



SOURCE: Kjeldsen Biological Consulting

FINAL ENVIRONMENTAL IMPACT REPORT
VOLUME I – RESPONSES TO COMMENTS DOCUMENT

**JASUD ESTATE VINEYARDS
TIMBERLAND CONVERSION PROJECT**

AUGUST 2012

LEAD AGENCY:

California Department of Forestry and Fire Protection
P.O. Box 944246
Sacramento, CA 94244-2460



FINAL ENVIRONMENTAL IMPACT REPORT
VOLUME I – RESPONSES TO COMMENTS DOCUMENT

**JASUD ESTATE VINEYARDS
TIMBERLAND CONVERSION PROJECT**

AUGUST 2012

LEAD AGENCY:

California Department of Forestry and
Fire Protection
P.O. Box 944246
Sacramento, CA 94244-2460



FINAL ENVIRONMENTAL IMPACT REPORT
VOLUME I – RESPONSES TO COMMENTS DOCUMENT

**JASUD ESTATE VINEYARDS
TIMBERLAND CONVERSION PROJECT**

AUGUST 2012

LEAD AGENCY:

California Department of Forestry and Fire Protection
P.O. Box 944246
Sacramento, CA 94244-2460



PREPARED BY:

Analytical Environmental Services
1801 7th Street, Suite 100
Sacramento, CA 95811
www.analyticalcorp.com



TABLE OF CONTENTS

FINAL ENVIRONMENTAL IMPACT REPORT VOLUME I – RESPONSES TO COMMENTS DOCUMENT JASUD ESTATE VINEYARDS TIMBERLAND CONVERSION PROJECT

1.0	INTRODUCTION	
1.1	Overview	1-1
1.2	Public Participation Process	1-1
1.3	Document Organization	1-2
2.0	COMMENTS ON THE DRAFT EIR	2-1
	Letter 1 – Vincent Salsedo, Tribal Council Member, Mishewal Wappo Tribe	
	Letter 2 – Kelli Felker, Conservation, Development and Planning, Napa County	
	Letter 3 – Scott Wilson, Acting Regional Manager, California Department of Fish and Game	
	Letter 4 – Martin Samuel Checov	
	Letter 5 – Frederic and Mary Constant	
3.0	RESPONSES TO COMMENTS.....	3-1
	Attachment A – Letter to Applicant from Mr. Tegan Passalacqua	
	Attachment B – Letter to Applicant from Mr. Cory Empting	
	Attachment C – California Department of Conservation, Engineering Geologic Review of Timber Harvest Plan	
	Attachment D – CAL FIRE Pre-Harvest Inspection Report	
	Attachment E – Email Correspondence with Napa County, August 8, 2012	
4.0	TEXT REVISIONS TO THE DRAFT EIR	
4.1	Introduction	4-1
4.2	Text Revisions	4-1
5.0	MITIGATION MONITORING AND REPORTING PLAN	
5.1	Introduction	5-1
5.2	Mitigation Monitoring and Reporting Plan.....	5-2

LIST OF TABLES

Table 2-1	Persons, Organizations, and Public Agencies Commenting in Writing	2-1
Table 5-1	Mitigation Monitoring and Reporting Plan	5-2

SECTION 1.0

INTRODUCTION

1.0 INTRODUCTION

1.1 OVERVIEW

This Responses to Comments document has been prepared to address comments received by the California Department of Forestry and Fire Protection (“CAL FIRE” or “Lead Agency”) on the Draft Environmental Impact Report (Draft EIR) for the proposed Jasud Estate Vineyards Timberland Conversion Project (Proposed Project). The Draft EIR was submitted to the State Clearinghouse on April 24, 2012 (SCH#2011042037). This Responses to Comments, together with the Draft EIR, as revised, comprises the Final EIR.

An EIR is an informational document that must be considered by the Lead Agency prior to project approval. CEQA *Guidelines* Section 15132 specifies that the Final EIR shall consist of:

- The Draft EIR or a revision of the draft (Draft EIR together with **Chapter 4.0** of this Final EIR Responses to Comments).
- Comments and recommendations received on the Draft EIR either verbatim or in summary (**Chapter 2.0** of this Final EIR Response to Comments).
- A list of persons, organizations, and public agencies commenting on the Draft EIR (**Chapter 2.0** of this Final EIR Responses to Comments).
- Responses by the Lead Agency to significant environmental points raised in the review and consultation process (**Chapters 3.0** and **4.0** of this Final EIR Responses to Comments).
- Any other information added by the Lead Agency.

1.2 PUBLIC PARTICIPATION PROCESS

The process of environmental review for the Jasud Estate Vineyards Timberland Conversion Project (Proposed Project) was initiated with public release of the Notice of Preparation (NOP) on April 17, 2011. The Notice of Availability (NOA) of the Draft EIR was released on April 24, 2012. The NOA announced a 45-day comment period from April 24, 2012 through June 7, 2012.

The public comment period provides an opportunity for interested public and private parties to provide input regarding the completeness and adequacy of an EIR. CEQA *Guidelines* Section 15151 addresses the standards by which EIR adequacy is judged:

An EIR should be prepared with a sufficient degree of analysis to provide decision-makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement

among the experts. The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure.

CEQA *Guidelines* Section 15204(a) encourages parties to focus comments on the “sufficiency of the document in identifying and analyzing the possible impacts on the environment and ways in which the significant effects of the project might be avoided or mitigated.” Commenters are advised:

Comments are most helpful when they suggest additional specific alternatives or mitigation measures that would provide better ways to avoid or mitigate the significant environmental effects. At the same time, reviewers should be aware that the adequacy of an EIR is determined in terms of what is reasonably feasible, in light of factors such as the magnitude of the project at issue, the severity of its likely environmental impacts, and the geographic scope of the project. CEQA does not require a lead agency to conduct every test or perform all research, study, and experimentation recommended or demanded by commenters. When responding to comments, lead agencies need only respond to significant environmental issues and do not need to provide all information requested by reviewers, as long as a good faith effort at full disclosure is made in the EIR.

1.3 DOCUMENT ORGANIZATION

This Responses to Comments document consists of this introduction and the chapters outlined below:

Chapter 2, Comments on the Draft EIR – This chapter includes a list of all agencies, organizations, and individuals that submitted written comments during the public review period for the Draft EIR. The list is followed by copies of original written comments received during the public review period for the Draft EIR. Comment letters are each assigned a number, and individual comments are bracketed in the margin.

Chapter 3, Responses to Comments - This chapter provides individual responses to each written comment submitted during the public review period for the Draft EIR. Responses are referenced to the bracketed comment numbers provided in **Chapter 2.0**.

Chapter 4, Text Revisions to the Draft EIR – This chapter presents any revisions to the Draft EIR text that were made in response to comments received during the public review period for the Draft EIR. These revisions are organized by the section and page number as they appear in the Draft EIR. Additions are indicated with an underline (e.g., new text) and deletions are designated by with a strikethrough (e.g., ~~deleted text~~).

Chapter 5, Mitigation, Monitoring, and Reporting Plan - This chapter presents the Mitigation Monitoring and Reporting Plan (MMRP) for the Proposed Project.

SECTION 2.0

COMMENTS ON THE DRAFT EIR

2.0 COMMENTS ON THE DRAFT EIR

This chapter contains written comments that were received during the public review period for the Draft EIR prepared for the Proposed Project. A total of five comment letters were received by Cal Fire in response to the Draft EIR. The agencies, organizations and individuals that provided comments on the Draft EIR are listed in **Table 2-1**. Individual comment letters are provided following this table.

TABLE 2-1. PERSONS, ORGANIZATIONS, AND PUBLIC AGENCIES COMMENTING IN WRITING

Comment Letter Number	Name/Individual(s)	Agency/Organization	Date
1	Vincent Salsedo, Tribal Council Member	Mishewal Wappo Tribe	June 7, 2012
2	Kelli Felker, Planner II	Conservation, Development and Planning, Napa County	June 7, 2012
3	Scott Wilson, Acting Regional Manager	Department of Fish and Game	June 1, 2012
4	Martin Samuel Checov	Neighbor/Land Owner	June 6, 2012
5	Frederic and Mary Constant	Neighbor/Land Owner	June 7, 2012 (Received June 15, 2012)

Jacqueline McCrory

From: Vincent Salsedo [vincents@mishewalwappotribe.com]
Sent: Thursday, June 07, 2012 4:08 PM
To: Sacramento Public Comment
Subject: Jasud Vineyard

Hello Jessica Griggs,

Per our discussion on the phone I'm writing to you in regards of the Jasud Estate Vineyards Timberland Conversion Project's DEIR. Our concerns are about disturbing the archaeological site that Tom Origer has in his report. We would like to know how you will guarantee that these mitigation measures will be followed out and thus providing us the proof it has been done. We suggest that pictures of all the boundaries being staked with orange snow/safety fence around the site are provided. We also ask that the pictures be dated while construction is going on to ensure the protection of the site for duration of the project. In order to insure no ground disturbing activities shall be done in this area. We also always ask if any discovery is made we will be informed immediately. If you have any question or concerns please contact us.

1-1

Thanks, take care and be good.

Vincent Salsedo, Tribal Council Member
Mishewal Wappo Tribe of Alexander Valley
vincents@mishewalwappotribe.com
www.mishewalwappotribe.com
Cell: 707-342-8393
Office: 707-284-1060 ext:105

Comment Letter 2



A Tradition of Stewardship
A Commitment to Service

Conservation, Development and Planning

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

Main: (707) 253-4417
Fax: (707) 253-4336

Hillary Gitelman
Director

June 7, 2012

Dennis Hall, Chief
Northern Region Headquarters
California Department of Forestry and Fire Protection (CalFire)
P.O. Box 944246
Sacramento, CA 94244

RE: Jasud Estate Vineyards THP/TCP, Draft Environmental Impact Report,
SCH#2011042037, 1-11-106NAP

Dear Mr. Hall,

Thank you for the opportunity to comment on the draft environmental impact report (Draft EIR) that was prepared for the Jasud Estate Vineyard Conversion, Timber Harvester Plan and Conversion Permit (THP/TCP). The project involves the conversion of 16.3 acres of coniferous forest, oak woodland, and grassland to vineyard under Erosion Control Plan P10-00309-ECPA. Of this, approximately 14 acres will be harvested under the THP/TCP. The County would like you to consider the following comments and questions regarding the Draft EIR:

- Mitigation Measure 4.3-1 is intended to mitigate impacts to oak woodlands through a combination of avoidance, protection and enhancement (pursuant to General Plan Policy CON-17). With respect to protection of the remaining oak woodlands onsite, the measure falls short in actually ensuring the oak woodland enhancement areas will be protected in perpetuity or prevented from being developed in the future. Given the analysis is relying on this notion, then a mechanism should be provided to ensure long term or permanent protection. With regard to replacement, The County recommends that Mitigation Measure 4.3-1 be amended to include enhancement of oak woodlands onsite through the replacement of trees at a 2:1 ratio, consistent with CON-17.
- Impact Statement 4.3-2 states that the overall removal of coast redwood forest is potentially inconsistent with Policies CON-17, CON-18, and CON-22. Proposed Mitigation Measure 4.3-2 does not effectively avoid to the extent feasible the loss of coastal redwood forest and therefore is inconsistent with General Plan Policy CON-17(e)¹.

Approximate 0.27-acre of coast redwood forest proposed for removal is considered to be a Sensitive Biotic Community, and is of limited distribution within the County. Sensitive Biotic Communities are those identified to be of limited distribution within the County, totaling less than

¹ Requires no net loss of sensitive biotic communities and habitats of limited distraction 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 habitat.

2-1

2-2

2-3

500 acres or less than 0.1% of the vegetation mapped. The Baseline Data Report has the total number of acres of coast redwood forest at 324 acres or 0.06% of the vegetation cover within the entire county. The total number of actual coast redwood onsite is approximately 5.23 acres or 13.8% of the parcel. As mentioned, the proposed project would remove approximately 0.27 acres, located at the fringe of proposed Block H, resulting in a significant impact.

2-3
Cont.

Napa County General Plan Policy CON-17 requires the preservation and protection of sensitive biotic communities and habitats of limited distribution to the greatest extent feasible; therefore, the removal of 0.27-acres of coast redwood forest would be considered a potentially significant impact. Policy CON-17e specifically requires no net loss of sensitive biotic communities through avoidance, restoration, or replacement where feasible.

Based on mapping, this area also includes the headwaters of a Class III watercourse requiring a minimum 35 foot stream setback. The project proposes mitigation stating that the project will avoid and protect the 4.96 acres of coast redwood forest not proposed for removal by this plan; however, the proposed enhancement is not consistent with Policy CON-17, as the mitigation measure does not propose enhancement through the replacement of lost redwood trees. County staff suggests modifying the boundary of Block H to avoid all mapped coast redwood forest, and modifying Mitigation Measure 4.3-2 to reflect complete avoidance.

2-4

Again, thank you for the opportunity to review the DEIR. If you should have any questions regarding any of the above issues, please don't hesitate to contact Kelli Felker at 707/265-2325 or kelli.felker@countyofnapa.org.

Sincerely,



Kelli Felker
Planner II of Conservation, Development and Planning

cc Hillary Gitelman, Brian Bordona, Dave Steiner, file

State of California
 Department of Fish and Game



M e m o r a n d u m

Date: June 1, 2012

To: Mr. Dennis Hall, Chief
 Northern Region Headquarters
 California Department of Forestry
 and Fire Protection (CAL FIRE)
 Post Office Box 944246
 Sacramento, CA 94244-2460
Sacramentopubliccomment@fire.ca.gov

Original signed by

From: Scott Wilson, Acting Regional Manager
 Department of Fish and Game – Bay Delta Region, 7329 Silverado Trail, Napa, CA 94558

Subject: Jasud Estate Vineyards Timberland Conversion Project, Draft Environmental Impact Report, SCH #2011042037, Napa County

Department of Fish and Game (DFG) personnel have reviewed the above Jasud Estate Vineyard Timberland Conversion Project (Project) draft Environmental Impact Report (EIR). The 38-acre Project site is located at 2087 Diamond Mountain Road off State Route 29 in Napa County within the Simmons Canyon watershed, approximately two miles south of the Town of Calistoga. There are two Class III watercourses on the property, which are located adjacent to the Project site. These watercourses drain into the Napa River, which is a Class I watercourse that supports anadromous salmonids. The property also contains a developed spring which has historically been used to water an on-site orchard, a former residence, and associated outbuildings. The Project is located along the main ridge that separates Napa and Sonoma counties and is composed of gentle east facing slopes. Elevations within the project area range from approximately 1,600 to 1,800 feet above mean sea level. The dominant species observed include Douglas-fir/oak forest, black oak alliance, bigleaf maple alliance, and redwood forest.

3-1

The proposed Project site is mainly surrounded by forested lands, with mixed vineyard and forested land to the west of the Project site. The Project proposes to harvest approximately 14 acres area of timberland. Within that area, the proposed Project will convert an approximately 12-acre area into vineyards and install an Erosion Control Plan (ECP).

DFG is identified as a Trustee Agency pursuant to the California Environmental Quality Act (CEQA) Section 15386 and is responsible for the conservation, protection, and management of the State's biological resources. DFG is concerned the Project will have a significant impact on northern mixed evergreen forest which provides suitable habitat for several special-status species including Northern spotted owl (*Strix occidentalis caurina*), pallid bat (*Antrozous pallidus*) and purple martin (*Progne subis arboricola*).

The Project description discusses a former residence site and remnants of an old walnut orchard in the southwest corner of the property. Additional farm outbuildings are located on the northeastern portion of the property. These existing developed areas within the Project area were not included within the currently proposed Project footprint. To reduce the amount of

3-2

forested area to be harvested and thus the overall impacts to forest habitats, DFG recommends modifying the location of the currently proposed Project to include the previously disturbed features.

3-2
Cont.

DFG is concerned the Project will result in a net-loss of mature northern mixed evergreen forest habitat. Proposed Project activities shown in Figure 3-4a of the draft EIR appear to fragment essential habitat, and the Project as proposed does not replace habitat loss associated with the proposed Project development.

Where avoidance and minimization measures are infeasible, the design of mitigation measures should consider the local, regional, and larger-scale environmental context in which the habitat loss or alteration is occurring. Mitigation required must be roughly proportional to level of impacts (including cumulative impacts) in accordance with the provisions of CEQA (Guidelines Sections 15126.4(a)(4)(B), 15064, 15065, and 15355).

DFG recommends that additional mitigation alternatives be developed to off-set the impacts for the cumulative loss of mixed evergreen forest through habitat conversion. Proposed measures should include an assessment of all off-site and on-site construction activities through the northern mixed evergreen forest habitat. Mitigation recommendations should be based on the function and value of habitat being impacted and conserved. Potential mitigation may include, but is not limited to: 1) avoidance or prevention of impacts through adoption of project alternatives, including the "no project" alternative, or modification of the project, 2) acquisition by purchase of fee title or easement for restoration, enhancement, and maintenance of lands and habitat to replace those affected by the project (including purchase of credits in conservation/mitigation banks when appropriate), and/or 3) restoration, enhancement, and/or management of replacement lands and habitat under lease or easement. DFG is available to work with the applicant to achieve these goals.

3-3

Table 4.3-1 shows approximately 9.74 acres of Douglas-fir forest to be removed and converted into vineyard. However, the Biological Resources Report states that only 7.9 acres of this habitat type will be removed. Please clarify. The Final EIR should consistently identify and analyze the level of impacts to each habitat type.

3-4

The draft EIR describes an approximate 1:1 retention ratio for native oak trees within the Project area. Native oak trees typically have very slow growth rates; therefore, a 1:1 ratio of retention is not sufficient to offset impacts resulting in the removal of mature oak trees and their habitat. Since permanently removed oak trees would no longer provide habitat structure for terrestrial wildlife, the Project would result in the unmitigated loss of oak woodland habitat. The lead agency should develop a restoration plan that would more adequately account for the slow growth rate and the quality and quantity of habitat provided by these trees. DFG recommends that the applicant be required to plant native oak trees at a minimum ratio of 5:1 to offset impacts associated with removal of mature oak woodland habitat.

3-5

Impact 4.3-4 states that after mitigation, a less-than-significant impact would occur to wildlife movement corridors as a result of the Project. As proposed, wildlife exclusion fencing would be installed around all vineyard blocks, developed spring and adjacent wetland areas. The draft EIR identifies significant impacts to wildlife movement as a consequence of exclusion fencing. Mitigation Measure 4.3-4 requires plan modification to accommodate small mammal movement and protection of stream corridors. To further mitigate significant impacts to wildlife movement and habitat fragmentation, all exclusion fencing should be placed around each vineyard block

3-6

allowing movement between blocks instead of enclosing all vineyard blocks. DFG recommends all areas intended for wildlife movement corridors maintain a minimum width of 100 feet and each drainage feature on-site (including the spring seeps) should be left accessible to wildlife.

3-6
Cont.

Fish and Game Code § 3503.5 states it is unlawful to take, possess, or destroy any birds in the orders of Falconiformes or Strigiformes (birds-of-prey or raptors) or take, possess, or destroy the nest or eggs of any such bird. Additionally, Fish and Game Code §3503 protects the nests or eggs of any bird. Activities such as staging, access, excavation, and other ground-disturbing activities may create substantial noise impacts which may cause nest abandonment or premature fledging of nesting birds. DFG recommends the following measure replace Mitigation Measure 4.3-5:

- If Project activities are scheduled between February 1 and August 31, DFG recommends surveys and avoidance measures for nesting birds. With respect to surveys for nesting bird and raptor species, DFG recommends that the Project specifies: 1) nest surveys be conducted no earlier than 14 days prior to tree removal and/or breaking ground (surveys should be conducted a minimum of 3 separate days during the 14 days prior to disturbance), 2) in the event that nesting birds are found, the Project applicant should consult with DFG and obtain approval for nest-protection buffers prior to tree removal and/or ground disturbing activities, and 3) nest protection buffers will remain in effect until the young have fledged. All nest protection measures should apply to off-site impacts and within 500 feet of project activities. If a lapse in project-related work of 15 days or longer occurs, another focused survey and if required, consultation with DFG, will be required before project work can be reinitiated.

