project-related activities that could cause nest or fledging abandonment within 0.25 mile of a nest site between March 1 and September 15. Should active nest(s) be present within 0.25 mile of development areas, the County and CDFW shall be consulted to develop take avoidance measures including but not limited to the following: • Establishing appropriate noise buffers. • Installing high-visibility construction fencing around the buffer zone. Following the installation of any such fencing, it shall be inspected and approved by the County. • Implementing a monitoring and reporting program before any construction activities occur within 0.25 mile of the nest. The monitoring and reporting program shall include, at minimum, the presence of a full-time qualified biological monitor to monitor the nest during all construction activities. After take avoidance measures are implemented and construction activities begin, if the qualified biological monitor determines that the construction activities are disturbing the nest, construction activities shall cease until the County and CDFW are consulted. The construction activities shall not resume until the County, in cooperation with CDFW, has determined that construction activities would not result in abandonment of the nest site. Once the qualified biologist confirms that the nest is no longer active or that the nest would not be disturbed during construction activities within the buffer zone, the biologist shall submit a report summarizing the monitoring results to the County and CDFW within 30 days after the final monitoring event. In this case, no further avoidance and minimization measures for nesting habitat are required for that phase of construction.	Owner/permittee, qualified biologist	Napa County, qualified biologist, CDFW	If nesting Swainson's hawks are found, a qualified biologist will contact Napa County and CDFW via phone call or email within 1 day after preconstruction survey to report findings. Identify and prepare an appropriate monitoring and reporting program in consultation with the County and CDFW.	Before and during construction
		Mitigation Measure 3.3-1g (proposed project, Reduced Intensity and Increased Stream and Wetland [Aquatic Resource] Setbacks Alternative, and Reduced Vegetation Removal/Grading and Road Use Alternative): A qualified biologist shall conduct a habitat assessment for burrowing owls. The survey area shall include a 500-foot radius around the annual grasslands within applicable development areas (i.e., annual grassland habitat). The qualified biologist shall provide a report to Napa County following the completion of the habitat assessment, which shall identify areas of suitable habitat for burrowing owl, if any. If the results of the habitat assessment determine that there is no suitable habitat for burrowing owls, then no further measures regarding burrowing owls are required. If suitable habitat is present, a qualified biologist shall conduct surveys in accordance with Appendix D of the 2012 Staff Report on Burrowing Owl Mitigation (CDFG 2012). (A "qualified biologist" is defined as a person with a minimum of two years of experience implementing the 2012 Staff Report methodology.) Time lapses of project activities of greater than 14 days shall trigger subsequent surveys including but not limited to a final survey within 24 hours prior to ground disturbance before construction equipment mobilizes to areas deemed to be suitable habitat for burrowing owls. If burrowing owls are detected on or adjacent to the site, the following restricted activity dates and setback distances recommended per CDFW's Staff Report (CDFG 2012) shall be implemented, unless reduced buffers are accepted by CDFW in writing based on site-specific conditions: • From April 1 through October 15, low disturbance and medium disturbance activities shall have a 200-meter (656-foot) buffer, while high disturbance activities shall have a 500-meter (1,640-foot) buffer from occupied nests and wintering sites. • From October 16 through March 31, low disturbance activities shall have a 50-meter (164-foot) buffer, medium disturbance activities shall have a 100-meter (328-foot) buffer, and high disturbance activities shall have a 500-meter (1,640-foot) buffer from occupied nests and wintering sites.	Qualified biologist	Napa County, qualified biologist, CDFW	Conduct habitat assessment for burrowing If suitable habitat is present, conduct surveys in accordance with Appendix D of the 2012 Staff Report on Burrowing Owl Mitigation (CDFG 2012).	Before construction

TABLE 4-1
KJS AND SORRENTO VINEYARD CONVERSION #P17-00432-ECPA MITIGATION MONITORING AND REPORTING PROGRAM

Issue Area	Impact	Mitigation Measure	Responsibility for Implementing	Responsibility for Monitoring	Monitoring and Reporting Actions	Timing
3.3 Biological Resources (cont.)	3.3-1g (cont.)	If burrowing owls are present outside of the nesting season, burrowing owls may be passively relocated from the project site and adjacent habitat using CDFW-accepted methods so that construction can proceed. Any required passive relocation of burrowing owls would require CDFW acceptance. If passive relocation of burrowing owls is necessary, a qualified biologist shall prepare a Relocation Plan, including compensatory habitat as described below, for CDFW review and acceptance prior to the start of construction activities. If the survey determines that the project site is actively being used by burrowing owls, or any owls are passively relocated as described above, then compensatory habitat mitigation shall be provided. The habitat mitigation/compensation plan shall be submitted to CDFW for review and approval prior to the start of project activities. If burrowing owls are observed during surveys, notification shall also be submitted to the California Natural Diversity Database (see https://wildlife.ca.gov/Data/CNDDB/Submitting-Data).				