3-7

The Biological Resources Report states that the site does not contain any natural roosting habitat for bat species, yet the Project proposes to remove several mature trees which may provide suitable habitat for pallid bat (*Antrozous pallidus*), a Species of Special Concern. The pallid bat occurs throughout a variety of habitats including all types of woodland, forest and riparian areas if appropriate roosting sites are available. This species may seek shelter inside crevices and cavities found in natural features such as trees, cliffs, caves and rocky outcrops, as well as man-made features. Examples of threats to the pallid bat include mortality and/or loss of roosting habitat due to disturbance, exclusion, extermination, and pesticide use. DFG recommends a qualified biologist conduct a habitat assessment for potentially suitable bat habitat within six months of Project activities. Where suitable bat habitat is identified, a qualified biologist should do a presence/absence survey during peak activity periods. If bats are present, then the qualified biologist should submit an avoidance and habitat replacement plan to DFG for approval. The plan should evaluate the type of habitat to be disturbed, length of time of disturbance, equipment noise, adjacent habitat available, and habitat replacement methods if appropriate.

3-8

The Timber Harvest Plan/Timber Conversion Plan (THP/TCP) contained within the draft EIR discloses that eight trees are proposed for removal on the property to reduce potential hazards. During a Pre-harvest Inspection conducted in conjunction with the THP/TCP review, DFG staff examined these eight trees. Of the eight trees, two redwood trees growing within 30 feet of each other were observed to support valuable wildlife characteristics including large limbs and basal hollows. These trees are shown on the Timber Harvest Map as the clump of two trees in the easternmost portion of the Project area. Trees with fire-derived basal hollows are rare, provide extremely valuable wildlife habitat, and are an irreplaceable habitat feature since most fires on private lands are suppressed. Although both of these redwoods were near some

3-9

structures on the property, they were observed to be leaning away from the structures and did not appear to be a potential hazard if they were to naturally fall. Therefore, in order to retain the rare and valuable wildlife habitat these trees provide, especially since it is unlikely basal hollows will be replaced if lost, DFG recommends retention of these two redwood trees.

3-9
Cont.

Please be aware, that DFG may require a Lake and Streambed Alteration Agreement (LSAA), pursuant to Section 1600 et seq. of the Fish and Game Code for all activities which will impact drainages on the Project site. Issuance of an LSAA is subject to CEQA. DFG, as a responsible agency under CEQA, will consider the environmental document, which should fully identify the potential impacts to the stream or riparian resources and provide adequate avoidance, mitigation, monitoring and reporting commitments for completion of the agreement.

3-10

We appreciate this opportunity to comment on the proposed Project. If you have questions regarding these comments, please contact Ms. Suzanne Gilmore, Environmental Scientist, at (707) 944-5536 or sgilmore@dfg.ca.gov; or Ms. Karen Weiss, Senior Environmental Scientist, at (707) 944-5525; or by writing to DFG at the memorandum address listed above.

cc: Kelli Felker, kelli.felker@countyofnapa.org

MARTIN SAMUEL CHECOV
TWENTY-EIGHTH FLOOR
TWO EMBARCADERO CENTER
SAN FRANCISCO, CALIFORNIA 94111-3823
(415) 984-8713
FAX: (415) 984-8701

June 6, 2012

VIA EMAIL AND U.S. POSTAL SERVICE EXPRESS MAIL

Mr. Dennis Hall
CAL FIRE
Resource Management
P.O. Box 944246
Sacramento, CA 94244-2460

Re: ***Jasud Estate Vineyards
Diamond Mountain, Calistoga
Timberland and Conversion Project***

Dear Mr. Hall:

I am submitting the following comments in response to the "Notice of Availability re Jasud Estate Vineyards Timberland Conversion Project; Draft Environmental Impact Report (Dated April 24, 2012)." I am writing on behalf of myself as the owner of a 41-acre property, containing two dwellings and other structures, along with substantial landscaping and recreational improvements, located at 2031 Diamond Mountain Road, which is immediately adjacent and downgradient (eastward) to the subject property. I am also speaking on behalf of the other joint owner of the property, my spouse, Mr. Timothy J. Bause, in the matter. In terms of erosion control, no other property in the area stands to be more directly impacted than ours.

After reviewing the report, and surveying the affected land on foot, I reluctantly conclude that the measures proposed to be taken with regard to the uniquely sited Block H portion of the project in question are inadequate.

The remedial steps outlined in the report are unsatisfactory with respect to the steep slope on which H is situated, above the "small drainage channel (Class III Stream) in the southeastern part of the property, separating proposed vineyard block H from vineyard block G." In particular, the conclusion that the "property overall shows favorable slope stability and drainage conditions with low slope

inclinations" is not an accurate assessment of the particular topography at Block H. Neither the description of measures regarding Block H in the draft report, nor its depiction in Figure 3.4c, give any confidence that Proposed Detention Basin H would be sufficient to prevent a cataclysmic event of the nature that caused the notorious inundation of property emanating from the Wallis vineyard on Diamond Mountain during the New Year's floods of several seasons ago. The clear direction of the Class III Stream into which Block H drains is alarmingly apparent from Figure 4.3.3; it is difficult to resist the visual association with an arrow aimed menacingly at our property.

4-1
Cont.

In terms of proposed remediation, the basin depicted in 3-4c is located at the very tip of the cleared area, rather than in a position to serve to arrest the collapse of soil and rocks from the upper portion of Block H downgradient northward into the drainage channel on Figure 4.3.3. Perhaps no drainage basin could provide adequate protection in this particular location; however it is not plausible that this particular basin, as situated, could suffice as an erosion control measure and protect against the threat of inundation potentially posed to our property—even though the 1-foot diameter standpipe is claimed to have sufficient capacity to "dissipate outflows without causing surface erosion" in the tip of Block H and, supposedly, to prevent a triggering event.

4-2

The presence of a cover crop on the slope adjacent to the proposed planting in Block H does not, given the steepness of that slope, provide any comfort in that regard. I recall that the Wallis vineyard also had mature plantings and cover crop in place at the time of the massive collapse there. The removal of a significant grove of stout, deep-rooted redwoods at the upper source, immediately above the steep slope of the drainage area, could create a triggering mechanism for a landslide event that shallow-rooted perennial groundcover would hardly be expected to mitigate.

4-3

Moreover, the fact that the plan now under consideration was tested against a 100-year, 24-hour storm scenario provides little reassurance in light of the ever-increasing severity in climatic variations, along with the recent memory of the Wallis catastrophe arising in a similar geographical and geologic formation.

4-4

In light of the risks, the destruction of a particularly attractive, established timber stand to facilitate the planting of a very small incremental area would seem to be an excessive environmental encroachment, to the extent such a cost-benefit analysis is valid consideration in the EIR process.

4-5

Given all of these factors, the efficacy of Mitigation Measure 4.8-1 appears highly questionable.

4-6

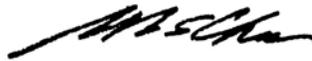
Finally, I note the report's comment that "an impact from the conversion of existing vegetation to vineyard areas would be considered significant if sediment erosion and yield are substantial to the extent that damage occurs to roads, vineyard facilities, or adjoining vineyards..." This threshold of "significance" fails to take into account any potential for damage to the structures and other improvements on our immediately adjacent property, or to the possible risk of bodily injury to the occupants, as a consequence of a failure of the soils in this area precipitated by the clear-cutting on Block H.

4-7

I have informed the project manager that the removal of Block H from the project would resolve my objections.

Please do not hesitate to contact me with any questions.

Very truly yours,



Martin S. Checov

To: California Department of Forestry and Fire Protection
From: Frederic and Mary Constant
Date: June 7, 2012
Re: Public Comment Regarding THP 1-11-106 NAP, Close of Public Comment 6/7/2012

Deal Cal Fire,

Water availability is of critical importance to support biological resources and riparian resources dependent on adequate supplies of water. Water for Domestic consumption and agricultural uses are also critical, particularly in the area surrounds THP 1-11-106NAP.

I am a neighbor to the north of the property submitting the proposed timber harvest plan and associated timber conversion permit. I also farm 40 acres of grapes directly adjacent to the proposed project area. I am intimately familiar with the availability of water on the mountainside surrounding the proposed project area; I can verify that water is in short supply, and wells in the area are typically poor. I am concerned that the proposed activities will strain available water supplies; it will threaten existing agricultural uses, and possibly negatively impact other beneficial uses of water.

The activities proposed on the project area included converting approximately 13.5 acres of timberland, and then planting a larger vineyard area on both timberland and non-timberland areas. Additionally, the project calls for dry-farming vines on a 6 x 4 foot spacing, with only limited watering during initial vineyard establishment.

The forest practice rules regarding timberland conversion also require that the plan submitter provide satisfactory proof of their "bona fide intent to convert timberland". Seemingly, this intent requirement also would require that the described proposed future use (requiring conversion) must also be considered feasible and economically viable. Unfortunately, my vineyard experience (next door) indicates that the proposed project is unfeasible, and will not be economically viable.

On my adjacent, established vineyard blocks which are planted at less intensive spacing, I must irrigate 4 to 6 times annually to maintain vigor and productive capacity. I therefore question whether or not the proposed vineyard project is feasible and viable given their stated vineyard layout and management regime. Without water for irrigation the ability to produce wine grapes under the proposed management regime is highly un-likely.

Additionally, I know of no dry-farmed vineyards on 6 x 4 spacing. Even the vineyards on the Sonoma Coast (Platt near Freestone) that has about 1700 degree days still has to be watered with 6 to 10 gallons per year. Flowers (Sonoma Coast, first ridge from ocean) also has to water their vines on 7 x 5 ft spacing. They have a reservoir that frequently runs dry in the late summer. The old dry-farmed vineyards of the valley floor were typically on a 12 x 8, 10 x 10 or occasionally an 8 x 8.

Therefore, it is highly likely that even after the vines are more than 3 years old they will require 8 to 20 gallons of water per vine per season. This requirement is not stated, acknowledged, or studied in the Cumulative Impacts Analysis for the proposed project; and as such the THP document and its supporting appendices should be deemed to be incorrect, incomplete, and misleading. As such, I urge the Director to disapprove of THP 1-11-106NAP pursuant to 14CCR898.2(c), and 14CCR1106.4(a)(2).

5-1
Cont.

Sincerely,

Fred and Mary Constant

Jessica Griggs

From: CONSTANT [constant@constantwine.com]
Sent: Friday, June 15, 2012 5:57 PM
To: Sacramento Public Comment
Subject: Jesud Vineyard
Attachments: EIR.docx

Good evening,

I apologize for the delay, but just received notice that my email dated June 14, 2012 at 4:52pm was undelivered. Please accept the attached letter of comment regarding the Jesud Vineyard EIR. If you have any questions, please contact me at 707-942-0707

Cheers,
Freddy

From: <MAILER-DAEMON>
To: "sacramentopubliccomment@fire.ca.gov <<mailto:michael.gerhshenson@carlyle.com>>"
Date: June 15, 2012 5:12 PM
Subject: Undeliverable: Redirect

Delivery has failed to these recipients or distribution lists:

sacramentopubliccomment@fire.ca.gov <<mailto:sacramentopubliccomment@fire.ca.gov>>

The recipient's e-mail address was not found in the recipient's e-mail system. Microsoft Exchange will not try to redeliver this message for you. Please check the e-mail address and try resending this message, or provide the following diagnostic text to your system administrator.

From: Frederic Constant <freddy@constantwine.com>
Date: Friday, June 14, 2012 4:52 PM
To: "sacramentopubliccomment@fire.ca.gov" <sacramentopubliccomment@fire.ca.gov>
Subject: Jesud Vineyard

Good afternoon,

Attached please find our letter of comment regarding the Jesud Vineyard EIR. We greatly appreciate the opportunity to review their plan and to be part of the discussion.

CONSTANT Cheers,
Freddy

SECTION 3.0

RESPONSES TO COMMENTS

3.0 RESPONSES TO COMMENTS

The following responses have been prepared for each bracketed comment included in **Chapter 2.0** of this Response to Comments document.

Letter 1 - Vincent Salsedo, Tribal Council Member Mishewal Wappo Tribe, June 7, 2012

Response to Comment 1-1

The archaeological site identified by Tom Origer and Associates (**Section 4.4**) on the project site describes a developed spring, concrete cistern, and wooden water storage tank, which are currently not in use. Photographs of these features as they appear today are provided in the new **Figure 4.4** in the Final EIR. As stated in **Section 3.0 Project Description**, the developed spring has historically been used for agricultural and domestic purposes on the property and will be used as the source of water for the proposed vineyard. No new significant developments will be needed to utilize the water from the spring. Therefore, no adverse disturbances to the site are anticipated during project construction and operation, which will be performed consistent with **Mitigation Measures 4.4.1** through **4.4.3**, which include avoidance and protection measures for cultural resources. **Mitigation Measure 4.4.2** indicates that the local CAL FIRE Archaeologist will be notified in the event of a discovery onsite. Consistent with the Commenter's request, **Mitigation Measures 4.4.2** has been revised to include that the Mishewal Wappo Tribe of Alexander Valley be notified immediately if such a discovery is made.

A supplemental mitigation measure (**Mitigation Measure 4.4-4**) has been included in the Final EIR, which requires photographs to be taken of the archaeological site boundaries that are to be staked with orange exclusion fencing during construction. These photographs will be dated appropriately to ensure the protection of the archaeological site for the duration of the project. Photo documentation will be submitted to the Mishewal Wappo Tribe of Alexander Valley per its guidance on protection of the archaeological site on the property. This supplemental mitigation measure is included as part of the Mitigation Monitoring and Reporting Plan for the Proposed Project (**Section 5.0** of the Final EIR).

Letter 2 - Kelli Felker, Conservation, Development and Planning Department, Napa County. June 7, 2012

Response to Comment 2-1

The Oak Woodland Habitat Enhancement Areas identified on the property are largely located either within the stream, spring, or wet area setbacks identified onsite or are on slopes greater than 30 percent, which prevent future development in these areas (see **Revised Figure 4.3-6**). Also, the property is largely protected from future development on account of Napa County Conservation Regulations, Section 18.108.027B which contains minimum canopy retention requirements to be maintained as part of any use involving earth disturbing activity (commonly referred to as the "60/40 Rule"). As stated in **Section 3.3**, the entire property comprises 38± acres of which only 14± acres containing both forest land and grassland will be impacted by the Proposed Project. As stated in the THP (**Appendix K**), the existing tree

canopy on the project site totals approximately 27.3 acres of which approximately 10 acres of canopy cover would be removed, resulting in approximately 63 percent of the canopy cover on the property that would be retained (see Appendix B of the THP, **Appendix K**). Additionally, there were approximately 10.7 acres identified as the existing canopy acres of shrub, brush, and grass (without tree canopy) on the project site, of which only 5 acres of this canopy would be removed by the Proposed Project. This would result in a 53 percent retention of the existing canopy acres of shrub, brush, and grass on the project site (see Appendix B of the THP, **Appendix K**).

Furthermore, in accordance with the Napa County Zoning Ordinance, if the average slope of any development area is 30 percent or greater, work in that area cannot be undertaken unless a use permit is approved by the County Zoning Administrator or the Conservation Development and Planning Commission. There are no reasonable foreseeable developments or uses proposed for the areas designated as Oak Woodland Habitat Enhancement Areas. Consequently, there is no need for a further mechanism to protect these areas.

Response to Comment 2-2

Onsite resources were considered during placement of the vineyard blocks, and areas with the highest-value of oak woodlands were avoided to the extent feasible. The Proposed Project will retain half of the existing oak woodland onsite and will allow for the establishment of Oak Woodland Habitat Enhancement (see **Revised Figure 4.3-6**). As discussed in **Section 1.0** of the Final EIR, the oak removal will occur during the timber harvest portion of the Proposed Project, which will be directed by CAL FIRE. The County's 60/40 Rule is deemed an acceptable practice for the project by CAL FIRE and will be followed during construction to ensure that canopy requirements of the site are maintained (See Response to Comment 2-1).

To be consistent with the Commenter's (County's) recommendations, a replanting program will be supplemented with the retention and enhancement treatments to be performed within the Oak Woodland Habitat Enhancement Areas. This supplement will be included as additional mitigation under **Mitigation Measure 4.3-1**. In addition to the oak woodland retention and enhancement activities detailed in **Section 4.3** of the Final EIR, the removal of oak trees will be mitigated by replanting. Replacement of oak trees will occur at a 2:1 ratio consistent with Napa County General Plan policy CON-17 (see revised **Mitigation Measure 4.3-1**). Annual monitoring of the replanting program shall occur for three years to ensure establishment; during this time, additional plantings may occur as needed under the guidance of a certified arborist or RPF to ensure the 2:1 replacement ratio is achieved at the end of the three year period. Oaks will be planted within the designated Oak Woodland Habitat Enhancement Areas, provided that such placement is not detrimental to existing oaks, as determined by a qualified forester or arborist. To the degree that additional acreage is needed to accommodate new oak plantings, such acreage will be located either adjacent to, or nearby existing oak woodland enhancement areas, which are illustrated in the Oak Woodland Habitat Enhancement Areas provided in the revised **Figure 4.3-6**. The rationale for supplementing the replanting of oaks within the Oak Woodland Habitat Enhancement Areas and expanding the Area in revised **Mitigation Measure 4.3-1** is to provide full and complete mitigation to address the County's concerns for impacts to oak woodland. The establishment of the Oak Woodland Habitat Enhancement Areas and the supplemental enhancement and replanting activities therein will

improve the quality of the habitat and the value of the resource to wildlife that utilize this habitat onsite. Based on this approach, the County's replacement goal for oak woodlands is effectively met.

Furthermore, the concept of the Habitat Enhancement Areas was recommended by the Registered Professional Forester (RPF) knowledgeable about the ecology of oak woodlands. The RPF designated the areas best suited for enhancement activities on the property. These activities will include the non-chemical control of Scotch broom and the selective removal of Douglas fir under four inches diameter at breast height (dbh). This is in addition to the placement of highly visible fencing around the Habitat Enhancement Areas, to protect these areas from activity that may compromise the health of the existing oaks (e.g., root damage, soil compaction) during construction. Placement of the restrictive fencing will likewise be directed by the RPF.

Oak woodland is not a climax habitat. Under natural conditions in coastal California, it eventually develops into a conifer-dominated habitat initially composed of Douglas fir, and dominated by redwood at the later, seral stage. As described in **Section 4.3**, the oak woodland in many areas is being infiltrated with Douglas fir to the degree that Douglas fir is the dominant understory species in these areas on the property. The presence of non-native and highly invasive Scotch broom in many areas of the oak woodland reduces the habitat value. Thus, much of the oak woodlands onsite are in transition to a different habitat type.

The advantage of the Habitat Enhancement Areas is that the current oak woodland habitat will be transformed into higher quality habitat. Removal of Scotch broom and smaller Douglas fir will facilitate the growth of the existing, established oaks within these areas. The presence of Scotch broom is a detriment to any natural plant community. Scotch broom competes for water, nutrients, and root space, and displaces and prevents native forbs from establishing. The smaller Douglas fir are similarly competing for water, etc., without providing the habitat benefit that larger Douglas firs provide (e.g., food, structural diversity in the canopy). Their removal, through cutting, will eliminate competition without disturbing the roots of the existing oaks. This will facilitate the establishment and growth of oak seedlings, which would otherwise be shaded out by the faster-growing Douglas fir. Thus, the dominance of oaks in the woodland will be maintained, and the natural progression to coniferous forest will be delayed.

There are further, practical advantages to the enhancement of the existing oak woodland onsite. The existing oaks are established, with extensive root systems in place. Trees planted from containers would need initial irrigation, and the roots would take time to establish. Additionally, there is always an unknown mortality rate in such plantings (e.g., irrigation issues, browsing, rodent damage). Though trees that fail will be replaced, this process adds delay and uncertainty to rehabilitating the oak woodland. Because the existing oaks already have extensive root systems and have survived early predation by herbivores, they are the best replacement for the smaller Douglas fir that will be removed. In addition, the action of planting necessitates digging holes, which would sever or injure roots of surrounding trees. The trees that would be most affected by root damage and which would recover poorly are the older, mature, and more valuable oak trees. In addition to this enhancement work, some replanting will occur within the expanded Oak Woodland Habitat Enhancement Areas identified in the revised **Figure 4.3-6**. All eventually replanted oaks will be protected from wildlife impacts during the establishment phase. The additional enhancement (and replanting area) identified in revised **Figure 4.3-6** are located adjacent to

un-impacted oak woodland. These expanded areas were chosen as they exhibit the greatest possibility of success due to soils and other factors identified by the RPF. In this way, the expanded Oak Woodland Habitat Enhancement Areas, and supplemental replanting within these areas, have been designed with the goal of meeting the County standards relative to overall oak conservation and replacement.

Response to Comment 2-3

The Proposed Project purposely avoids the majority of the coast redwood forest community on the property. To address the Commenter's (County's) concerns regarding no net loss of coast redwood forest, the Coast Redwood Habitat Enhancement Areas will be expanded and a replanting program will be supplemented to the retention and enhancement treatments to be applied to these areas. A map showing the expanded Coast Redwood Enhancement Areas is shown in **Revised Figure 4.3-6**.

In addition, in response to recent consultation and email correspondence with the County and consistent with the concerns raised in its comment letter, **Mitigation Measure 4.3-2** in the Final EIR has been revised to reflect that the coast redwood forest occurring within proposed vineyard block H will be fully avoided except for 0.02 acres of coast redwood forest that lies within the clearing limits of the farm avenue that is shown linking the proposed vineyard block H to the main vineyard area (see **Revised Figure 4.3-6; Attachment E** to this Section 3.0 Response to Comments). The impacts to coast redwood from the Proposed Project will be reduced from 0.27 acres to 0.02 acres, which reflects an increased retention of 0.25 acres of coast redwood. The ECP, THP, and TCP will be revised accordingly to reflect this change. See **Revised Figure 4.3-6** in the Final EIR, which shows the reduced vineyard block H boundary to accommodate the retention of 0.25 acres of coast redwood.

Replanting within the expanded Coast Redwood Habitat Enhancement Areas will be planned at the discretion of a qualified forester or arborist to provide full and complete mitigation for the loss of 0.02 acres of coast redwood that would be removed for construction of the narrow farm avenue linking the main vineyard to block H. The loss of 0.02 acres will be replaced through the supplemental replanting program to ensure no net loss of coast redwood onsite, per the County's comments. The retention, enhancement, and replanting treatments within the expanded Coast Redwood Enhancement Areas will improve the quality of the coast redwood habitat onsite and will provide a greater value to wildlife that utilize these areas.

Response to Comment 2-4

Refer to the Response to Comment 2-3 above regarding full and complete mitigation for the loss of 0.02 acres of coast redwood onsite. Also, see the Response to Comments 2-2 and 2-3 regarding the design of the vineyard blocks away from sensitive resources, which complements the Applicant's overall sustainable approach towards management of the vineyard and the Habitat Enhancement Areas on the property. As stated in **Section 3.0 Project Description**, the southeastern Class III watercourse on the property has a 35 foot setback, as recommended by the registered professional forester (Environmental Resource Management), which exceeds the Forest Practice Rules recommended guidelines of 30 foot setbacks. This watercourse would not be impacted by the Proposed Project.

Refer to the Response to Comment 3-3 below which describe the Applicant's proposed sustainable dry farming and biodynamic practices for the vineyard's operation, which compliment its dedication to conserving natural resources onsite to benefit wildlife and vineyard uses.

Letter 3 - Scott Wilson, Acting Regional Manager California Department of Fish and Game, June 1, 2012

Response to Comment 3-1

This comment provides an introductory description of the onsite resources based on the Draft EIR. The project site was visited by California Department of Fish and Game (CDFG) staff for the purpose of the Pre-Harvest Inspection, which is part of the Timber Harvesting Plan (THP) process and which is a preceding action to the timber conversion, and the ECP processes, which are the subject of the Draft EIR.

Three species are specifically mentioned by the Commenter (CDFG) as being possibly impacted by the Proposed Project: northern spotted owl, purple martin, and pallid bat. CDFG's concern regarding potential impacts of the Proposed Project to northern spotted owl have been fully addressed in **Section 4.3** and in the Biological Resources Report and appended documentation (**Appendix D** of Final EIR). Suitable nesting and foraging habitat occurs for northern spotted owl in the Douglas fir forest onsite. Although northern spotted owl was not observed during the biological surveys (Kjeldsen, 2011), it has the potential to nest and forage on the property. According to the Northern Spotted Owl Take Avoidance report attached to the Biological Resources Report in **Appendix D** (Forest Ecosystem Management, PLLC., 2011), the THP for the Proposed Project abides by California Forest Practice Rule 14 CCR 919.9(e) Scenario 4: Avoidance of Disturbance and Direct Take through Habitat Retention. Additionally, **Mitigation Measure 4.3-6** requires field surveys and avoidance measures to be taken to reduce potential impacts to northern spotted owl during project construction. With implementation of this measure, no significant impacts to northern spotted owl are anticipated.

Potential impacts to purple martin have been fully addressed in the EIR. As stated in **Section 4.3**, two occurrences of this species have been recorded in Napa County, one south of the town of Angwin and the second near the town of Calistoga at the northern end of Napa Valley. Neither of these occurrences is within five miles of the property (CNDDDB, 2003). As stated in **Section 4.3**, the property does not provide suitable nesting habitat for this species in the form of large snags with woodpecker holes, largely due to current management practices that include the removal of dead or decaying trees for firewood and/or safety. This species was not observed during the biological surveys by Kjeldsen (2011) (**Appendix D**). However, purple martin may occur on the property as transients during migration. **Mitigation Measure 4.3-5** requires preconstruction surveys and avoidance measures to protect special-status bird species (including purple martin) with the potential to occur onsite during project construction. With implementation of this measure, no significant impacts to purple martin are anticipated.

As stated in **Section 4.3**, while there is no suitable roosting habitat identified onsite, the open grasslands and woodlands on the property provide suitable foraging habitat for pallid bat. This species was not observed onsite during the field surveys (Kjeldsen, 2011). Project construction would occur during the breeding season for these and other bat species (generally between early April and mid-September). **Mitigation Measure 4.3-8** requires that pre-construction surveys for bats shall be conducted two to three

days prior to tree removal. If bats are discovered during the surveys, then a buffer of 100 to 150 feet will be established. Optimal time to remove trees is September 15 to October 15 and February 15 to April 1. Pre-construction surveys shall also focus on habitat adjacent to the Proposed Project (**Appendix D**). With implementation of this measure, no significant impacts to pallid bat are anticipated. Refer to the Response to Comment 3-8 for further discussion of pallid bat.

Response to Comment 3-2

The Applicant requires the retention and use of the existing outbuildings onsite for the purposes of storing agricultural equipment and reserves the right to use the existing disturbed areas in the event additional storage space or turnaround areas are needed to facilitate operation of the vineyard. Therefore, to shift the vineyard site plan into the existing disturbed areas onsite would not be practicable from the Applicant's standpoint of vineyard operation as to do so would require the need to impact other undisturbed areas.

As shown in **Figure 4.3-6**, a large portion of the disturbed area surrounding the former residence site near the center of the property will be designated as an Oak Woodland Habitat Enhancement Area to minimize impacts to oak woodland from the Proposed Project. The Applicant has expressed to the County the desire eventually construct a residence on this former home site. This site is the most likely location to place any future structure to avoid further impacts to undisturbed habitat on the property. If the Applicant eventually chooses to build a residence at this location, a separate County Building Permit will be required. As stated in **Section 3.0**, the Applicant had obtained a County demolition permit for the removal of the former residence. This permit was obtained independently from the Proposed Project. Although modifying the proposed location of the vineyard would reduce short term impacts to the forested areas onsite, the establishment of Habitat Enhancement Areas adjacent to or partially within these existing disturbed areas reduces the project's long term impacts overall to forest habitat onsite. The proposed vineyard site plan allows for viable operation of the vineyard and the continued use of the former residence site in the event a future residence is built.

Response to Comment 3-3

In response to CDFG's concern on the design and implementation of mitigation measures, the following is provided:

As discussed in **Section 1.0** of the EIR, the Proposed Project is a two step process including a timber harvest and subsequent conversion to vineyard. This EIR has been prepared for the conversion of timberland to vineyard since the ECP for the proposed vineyard requires approval by the County, a Responsible Agency for the project. The EIR addresses the cumulative conditions of both the timber harvest and subsequent vineyard conversion on the project site and in the surrounding watershed (**Section 6.0**). Further, the timber harvest process is guided by the California Forest Practice Rules, as amended, which provide a CEQA-equivalent regulatory process [THP and Timberland Conversion Permit (TCP)] for the analysis, review, and approval of the timber harvest element of the Proposed Project by CAL FIRE. Therefore, mitigation measures included in the EIR are designed to be proportional to the level of impacts resulting from the timberland conversion to vineyard, pursuant to CEQA. All mitigation measures adopted by CAL FIRE to lessen impacts of the THP are proportional to the level of impacts

resulting from the timber harvest onsite. Moreover, all such mitigation will be included in the EIR by way of adoption of the THP, which is included as an attachment to the EIR for full disclosure of impacts and any separate mitigation specified under the THP process. The mitigation specific to the THP will be followed in accordance with Forest Practice Rules and conformance with CAL FIRE regulations.

In response to CDFG's concern on impacts to northern mixed evergreen forest, the following is provided:

Consistent with CEQA guidelines and Napa County's Conservation Regulations, **Section 6.2** analyzes cumulative impacts to biological resources and forestry resources due to construction of the Proposed Project. In this comment, CDFG raises concern over the loss of northern mixed evergreen forest, which is interpreted to generally mean the associations of Douglas fir, black oak woodland, and coast redwood forest on the project site. As described in **Section 4.3** of the EIR, the black oak woodland habitat onsite intergrades with Douglas fir forest along its margins. In many areas onsite, Douglas fir saplings are becoming dominant in the understory of the black oak woodland. This recruitment of Douglas fir in the oak woodland could be a natural forest succession trend or resultant from past logging and other disturbances onsite. In many places onsite while the overstory is dominated by black oak, the shrub layer in the understory contains several successional species that require some type of disturbance regime, such as fire or timber harvest, for seed germination and growth. Therefore, the retention, enhancement, and replanting treatments to be applied to the Oak Woodland Habitat Enhancement Areas dedicated onsite would increase the value and function of this habitat type, which is identified by Napa County as a sensitive habitat type. Although 3.35 acres out of the 6.7 acres (50 percent) of black oak woodland onsite would be converted to vineyard, retention, enhancement, and replanting treatments would be applied to 3± acres of designated Oak Woodland Habitat Enhancement Areas onsite.

Douglas fir forest readily intergrades with coast redwood forest onsite. However, coast redwood is the dominant overstory species as identified in the coast redwood habitat areas shown in **Figure 4.3-6**. Coast redwood forest supports many of the same wildlife species as does Douglas fir forest. Refer to the Response to Comment 2-3, which states that impacts to coast redwood will be reduced from 0.27 acres to 0.02 acres with the implementation of revised **Mitigation Measure 4.3-2** in the Final EIR. With this revised mitigation measure, retention, enhancement, and replanting treatments will be applied to the expanded Coast Redwood Habitat Enhancement Areas which will total 6.94± acres (see **Revised Figure 4.3-6**). Therefore, not only will the quality and function of the coast redwood habitat be improved onsite as a result of the Proposed Project, but the value of the overall coast redwood habitat will increase. (See the Response to Comment 2-3).

The Applicant's commitment to preserving the Habitat Enhancement Areas for Coast Redwood and Oak Woodland onsite is compatible with the biodynamic principles to be applied to the operation of the vineyard. The vineyard's design, which largely avoids sensitive habitats onsite such as coast redwood forest, the spring, wet area, and drainages, in combination with the sustainable dry farming and biodynamic practices for vineyard operation, collectively demonstrate the dedication of the Applicant to conserve natural resources onsite to benefit wildlife and vineyard uses. Total tree cover canopy retention on the site per Napa County requirements (60/40 Rule) is roughly 63 percent (Refer to the Response to Comment 2-1). The combination of the Applicant's management principles for conservation of sensitive resources, onsite retention, enhancement and replanting of sensitive forest types, and adherence to the County's 60/40 Rule collectively function as an equivalent of the conservation easement requested by

CDFG for the property. Therefore, the dedication of a conservation easement is not necessary to achieve the goals of maintaining and enhancing the quality of either overall forest habitat or the Napa County identified sensitive habitats (oak woodland and coast redwood forest) onsite.

Response to Comment 3-4

As explained in **Section 4.3**, supplemental surveys of the project site were conducted by AES and Environmental Resource Management to ground-truth and refine the vegetation community boundaries mapped by Kjeldsen (2011) to ensure accurate assessment of impact acreages (see also AES Memo appended to Biological Resources Report, **Appendix D**). Therefore, as specifically identified in the EIR, the impact acreages calculated in **Section 4.3, Table 4.3-1**, are correct based on the refinement of acreages performed by AES and Environmental Resource Management on the property.

Response to Comment 3-5

Mitigation Measure 4.3-1 has been revised to fully offset impacts from the removal of oak trees and habitat (refer to the Response to Comment 2-2). With the implementation of this revised mitigation measure, the Proposed Project would be consistent with Napa County's conservation goals for sensitive forest types. The Oak Woodland Habitat Enhancement Areas will ensure that mediocre oak woodland habitat will be transformed into higher quality habitat. In addition, oak trees proposed for removal would be mitigated for by means of replanting at a 2:1 replacement ratio consistent with Napa County General Plan policy CON-17 (refer to the Response to Comment 2-2). Annual monitoring of the replanting program shall occur for three years and additional plantings may occur as needed under the guidance of a certified arborist or RPF to achieve the 2:1 replacement ratio at the end of the three year period. Replanting activities would occur in designated Oak Woodland Enhancement Areas provided that such placement is not detrimental to existing oaks, as determined by a qualified forester or arborist. To the extent necessary, additional acreage needed to accommodate oak plantings without interfering with the continued health of existing oaks would be located either adjacent to, or nearby, existing Oak Woodland Habitat Enhancement Areas. Part of the rationale for enhancement of the post-harvest acreage of oak woodlands onsite is the limited space on the property; as such, replanting within the Oak Woodland Habitat Enhancement Areas will be conducted where replanting is feasible to achieve a 2:1 replacement ratio. See revised **Figure 4.3-6** which shows the expanded Oak Woodland Enhancement Areas.

Response to Comment 3-6

While CDFG recommends 100-foot wildlife corridors be dedicated onsite, the Biological Resources Report (**Appendix D** of the EIR) states that no existing wildlife corridors of animal movement were identified onsite. As part of the Proposed Project, permanent exclusionary fencing will be placed around the vineyard to exclude large mammals, such as deer, from entering the vineyard and becoming trapped. As stated in the THP for the Proposed Project (**Appendix K** of the EIR) exclusionary fencing on the property will have 6 inch holes spaced every 15 feet along its entire length, which will not impede the free movement of smaller animals across the property. Additionally, the vineyard blocks are designed to be set back from all drainages onsite, including the wet area and spring, which will reduce disturbances from operation of the vineyard to wildlife utilizing these water resources onsite and will facilitate wildlife movement corridors along these water courses, which are a high quality resource onsite for wildlife. The

exclusionary fencing will not impede the movement of small animals throughout the property and, combined with the retention of most of the forest canopy and protection of water courses onsite, will provide usable wildlife corridors onsite .

Response to Comment 3-7

To address CDFG's concern regarding measures to protect and avoid impacts to migratory bird species, the recommended language provided by CDFG will replace **Mitigation Measure 4.3-5**. See the revised **Mitigation Measure 4.3-5** in the Final EIR.

Response to Comment 3-8

As discussed in **Section 4.3.8** of the EIR, pallid bat has the potential to forage and/or roost on the property. However, this species was not observed during the field surveys (Kjeldsen, 2011). Additionally, the site does not contain any major natural roosting habitat for bat species (i.e. mines, caves, riparian woodlands etc.) (Kjeldsen, 2011). **Mitigation Measure 4.3-8** requires that pre-construction surveys for bats shall be conducted two to three days prior to tree removal. If bats are discovered during the surveys, then a buffer of 100 to 150 feet shall be established. With the implementation of this mitigation, potential impacts to bats would be less than significant. The expanded Habitat Enhancement Areas for Oak Woodland and Coast Redwood effectively provide retention, enhancement, and replanting of forest onsite for use by bat species. The avoidance measures to be taken during construction and the improvement of the forest habitat value onsite through the establishment of the Habitat Enhancement Areas will effectively provide sufficient avoidance and habitat replacement for bat species.

Response to Comment 3-9

As discussed in the THP, eight individual trees near the proposed vineyard development were determined by a Registered Professional Forester (RPF) to be potentially hazardous and capable of causing substantial damage to surrounding existing and proposed infrastructure, which would have the potential to create hazardous conditions for human health and erosion control. CDFG identified two redwood trees, among the eight individual trees proposed for removal, to contain fire-derived basal hollows that are considered rare and capable of providing valuable wildlife habitat. While these two redwoods were found to possess these potentially valuable characteristics, they are not the only trees in the area that were found to have them. And while these features have the potential to provide valuable habitat, upon inspection, there was no evidence that the basal hollows were actively being used by wildlife in the area.

The landowner has agreed to post CDFG wildlife tags on four large trees that indicate extensive wildlife habitat characteristics, including the two redwoods identified by CDFG. All four of these trees are located in the northeast portion of the property (outside of the project footprint) and would be tagged by the RPF and not removed.

Response to Comment 3-10

Based on the site visit and recommendations provided by CDFG staff during the Pre-Harvest Inspection for the THP process, the location of the Proposed Project was purposefully chosen because it is outside

of the area where a Lake and Streambed Alteration Agreement (LSAA) would be required. The Proposed Project will not cross or otherwise alter any stream bed or bank. All other streambed areas are protected by the County's buffers.

Letter 4 - Martin S. Checov, June 6, 2012

Response to Comment 4-1

Every attempt was made to incorporate the best, most recent knowledge in the planning of this project, including the elimination of impacts to downstream landowners. Numerous factors on the project site were taken into consideration in the placement of the vineyard blocks such as slopes, streams, the spring and wet area, the location of the former residence onsite and remaining outbuildings, distance from the property line, and leaving reasonable aesthetic buffers to reduce visual impacts on neighbors. Napa County ordinance limits projects of this type to slopes of less than 30 percent, and this project is in compliance with the County's ordinances.

Regarding slope stability, please refer to the Engineering Geological and Geotechnical Evaluation (EGGE), found in **Appendix H**. This report was prepared by a Registered Engineering Geologist (Gilpin Geosciences, Inc.), and it concluded that the slopes are stable for the proposed vineyard development. No active unstable areas were observed or are associated with the site plan. There is no evidence of slope instability, such as landslides or soil creep on the project site. In addition, the Napa County Environmental Baseline Data Report includes Geographic Information System (GIS) maps of areas of potential landslide hazards; these maps were studied and no areas susceptible to landslides were identified within the property.

The placement of detention basins adjacent to the proposed vineyard development are part of the Erosion Control Plan (ECP) (**Appendix B**) which was designed and provided by licensed civil engineers (Napa Valley Vineyard Engineering). The ECP complies with Napa County's stringent regulatory requirements, including the requirement to "...*maintain pre-development sediment erosion conditions...*" (Policy CON 48) and the requirement for "*discretionary projects to meet performance standards designed to ensure peak runoff in 2-, 10-, 50-, and 100-year floods following development is not greater than predevelopment conditions*" (Policy CON 50).

The Erosion and Sediment Delivery Analysis (ESDA) (**Appendix I**) analyzed the potential for erosion to occur due to the Proposed Project. This report was prepared by a Certified Engineering Geologist (O'Connor Environmental, Inc.), and concluded that the erosion control measures prescribed for the Proposed Project provide maximum runoff diversion to sedimentation basins and level flow spreaders. The report also recommends a 3-year monitoring period, during which any unexpected erosion can be identified and controlled.

The Hydrologic Analysis (**Appendix F**) was prepared by a Certified Engineering Geologist (O'Connor Environmental, Inc.) and used extensive mathematical modeling to evaluate the effects of the Proposed Project on on-site and off-site runoff levels. This report concluded that the detention basins are satisfactory mitigation for runoff. The EGGE concurred with the suitability of the numerous erosion control measures in the ECP, including the detention basins.