		Mitigation Measure 3.3-1h (proposed project, Reduced Intensity and Increased Stream and Wetland [Aquatic Resource] Setbacks Alternative, and Reduced Vegetation Removal/Grading and Road Use Alternative): Before tree removal and other earth-disturbing activities begin during the nesting season (February 1 through August 31, coinciding with the grading season of April 1 through September 1 [Napa County Code Section 18.108.070.L]) for each project construction phase, a qualified biologist shall conduct a preconstruction survey within 7 days before the tree removal and other earth-disturbing activities are to occur. (A "qualified biologist" is defined as a person knowledgeable and experienced in the biology and natural history of local avian resources with potential to occur at the project site.) The nesting-bird preconstruction survey shall cover the development areas plus an approximately 500-foot radius around the development areas. If the preconstruction survey shows no evidence of active nests, a copy of the survey results shall be provided to Napa County and CDFW before the start of work, and no additional measures are required for that phase. If construction does not begin within 7 days of the preconstruction survey or halts for more than 7 days, an additional preconstruction survey shall be conducted. If any active nests are located within development areas or within 500 feet of the development areas, an appropriate buffer zone shall be established around the nest(s), as determined by the qualified biologist in consultation and cooperation with the County and CDFW; the minimum buffer zones pursuant to this measure shall be 100 feet for migratory bird nests and 250 feet for raptor nests. Before the start of vegetation removal and earth-disturbing activities, the biologist shall mark the buffer zone(s) with temporary construction fencing. The fencing shall be inspected and approved by the County before any earth-moving and/or development activities begin and shall be maintained until the end of the breeding season or the young have fledged. If active migratory-bird nests are found between 100 and 500 feet of construction activities (i.e., development areas), or if raptor nests are found between 250 and 500 feet of construction activities (i.e., development areas), a qualified biologist shall monitor the nests weekly during construction to evaluate potential nesting disturbance by construction activities. Alternatively, work may be phased to avoid these areas and continue in other vineyard blocks (development areas) until the nest is no longer occupied. The qualified biologist shall provide monitoring reports weekly to Napa County to document monitoring activities and evaluate effects on nesting birds as prescribed by this measure. Alternative methods of flushing out nesting birds before preconstruction surveys shall be prohibited, whether those methods are physical (removing or disturbing nests by physically disturbing trees with construction equipment), audible (using sirens or bird cannons), or chemical (spraying nesting birds or their habitats).	Qualified biologist	Napa County, qualified biologist, CDFW	Conduct preconstruction survey for nesting birds in all suitable habitat in the development area, and within a minimum of 500 feet from the project area. Provide Napa County and CDFW with a copy of the survey results for review and written acceptance. If nesting birds are found, identify appropriate avoidance methods and exclusion buffers in consultation with the County and CDFW before the start of project activities.	Before and during construction

TABLE 4-1
KJS AND SORRENTO VINEYARD CONVERSION #P17-00432-ECPA MITIGATION MONITORING AND REPORTING PROGRAM

Issue Area	Impact	Mitigation Measure	Responsibility for Implementing	Responsibility for Monitoring	Monitoring and Reporting Actions	Timing
3.3 Biological Resources (cont.)	3.3-1 (cont.)	**Mitigation Measure 3.3-1i (proposed project, Reduced Intensity and Increased Stream and Wetland [Aquatic Resource] Setbacks Alternative, and Reduced Vegetation Removal/Grading and Road Use Alternative):** Erosion Control Plan #P17-00432-ECPA shall be revised before approval to avoid all potential bat habitat/roost trees in proposed vineyard Blocks 5D, 5F, 5H, 5J, 6, 8, 17, 23C, 23F, 23G, 24G, 25, 27, and 29B. These trees are identified in Figure 3.3-5. A minimum 50-foot avoidance buffer shall be established around the driplines of the habitat/roost trees, under the direct supervision of a qualified biologist, to protect the trees' canopies and root protection zones with high-visibility fencing. (The term "qualified" refers to a biologist who is knowledgeable and experienced in the botany, biology, and natural history of local mammalian and avian resources with potential to occur at the project site.) The fencing shall be inspected and approved by Napa County before the start any earth-moving and/or development activities. Exclusion buffers shall remain in effect until vineyard development and planting activities are complete.	Owner/permittee, qualified botanist	Napa County	Revise Erosion Control Plan #P17-00432-ECPA before approval to avoid all potential bat habitat/roost trees in proposed vineyard Blocks 5D, 5F, 5H, 5J, 6, 8, 17, 23C, 23F, 23G, 24G, 25, 27, and 29B.	Before construction