In addition to the above technical studies for the proposed timber harvest and vineyard conversion, a Pre-Harvest Inspection (PHI) lead by CAL FIRE was performed on November 29, 2011 for the project site. In attendance at the PHI were Registered Professional Geologists from the Department of Conservation, California Geological Survey (CGS) and O'Connor Environmental, respectively. Napa County and CDFG staff were also in attendance. These specialists took an active part in the PHI, which was comprised of an onsite evaluation of the THP and ECP for the Proposed Project for potential erosion hazards and unstable soils using field observations of the project site as part of the evaluation. The PHI report including the results of the onsite inspection is provided as **Attachment D** to this Section 3.0 Response to Comments. A summary of the findings in the PHI report (**Attachment D**) indicate that

“as stated in the THP and observed during the PHI, no active erosion sites exist within the project area. A Certified Engineering Geologist has performed an engineering geotechnical evaluation of the vineyard blocks...which concludes [that] the proposed vineyard development appears feasible from the standpoint of an engineering geological evaluation. We did not observe any evidence of global slope instability such as landslides or areas of pervasive soil creep.”

In regards to an evaluation of soil stabilization and erosion hazard rating, the PHI report states that “soil stabilization measures in the THP meet the minimum standards of the Forest Practice Rules. These measures adequately address field conditions” (**Attachment D** to this Section 3.0 Response to Comments). The technical reports prepared for the Proposed Project (**Appendix F, H, and I**) were used in the development of the soil stabilization measures stated in the THP and ECP. The PHI report concludes that these measures adequately address field conditions and mitigate for any significant adverse impacts resulting from the Proposed Project.

In response to the Commenter's concern regarding the erosion control measures shown in Figure 3-4c for the proposed detention basin adjacent to vineyard block H, refer to the discussion of the engineering of the detention basins described above in the ECP (**Appendix B**) and Erosion and Sediment Delivery Analysis (ESDA) (**Appendix I**) as well as the Response to Comment 4-2 below. In response to the Wallis vineyard event referenced by the Commenter, refer to the Response to Comment 4-3 below.

Additionally, refer to the Response to Comment 2-3 above, which states that **Mitigation Measure 4.3-2** has been revised in the Final EIR to show the reduction of the impact area for proposed block H. **Revised Figure 4.3-6** in the Final EIR shows the expanded Coast Redwood Enhancement Areas on the property, which effectively reduce the size of proposed block H by 0.25 acres. This reduction in size will require the ECP to be revised, which will reflect a reduction in the erosion control measures needed for block H and may include reduction of the detention basin adjacent to reduced block H.

In summary, the Commenter's concern has been fully addressed in the EIR as shown above. The findings in the technical reports prepared for the Proposed Project and the ECP indicate that the Proposed Project would not cause adverse impacts to adjacent off-site landowners due to slope instability at the site of proposed vineyard block H.

Response to Comment 4-2

As noted above, the detention basin plans for the vineyard development are part of the ECP, which complies with Napa County's technical adequacy requirements for ECPs. Detention basin boundaries were determined using topographic contours generated from ground survey data, and adapted to the changed flow paths (post-project) identified in the ECP. The proposed size and location of the basins were used in the mathematical models described in the Hydrologic Analysis (**Appendix F**) to determine runoff, storage, and outflows. As noted above, this report concludes that the basins mitigate for runoff. The Napa County Resource Conservation District has thoroughly reviewed the ECP, including the size and placement of all detention basins, and has determined that the ECP meets all technical adequacy requirements including the appropriate design and placement of the detention basins.

As described in the ESDA (**Appendix I**), the measures to dissipate outflows without causing surface erosion include the discharge of surface flow (from the perimeter of vineyard fields and from level flow spreaders) onto forested slopes at locations that minimize concentration of runoff and maximize the distance of runoff from channels. The level flow spreaders are 115 to 250 feet in length, depending on location within the project site. Flow is then discharged along this length through weep holes, as shown in the ECP. This effectively disperses water flow and prevents surface erosion. Therefore, for these reasons, the concerns of the Commenter regarding the placement of a detention basin adjacent to proposed vineyard block H are addressed through the technical findings in the EIR and supporting studies. In addition, as shown in Response to Comment 2-3 above, the proposed block H has been reduced by 0.25 acres to avoid coast redwood forest. For this reason, the ECP will be revised to show this reduction in acreage, which may include a reduction in the size of the detention basin adjacent to proposed block H.

Response to Comment 4-3

As stated above, the Napa County Resource Conservation District determined that the ECP meets all technical adequacy requirements for erosion control, including the prescribed cover crop in the ECP. The ECP recommends that the condition of the cover crop be evaluated and reseeded as necessary. In addition, the modeling used in the Hydrologic Analysis (**Appendix F**) includes 'ground cover type' as one of the variables; both the Hydrologic Analysis and the EGGE (**Appendix H**) concur with the ECP measures for the prescribed cover crop.

An Engineering Geologic Review of the THP based on the PHI was performed by a Registered Professional Geologist from the Department of Conservation, California Geological Survey on December 1, 2011 (see **Attachment C** to this Section 3.0 Responses to Comments). The Engineering Geologic Review concluded that

“the THP and its geologic and hydrologic appendices adequately describe the existing geologic, hydrologic, and soil erosion conditions for the site. The proposed mitigation measures included in the THP appear to be reasonable and appropriate.”

Therefore, it is reasonable to conclude that the cover crop prescribed and methods for erosion control will adequately serve the Proposed Project as verified by the CGS.

A review of the Wallis vineyard event referenced by the Commenter found that the Wallis vineyard is roughly 13 acres in size and is located approximately 0.6 miles to the northwest of the project site. The Wallis vineyard was developed in 1997. CAL FIRE records do not show an erosion event noted in the THP files. However, the RPF for the Proposed Project contacted County staff who recalled that the erosion event at the vineyard was attributed to a storm event where a failed culvert on an adjacent County road resulted in high flood waters that affected the vineyard. County staff recalled that concurrent off-site construction near the road site may have further worsened conditions, which eventually led to erosion on the adjacent Wallis vineyard block.

This Wallis vineyard event was an isolated, past event that may be traced to a number of factors. The Wallis vineyard was developed roughly 15 years ago, so it is reasonable to conclude that the mitigation measures in place at that time have been largely improved upon over the years. As stated in the Response to Comment 4-1, every attempt was made to incorporate the best, most recent knowledge in the planning of this project, including the elimination of impacts to downstream landowners. As shown in the technical studies for the Proposed Project (**Appendix F, H, and I**), the PHI Report (**Attachment D** to this Section 3.0 Responses to Comments), and the Engineering Geologic Review of the THP based on the PHI (Attachment C of this Section 3.0), no significant adverse impacts would occur on- or off-site due in part to the implementation of the erosion control measures and best management practices incorporated into the THP and ECP. Implementation of these measures allows for the most recent, calculated, and technologically advanced practices to be undertaken for the Proposed Project. Therefore, it is reasonable to conclude that all attempts have been made to ensure no adverse impacts that could be compared to that of the Wallis vineyard event would occur due to the Proposed Project.

Response to Comment 4-4

Section 4.8 Hydrology and Water Quality of the EIR, describes the level of effort by which data was collected to assess post-project effects relating to stormwater flow due to rain events. For the property, rainfall events of a 24-hour duration were simulated using the U.S. Department of Agriculture's T-55 model for the 2, 10, 50, and 100 year reoccurrence interval storms. Rainfall depths were calculated using the National Oceanic and Atmospheric Administration (NOAA) data. An analysis of this modeling found that in general peak runoff rates show a decreasing trend from pre-existing conditions when the proposed development conditions onsite include the proposed detention basins. Simply stated, without the proposed four detention basins and prescribed cover crop detailed in the ECP, stormwater surface flows within the property would increase. However, with development and routine maintenance of all proposed diversion and detention structures onsite, there will be a decrease in the volume of peak runoff rates which will ensure no adverse impacts occur to adjacent landowners or off-site water resources. Please refer to **Appendix F** (Hydrologic Analysis) and **Appendix H** (EGGE) for full details regarding the information used to arrive at the findings presented in **Section 4.8**. Also, refer to the Response to Comment 4-3 regarding the referenced Wallis vineyard event.

Response to Comment 4-5

See the Responses to Comments 2-2 and 2-3, which discuss the program for retention, enhancement, and replacement of coast redwood and oak woodland habitat onsite (**Section 4.3** of the EIR). See Responses to Comments 4-1 through 4-4 that address the risks described by the Commenter.

Response to Comment 4-6

As summarized above, the analysis of factors such as soils, geology, hydrology, water quality, and erosion in regards to implementation of the Proposed Project was provided by licensed or certified experts in their respective fields. These analyses, together with the science behind the technical reports and the mitigation measures designed in the EIR, provide a sufficient basis by which the Lead Agency, CAL FIRE, and the Responsible Agency, Napa County, may approve the project per CEQA guidelines. As such, both the Lead and Responsible Agencies undergo independent review processes of the Proposed Project. The level of analysis undertaken by Napa Valley Vineyard Engineering in its development of the ECP as well as the level of review conducted by Napa County Resource Conservation District, each found the ECP to be technically adequate and appropriate for proposed vineyard blocks A through G. Therefore, it is stressed that the same level of analysis was undertaken and deemed appropriate for vineyard Block H. Proposed block H underwent the same process of analysis, synthesis, and review as the other vineyard blocks.

Response to Comment 4-7

Please see Responses to Comments 4-1, 4-2, and 4-7 above. Please refer to the technical studies prepared for the project: **Appendix B**, the ECP; **Appendix F**, Hydrologic Analysis; **Appendix H**, EGGE; **Appendix I**, ESDA; **Appendix G**, Water Balance Assessment, and **Appendix J**, Erosion Mitigation Assessment Report. Multiple experts in various disciplines have concluded that the mitigation measures are appropriate, the soils are stable and will not slump or otherwise fail, and it is not anticipated that there will be any significant impacts, particularly to neighboring properties. The significance criteria listed in **Section 4.5.3-1** are based on CEQA guidelines significance criteria and are intended to include possible impacts to people and occupants of structures on neighboring properties. The significance criteria listed in **Section 4.8.3-2** explicitly include damage to property and people due to erosion and instability. In summary, the erosion control measures in the ECP and the mitigation measures in the Final EIR reduce these risks to a less than significant level.

Letter 5 – Frederic and Mary Constant, June 7, 2012 (Received by CAL FIRE on June 15, 2012)

Response to Comment 5-1

This Commenter raises concerns regarding water supply. Please refer to **Appendix G**, Water Balance Assessment, which analyzes potential hydrologic effects of the Proposed Project, including factors such as soil infiltration, percolation, evapotranspiration, runoff, and groundwater storage capacity and demand. This report indicates that the project will create a potential increase in water available for groundwater recharge, and that the onsite developed spring could easily meet water demands of the proposed vineyard.

Please refer also to the letter in **Attachment A** to this Section 3.0 Response to Comments, which supplements the findings in **Appendix G** and supports the dry farming approach of the Applicant for the onsite proposed vineyard. This letter is provided to the Applicant by Mr. Tegan Passalacqua, a winemaker and professional manager of dry farmed vineyards with experience in Napa County and eight other counties in California. Mr. Passalacqua states that the Applicant's proposed plan for the

establishment of a dry farmed vineyard with the spacing given (6 feet by 4 feet) is feasible, responsible, and sustainable. His letter details the importance of daily management of the property, and points out that many of Napa County's old vine, dry-farmed vineyards were planted before trellising was the norm, and that older vineyards were commonly designed with vine spacing to accommodate the width of the vineyard owner's tractor. Mr. Passalacqua further names several successful dry farmed vineyards in Napa County planted to the exact same spacing as that proposed for the Proposed Project.

Additionally, please refer to a second letter (**Attachment B** to this Section 3.0 Response to Comments), which also supports this position. This letter is provided to the Applicant by another winemaker, Mr. Cory Empting, who has over a decade of experience on different vineyard sites in Napa Valley. Similar to Mr. Passalacqua's remarks (**Attachment A**), Mr. Empting states that historic vineyard planting densities were based on tractor width and labor constraints rather than on wine quality. Mr. Empting notes that the best wines generally come from vines that have been able to weather the season with little to no irrigation, and that he has successfully dry farmed his vineyards with zero irrigation throughout the growing season for almost three years. Mr. Empting describes the factors that contribute to the success of a vineyard. Based on these factors, Mr. Empting expresses his belief that the proposed vineyard site lends itself to the proposed vineyard design.

As shown in these letters from professional winemakers and in the findings in the Water Balance Assessment (**Appendix G**), the Proposed Project would not strain available water supplies, threaten existing agricultural uses in the vicinity or negatively impact other beneficial uses.

ATTACHMENTS

ATTACHMENT A

LETTER TO APPLICANT FROM MR. TEGAN PASSALACQUA

Tegan Passalacqua
Turley Wine Cellars
3358 St. Helena Highway
St. Helena, CA 94574

July 5, 2012

California Department of Forestry and Fire Protection
1199 Big Tree Road
St. Helena, CA 94574

RE: Public Comment Regarding THP 1-11-106 NAP

Dear Sir/Madam,

I am writing on behalf of Ketan Mody regarding the viability of dry-farming the Jasud vineyard. My qualification to address this topic stems from over nine years of managing dry-farmed vineyards in Napa, Sonoma, Mendocino, Amador, Lodi, Contra Costa and Paso Robles counties. I have personally managed the establishment of eleven dry-farmed vineyards during my tenure at Turley Wine Cellars. In addition, I have been a panel expert and guest speaker on dry-farming at conferences hosted by both the Napa Valley Grapegrowers and the Napa County Resource Conservation District. My experience extends beyond California; I have worked in and consulted for dry-farmed vineyards in the Swartland and Stellenbosch regions of South Africa and the Northern Rhone and Roussillon regions of France.

It is my professional opinion that Mr. Mody's proposed plan for the establishment of a dry-farmed vineyard, with 4X6 foot spacing, is not only feasible, but could become a model for responsible and sustainable grapegrowing in the Napa Valley, especially as we continue to face continued water scarcity.

It is indeed true that historically many of Napa's old vine, dry-farmed vineyards were planted to wider spacings than the proposed Jasud planting. These vineyards, however, were planted before trellising was the norm and were planted in relation to the width of the vineyard owner's tractor. The key to successful dry-farmed plantings does not rest on the spacing measurement; rather it is the establishment of the grapevines and the day-to-day management of the property that guarantees long-term success. A range of available technology, such as sap-flow monitoring and pressure bombs, helps grapegrowers monitor the health of their vines through establishment until harvest. In addition, a solid understanding of organic soil management, organic matter, and its waterholding capacity allows one to fine-tune the vines' ability to take up water, thereby reducing overall water use. Establishing a dry-farmed vineyard will generally take 1-2 years longer than an irrigated vineyard. Dry-farmed vineyards normally yield less fruit than their irrigated counterparts, but they are more sustainable vineyards with a focus on the quality of the grapes instead of quantity.

I am not alone in my support for dry-farmed vineyards in Napa Valley. Andy Erickson and Annie Favia, responsible for such vaunted Napa properties as Screaming Eagle, Ovid, and Dalle Valle, among many other past and present clients, have successfully planted their home estate in the Napa Valley with a dry-farmed vineyard and to the exact same spacing that is proposed for Jasud estate.

Please feel free to reach out to me with any questions.

Thank you,

Tegan Passalacqua
Winemaker and Vineyard Manager
Turley Wine Cellars
707-963-0940 x. 107

ATTACHMENT B

LETTER TO APPLICANT FROM MR. CORY EMPTING

To: Cal Fire

From: Cory Empting

Date: June 28th 2012

Re: Jasud Vineyard THP-1-11-106NAP

My name is Cory Empting, I am the winemaker for Harlan Estate Winery, Bond Estate Winery, and Promontory Estate. I have worked for those Estates for a total of 11 years. Ketan Mody worked for me as a harvest intern in the 2008 and 2009 Vintages. Ketan has asked me to give my personal opinion regarding the sustainability of drying farming his property on Diamond Mountain Road. I am also acutely aware that the viability of this methodology has been called into question by one of the neighboring vintners.

Over the past 11 years I have worked intimately with several vineyard sites throughout Napa Valley totaling over 150 acres combined. The vineyards are geographically located as far south as Yountville and as far north as Diamond Mountain with the vast majority being located in Oakville. They are planted on densities ranging from 3600 vines per acre to 742 vines per acre. I have experienced that the best wines generally come from vines that have been able to weather the season with little or no irrigation. Because of this it has been my personal intention to try to move as much of our acreage to dry farming as possible. There are areas where I have been 100% successful (meaning the vines have received zero irrigation throughout the growing season for almost 3 years now), there are areas that have required a little help to make it through prolonged heat spells and there are areas that we will have to commit to water more frequently based on limited water holding capacity of the soils. Coinciding with my personal experience I have traveled all over the world and witnessed dry farming in multiple regions, some of which are analogues to our climate with densities that surpass the proposal submitted by Jasud Vineyard. Many of these sites also produce wines that sell for hundreds if not thousands of dollars per bottle and are obviously very viable business models.

Over the past several years we have re-developed certain parts of our vineyard and as we do so we have planted the vineyards at a much higher spacing (previous planting were 742 vines per acre to between 2900-3600 vines per acre). Knowing that it is my goal to reduce water requirements and also to improve wine quality this might seem counter intuitive. The rationale is actually quite simple. Vines transpire based on the plant water demands. These demands are affected by temperature, humidity, wind speed but more importantly the total amount of leaf surface area receiving light and the total amount of fruit per plant. So with this in mind, if we reduce the amount of exposed leaf area per plant as well as the total amount of fruit we make the vine carry, you can ease the amount of water required per plant. The total amount of water transpired per acre increases because you are using the total surface area more efficiently but the amount of water used per kilo of fruit is lower and the amount of water used per plant decreases significantly. This brings us to the age old argument in viticulture which

is: Is it better to have 100 vines per acre with 10lbs of fruit each or 1000vines per acre with 1 lb of fruit each? I would argue that it is almost semantics regarding productivity of the land but the difference is the ability to ease the stress on each plant and thus not negatively affect the carbon assimilation that produces not only sugar but color, tannins, flavors and aromas as well.

Each site is unique in regards to exposure, soil water holding capacity, temperature, wind etc. Depending on each sites difficulties other practices need to be used in tandem in order to ensure the sustainability of this practice. Some of these include the timely mowing of cover crops early in the season, the use of mulching in the vineyard to prevent not only surface evaporation but also to mitigate higher soil temperatures that are detrimental to plant nutritional status. Other practices include using winter cover crops that provide deep rooting to break up compacted layers, to create galleries for oxygen exchange which ultimately facilitate the vine roots to penetrate deeper into the soil profile in search of water. The use of these techniques in mitigating challenging conditions should not be dismissed as marginal as I have seen significant transformation when employing these techniques in our vineyards.

I would also like to speak to the point of how vineyards were planted historically in the Napa Valley as evidence for the feasibility and practicality of how we should plant our vineyards today. I have a huge respect for the pioneers of Napa Valley and the generations of farmers that have come before us. They have paved the ways for the opportunities and knowledge base that we all share today. Many did things that made sense for the technology and labor that was available at that time. They did things the way their neighbors did regardless of the diversity of soils or other meso-climatic variations. Planting densities were generally based on tractor width and labor constraints and not wine quality. They didn't have the benefits of information coming from all over the globe 24 hours a day 7days a week like we do today. This can be easily dismissed but it is really one of the biggest differences between the past and present and it is a recent development (e.g. in the last 10-15 years. The access to information and international contact doesn't replace our experiential knowledge but it is something that reinforces our observations/intuitions and gives us confidence to break away from myopic thinking. It is also critical to comprehend that farmers and winemakers were two different entities often times with goals that were polar opposites. The farmer (understandably) wanted to maximize total tonnage and sugar quantity and the winemaker trying to produce high quality wines that would sell in the market. Neither were in close contact and very rarely were mutual benefits realized in the same growing season. Suffice it to say, one should be careful to unilaterally use the historical agricultural designs of Napa as a template for the future without first contemplating the other variables that shaped those decisions.

In summary I would like to reiterate that this is my personal opinion based on over a decade of work experience in Napa Valley Vineyards. From what I've observed at the Jasud vineyard site, I believe that it lends itself to the design proposed by the proprietor. It generally faces north and has very deep soils with high water holding capacities. The trees and vegetation that grow natively on the slopes are evidence of its depth and water holding capacity. Having said that , no vineyard development is without risk. I believe that the success of any planting and design lies in the hands of the person who will be intimately working with the land. In this rare case the proprietor will be one in the same. I know Ketan Mody to be a hardworking and conscientious practitioner of everything he sets his mind to. I believe he

will execute his proposed design and ensure that it is viable through his constant vigilance and diligence. I ask that you please allow him to move forward with his project as designed. Thank you for your consideration.

Sincerely,

Cory A. Empting

ATTACHMENT C

***CALIFORNIA DEPARTMENT OF CONSERVATION,
ENGINEERING GEOLOGIC REVIEW OF TIMBER HARVEST PLAN***



DEPARTMENT OF CONSERVATION

CALIFORNIA GEOLOGICAL SURVEY

135 RIDGWAY AVENUE • SANTA ROSA, CALIFORNIA 95401

PHONE 707 /576-2987 • FAX 707 /576-2979 • TDD 916 / 324-2555 • WEB SITE conservation.ca.gov

TO: William Snyder, Deputy Director for Resource Management
California Department of Forestry and Fire Protection
135 Ridgway Ave.
Santa Rosa, California 95401

UNIT, RPF, PLANSUB, ftp/NEW

FROM: Thomas E. Spittler
California Geological Survey
135 Ridgway Ave.
Santa Rosa, California 95401

DATE: December 1, 2011

SUBJECT: ENGINEERING GEOLOGIC REVIEW OF TIMBER HARVESTING PLAN
1-11-106 NAP

Date of Inspection: November 29, 2011

Participants-Affiliation:

Time Spent on Review:
Field - 5 hr., Office - 6 hr

Scott Butler – RPF
Ketan Mody – landowner
Mike Sherwood – OEI geologist
Kim Sone – CAL FIRE
Terris Kastner – DFG
Kelli Felker – Napa County
Tom Spittler – CGS

County: Napa

Quadrangle: Calistoga 7.5'

Watershed: Simmons Canyon
CalWater v. 2.2 #2206.500102

Legal Description:
T8N, R6W, Sec. 18, MDBL&M

Timber and Timberland Owners:
Jasud Estate LLC

Area: 14 acres

Logging Method: Tractor

Silviculture: Conversion

EHR: Moderate

Slope: Ave. 5% to 35%

Geologic Concerns

Potential impacts of timber harvesting and vineyard conversion on soil erosion and sediment yield to the Napa River.

References:

Dwyer, M.J., Noguchi, N., and O'Rourke, J., 1976, Reconnaissance photo-interpretation map of landslides in 24 selected 7.5' quadrangles in Lake, Napa, Solano, and Sonoma Counties, California: U.S. Geological Survey Open File Report 76-74, scale 1:24,000.

RECEIVED

DEC - 1 2011

COAST AREA OFFICE
RESOURCE MANAGEMENT

- Fox, K.T., Sims, J.D., Bartow, J.A., and Helley, E.J., 1973, Preliminary geologic map of Eastern Sonoma County and western Napa County, California: U.S. Geological Survey Miscellaneous Field Studies MF-483, scale 1:62,500.
- Gilpin Geosciences, Inc., 2010, Engineering Geologic & Geotechnical Evaluation, Jasud Vineyard, APN 020-300-005, 2087 Diamond Mountain Road, Calistoga, California: Report to Ketan Mody, Jasud Estate LLC, included as Appendix G to the Timber Harvesting Plan, 6 p.
- Lambert, G., and Kashiwagi, J., 1978, Soil Survey of Napa County, California: U.S. Department of Agriculture, Soil Conservation Service, 104 p., map scale 1:24,000.
<http://www.ca.nrcs.usda.gov/mlra02/napa.html>.
- Napa Valley Vineyard Engineering, Inc., 2010, Jasud Vineyard Erosion Control Plan, Report to Jasud Estate LLC, 3 sheets, map scale 1"= 60'.
- O'Connor Environmental, Inc. (OEI), 2011a, Hydrologic Analysis for Jasud Estate Vineyard, APN020-300-005 2087 Diamond Mountain Road, Napa County, California, Report to Jasud Estate LLC, included as Appendix H to the Timber Harvesting Plan, 60 p.
- O'Connor Environmental, Inc. (OEI), 2011a, Erosion and Sediment Delivery Analysis for Jasud Estate Vineyard, APN020-300-005 2087 Diamond Mountain Road, Napa County, California, Report to Jasud Estate LLC, included as Appendix I to the Timber Harvesting Plan, 54 p.
- O'Connor Environmental, Inc. (OEI), 2011a, Water Balance Assessment for Jasud Estate Vineyard, APN020-300-005 2087 Diamond Mountain Road, Napa County, California, Report to Jasud Estate LLC, included as Appendix J to the Timber Harvesting Plan, 31 p.

Aerial Photographs Inspected:

- ArcGIS Explorer, 2011, Natural color image dated 2007 accessed on November 28, 2011.
- California Division of Forestry, 1981, Black and white aerial photographs: Flight 6-20-81 CDF-ALL-SR, Roll 42, Frames 5 and 6, nominal scale 1:24,000.
- WAC Corporation, 1992, Black and white aerial photographs: Flight 5-27-92 WAC 92CA, Roll 21, Frames 27 and 28, nominal scale 1:31,680
- WAC Corporation, 1999, Color aerial photographs: Flight 4-14-99 WAC 99CA, Roll 5, Frames 117 and 118, nominal scale 1:24,000.

Geologic Conditions:

Timber Harvesting Plan 1-11-106 NAP is a proposal to convert 14 acres of timberland into vineyard on the northeastern flank of Diamond Mountain in Napa County (Figure 1). Gilpen Geosciences, Inc. (2010), evaluated the conversion area, which is part of a 39 acre parcel, and identified that it is underlain by andesitic to basaltic lava flows of the Sonoma Volcanics (Figure 2). Their aerial photographic interpretation and field review that no landslides affect the site is consistent with the mapping of Dwyer and others, 1976, and with the aerial photographic and field inspection conducted for this review.

The area included in the conversion is on slopes inclined a maximum of about 35 percent, with most of the conversion proposed for slopes inclined between 5 and 30 percent. As illustrated on Figure 1, the two Class III watercourses on the property are within gentle swales that are excluded from the conversion and are separated from operations by a buffer where no disturbances are proposed that is equivalent in width to a WLPZ.

Soils in the THP are the Atken loam, 2 to 15 percent slopes (Lambert and Kashiwagi, 1978). The Moderate EHR rating included in the THP is consistent with site conditions.

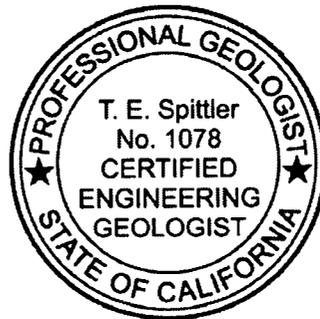
Observations:

The THP and its geologic and hydrologic appendices adequately describe the existing geologic, hydrologic, and soil erosion conditions for the site. The proposed mitigation measures included in the THP appear to be reasonable and appropriate.

Recommendations:

No additional recommendations appear warranted.

Original signed by
Thomas E. Spittler, CEG 1078
Senior Engineering Geologist
Santa Rosa, California



Concur:
12-01-11 Original signed by
Date, William R. Short, CEG 1429
Supervising Engineering Geologist



Attachments: Figures 1 and 2.

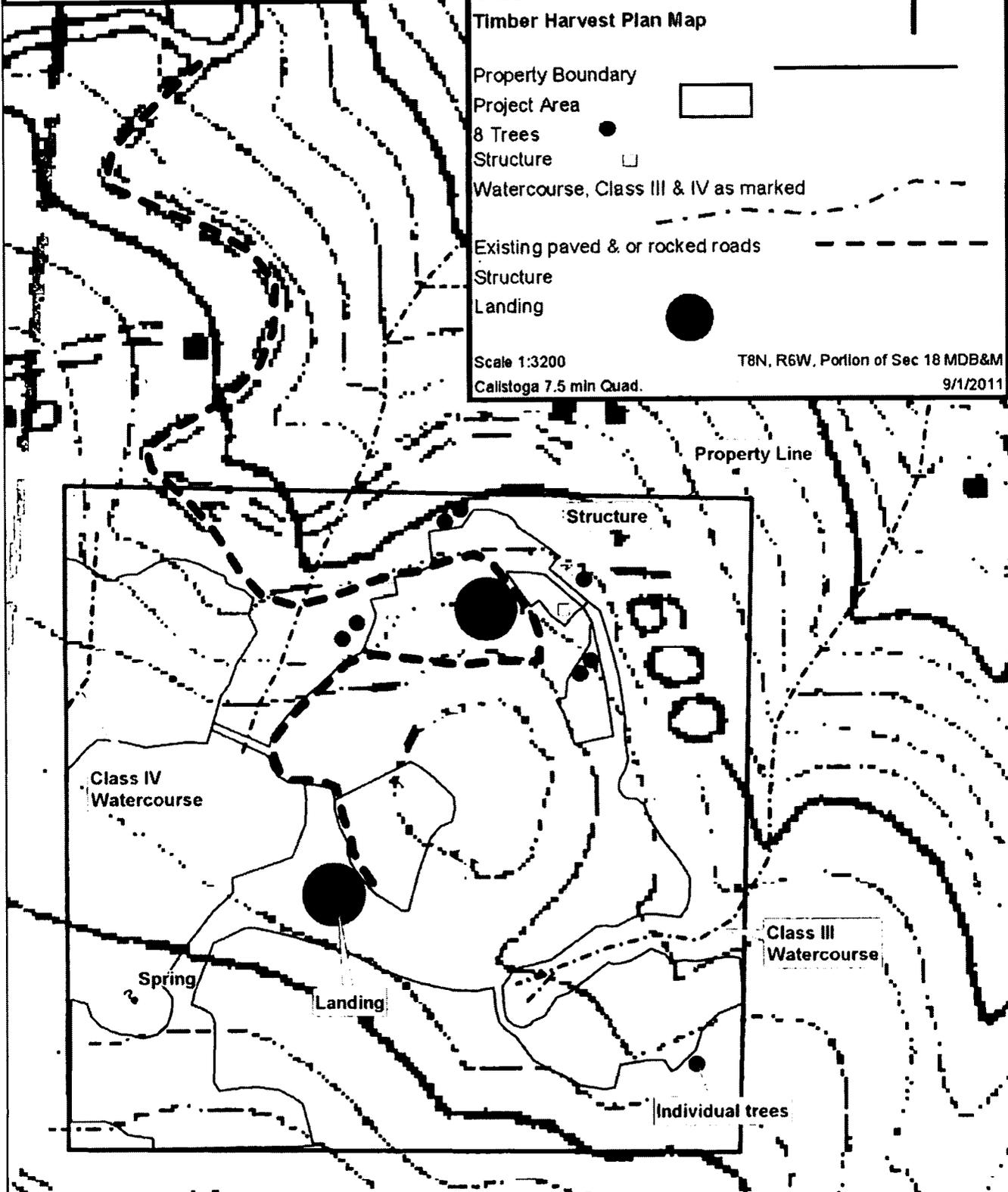
Figure 1 THP Site Map to accompany Engineering Geologic Review of THP 1-11-106 NAP

Environmental Resource Management
 Scott R. Butler, RPF 1851
Jasud Estate
 Timber Harvest Plan Map

Property Boundary
 Project Area
 8 Trees
 Structure
 Watercourse, Class III & IV as marked
 Existing paved & or rocked roads
 Structure
 Landing

Scale 1:3200
 Callstoga 7.5 min Quad.

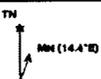
T8N, R6W, Portion of Sec 18 MDB&M
 9/1/2011

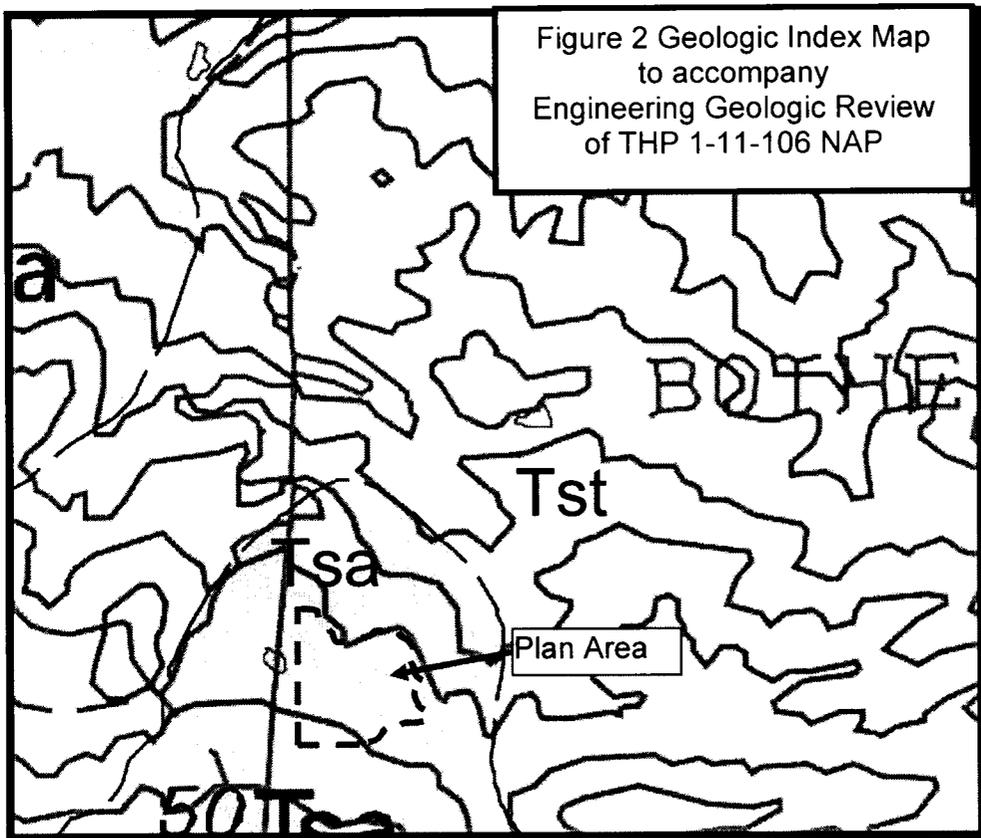


Data use subject to license.

© DeLorme. XMap® 6.

www.delorme.com





Scale
1:18,000

Explanation

- Tst Sonoma Volcanics, tuff
- Tsa Sonoma Volcanics, andesite
- THP boundary

Geology from Fox and others, 1973

ATTACHMENT D

CAL FIRE PRE-HARVEST INSPECTION REPORT

MEMORANDUM

TO: Bill Snyder, Deputy Director,
Resource Management

Attention: Leslie Markham, Deputy Chief
Resource Management, Northern Region Headquarters

DATE: November 30, 2011

FROM: Department of Forestry and Fire Protection
Sonoma Lake Napa Unit

SUBJECT: 5400 FOREST PRACTICE REGULATION AND TIMBER TAXATION
5410 Forest Practice Act
Pre-Harvest Inspection
THP 1-11-106 NAP
Inspection No.: 1
Inspection Date: November 29, 2011
Final Public Comment Date: December 29, 2011
Inspection Hours: 27
Forest District: Coast Forest District
Present:
Scott Butler - RPF
Tom Spittler - CGS
Kelli Felker - County of Napa
Terris Kastner - DFG
Mike Sherwood - O'Connor Environmental, Inc.
Ketan Mody - Plan Submitter/Timberland Owner
Kimberley Sone - CAL FIRE

On November 29, 2011, a Pre-Harvest Inspection (PHI) was conducted on the site of the proposed harvest area. Provisions of the proposed THP have been evaluated; following is a summary of the observations, evaluations, and recommendations made during the field inspection for each of the items below. CAL FIRE Archaeology conducted a pre-consultation on the project on April 12, 2011. Please see the Archaeologist's report for further information.

1. **TIMBERSTAND DESCRIPTION AND SILVICULTURE (THP ITEMS 14, 15, AND 37).**

The plan accurately describes the timberstand condition as verified by the PHI.

On September 9, 2010, the project area was inspected during an on-site pre-consultation with the RPF (Scott Butler), CAL FIRE LNU Unit Forester (Kimberley Sone), CAL FIRE Sacramento Staff (Allen Robertson), Analytical Environmental Services, the timberland owner (Ketan Mody), and Napa Valley Vineyard Engineering. The topics discussed in the field included the EIR process, the THP/TCP process, the ECP, and overall project site evaluation.

The total project area encompasses 16.5 acres. The THP is 14 acres comprised of a timberland conversion to vineyard. A Timberland Conversion Permit (TCP) was submitted with the THP. The remaining 1.5 acres is composed of grass and brush land and orchard. An additional 1.3 acres is composed of existing roads that will be treated for erosion control. There are eight individual trees scattered around the proposed project area that are considered potentially hazardous to surrounding infrastructure (i.e. outbuildings, electrical wire, roads, vineyard, and orchard). The THP states under Item 14 page 4.10 that these trees have been marked with yellow paint and are located outside the flagged project boundary. The individual trees are 5-20 feet from the boundary. As determined during First Review, the eight trees are to be used for personal use only and the trees will not be commercialized. The THP was revised to clearly state that these trees will only be cut and utilized for personal use only (RPF Response to First Review Question #1).

All of the eight trees were evaluated during the field inspection. The yellow paint on the trees was faded and on some trees, it was not visible. During the PHI, the RPF flagged all of the eight trees with pink flagging around each of the eight trees. For consistency with the THP, please re-mark the eight trees with long lasting yellow paint.

Recommendation 1A. The yellow paint and pink flagging is sufficient identification for tree falling. The plan boundary is clearly flagged around the perimeter of the project area with blue flagging. During the PHI, the timberland owner and RPF confirmed that these eight trees will not be commercially harvested; rather the owner will utilize the wood for personal use. *Answer to Agency Question # 21.*

It was observed during the PHI that seven out of the eight trees are within approximately 150 feet of a structure. Many of these trees are Douglas-fir trees of considerable size and height. These trees are considered hazard trees. One of the eight trees is a redwood tree

that is also within approximately 150 feet of a structure. The THP states that this redwood is also considered a hazard tree. This redwood tree is adjacent to another redwood that is located within the conversion area that is also proposed to be harvested. DFG evaluated the two redwood trees for potential wildlife habitat. See DFG PHI report for any further information regarding these redwood trees.

All hardwood within the vineyard blocks will be harvested. The PHI team evaluated the marginal timberland located near the Class IV watercourse (near the northwestern property boundary). This area is primarily dominated by hardwoods (black oak, manzanita). The RPF and DFG discussed habitat modification and potential mitigation measures for the removal of oak woodland habitat. See DFG PHI report for further information.

The plan area is in Napa County which is a declared zone of infestation for Sudden Oak Death. Best management practices are included in the THP to mitigate for Sudden Oak Death. The plan proposes the removal of several ponderosa pine trees. The plan includes pine slash treatment guidelines pursuant to the Board of Forestry Technical Rule Addendum No. 3 Brood Material. The plan is in the regulated area for pine pitch canker and mitigation measures are included in the plan. Pitch pine canker and Sudden Oak Death have not been found on the plan area. The THP also includes a Sustainable Pest Management Plan. These best management practices will be part of the vineyard management activities. These practices are also part of the Erosion Control Plan application with Napa County.

The site index averages a Site Class III. The THP includes a geologic report performed by Gilpin Geosciences Inc., which states that there was no evidence of global slope instability such as landslides or areas of pervasive soil creep. The elevation ranges from 1600 to 1800 feet and slopes range from 0 to 30%. The gentle ridge top area is composed of east facing slopes. The site is mostly comprised of Douglas-fir with scattered redwood, ponderosa pine, oaks and an old orchard.

THP page 4.52 (Appendix D) states:

“The land owner proposes to develop a vineyard that is certified Biodynamic. This certification would be done by Demeter USA, ‘the worlds only certifier of biodynamic farms and products. Biodynamic agriculture goes beyond organic, envisioning the farm as a self-contained and self-sustaining organism....’ The project will be a dry farmed, hand farmed, non-tilled biodynamic vineyard....This sustainable approach to farming will reduce the overall impacts of the project’s

operation on the environment.”

2. **SLIDES AND/OR UNSTABLE AREAS.**

THP Item 21 is marked “no.” As stated in THP and observed during the PHI, no active erosion sites exist within the project area. A Certified Engineering Geologist has performed an engineering geological evaluation of the vineyard blocks. The geology report is included in the THP (Appendix G) and concludes:

“Based on our research and review of the site conditions, the proposed vineyard development appears feasible from the standpoint of an engineering geological evaluation. We did not observe any evidence of global slope instability such as landslides or areas of pervasive soil creep. We observed favorable slope stability and drainage conditions with low slope inclination, combined with strong to very strong andesitic lava underlying the site.