		Mitigation Measure 3.3-1j (proposed project, Reduced Intensity and Increased Stream and Wetland [Aquatic Resource] Setbacks Alternative, and Reduced Vegetation Removal/Grading and Road Use Alternative): Erosion Control Plan #P17-00432-ECPA shall be revised before approval to provide for the installation of one bat roost box for every 5 acres of oak woodland habitat removed (a total of six bat roost boxes). The type of bat roost box shall be identified and box locations shall be mapped on the ECPA site plan near the habitat trees proposed for removal, and under the direction of a qualified biologist in consultation with Napa County. The owner/permittee/biologist shall provide adequate documentation to the County, including photographs showing that the bat roost boxes have been installed properly, before the start of any vegetation removal and earth-disturbing activities associated with the project.	Owner/permittee	Napa County	Revise Erosion Control Plan #P17-00432-ECPA before approval to provide for the installation of one bat roost box for every 5 acres of oak woodland habitat removed (a total of six bat roost boxes).	Before construction
		Mitigation Measure 3.3-1k (proposed project, Reduced Intensity and Increased Stream and Wetland [Aquatic Resource] Setbacks Alternative, and Reduced Vegetation Removal/Grading and Road Use Alternative): At least 30 days prior to tree removal activities, a qualified biologist shall assess all trees to determine if they contain suitable bat roosting habitat (e.g., cavities, crevices, deep bark fissures). If any trees contain such habitat, bat presence shall be presumed. Trees containing bat roosting habitat shall be removed using the method described below during the following seasonal periods of bat activity: Prior to maternity season – from approximately March 1 (or when night temperatures are above 45 degrees Fahrenheit and when rains have ceased) through April 15 (when females begin to give birth to young); and prior to winter torpor – from September 1 (when young bats are self-sufficiently volant) until October 15 (before night temperatures fall below 45 degrees Fahrenheit and rains begin). On day 1, in the afternoon and under the supervision of a qualified biologist, chainsaws only shall be used to remove tree limbs that do not contain suitable bat roosting habitat (e.g., cavities, crevices, deep bark fissures). The next day, the rest of the tree shall be removed. If bat habitat trees cannot be removed during the above seasonal periods of bat activity, a qualified biologist shall survey the trees to determine if the tree contains a maternity colony or winter torpor bats. If the qualified biologist cannot make this determination with certainty, the presence of maternity colonies or winter torpor bats shall be assumed, and removal of the tree shall be delayed until the seasonal periods of bat activity specified above. If the biologist determines that bats are present but maternity colony or winter torpor bats are absent, then the tree may be removed outside of the above periods of seasonal bat activity using the above two-step tree removal process. If the qualified biologist determines that bats are absent, then the tree may be removed without bat seasonality or method restrictions.	Qualified biologist	Napa County, qualified biologist, CDFW	At least 30 days prior to tree removal activities, assess all trees to determine if they contain suitable bat roosting habitat. Remove trees containing bat roosting habitat according to the described methods.	Before and during construction

TABLE 4-1
KJS AND SORRENTO VINEYARD CONVERSION #P17-00432-ECPA MITIGATION MONITORING AND REPORTING PROGRAM

Issue Area	Impact	Mitigation Measure	Responsibility for Implementing	Responsibility for Monitoring	Monitoring and Reporting Actions	Timing
3.3 Biological Resources (cont.)	**3.3-2:** Construction and operation of the proposed project could have a substantial adverse effect on riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by CDFW or USFWS.	**Mitigation Measure 3.3-2a (proposed project, Reduced Intensity and Increased Stream and Wetland [Aquatic Resource] Setbacks Alternative, and Reduced Vegetation Removal/Grading and Road Use Alternative):** To avoid impacts on beardless wildrye grassland, blue wildrye grassland, and purple needlegrass grassland, Erosion Control Plan #P17-00432-ECPA shall be revised before approval to exclude these sensitive natural grassland communities/habitats and plant populations and provide them with a minimum 50-foot buffer from development areas. Figure 3.3-5 shows the areas that would be excluded from development as a result of implementation of this mitigation measure. Before vegetation clearing, the 50-foot buffer shall be established around these grasslands under the direct supervision of a biologist, using high-visibility construction fencing. The fencing shall be inspected and approved by Napa County before the start of any earth-moving and/or development activities. The protective constructive fencing shall be replaced with a permanent means of demarcation and protection around the grassland habitats (such as permanent fence or rock barrier) so that grassland avoidance areas are not encroached upon or disturbed as part of ongoing vineyard operations.	Owner/permittee, qualified botanist/ biologist	Napa County	Revise Erosion Control Plan #P17-00432-ECPA before approval to exclude sensitive natural grasslands communities/habitats and plant populations and provide a minimum 50-foot buffer from development areas.	Before construction
		Mitigation Measure 3.3-2b (proposed project, Reduced Intensity and Increased Stream and Wetland [Aquatic Resource] Setbacks Alternative, and Reduced Vegetation Removal/Grading and Road Use Alternative): A qualified biologist shall provide a worker education and awareness program to all on-site personnel before the start of materials staging or ground-disturbing activities. The biologist shall explain to construction workers how to avoid impacts on beardless wildrye grassland, blue wildrye grassland, and purple needlegrass grassland and shall include topics on species identification and descriptions. The education program should include handouts, illustrations, photographs, and project maps that show areas where avoidance measures are in place. The crew members shall sign a sign-in sheet documenting that they received the training. Proof that the education and awareness program has been conducted shall be submitted to Napa County before the start of vegetation removal and earth-disturbing activities associated with Phases 1 and 2 of project construction.	Owner/permittee, qualified botanist/ biologist	Napa County, qualified botanist/ biologist	Implement worker education and awareness program regarding the appearance and description of beardless wildrye grassland, blue wildrye grassland, and purple needlegrass grassland.	Before construction
	3.3-3: Construction and operation of the proposed project could have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.	**Mitigation Measure 3.3-3a (proposed project, Reduced Intensity and Increased Stream and Wetland [Aquatic Resource] Setbacks Alternative, and Reduced Vegetation Removal/Grading and Road Use Alternative):** All necessary federal, state and local permits shall be obtained and provided to the County before the construction of the water intake device on Elder Creek and the spillway berm and overflow structure at the unnamed pond. The owner/permittee shall comply with all permit minimization and mitigation measures. Impacts on waters of the United States would require a minimum mitigation ratio of 1:1 (mitigated:affected) to comply with USACE's no-net-loss policy. In addition, the owner/permittee shall comply with the state's NPDES General Permit for Discharges of Storm Water Runoff Associated with Construction Activity, issued by the Regional Water Quality Control Board.	Owner/permittee	Napa County, USACE, Regional Water Board, CDFW	Obtain necessary permits and comply with all permit minimization and mitigation measures.	Before construction
		Mitigation Measure 3.3-3b (proposed project, Reduced Intensity and Increased Stream and Wetland [Aquatic Resource] Setbacks Alternative, and Reduced Vegetation Removal/Grading and Road Use Alternative): For project activities that are anticipated to occur within 50 feet of potential jurisdictional features and riparian areas that are proposed for avoidance, high-visibility construction fencing and silt fencing shall be erected at the edge of the construction/maintenance footprint (i.e., development area) before the commencement of construction. The fencing shall be inspected and approved by Napa County before the start of any earth-moving and/or construction activities in these areas. A qualified biological monitor shall be present during fence installation and during any initial grading or vegetation-clearing activities within 50 feet of potential jurisdictional features and riparian habitat, which are proposed for avoidance. The biological monitor shall submit letter reports to the County summarizing the results of fencing installation and construction monitoring to document these provisions.	Construction contractor, biological monitor	Napa County, biological monitor	Install high-visibility construction fencing and silt fencing at the edge of the construction/ maintenance footprint (i.e., development area) within 50 feet of potential jurisdictional features and riparian areas that are proposed for avoidance. Biological monitor shall be present during fence installation and during initial project activities within 50 feet of potential jurisdictional features and riparian habitat and fencing shall be inspected by Napa County. Biological monitor shall submit letter reports to Napa County summarizing results of fence installation and construction monitoring.	Before and during construction
		Mitigation Measure 3.3-3c (proposed project, Reduced Intensity and Increased Stream and Wetland [Aquatic Resource] Setbacks Alternative, and Reduced Vegetation Removal/Grading and Road Use Alternative): All areas with temporary impacts on potential waters of the United States shall be restored immediately after construction. The biological monitor shall submit letter reports to the County summarizing the results of restoration activities to document this provision and compliance with Mitigation Measures 3.3-3a and 3.3-3b.	Construction contractor, biological monitor, owner/permittee	Napa County	Potential waters of the United States will be restored immediately after construction. Biological monitor shall submit letter reports to Napa County summarizing the results of restoration activities and compliance with mitigation measures.	During and after construction

TABLE 4-1
KJS AND SORRENTO VINEYARD CONVERSION #P17-00432-ECPA MITIGATION MONITORING AND REPORTING PROGRAM

Issue Area	Impact	Mitigation Measure	Responsibility for Implementing	Responsibility for Monitoring	Monitoring and Reporting Actions	Timing