The NVVE Erosion Control Plan has proposed several drainage improvements for the new vineyard blocks that include water spreaders, detention basins, and areas for rock stabilization, and straw mulch that appear to be appropriate for the proposed application. NVVE has specified appropriate temporary drainage improvements such as water bars and fiber rolls to dissipate any concentrated flow.”

The proposed detention basins (as part of the vineyard) were evaluated during the PHI. Tom Spittler, CGS, attended the PHI; please see CGS PHI report.

3. **EROSION HAZARD RATING AND SOIL STABILIZATION (ITEMS 17 & 18).**

Soil stabilization measures in the THP meet the minimum standards of the Forest Practice Rules. These measures adequately address field conditions. Erosion control measures are stated in the Erosion Control Plan (ECP) and are attached as part of the THP. The EHR worksheet in the THP (Appendix R page 18.1) indicates a moderate rating. This rating is consistent with field conditions observed during the PHI.

Soil stabilization measures required by the Forest Practice Rules will be implemented up to the completion of the THP. Item 18 states:

“All exposed soil surfaces greater than 100 sq.ft. shall be straw mulched and grass seeded, this applies to landing surfaces and road surfaces unless rocked. All permanent road surfaces shall be rocked upon completion. A three-year erosion control maintenance period applies to all roads and skid trails within this project area until implementation of the ECP, at which time all ECP measures shall apply.”

Straw mulch shall cover at least 90% of exposed soil surfaces to a depth of two inches. No operations shall occur within a WLPZ. As stated in the THP, there are no watercourse crossings proposed for this plan. This was also observed during the PHI. Furthermore, the THP states on page 4.30-4.31 (Appendix D) that “As a result of implementation of this Timber Harvest Plan along with the Erosion Control Plan, post project sediment erosion conditions and peak hydrological runoff are projected to be below pre project conditions. Implementation of this plan will not cause significant cumulative watershed effects.”

The THP also includes an Erosion and Sediment Delivery Analysis prepared by O’Connor Environmental Inc. (Appendix I). Also included in the THP is a Water Balance Assessment and Erosion Mitigation Assessment Report prepared by the same company (Appendix J and Appendix K). THP Item 26 states the following regarding sediment:

“The universal soil loss equation (USLE) was used by Napa Valley Vineyard Engineering to model soil loss per acre, pre and post-project. See **Appendix I page 9**. The USLE predicts the long term average annual rate of erosion on a field slope based on rainfall pattern, soil type, topography, crop system and management practices. This analysis was performed for individual transects on each of the proposed blocks.

The source area from which sediment may be delivered under pre-project conditions is restricted to the area located within 200 ft of stream channels on the Project site. Erosion rates and sediment delivery were calculated only for areas within the proposed project area within 200 ft of streams.”

Recommended mitigation measures are included in the plan throughout Section II in efforts to reduce sediment delivery. In conclusion, the reports discussed above state “Mitigation proposed within the ECP offsets the increase in sediment delivery determined for the Project conditions (0.9t/yr), and creates a net reduction in sediment delivery of about 5.3t/yr.” (Appendix K) The soil stabilization measures stated in the plan appear adequate to mitigate significant adverse

impacts resulting from the proposed timber operations.

Furthermore, the ECP and THP Item 38 Section II (THP page 4.47) states construction fencing shall be installed to prevent any equipment from entering the wet areas and drainage areas. No timber operations shall occur within the wet areas. Considering the sediment analysis included in the plan and the mitigation measures, potential adverse impacts resulting from the THP appear to be mitigated. *Answer to Agency Question # 20.*

4. **YARDING AND HARVESTING PRACTICES (ITEMS 16, 19, 20, 21 & 22).**

Ground based yarding is proposed in the THP. Considering the terrain (gentle to moderate slopes not exceeding 30%) and those conditions evaluated during the PHI, ground based yarding is an appropriate harvest method.

5. **WINTER PERIOD OPERATIONS (ITEM 23).**

No timber operations will occur during the winter period (November 15 through April 1), except timber falling. The plan includes a wet weather operating plan applicable to timber operations occurring in the non-winter period (May 1 through October 15). Mitigation measures related to the winter period comply with the Forest Practice Rules and appear adequate. The THP on page 4.23 (Appendix D) states that the winter period is from November 15 through January 31. This appears to be a discrepancy from the information provided on THP page 4.21. Please correct this discrepancy throughout the THP (ref. THP page 4.23, 4.24, 4.46). **Recommendation 1B.** Furthermore, the winter operating plan on THP page 4.24 bullet point #6 includes an incomplete sentence. For plan accuracy, please revise bullet point #6 of the winter operating plan discussed on THP page 4.24 Item 23. **Recommendation 1C.**

6. **ROADS AND LANDINGS (ITEMS 24 AND 25).**

No roads/landings will be constructed or reconstructed. No active erosion sites exist within the project area. Mitigation measures and soil stabilization measures are included in the ECP. The outslipping of roads described under Item 25 is specific to the ECP. Hauling of logs will not occur. (Reference THP page 4.76 Appendix D) One segment of existing ranch road will be abandoned and graded into the surrounding landscape. The road was evaluated during the PHI. This road does not meet the definition of a "logging

road” pursuant to 14CCR 895.1. Soil stabilization measures included under Item 18 appear adequate.

7. WATERCOURSE AND LAKE CLASSIFICATION AND PROTECTION MEASURES (ITEM 26).

Watercourses were inspected during the PHI and pre-consultation. Classifications and WLPZs were evaluated and deemed appropriate. Class I and II watercourses do not exist within the plan area. The property contains two Class III watercourses and a spring. The project has been setback from these watercourses. The Class III watercourses will receive a 35 foot WLPZ. In areas where the watercourse meets County of Napa watercourse protection definitions, the setbacks are increased to 85 feet or more. No harvesting or equipment is proposed within any WLPZ. During the PHI, blue flagging was observed to define the WLPZ of the Class III watercourses. No operations are proposed within any WLPZ.

The spring was evaluated during the PHI. The spring is located within an old orchard area. Historically, the spring was utilized for the orchard, previous residence that has been demolished, and outbuildings for many generations. The project has been set back from the spring by 50 feet.

The Class IV manmade watercourse located adjacent to the northwestern property boundary was also evaluated during the PHI. The RPF has exercised a conservative definition of a Class IV watercourse for this feature. The PHI team did not voice recommendations regarding this feature during the PHI.

Item 26 Appendix D page 4.36 discusses the objectives and mitigations proposed to minimize impact to the watercourses, the buffers, and the spring area. These include:

“1. Reduce the transport of sediment into a watercourse by application of an Engineered Erosion Control Plan. The ECP proposes a permanent cover crop, non-tilled vineyard, diversion ditched, grassy waterways, T-spreaders, rock slope protection and detention ponds. These best management practices will reduce the availability of sediment to transport into the WLPZ during the winter period. The ECP proposes hand farming, non tillage, a permanent covercrop and detention ponds. These practices will reduce the production of sediment by minimizing disturbance to the soil.

Analysis of the USLE shows soil loss to be less for the post project than pre project due to implementation of ECP measures and mitigation measures.”

The first paragraph on THP page 4.32 (Item 26 Section II) references Appendix A page 1.4. This reference should reflect Appendix A page 1.12. Please revise for plan clarity.
Recommendation 1D.

8. **WATERCOURSE AND LAKE PROTECTIONS (IN-LIEU/ALTERNATIVE PRACTICES) (ITEM 27).**

No “In Lieu” practices are proposed in the plan.

9. **DOWNSTREAM DOMESTIC WATER SOURCES (ITEM 28).**

There are landowners within 1000 feet downstream of the plan boundary. THP Item 28 states that three landowners responded to the domestic water source inquiry and the RPF states that there has been no indication of surface water use from downstream watercourses. The THP includes copies of comment letters and the RPF responses. Both the landowner and the RPF have spoken with the adjacent landowners that submitted comment.

10. **SENSITIVE WATERSHEDS (ITEM 29).**

This THP is not located in a Sensitive Watershed as defined by the State Board of Forestry and Fire Protection.

11. **HAZARD REDUCTION (ITEMS 30 AND 31).**

The landowner has several structures within 200 feet of the plan area. There are no structures owned by adjacent landowners that are located within 200 feet of the project. However, due to the proximity of the plan area to these structures, all slash created within 200 feet by the harvest operation will be mulched, chipped, burned, or removed from the site.

12. **WILDLIFE/BIOLOGICAL RESOURCES (ITEMS 32, 33, 34, AND 35).**

The THP is located within the range of Northern Spotted Owl (NSO). A NSO consultation was conducted by Pam Town, Consulting Wildlife Biologist. This report is included in the THP (Appendix F). Page 6.74 includes Pam Town's November 22, 2010 NSO Take Avoidance stating that the THP complies with 14CCR 919.9(e) Scenario #4 and that no timber operation shall occur until such time as a current years NSO survey (following the appropriate NSO survey protocol) has been completed, the results have been provided to the appropriate agency, and the results of take avoidance determinations have been incorporated into the plan. Appendix F page 6.73.1 includes updated NSO information from Pam Town dated October 18, 2011. This includes the addition of the operational and habitat requirements of USFWS March 15, 2011 Attachment A, current NSO database inquiry, and the 2011 survey information. The consulting biologist states that "The habitat maps submitted in November 2010 are still accurate and do not need to be re-done."

There is one NSO territory within 1.3 miles of the plan boundary (NAP 007). This territory has two activity centers. No harvesting will occur until NAP 007 is detected within the historic activity center within the year of planned harvest operations. This activity center is located on private property. If it is not detected within its' historic activity centers, the plan area must be surveyed pursuant to current NSO protocol.

The only timber operations that will occur within 1000 feet of the activity centers of NAP 007 are the use of existing roads. The activity centers for NAP 007 are located further than 1000 feet from the plan boundary. Currently, restrictions do not apply to this THP. However, if the activity center moves within 1000 feet of the boundary, then timber operations may be restricted.

A portion of the property is located within the 100 acre core nesting/roosting habitat for NAP 007. This area is located outside the plan boundary, but is within the landowner's property.

The NSO habitat maps (THP pages 6.94-6.100 Appendix F) were revised in response to First Review. The habitat maps were evaluated by the Forest Practice Inspector prior to and during the PHI. The habitat typing was discussed with the RPF during the PHI. The NSO habitat typing included in THP is consistent with those field conditions observed during the PHI. The unsuitable habitat area on the Post Harvest NSO Habitat map on page 6.98 Appendix F is difficult to discern. Please revise this map to include a label and area for "Unsuitable Habitat." **Recommendation 1E.**

The plan contains language for the protection of listed species if discovered during timber operations. The plan states that should additional listed species be identified during active operations, DFG and CAL FIRE will be notified of the detection and operations shall not proceed until the RPF has determined that all appropriate measures have been taken.

Item 32 THP page 4.41 includes two incorrect references. Please revise “Mitigation Recommendation (Appendix F page 6.32)” to reflect page 6.30 and revise “Assessment of Potential Impacts detail, see Appendix F page 6.29” to reflect page 6.27.

Recommendation 1F.

Item 32 THP page 4.43 under “Directions to LTO concerning listed species” states an incorrect reference. Please revise the reference to Appendix F page 6.21+ to reflect Appendix F page 6.20+ for correct LTO reference. Also make this revision to Bio Mitigation #5 at the bottom of page 4.47. **Recommendation 1G.**

13. **CULTURAL AND HISTORICAL RESOURCES (ITEM 36).**

CAL FIRE Archaeology attended a pre-consultation meeting on site. Please reference Chuck Whatford’s report for information regarding archaeological concerns.

14. **CUMULATIVE IMPACTS ASSESSMENT.**

I have reviewed the THP, the cumulative impact assessment, and have conducted a field review of the proposed timber operations. I have also inspected the condition of the watercourses within the THP area.

The RPF states that with the protection measures proposed, no significant impacts are expected. Within the last 10 years, there have been six timberland conversions. These projects equate to a total of 86 acres out of a watershed assessment area consisting of 8560 acres. The property is zoned Agriculture Watershed which is intended to be applied to those areas of the county where the predominant use is agriculturally oriented. The property has been agriculturally managed for many years. The THP includes historic photos of the orchard dating back to 1908 (see Appendix W). The spring area has been used historically and there is evidence of orchards throughout the property. The THP includes an analysis of timberland conversion impacts on habitat loss, habitat

fragmentation, watercourse impacts, timber production, and economics of Napa County. This analysis is included in Appendix U. The RPF summarizes the analysis on Appendix U page 21.19:

- “The forest component of the project (15 acres) represents 1% of the total watershed. Approximately 60% of the total watershed is undevelopable due to local, state and federal regulations concerning wet area, watercourses, archaeological sites and slopes over 30%. In addition the balance of the property ownership or approximately 20 acres will not be developed due to these regulations. This equates to 54% of the 38 acre parcel as being undevelopable. The loss of habitat is minimal and does not need mitigation.
- Habitat fragmentation is not a significant issue in the area. Due to fire control over the past century vegetation density and ages have increased significantly in the watershed. The forest component of the watershed has increased 12 percent in the last 50 years even with an increase in intensive agriculture. Fencing is proposed around the vineyard block. The forested area around the vineyard blocks will continue to be available for wildlife use.”

15. NOTICE OF INTENT.

A Notice of Intent (NOI) has been properly posted at the front gate to the property. The NOI was seen during the PHI. The NOI was color copied and laminated.

16. PUBLIC ISSUES.

Three written public comment letters were received by this inspector during the preparation of this report. Two of the comment letters were the same letter sent by the comment writer twice. The other comment letter was addressed to the RPF. The RPF responded in writing and answered each of the comment writers' questions. The RPF letter is included in the THP within Appendix X pages 24.14-24.16.

The other comment letter was in response to the NOI. The concerns raised by the comment writer were: size of project, advance notice of project, EIR requirement, NSO, pileated woodpeckers, Wallis vineyard, watershed assessment, sustainable project, and old trees.

The size of the project has been evaluated. The property is 38 acres in size and the plan

proposes to convert 14 acres of timberland to vineyard. The slope requirements of Napa County, the watercourse protection measures required by the Forest Practice Rules and Napa County have further limited the size of the project. The property has been used for agriculture for many decades; see **Cumulative Impacts Assessment** above.

The RPF has provide notice to adjacent landowners consistent with the Forest Practice Rules (14CCR 1032.7). The comment writer can submit comment letters throughout the review process of the THP, TCP, and EIR.

An EIR is required for this conversion of timberland to vineyard. The THP, TCP, and EIR will evaluate and address potential watershed impacts, erosion control, wildlife, habitat, and aesthetic concerns.

NSO has been evaluated by the RPF during the preparation of the THP. NSO has also been evaluated by CAL FIRE and DFG. DFG attended the PHI. See **Wildlife/Biological Resources** section above.

Although it is likely that pileated woodpeckers utilize the area, this species is not a listed species of concern (i.e. threatened or endangered). This species utilizes decayed wood (either standing snags or logs on the ground). No snags are proposed for removal unless they pose a safety hazard. The habitat for this species will likely remain post harvest within the areas not proposed for conversion.

Soil stabilization and erosion control has been thoroughly evaluated through the THP, TCP, EIR and the ECP. DFG, CGS, and CAL FIRE participated in the PHI. See **Soil Stabilization** and **Slides and Unstable Areas** sections above.

Watershed issues have also been addressed and evaluated through the THP, TCP, ECP, and EIR. Such issues are addressed throughout this PHI report.

THP page 4.52 (Appendix D) states:

“The land owner proposes to develop a vineyard that is certified Biodynamic. This certification would be done by Demeter USA, ‘the worlds only certifier of biodynamic farms and products. Biodynamic agriculture goes beyond organic, envisioning the farm as a self-contained and self-sustaining organism....’ The project will be a dry farmed, hand farmed, non-tilled biodynamic vineyard....This sustainable approach to farming will reduce the overall impacts of the project’s operation on the environment.”

The THP also includes biological assessments, geologic reports, peak flow analysis, vineyard erosion analysis, water balance assessments, road mitigation reports, Napa County RCD for erosion and sediment, water feasibility analysis, and a sustainable pest management plan. The THP also includes an analysis of the timberland conversion and its potential impact; see **Cumulative Impacts Assessment** above.

17. OTHER

Item 38 THP page 4.48 references Appendix R page 18. Please revise this to reflect Appendix T page 20. **Recommendation 1H.**

The top of THP page 4.56 references Appendix Y. Please include Appendix Y in the THP. **Recommendation 1I.**

THP page 4.76 states “Road surfaces will be watered regularly to abate dust and protect the road surface.” For enforcement purposes, include this requirement under Item 38 in Section II of the THP. **Recommendation 1J.**

Answer to Review Team Questions

- Contact CGS (Michael Huyette) @ (707) 576-2987, Michael.Huyette@fire.ca.gov, or Geologist (Tom Spittler) @ (707) 576-2949, Tom.Spittler@fire.ca.gov for a Mutually Agreeable PHI date.

Tom Spittler attended the PHI.

- Notify DFG (Terris Kastner) @ (408) 365-1066, tkastner@dfg.ca.gov of the PHI

Terris Kastner attended the PHI.

****Also, the Unit Forester notified the County of Napa regarding the PHI. Kelli Felker from the County of Napa attended the PHI.***

RPF Questions to be addressed prior to PHI: (The RPF made his responses to First Review Questions available at PHI to all participating agencies.)

1. The maps and Item 14 indicate harvest of eight individual trees under the Selection method (0.2 acres). After discussion with the RPF on November 17, 2011 it has been clarified that the 8 trees are

to be used for personal use only and not commercialized. As such, please add a clear statement to that effect in Item 14. Also in Item 14 and throughout the plan, remove the 0.2 acres from Item 14 and revise the total acreage as well. Review the plan and remove any references to the Selection method. Revise the map legends which show “8 Trees” to reflect they are for personal use only.

The RPF agreed and revised the plan accordingly.

2. Please provide a watercourse classification label for the watercourse which is east of the northwestern most conversion area as the head of this watercourse crosses a narrow strip of the conversion.

The RPF agreed and revised the plan accordingly.

3. Please revise Item 8 on page 4.6 to include the Planning Watershed ID number, name, and CALWATER Version.

The RPF agreed and revised the plan accordingly.

4. Please revise Item 12 on page 4.6 to include accurate page number references (i.e. pages Appendix X page 24 and 4.111 do not contain the referenced information).

The RPF agreed and revised the plan accordingly.

5. Please revise the page numbers referenced in Item 13(a) on page 4.7 (i.e. page 4.111 does not contain the referenced letter).

The RPF agreed and revised the plan accordingly.

6. Please revise Item 14(a) to check the box for both “Selection” and “Non-Timberland Area.”

The RPF agreed and revised the plan accordingly.

7. Item 15

- a. The plan is in the regulated area for pine pitch canker and proposes ponderosa pine removal (ref. page 4.11). Please revise Item 15 to address this pathogen. 14 CCR 917.9(c)

The RPF response is adequate.

- b. Please revise Item 15 to state who will inspect equipment and vehicles for SOD host material. Although this item indicates that “operations personnel” are responsible for inspections, for enforceability the person responsible for the inspection should be a signing party to the plan (e.g. the LTO).

- c. Please provide the potential forest product destination(s). If the destination(s) are unknown, please provide a statement that destinations will be amended into the plan prior to shipping.
- d. Please address the transportation of SOD host material from the plan area specific to material greater than 4-inches and less than 4-inches.
- e. Please state under Item 15 that the SOD mitigations proposed are valid for one (1) year and if SOD mitigations change after that point, the THP will be amended to include the most current SOD information and mitigations.

The RPF agreed and revised the plan accordingly for item b - e.

8. Please revise Item 18 to explicitly address 14 CCR 923.5(f)(4).

The RPF agreed and revised the plan accordingly.

9. The top of page 4.32 references the "T and I" rules. The "T and I" rules no longer exist as they were replaced by the ASP rules. Please revise the top paragraph of page 4.32 to reference the correct rule designation. (CAL FIRE/DFG)

The RPF agreed and revised the plan accordingly.