3.3 Biological Resources (cont.)	**3.3-4:** Construction and operation of the proposed project could interfere substantially with the movement of native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or could impede the use of native wildlife nursery sites.	**Mitigation Measure 3.3-4 (proposed project, Reduced Intensity and Increased Stream and Wetland [Aquatic Resource] Setbacks Alternative, and Reduced Vegetation Removal/Grading and Road Use Alternative):** Erosion Control Plan #P17-00432-ECPA shall be revised before approval to fence clusters of vineyard blocks as shown in Figure 3.3-6 and as described below. The revised fencing plan (i.e., Figure 4 of #P17-00432-ECPA) shall be subject to review and approval by Napa County before its incorporation into #P17-00432-ECPA, and shall include and show the fencing design features describe in 3.3-4iii below. i. The following vineyard blocks shall be fenced individually (not together): Vineyard Blocks 4 and 5, 19 and 20A, 21 and 22, 23C and 23D, 23G and 23F, 23E and 33A, and 29B, 30, and 31. The location of new wildlife exclusion fencing shall generally be limited to the outside edge of vineyard avenues and development areas. ii. Fencing around vineyard Blocks 9, 19, 20, 29, 30, 31, and 33 shall be revised to place the fencing along the outside the edge of vineyard avenues. iii. New fencing shall use a design that has 6-inch-square gaps at the base (instead of the typical 3-inch by 6-inch rectangular openings) to allow small mammals to move through the fence. Exit gates shall be installed at the corners of wildlife exclusion fencing to allow trapped wildlife to escape. Smooth wire instead of barbed wire shall be used on top of the fencing to keep wildlife from becoming entangled.	Owner/permittee	Napa County	Revise Erosion Control Plan #P17-00432-ECPA before approval to fence clusters of vineyard blocks. Fence vineyards as indicated in the Vineyard Fencing Plan.	Before and after construction
	3.3-5: Construction and operation of the proposed project could conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.	**Mitigation Measure 3.3-5a (proposed project, Reduced Intensity and Increased Stream and Wetland [Aquatic Resource] Setbacks Alternative, and Reduced Vegetation Removal/Grading and Road Use Alternative):** In order to mitigate impacts to oak woodland resulting from development of the proposed project, the owner/permittee shall place in permanent protection a Preserve Area of no less than 61.24 acres of oak woodland (30.62 x 2, for a 2:1 preservation ratio), half of which shall be situated on developable lands (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 as shown in Figure 3.3-7) and include the 2.9 acres of woodland removed through other mitigation measures. The preserved woodlands shall have similar habitat value as that being removed, as determined by a qualified professional knowledgeable and experienced in local botany and habitats. Erosion Control Plan #P17-00432-ECPA shall be revised prior to approval to identify the Preservation Area. All acreage designated for preservation shall be identified as such 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. The mitigation easement shall be prepared in a form acceptable to County Counsel and entered into and recorded with the Napa County Recorder's office prior to any earth disturbing activities, grading or vegetation removal, or within 12 months of project approval, whichever occurs first. In no case shall earthmoving activities be initiated until said mitigation easement is recorded. Any request by the Applicant for an extension of time to record the mitigation easement shall be considered by the PBES Director and shall be submitted to Napa County prior to the 12 month deadline, and shall provide sufficient justification for the extension. Land placed in protection shall be restricted from development and other uses that would potentially degrade the quality of the habitat (e.g., conversion to other land uses such as agriculture or urban development, and excessive off-road-vehicle use that increases erosion), and should otherwise be restricted by the existing goals and policies of Napa County. Any county staff time spent assessing and monitoring said provision shall be charged to the permittee, at the rate in effect at the time assessment and monitoring occurs, pursuant to County Fee Policy Part 80.	Owner/permittee	Napa County	Establish an enforceable restriction to preserve a minimum of 61.24 acres of oak woodland in similar habitat in the west-central or northwest portion of the project site. Record the enforceable restriction within 60 days of the County's approval of #P17-00432-ECPA.	Before and after construction

TABLE 4-1
KJS AND SORRENTO VINEYARD CONVERSION #P17-00432-ECPA MITIGATION MONITORING AND REPORTING PROGRAM

Issue Area	Impact	Mitigation Measure	Responsibility for Implementing	Responsibility for Monitoring	Monitoring and Reporting Actions	Timing
3.3 Biological Resources (cont.)	3.3-5 (cont.)	**Mitigation Measure 3.3-5b (proposed project, Reduced Intensity and Increased Stream and Wetland [Aquatic Resource] Setbacks Alternative, and Reduced Vegetation Removal/Grading and Road Use Alternative):** The owner/permittee shall locate and construct the point of diversion and associated infrastructure in an area along Elder Creek that does not contain valley oak trees. The location shall avoid removal and damage to valley oaks by providing a minimum protective buffer that extends to the tree's dripline. "Removal and damage" also means trimming of the tree and/or work occurring within the tree's buffer area. The tree protective buffer fencing shall be inspected and approved by Napa County before construction of the point of diversion begins. If avoiding valley oak trees is infeasible during construction of the point of diversion, the owner/permittee shall provide justification of the infeasibility, and a removal and replacement plan prepared by a qualified biologist or restoration ecologist, for review and approval by Napa