10. Page 6.27 provides a brief general discussion of California Red-legged Frog. The discussion states there are no known specific occurrences for CRLF within five miles. The discussion also states there is no potential habitat associated with the proposed conversion area. However, other habitat in the current range of CRLF, even if there is no habitat directly associated with the conversion area, must be evaluated. All of Napa County is within the current range. As such, it is suggested you use guidance provided by the USFWS to address CRLF in Item 32.

http://www.fire.ca.gov/resource_mgt/resource_mgt_forestpractice_pubsmemos_memos.php

The USFWS has provided 3 possible methods for addressing CRLF timber harvesting documents 1) Scenarios, 2) Site Specific methods or 3) USFWS Technical Assistance. Considering the characteristics of your plan, it is suggested you consider one of the scenarios from the USFWS's "California Red Legged Frog Take Avoidance Scenarios (March 25, 2008)"

The RPF agreed and revised the plan accordingly.

11. NSO
 - a. Page 6.74 indicates the NSO take avoidance evaluation method will be demonstrated through 14 CCR 919.9(e) Scenario 4. Based on the November 22, 2010 date of the NSO report from Pam Town and the protection measures provided on Page 6.85, it appears that an outdated version of Attachment A (required by Scenario 4) was used. Please provide an updated report which is

revised to reflect the operational and habitat requirements of USFWS March 15, 2011 Attachment A.

The RPF response is adequate.

- b. The habitat polygons identified on the Habitat Maps (pages 6.94-6.100) are not distinguishable based on the shading provided, even on the original pages. First generation photocopies are even more problematic. Revise these maps for clarity and provide to CAL FIRE at least 5 working days prior to PHI. The CAL FIRE Inspector will need them to verify habitat typing.

The RPF agreed and revised the plan accordingly.

12. For plan clarity and compliance with 14 CCR 1035.4, please include the following information specifically under Item 38 of the THP:
 - a. The specific title or name of the person responsible for notifying the Department of the commencement of timber operations. (A title may be Submitter, RPF, Licensed Timber Operator, etc.)
 - b. Designate how the Department will be notified in accordance with 14 CCR 1035.4 using the contact below:
Telephone: LNU = (707) 576-2344, Mail: 2210 W. College, Santa Rosa 95401-4909,
Email: santarosareviewteam@fire.ca.gov

The RPF agreed and revised the plan accordingly.

13. Maps:
 - a. Appendix A, Pages 1.2 – 1.10 contain maps where shading and a line symbols distinguish the conversion area from the property ownership area. On first generation photocopies, the shading “drops out” and it becomes very difficult to identify the boundaries simply based on the slight difference in the boundary line thickness. As such, please revise the maps (and others in the entire document) to revise the maps such that the shading is not critical in identifying the areas. Hash marks on the conversion area boundary lines are suggested, with use of the word “out” for larger blocks of out areas. Remember to revise the legends as well. 14 CCR 1034(x)
 - b. The THP/Conversion boundary on page 1.10 appears to be inconsistent with the boundary depicted on the operational maps (pages 1.2-1.8). For plan clarity and consistency, please revise THP/Conversion boundary map on page 1.10 to match the associated boundary provided on the operational maps.
 - c. Please note that “appurtenant roads” are private roads under the ownership or control of the timber owner, timberland owner, timber operator or submitter of the plan, which are outside of

the plan boundaries. An appurtenant roads map was not located in the plan. Please revise map page 1.2 to address appurtenant roads. 14 CCR 1034(x)(2)

The RPF agreed and revised the plan accordingly for item a - c.

14. Page 6.57 is titled "Appendix C", however the footer identifies the page as "Appendix F." For plan clarity, please revise.

The RPF response is adequate.

15. Page 6.73 is titled "Appendix D", however the footer identifies the page as "Appendix F." For plan clarity, please revise.

The RPF response is adequate.

16. Minor Items:

- a. The copy of the Notice of Intent in Appendix E does not have a page number. Please revise.

The RPF agreed and revised the plan accordingly.

- b. Appendix E contains pages "5.1" – "5.30". Following page "5.30" are several more pages designated as just "5." Please revise to continue the page numbering.

The RPF agreed and revised the plan accordingly.

- c. In 2006 the Department's moniker changed from CDF to CAL FIRE. Please assist our Department with phasing out the old moniker; on future plans please use the CAL FIRE moniker.

The RPF agreed.

- d. Page 5.86 references "Section V" as the Archaeological Addendum. Archaeological Addendums are typically presented in Section VI of a THP.

The RPF response is adequate.

- e. Page 5.87 references "Section VI" as supplemental information. Supplemental information and supporting documentation is typically presented in Section V of a THP.

The RPF response is adequate.

17. The Winter Operating Plan states that no logging operations are proposed during the winter period defined as November 15 through March 31. It also states that no THP operations will take place

during November 15 through January 31 except for timber falling. These dates appear to be contradictory. Please clarify. DFG

See PHI Recommendation 1B.

18. Please provide further information on the presence of trees within the conversion area that contain characteristics favorable to wildlife (e.g. basal hollows, other cavities, reiterated tops, broken tops, and large limbs). How will the permanent loss of these trees be mitigated? DFG

This issue was evaluated during the PHI; see DFG PHI report.

RPF Archaeology Questions to be addressed prior to the PHI:

19. The Archeological questions are provided for the RPF in this original document, but have been omitted from copies in order to maintain confidentiality in accordance with policy. A copy has been provided to the CAL FIRE field unit as well. The original copy of this material is maintained in a confidential file at CAL FIRE Northern Region Headquarters, 135 Ridgway Avenue, Santa Rosa, CA 95401. CAL FIRE ARCH

(Archeological issues have been addressed in Chuck Whatford's report.)

Agency Questions to be addressed at PHI:

20. Please verify the Soil Stabilization elements proposed in Item 18 and Appendix C page 3, sufficiently address the requirements described in 14 CCR 916.9.

See Soil Stabilization section above.

21. Should the 8 trees to be harvested "for personal use only" (See RTQ #1) be marked in some unique fashion to distinguish them from other possible commercialized harvest trees?

See Description of Timberstand above.

Agency Archaeology Questions to be addressed at PHI: (For confidentiality purposes, please submit Archeological responses attached separately.)

- There are no Archaeological questions for the Inspector.

CAL FIRE PHI RECOMMENDATIONS

- 1. Prior to noon, on the Monday BEFORE the scheduled Second Review Team meeting, the RPF shall make the following revisions, send the original revisions to CAL FIRE-Santa Rosa.**
 - A.** All of the eight trees were evaluated during the field inspection. The yellow paint on the trees was faded and on some trees, it was not visible. During the PHI, the RPF flagged all of the eight trees with pink flagging around each of the eight trees. For consistency with the THP, please re-mark the eight trees with long lasting yellow paint.

- B.** The THP on page 4.23 (Appendix D) states that the winter period is from November 15 through January 31. This appears to be a discrepancy from the information provided on THP page 4.21. Please correct this discrepancy throughout the THP (ref. THP page 4.23, 4.24, 4.46).
- C.** The winter operating plan on THP page 4.24 bullet point #6 includes an incomplete sentence. For plan accuracy, please revise bullet point #6 of the winter operating plan discussed on THP page 4.24 Item 23.
- D.** The first paragraph on THP page 4.32 (Item 26 Section II) references Appendix A page 1.4. This reference should reflect Appendix A page 1.12. Please revise for plan clarity.
- E.** The unsuitable habitat area on the Post Harvest NSO Habitat map on page 6.98 Appendix F is difficult to discern. Please revise this map to include a label and area for “Unsuitable Habitat.”
- F.** Item 32 THP page 4.41 includes two incorrect references. Please revise “Mitigation Recommendation (Appendix F page 6.32)” to reflect page 6.30 and revise “Assessment of Potential Impacts detail, see Appendix F page 6.29” to reflect page 6.27.
- G.** Item 32 THP page 4.43 under “Directions to LTO concerning listed species” states an incorrect reference. Please revise the reference to Appendix F page 6.21+ to reflect Appendix F page 6.20+ for correct LTO reference. Also make this revision to Bio Mitigation #5 at the bottom of page 4.47.
- H.** Item 38 THP page 4.48 references Appendix R page 18. Please revise this to reflect Appendix T page 20.
- I.** The top of THP page 4.56 references Appendix Y. Please include Appendix Y in the THP.
- J.** THP page 4.76 states “Road surfaces will be watered regularly to abate dust and protect the road surface.” For enforcement purposes, include this requirement under Item 38 in Section II of the THP.

TIM STREBLOW
Unit Chief, Sonoma Lake Napa Unit

Original signature is on file with CAL FIRE

by: Kimberley Sone RPF#2745

THP 1-11-106 NAP
PREHARVEST INSPECTION
DATE OF INSPECTION: November 29, 2011
Page 21 of 22

Forest Practice Inspector
Division Chief, Resource Management

Attachments: CAL FIRE PHI map
Electronic mail to: santarosareviewteam.fire.ca.gov
cc: File/Field

TIM STREBLOW
Unit Chief, Sonoma Lake Napa Unit

By:

 Kimberley Sone
Forest Practice Inspector

THP 1-11-106 NAP
PREHARVEST INSPECTION
DATE OF INSPECTION: November 29, 2011
Page 22 of 22

Division Chief, Resource Mgmt
RPF #2745

Attachments: CAL FIRE PHI map
Electronic mail to: santarosareviewteam.fire.ca.gov
cc: File/Field

ATTACHMENT E

***EMAIL CORRESPONDENCE WITH NAPA COUNTY,
AUGUST 8, 2012***

Jessica Alexander

From: Felker, Kelli [KELLI.FELKER@countyofnapa.org]
Sent: Wednesday, August 08, 2012 2:15 PM
To: Jessica Alexander
Cc: Pete Bontadelli; 'Scott R. Butler'; Bordona, Brian
Subject: Jasud Vineyard Conversion

Jessica,

I am following up on our conversation yesterday regarding the proposed mitigation for the loss of approximately 0.27 acres of redwood forest removal/enhancement along the fringe of proposed Block H. The proposed mitigation recommends the removal of mature redwood forest within the development area, replacing those trees at a 2:1 ratio with young plantings within an existing forest, thereby modifying that forest to achieve the planting. The County's position is that the issue is not whether the mitigation will offset the loss of redwood, but rather the need to comply with the County GP policy, which requires avoidance of a given resource unless determined to be infeasible. In our opinion the avoidance of 0.27 acres of redwood forest is feasible to fully execute the objectives of the project, which is to plant vineyard. The 0.27 acres represent a relatively minor area compared to the 14.6 acre project area, representing a minor loss in acreage.

The County's position remains consistent with our comment letter in that Block H would need to be modified to avoid the removal of redwood trees located within or adjacent to the development area before the project can be found consistent with the referenced general plan policy and ultimately approved. However, we are willing to consider limited removal of trees to allow the construction of the road accessing Block H from Block I, at the base of the Class III stream, in order to adhere to required stream setbacks.

If you should have any questions, please let me know.

Thank you,

Kelli Felker
Planner III - Engineering & Conservation

Napa County
Department of Planning, Building & Environmental Services
1195 Third Street, Napa, CA 94559
(707) 265-2325, (707) 299-4271 fax

SECTION 4.0

TEXT REVISIONS TO THE DRAFT EIR

4.0 TEXT REVISIONS TO THE DRAFT EIR

4.1 INTRODUCTION

The following corrections/edits have been made to the text of the Draft Environmental Impact Report (DEIR) subsequent to its public release in April of 2012. The corrections to the EIR include corrections that improve the clarity of writing and corrections of grammatical and consistency errors. Additional corrections or clarifications have been made to address comments and to update information. Text that has been deleted from the EIR will be marked in this chapter as a ~~strikeout (deleted text)~~, while new text will be labeled with an underline (new text).

4.2 TEXT REVISIONS

Mitigation Measure 4.2-1, in **Section 4.2.3-2** of the EIR and in **Section 4.2** of the MMRP Table, has been revised as follows:

4.2-1: The Applicant shall implement a fugitive dust abatement program during the construction of #P10-00309-ECPA, which shall include the following elements:

- Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard.
- Cover all exposed stockpiles.
- Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent paved streets.
- Limit traffic speeds on unpaved roads to 15 miles per hour (mph).
- Suspend excavation and grading activity when winds (instantaneous gusts) exceed 25 mph.

In addition to the above measures, the Applicant shall also implement the required basic construction mitigation measures as recommended by the BAAQMD during the construction of the Proposed Project, which shall include the following elements:

- All exposed surfaces (e.g., parking areas, staging areas, and unpaved access roads) shall be watered as needed to ensure dust abatement.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of the California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
- 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 prior to operation.
- Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond ~~and take corrective action~~ within 48 hours.

and the Applicant shall take corrective action. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

- All heavy duty construction equipment shall be fitted with diesel particulate matter filters and use only aqueous diesel fuel.

Mitigation Measure 4.3-1, in **Section 4.3.5-2** of the EIR and in **Section 4.3** of the MMRP Table, has been revised as follows:

4.3-1: Impacts to oak woodland would be reduced to a less than significant level and would result in the greatest quality of oak woodland mitigation through a combination of onsite avoidance, protection, and enhancement. Mitigation to offset the removal of approximately 3.35 acres of oak woodland under the Proposed Project would be accomplished through a combination of 1) avoidance of oak woodlands remaining within the property and immediate vicinity; 2) protection of oak woodlands having the highest habitat values; and 3) enhancement of existing oak woodlands onsite. These measures are discussed further below.

1. Avoidance

The Proposed Project avoids approximately 3.35 acres of oak woodland, or roughly 50 percent of the oak woodland on the property. This avoidance would protect high value oak woodlands that occur onsite near drainages and springs which provide optimal perching and roosting habitat for raptors as well as habitat for many wildlife species. Additionally, for example, they provide moist conditions in the dry season by intercepting fog, which produces moist microclimates for plants and animals that require summer moisture.

All protected oak trees shall be marked on the property with visible plastic fencing during construction (consistent with the construction fencing requirements in the ECP) and shall be avoided. Visible fencing shall be placed at the edge of the dripline (edge of the tree canopy) to protect above- and below-ground tissues of these trees, which shall be field verified by a registered professional forester. The following shall not occur within the dripline of any retained oak tree: parking or storage of vehicles, machinery or other equipment; stockpiling of excavated soils, rocks or construction materials; or dumping of oils or other chemicals. A registered professional forester shall perform any pruning deemed necessary onsite.

2. Protection and Enhancement

Direct impacts to oak woodlands should be mitigated by protecting and enhancing the remaining onsite oak woodlands. Oak Woodland Enhancement Areas (**Figure 4.3-6**) shall be designated for protection and enhancement activities under the direction of a registered professional forester knowledgeable about the ecology of oak woodlands. **Figure 4.3-6** shows the Oak Woodland Enhancement Areas, which are the target areas for protection and enhancement on the property.

A total of 3.35 shall be designated as Oak Woodland Enhancement Areas onsite and these areas shall be marked and protected during construction as well as protected

during operation of the Proposed Project. The Oak Woodland Enhancement Areas shall be restricted from development and other uses that would degrade the quality of the habitat (including, but not limited to conversion to other land uses such as agriculture or urban development, and excessive off-road vehicle use that increases erosion) and should be otherwise restricted consistent with the goals and policies of Napa County. Methods to enhance the quality of the protected oak woodland onsite shall include selective cutting of Douglas Fir less than four inches diameter at breast height (dbh) so that all such trees are lopped and not removed from the site. Invasive broom shall be controlled by non-chemical methods such as weed whackers.

A replanting program will be supplemented with the retention and enhancement treatments to be performed within the Oak Woodland Habitat Enhancement Areas. Replacement of oak trees will occur at a 2:1 ratio consistent with Napa County General Plan policy CON-17. Annual monitoring of the replanting program shall occur for three years to ensure establishment; during this time, additional plantings may occur as needed under the guidance of a certified arborist or RPF to ensure the 2:1 replacement ratio is achieved at the end of the three year period. Oaks will be planted within the designated Habitat Enhancement Areas, provided that such placement is not detrimental to existing oaks, as determined by a qualified forester or arborist. To the degree that additional acreage is needed to accommodate new oak plantings, such acreage will be located either adjacent to, or nearby existing oak woodland enhancement areas, which are illustrated in the expanded Habitat Enhancement Area for Oak Woodland provided in the revised **Figure 4.3-6**. The establishment of the Habitat Enhancement Areas for Oak Woodland and the supplemental enhancement and replanting activities therein will improve the quality of the habitat and value of the resource to wildlife that utilize this habitat onsite.

Impact 4.3-2, in **Section 4.3.5-2** of the EIR and in **Section 2.0** Executive Summary, has been revised as follows:

- 4.3-2:** Development of the Proposed Project would result in the removal of approximately ~~0.27~~ 0.02 acre of Coast Redwood Forest (see revised Table 4.3-1), a sensitive biotic community in Napa County (NCBDR, 2009) and may be inconsistent with Policies CON-17, CON-18, and CON-22. This is a potentially significant impact.

Coast Redwood Alliance is considered a sensitive biotic community in Napa County due to its limited distribution (less than 500 acres in the County). The NCBDR mapped approximately 324 acres of this biotic community in the County, and approximately 23 acres in the East Mountain Study Area in which the Proposed Project resides. Though this community was not mapped in the project vicinity by Thorne et al. in 2009, approximately 5.23 acres of Coast Redwood Forest was identified onsite (**Table 4.3-1**). The timber harvest plan would remove ~~0.27~~ 0.02 acre of Coast Redwood Forest from the property and replace it with vineyard. If this amount were included in the Coast Redwood Forest currently described in the NCBDR, this removal would constitute approximately ~~4.2~~ 0.09 percent of the Coast Redwood currently mapped in the East Mountain Study area, and ~~0.08~~ 0.006 percent of the Coast Redwood Forest currently mapped in

the County. The Coast Redwood Forest identified onsite is not considered high quality due to past timber harvest practices. Impacts resulting from the removal of ~~0.27~~ 0.02 acre of this habitat type would be reduced through avoidance of existing Coast Redwood Forest onsite located in the northeastern and southeastern margins of the property (see revised **Figure 4.3-6**).

Mitigation Measure 4.3-2, in **Section 4.3.5-2** of the EIR and in **Section 4.3** of the MMRP Table, has been revised as follows:

Impacts to ~~approximately 0.27 acre~~ of Coast Redwood Forest would be reduced to less than significant levels by the avoidance and protection of approximately ~~4.96~~ 5.21 acres (~~95~~ 99 percent) of the total acreage of this habitat type onsite. These Coast Redwood Enhancement Areas shall be marked and protected during construction as well as protected during operation of the Proposed Project. **Revised Figure 4.3-6** shows the expanded Coast Redwood Enhancement Areas on the property and avoidance of 0.25 acre of coast redwood occurring in proposed block H. These areas shall be restricted from development and other uses that would degrade the quality of the habitat (including, but not limited to conversion to other land uses such as agriculture or urban development, and excessive off-road vehicle use that increases erosion) and should be otherwise restricted consistent with the goals and policies of Napa County. Any invasive broom identified within the Coast Redwood Enhancement Areas shall be controlled by the Applicant by non-chemical methods such as weed whackers.

The Habitat Enhancement Areas for Coast Redwood will be expanded and a replanting program will be supplemented to the retention and enhancement treatments to be applied to these areas (see revised Figure 3.4-6). The ECP, THP, and TCP will be updated to reflect this change prior to implementation of the Proposed Project. Replanting will be planned at the discretion of a qualified forester or arborist to provide full and complete mitigation for the loss of 0.02 acre of coast redwood due to the Proposed Project. The loss of approximately 0.02 acre will be replaced through the supplemental replanting program to ensure no net loss of coast redwood onsite. In addition, retention, enhancement, and replanting treatments will improve the quality of the coast redwood habitat onsite and will provide a greater value to wildlife that utilize these areas.

Mitigation Measure 4.3-5, in **Section 4.3.5-2** of the EIR and in **Section 4.3** of the MMRP Table, has been revised as follows:

4.3-5: The Applicant shall implement the following measures to avoid disturbing any special status bird species nesting on the property in accordance with the following CDFG-recommended measures: Vegetation removal conducted during the nesting period shall require a pre-construction survey for active bird nests, conducted by a qualified biologist. No known active nests shall be disturbed without a permit or other authorization from USFWS and/or CDFG.