County before construction of the point of diversion commences. If a valley oak or other oaks are removed (which includes substantial trimming of the tree and/or work within the buffer area), they shall be replaced on-site with 15-gallon oak trees at the following ratios: 4:1 removal between 5 and 10 inches dbh, 5:1 removal between 10 and 15 inches dbh, and 10:1 for removal greater than 15 inches dbh. Replacement trees shall be installed and their good health shall be documented before completion and finalization of the erosion control plan. Replacement trees shall be monitored and maintained as necessary for a minimum of seven years following planting to ensure that they achieve a minimum 80 percent survival. If valley oak plantings are not achieving this success criterion during the monitoring years, the owner/permittee shall replace the plantings and monitor them for an additional seven years following replanting until they achieve a minimum 80 percent survival rate. If avoidance of valley oaks is infeasible for construction of the point of diversion, the owner/permittee also shall preserve a minimum of 0.06 acre of riparian woodland in similar habitat in the west-central or northwest portion of the project site. This acreage shall be preserved in a deed restriction, an open space easement with an organization such as the Land Trust of Napa County as the grantee, or other means of permanent protection acceptable to the County as described in Mitigation Measure 3.3-5a.	Owner/permittee	Napa County	Avoid valley oak trees when locating the point of diversion and associated infrastructure in Elder Creek. Napa County shall inspect the tree protective buffer fencing. Prepare a removal and replacement plan if avoiding valley oak trees is infeasible. Replace and monitor any oaks on-site with 15-gallon oak trees at the ratios described in the measure for seven years to achieve a minimum 80 percent survival.	Before and after construction
3.4 Cultural and Tribal Cultural Resources	**3.4-1:** Construction and operation of the proposed project could cause a substantial adverse change in the significance of an archaeological resource pursuant to State CEQA Guidelines Section 15064.5.	**Mitigation Measure 3.4-1a (proposed project, Reduced Intensity and Increased Stream and Wetland [Aquatic Resource] Setbacks Alternative, and Reduced Vegetation Removal/Grading and Road Use Alternative):** Before the start of construction, an Archaeological Resources Worker Environmental Awareness Program shall be implemented. A qualified archaeologist, or designee, shall conduct training for project personnel regarding the appearance of archaeological resources and the procedures for notifying archaeological staff should materials be discovered. The owner/permittee shall ensure that project personnel are made available for and attend the training and retain documentation demonstrating attendance.	Owner/permittee, qualified archaeologist	Napa County	Implement Archaeological Resources Worker Environmental Awareness Program, train project personnel regarding the appearance of archaeological resources and the procedures for notifying archaeological staff should materials be discovered, and provide documentation showing that these steps have been taken.	Before construction
		Mitigation Measure 3.4-1b (proposed project, Reduced Intensity and Increased Stream and Wetland [Aquatic Resource] Setbacks Alternative, and Reduced Vegetation Removal/Grading and Road Use Alternative): If indigenous or historic-era archaeological resources are encountered during project development or operation, all activity within 100 feet of the find shall cease and the find shall be flagged for avoidance. The County and a qualified archaeologist, defined as one meeting the U.S. Secretary of the Interior's Professional Qualifications Standards for Archeology, shall be immediately informed of the discovery. The qualified archaeologist shall inspect the find within 24 hours of discovery and notify the County of their initial assessment. Indigenous archaeological materials might include obsidian and chert flaked-stone tools (e.g., projectile points, knives, scrapers) or toolmaking debris; culturally darkened soil (midden) containing heat-affected rocks, artifacts, or shellfish remains; stone milling equipment (e.g., mortars, pestles, handstones, or milling slabs); and battered stone tools, such as hammerstones and pitted stones. Historic-era materials might include building or structure footings and walls, and deposits of metal, glass, and/or ceramic refuse. If the County determines, based on recommendations from the qualified archaeologist, that the resource may qualify as a historical resource or unique archaeological resource (as defined in State CEQA Guidelines Section 15064.5) or a tribal cultural resource (as defined in PRC Section 21074), the resource shall be avoided if feasible. Avoidance means that no activities associated with the project that may affect cultural resources shall occur within the boundaries of the resource or any defined buffer zones.	Construction contractor, qualified archaeologist	Napa County, qualified archaeologist	If indigenous or historic-era archaeological resources are encountered during project development or operation, cease all activity within 100 feet of the find, flag the find for avoidance, and inform the correct parties.	During construction

TABLE 4-1
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Issue Area	Impact	Mitigation Measure	Responsibility for Implementing	Responsibility for Monitoring	Monitoring and Reporting Actions	Timing
3.4 Cultural and Tribal Cultural Resources (cont.)	3.4-1 (cont.)	If avoidance is not feasible, the County shall consult with appropriate Native American tribes (if the resource is indigenous) and other appropriate interested parties to determine treatment measures to avoid, minimize, or mitigate any potential impacts on the resource pursuant to PRC Section 21083.2, State CEQA Guidelines Section 15126.4, and County General Plan Policy CC-23. This shall include documentation of the resource and may include data recovery or other measures. Treatment for most resources would consist of (but would not be not limited to) sample excavation, artifact collection, site documentation, and historical research, with the aim to target the recovery of important scientific data contained in the portion(s) of the significant resource. The resource and treatment method shall be documented in a professional-level technical report to be filed with the California Historical Resources Information System. Work in the area may commence upon completion of approved treatment and under the direction of the qualified archaeologist.				
	3.4-2: Construction and operation of the proposed project could disturb human remains, including those interred outside of formal cemeteries.	**Mitigation Measure 3.4-2 (proposed project, Reduced Intensity and Increased Stream and Wetland [Aquatic Resource] Setbacks Alternative, and Reduced Vegetation Removal/Grading and Road Use Alternative):** If human remains are uncovered during project construction, all work shall immediately halt within 100 feet and the Napa County Coroner shall be contacted to evaluate the remains, and follow the procedures and protocols set forth in State CEQA Guidelines Section 15064.5(e)(1) and County General Plan Policy CC-23. If the County Coroner determines that the remains are Native American, the County shall contact the NAHC, in accordance with Health and Safety Code Section 7050.5(c) and PRC Section 5097.98. Per PRC Section 5097.98, the County shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located is not damaged or disturbed by further development activity until the County has discussed and conferred, as prescribed in PRC Section 5097.98, with the most likely descendants regarding their recommendations, if applicable, taking into account the possibility of multiple human remains.	Construction contractor	Napa County/Coroner	Halt work within 100 feet and notify the Napa County Coroner if human remains are uncovered. Contact the NAHC if the remains are determined to be Native American.	During construction
	3.4-3: Construction and operation of the proposed project could cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074.	**Mitigation Measure 3.4-3 (proposed project, Reduced Intensity and Increased Stream and Wetland [Aquatic Resource] Setbacks Alternative, and Reduced Vegetation Removal/Grading and Road Use Alternative):** Before the start of vegetation removal and earth-moving activities under #P17-004320-ECPA, the owner/permittee shall provide documentation to the Napa County Planning, Building and Environmental Services Department that a Monitoring Agreement has been entered into with the Yocha Dehe Wintun Nation. Should a Monitoring Agreement not be entered into with the Yocha Dehe Wintun Nation, the owner/permittee shall provide, for review and approval by Napa County, a Cultural Monitoring Plan prepared by a professional archaeologist certified by the Registry of Professional Archeologists that incorporates the Treatment Protocol for Handling Human Remains and Cultural Items Affiliated with the Yocha Dehe Wintun Nation. The following are examples of mitigation capable of avoiding or substantially lessening potential significant impacts on a tribal cultural resource or alternatives that would avoid significant impacts on the resource that will need to be included in the Monitoring Agreement or Cultural Monitoring Plan. These measures may be considered to avoid or minimize significant adverse impacts and constitute the standard by which an impact conclusion of less than significant may be reached: • Implement monitoring requirements, including but not limited to sensitivity training for site workers, identification of project activities and project site areas requiring an on-site monitor, procedures that are implemented in the event of a find, and monitoring documentation and reporting. • Avoid and preserve resources in place, including but not limited to planning construction to avoid the resources and protect the cultural and natural context, or planning greenspace, parks, or other open space to incorporate the resources with culturally appropriate protection and management criteria. • Treat the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including but not limited to the following: o Protect the cultural character and integrity of the resource. o Protect the traditional use of the resource. o Protect the confidentiality of the resource.	Owner/permittee	Napa County and Yocha Dehe Wintun Nation	Enter and implement Monitoring Agreement with the Yocha Dehe Wintun Nation	Before, during and after construction

TABLE 4-1
KJS AND SORRENTO VINEYARD CONVERSION #P17-00432-ECPA MITIGATION MONITORING AND REPORTING PROGRAM

Issue Area	Impact	Mitigation Measure	Responsibility for Implementing	Responsibility for Monitoring	Monitoring and Reporting Actions	Timing
3.4 Cultural and Tribal Cultural Resources (cont.)	3.4-3 (cont.)	○ Establish permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or using the resources or places. ○ Protect the resource.				
3.5 Geology and Soils	**3.5-5:** Construction and operation of the proposed project could directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.	**Mitigation Measure 3.5-5a (proposed project, Reduced Intensity and Increased Stream and Wetland [Aquatic Resource] Setbacks Alternative, and Reduced Vegetation Removal/Grading and Road Use Alternative):** A Paleontological Resources Worker Environmental Awareness Program shall be implemented before the start of construction. A qualified paleontologist shall train construction personnel regarding the appearance of fossils and procedures for notifying paleontological staff if fossils are discovered during construction work. The owner/permittee shall provide Napa County documentation demonstrating that construction personnel have attended the training before the commencement of vegetation removal and earth-disturbing activities associated with Phases 1 and 2 of project.	Construction contractor qualified paleontologist	Napa County	Implement Paleontological Resources Worker Environmental Awareness Program, train project personnel regarding the appearance of paleontological resources and the procedures for notifying paleontological staff should materials be discovered, and provide documentation showing that these steps have been taken.	Before construction
		Mitigation Measure 3.5-5b (proposed project, Reduced Intensity and Increased Stream and Wetland [Aquatic Resource] Setbacks Alternative, and Reduced Vegetation Removal/Grading and Road Use Alternative): Initial earth-disturbing, grading, and/or construction activities as defined by the County Conservation Regulations (NCC Chapter 18.108) in previously undisturbed sediments more than 2 feet deep in areas that are mapped as Great Valley Sequence (KJgvl or Jk) shall be monitored on a "full time" basis during Phases 1 and 2 of ECPA development, in accordance with a Paleontological Monitoring Plan prepared and implemented by a qualified paleontologist, defined as an individual who has experience collecting and salvaging paleontological resources and meets the minimum standards of the SVP (2010). The Plan shall be submitted to Napa County for review and approval before commencement of any vegetation removal or earth-disturbing activities associated with the project. Within the Plan, the extent, duration, and timing of the monitoring shall be determined by the qualified paleontologist based on the location and extent of proposed ground disturbance within the Great Valley Sequence (KJgvl or Jk) deposits. If the qualified paleontologist determines during project monitoring that full-time monitoring is no longer warranted based on the specific geologic conditions at the surface or at depth, the paleontologist may recommend (subject to review and approval by Napa County) that monitoring be reduced to periodic spot-checking or cease entirely. Monitoring shall not be required in any artificial fill or for activities that do not reach the above-stated depth and mapping areas. Should fossils be encountered, construction work shall halt within the Great Valley Sequence deposits until a qualified paleontologist can assess the significance of the find and develop, for Napa County review and approval, additional Plan measures to avoid impacts on paleontological resources. Significant fossils shall be salvaged, following the standards of the SVP (2010) and curated at an accredited repository, such as the University of California Museum of Paleontology or Los Angeles County Museum of Natural History.	Construction contractor, qualified paleontologist	Napa County, qualified paleontologist	Prepare and implement Paleontological Monitoring Plan.	Before and during construction
3.8 Land Use and Planning	**3.8-1:** Construction and operation of the proposed project could cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.	Implement Mitigation Measures 3.2-1a, 3.2-1b, and 3.3-1a through 3.3-5b (proposed project, Reduced Intensity and Increased Stream and Wetland [Aquatic Resource] Setbacks Alternative, and Reduced Vegetation Removal/Grading and Road Use Alternative).	See above.	See above.	See above.	See above.

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CHAPTER 5
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