~~Typical nesting season for raptors is March 1 through July 31. Any development of the site between the dates of March 1 through July 31 will require a pre-construction raptor survey. A qualified wildlife biologist shall conduct pre-construction surveys of all potential nesting habitat for birds within 500 feet of earthmoving activities. Surveys for nesting birds should be conducted within 14 days prior to tree removal and/or ground breaking activities. If active bird nests are~~

~~found during pre-construction surveys, a 500-foot no-disturbance buffer shall be created around active raptor nests during the breeding season or until it is determined that all young have fledged (Appendix D).~~

If project activities are scheduled between February 1 and August 31, CDFG recommends surveys and avoidance measures for nesting birds. With respect to surveys for nesting bird and raptor species, CDFG recommends that the project specifies: 1) nest surveys be conducted no earlier than 14 days prior to tree removal and/or breaking ground (surveys should be conducted a minimum of 3 separate days during the 14 days prior to disturbance), 2) in the event that nesting birds are found, the project applicant should consult with CDFG and obtain approval for nest-protection buffers prior to tree removal and/or ground disturbing activities, and 3) nest protection buffers will remain in effect until the young have fledged. All nest protection measures should apply to off-site impacts and within 500 feet of project activities. If a lapse in project-related work of 15 days or longer occurs, another focused survey and, if required, consultation with CDFG, will be required before project work can be reinitiated.

Mitigation Measure 4.4-2, in **Section 4.4.3-2** of the EIR and in **Section 4.4** of the MMRP Table, has been revised as follows:

4.4-2: There is a possibility that subsurface archaeological deposits may exist within the proposed vineyard areas, as archaeological sites may be buried with no surface manifestation, or may be obscured by vegetation. In accordance with CEQA Guidelines Section 15064.5 (f), should any previously unknown prehistoric or historic resources, such as, but not limited to, obsidian and chert flaked-stone tools or toolmaking debris; shellfish remains, stone milling equipment, concrete, or adobe footings, walls, filled wells or privies, deposits of metal, glass, and/or ceramic refuse be encountered during onsite construction activities, earthwork within 100 feet of these materials shall be stopped and the applicant shall consult with a professional archaeologist. Once the archaeologist has had the opportunity to evaluate the find he/she shall consult with the local ~~Cal Fire~~ CAL FIRE archaeologist (and, if the discovery includes prehistoric/Native American cultural resource materials, shall immediately notify the appropriate person(s) at the Mishewal Wappo Tribe of Alexander Valley) regarding the results of the evaluation and appropriate site treatment options, as necessary. Said measures shall be carried out prior to any resumption of related ceased earthwork. The CAL FIRE archaeologist and the Mishewal Wappo Tribe shall be consulted regarding the appropriate assessments of significance and treatment of prehistoric/Native American cultural resource materials—if any such are found during construction—which, with the Tribe's concurrence, could include scientific analysis and professional museum curation, among other possible treatment options. All significant historic-era cultural resource materials recovered shall be subject to scientific analysis and professional museum curation, ~~and a~~ A report shall be prepared by the qualified professional archaeologist according to current professional standards and a copy of the draft report shall be provided to the local ~~Cal Fire~~ CAL FIRE archaeologist for review and approval prior to finalization of it.

Mitigation Measure 4.4-4, in **Section 4.4.3-2** of the EIR and in **Section 4.4** of the MMRP Table, has been revised as follows:

4.4-4: To further ensure protection of the archaeological site identified on the property, photographs will be taken of all site boundaries staked with orange safety fencing during construction and will be dated accordingly. Photo documentation will be submitted to the Mishewal Wappo Tribe of Alexander Valley.

SECTION 5.0

MITIGATION MONITORING AND REPORTING PLAN

5.0 MITIGATION MONITORING AND REPORTING PLAN

5.1 INTRODUCTION

The California Environmental Quality Act (CEQA) requires that a Lead Agency establish a program to report on and monitor measures adopted as part of the environmental review process to mitigate or avoid significant effects on the environment. This Mitigation Monitoring and Reporting Plan (MMRP) is designed to ensure that the mitigation measures identified in the Environmental Impact Report (EIR) for the Jasud Estate Vineyards Timberland Conversion Project (Proposed Project) are fully implemented. The MMRP, as presented in **Table 5-1**, describes the timing/frequency of mitigation implementation responsibilities and standards, and verification of compliance for the mitigation measures identified in the Proposed Project EIR.

Table 5-1 presents all recommended mitigation measures and is organized in the same order as the contents of the EIR, by topic. A number of entities have been assigned monitoring responsibilities under this MMRP. All monitoring actions, once completed, would be reported in writing to CAL FIRE, which would maintain mitigation monitoring records for the Proposed Project. The MMRP will be considered by the Lead Agency, CAL FIRE, and Responsible Agency, Napa County, in conjunction with review and approval of the Proposed Project and each subsequent approval related to project phases [i.e. erosion control plan (ECP), timber harvest plan (THP), timber conversion plan (TCP)], and will be adopted as a condition of project approval for each action and future action.

The components of this table include:

Mitigation Measures: The mitigation measures listed in the Final EIR.

Timing of Action: Identifies the timing for the implementation of each action.

Responsibility for Implementation: Identifies the authority responsible for implementing the mitigation measure.

Responsibility for Monitoring: Identifies the authority responsible for monitoring implementation of the mitigation measure.

Standards for Compliance: Identifies the standard to be met in order for the mitigation measure to be considered implemented.

Verification of Compliance: Identifies verification of compliance for each identified mitigation measure.

TABLE 5-1. Mitigation Monitoring and Reporting Plan

Mitigation Measure	Timing of Action	Responsible for Implementing	Responsibility for Monitoring	Standards for Compliance	Verification of Compliance
4.1 AGRICULTURE AND FORESTRY RESOURCES					
4.1-1: With implementation of mitigation to offset tree loss discussed in below under 4.3 Biological Resources , impacts resulting from the loss of forest land would be considered less than significant.	Refer to 4.3 Biological Resources	Applicant	Applicant	Refer to Section 4.3 Biological Resources	
4.2 AIR QUALITY					
4.2-1: The Applicant shall implement a fugitive dust abatement program during the construction of #P10-00309-ECPA, which shall include the following elements:	During construction	Applicant	Applicant	Bay Area Air Quality Management District (BAAQMD)	
<ul style="list-style-type: none"> Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard. Cover all exposed stockpiles. Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent paved streets. Limit traffic speeds on unpaved roads to 15 miles per hour (mph). Suspend excavation and grading activity when winds (instantaneous gusts) exceed 25 mph. 					
<p>In addition to the above measures, the Applicant shall also implement the required basic construction mitigation measures as recommended by the BAAQMD during the construction of the Proposed Project, which shall include the following elements:</p> <ul style="list-style-type: none"> All exposed surfaces (e.g., parking areas, staging areas, and unpaved access roads) shall be watered as needed to ensure dust abatement. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of the California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points. 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 					

Mitigation Measure	Timing of Action	Responsible for Implementing	Responsibility for Monitoring	Standards for Compliance	Verification of Compliance
<p>condition prior to operation.</p> <ul style="list-style-type: none"> Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond within 48 hours and the Applicant shall take corrective action. The Air District's phone number shall also be visible to ensure compliance with applicable regulations. All heavy duty construction equipment shall be fitted with diesel particulate matter filters and use only aqueous diesel fuel. 					

The measures above are in addition to the permanent erosion control measures specified in #P10-00309-ECPA, which include establishing a permanent no till cover crop on all disturbed areas. The Proposed Project would not exceed the BAAQMD criteria pollutant threshold. The permanent erosion control measures would avoid the creation of nuisance dust and PM10 during operation of the Proposed Project, which would reduce these potentially significant impacts to a less than significant level.

4.3 BIOLOGICAL RESOURCES

4.3-1: Impacts to oak woodland would be reduced to a less than significant level and would result in the greatest quality of oak woodland mitigation through a combination of onsite avoidance, protection, and enhancement. Mitigation to offset the removal of approximately 3.35 acres of oak woodland under the Proposed Project would be accomplished through a combination of 1) avoidance of oak woodlands remaining within the property and immediate vicinity; 2) protection of oak woodlands having the highest habitat values; and 3) enhancement of existing oak woodlands onsite. These measures are discussed further below.

1. Avoidance

The Proposed Project avoids approximately 3.35 acres of oak woodland, or roughly 50 percent of the oak woodland on the property. This avoidance would protect high value oak woodlands that occur onsite near drainages and springs which provide optimal perching and roosting habitat for raptors as well as habitat for many wildlife species. Additionally, for example, they provide moist conditions in the dry season by intercepting fog, which

During construction and operation

Applicant

Applicant/
Qualified forester
or arborist

Consistent with Napa
County Conservation
Guidelines

Mitigation Measure	Timing of Action	Responsible for Implementing	Responsibility for Monitoring	Standards for Compliance	Verification of Compliance
<p>produces moist microclimates for plants and animals that require summer moisture.</p> <p>All protected oak trees shall be marked on the property with visible plastic fencing during construction (consistent with the construction fencing requirements in the ECP) and shall be avoided. Visible fencing shall be placed at the edge of the dripline (edge of the tree canopy) to protect above- and below-ground tissues of these trees, which shall be field verified by a registered professional forester. The following shall not occur within the dripline of any retained oak tree: parking or storage of vehicles, machinery or other equipment; stockpiling of excavated soils, rocks or construction materials; or dumping of oils or other chemicals. A registered professional forester shall perform any pruning deemed necessary onsite.</p>					
<p>2. Protection and Enhancement</p> <p>Direct impacts to oak woodlands should be mitigated by protecting and enhancing the remaining onsite oak woodlands. Oak Woodland Enhancement Areas (Figure 4.3-6) shall be designated for protection and enhancement activities under the direction of a registered professional forester knowledgeable about the ecology of oak woodlands. Figure 4.3-6 shows the Oak Woodland Enhancement Areas, which are the target areas for protection and enhancement on the property.</p> <p>A total of 3.35 acres shall be designated as Oak Woodland Enhancement Areas onsite and these areas shall be marked and protected during construction as well as protected during operation of the Proposed Project. The Oak Woodland Enhancement Areas shall be restricted from development and other uses that would degrade the quality of the habitat (including, but not limited to conversion to other land uses such as agriculture or urban development, and excessive off-road vehicle use that increases erosion) and should be otherwise restricted consistent with the goals and policies of Napa County. Methods to enhance the quality of the protected oak woodland onsite shall include selective cutting of Douglas Fir less than four inches diameter at</p>					

Mitigation Measure	Timing of Action	Responsible for Implementing	Responsibility for Monitoring	Standards for Compliance	Verification of Compliance
<p>breast height (dbh) so that all such trees are lopped and not removed from the site. Invasive broom shall be controlled by non-chemical methods such as weed whackers.</p> <p>A replanting program will be supplemented with the retention and enhancement treatments to be performed within the Oak Woodland Habitat Enhancement Areas. Replacement of oak trees will occur at a 2:1 ratio consistent with Napa County General Plan policy CON-17. Annual monitoring of the replanting program shall occur for three years to ensure establishment; during this time, additional plantings may occur as needed under the guidance of a certified arborist or RPF to ensure the 2:1 replacement ratio is achieved at the end of the three year period. Oaks will be planted within the designated Habitat Enhancement Areas, provided that such placement is not detrimental to existing oaks, as determined by a qualified forester or arborist. To the degree that additional acreage is needed to accommodate new oak plantings, such acreage will be located either adjacent to, or nearby existing oak woodland enhancement areas, which are illustrated in the expanded Habitat Enhancement Area for Oak Woodland provided in the revised Figure 4.3-6. The establishment of the Habitat Enhancement Areas for Oak Woodland and the supplemental enhancement and replanting activities therein will improve the quality of the habitat and value of the resource to wildlife that utilize this habitat onsite.</p>					
<p>4.3-2: Impacts to Coast Redwood Forest would be reduced to less than significant levels by the avoidance and protection of approximately 5.21 acres (99 percent) of the total acreage of this habitat type onsite. These Coast Redwood Enhancement Areas shall be marked and protected during construction as well as protected during operation of the Proposed Project. Revised Figure 4.3-6 shows the Coast Redwood Enhancement Areas on the property and avoidance of 0.25 acre of coast redwood occurring in proposed block H. These areas shall be restricted from development and other uses that would degrade the quality of the habitat (including, but not limited to conversion to other land uses such as agriculture or urban development, and excessive off-road vehicle use that increases erosion) and should be otherwise</p>	<p>During construction and operation</p>	<p>Applicant</p>	<p>Applicant/ Qualified forester or arborist</p>	<p>Consistent with Napa County Conservation Guidelines</p>	

Mitigation Measure	Timing of Action	Responsible for Implementing	Responsibility for Monitoring	Standards for Compliance	Verification of Compliance
<p>restricted consistent with the goals and policies of Napa County. Any invasive broom identified within the Coast Redwood Enhancement Areas shall be controlled by the Applicant by non-chemical methods such as weed whackers.</p> <p>The Habitat Enhancement Areas for Coast Redwood will be expanded and a replanting program will be supplemented to the retention and enhancement treatments to be applied to these areas (see revised Figure 3.4-6). The ECP, THP, and TCP will be updated to reflect this change prior to implementation of the Proposed Project. Replanting will be planned at the discretion of a qualified forester or arborist to provide full and complete mitigation for the loss of 0.02 acre of coast redwood due to the Proposed Project. The loss of approximately 0.02 acre will be replaced through the supplemental replanting program to ensure no net loss of coast redwood onsite. In addition, retention, enhancement, and replanting treatments will improve the quality of the coast redwood habitat onsite and will provide a greater value to wildlife that utilize these areas.</p>					
<p>4.3-3: Project site design plans have been modified to avoid direct impacts to wetlands and jurisdictional waters of the U.S. In addition, the following measures will ensure further avoidance of impacts to wetlands and streams:</p> <ol style="list-style-type: none"> 1. To avoid indirect impacts to waters of the U.S. and wetlands, avoidance buffers of 50 feet shall be established around the spring and adjacent wet area, consistent with the ECP. Temporary orange construction fencing shall be installed around these features and along the designated setbacks for the two onsite Class III streams per the ECP. All fencing shall be installed prior to the commencement of any earthmoving activities and shall be field verified by a qualified biologist or registered professional forester. The fencing shall remain in place until all construction activities in the vicinity have been completed. 2. Construction activities shall be conducted during the dry season to minimize impacts related to erosion, water quality, and aquatic resources and activities shall be 	<p>During construction and operation</p>	<p>Applicant</p>	<p>Applicant</p>	<p>Consistent with Napa County Conservation Guidelines</p>	

Mitigation Measure	Timing of Action	Responsible for Implementing	Responsibility for Monitoring	Standards for Compliance	Verification of Compliance
<p>conducted consistent with Mitigation Measure 4.3-4 (below) to protect wildlife corridors. All disturbed areas shall be seeded and mulched to prevent erosion and sediment deposit into onsite water features and/or any off-site wetlands and waters of the U.S.</p> <p>3. Staging areas shall be located away from the areas of wetland habitat onsite that are fenced off. Temporary stockpiling of excavated or imported material shall occur only in approved construction staging areas within the gross acres allocated for vineyard development (i.e., approved vineyard blocks and associated acreage). Excess excavated soil shall be used on site or disposed of at a regional landfill or other appropriate facility. Stockpiles that are to remain on the site through the wet season shall be protected to prevent erosion (e.g. with tarps, silt fences, or straw bales).</p> <p>4. Standard precautions shall be employed by the construction contractor to prevent the accidental release of fuel, oil, lubricant, or other hazardous materials associated with construction activities into jurisdictional features (as detailed in Section 4.7).</p>					
<p>4.3-4: Prior to approval of the ECP and THP, the plans shall be modified to include the following:</p> <p>1. The ECP shall specify fencing with openings of no less than six inches for unrestricted movement of small animals. This would reduce potential restrictions on small animals while excluding deer, wild pigs and cattle from the vineyards.</p> <p>The onsite stream corridors, spring, and wet area shall be protected from development and other uses that would degrade the quality of the habitat (including, but not limited to conversion to other land uses such as agriculture or urban development, and excessive off-road vehicle use that increases erosion) consistent with the goals and policies of Napa County for sensitive habitats.</p>	<p>During construction and operation</p>	<p>Applicant</p>	<p>Applicant</p>	<p>Consistent with Napa County Conservation Guidelines</p>	
<p>4.3-5: The Applicant shall implement the following measures to avoid disturbing any special status bird species nesting on the property in accordance with the following CDFG-recommended</p>	<p>During construction</p>	<p>Applicant</p>	<p>Qualified biologist</p>	<p>CDFG-recommended guidance</p>	

Mitigation Measure	Timing of Action	Responsible for Implementing	Responsibility for Monitoring	Standards for Compliance	Verification of Compliance
measures:					
<p>If project activities are scheduled between February 1 and August 31, CDFG recommends surveys and avoidance measures for nesting birds. With respect to surveys for nesting bird and raptor species, CDFG recommends that the project specifies: 1) nest surveys be conducted no earlier than 14 days prior to tree removal and/or breaking ground (surveys should be conducted a minimum of 3 separate days during the 14 days prior to disturbance), 2) in the event that nesting birds are found, the project applicant should consult with CDFG and obtain approval for nest-protection buffers prior to tree removal and/or ground disturbing activities, and 3) nest protection buffers will remain in effect until the young have fledged. All nest protection measures should apply to off-site impacts and within 500 feet of project activities. If a lapse in project-related work of 15 days or longer occurs, another focused survey and, if required, consultation with CDFG, will be required before project work can be reinitiated.</p>					
<p>4.3-6: The applicant shall implement the following measures to avoid take of the northern spotted owl (based on Forest Ecosystem Management, PLLC., 2011; Appendix D):</p> <ol style="list-style-type: none"> 1. No timber operations shall occur until such time as a current years' NSO survey (following the appropriate and most current NSO survey protocol) has been completed, the results have been provided to the appropriate agency, and the results of a take avoidance determination has been incorporated into the plan. 2. No harvesting of trees shall occur until NAP007 is detected/located within their historic activity center during the year of planned timber harvest activities. The owl's activity center is located on private property; therefore, daytime monitoring of the owl may not be possible due to access issues. If the owl is not detected within their historic activity centers, the property must be surveyed according to the current acceptable NSO protocol. 3. No timber harvest operations other than the use of existing roads will occur within 1,000 feet of the activity 	During construction	Applicant	Qualified biologist	Consistent with guidance of Forest Practice Rules, latest NSO protocol	

Mitigation Measure	Timing of Action	Responsible for Implementing	Responsibility for Monitoring	Standards for Compliance	Verification of Compliance
<p>centers of NAP007. The activity centers for NAP007 are further than 1/4 mile from the THP boundary (1,472 feet - AC #1); therefore, at this time, no seasonal or harvest restrictions apply. However, if the activity center moves within 1/4 mile of the property boundary, the following seasonal restrictions may be applied by Cal Fire CAL FIRE.</p> <p>a. Seasonal Restrictions: No operations from February 1 to July 30 within 1/4 mile of the activity centers of NAP007, except on the use of existing roads (refer to Forest Ecosystem Management, PLLC, 2011; Appendix D).</p>					
<p>4.3-8: Pre-construction surveys for bats shall be conducted two to three days prior to tree removal. If bats are discovered during the surveys then a buffer of 100 to 150 feet will be established. Optimal time to remove trees is September 15 to October 15 and February 15 to April 1. Pre-construction surveys shall also focus on habitat adjacent to the Proposed Project (Appendix D).</p>	During construction	Applicant	Qualified biologist	Consistent with CDFG-recommended guidance	
4.4 CULTURAL RESOURCES					
<p>4.4-1: The Jasud Spring archaeological site shall be avoided by all ground disturbing activities during project construction and a staked, visible boundary shall be marked around its perimeter by the Applicant or the Applicant's designee using the scale plan view map of the Jasud Spring Site prepared by Tom Origer and Associates. The Applicant shall install and maintain protective fencing along the outside of the perimeter to ensure protection during construction. During operation of the Proposed Project, no ground disturbing activities shall occur within the archaeological site's perimeter.</p>	During construction and operation	Applicant	Applicant	—	
<p>4.4-2: There is a possibility that subsurface archaeological deposits may exist within the proposed vineyard areas, as archaeological sites may be buried with no surface manifestation, or may be obscured by vegetation. In accordance with CEQA Guidelines Section 15064.5 (f), should any previously unknown prehistoric or historic resources, such as, but not limited to, obsidian and chert flaked-stone tools or toolmaking debris; shellfish remains, stone milling equipment, concrete, or adobe footings, walls, filled wells or privies, deposits of metal, glass,</p>	During construction	Applicant	Applicant	A qualified archaeologist shall verify the find and shall consult with the local CAL FIRE Archaeologist for further guidance.	

Mitigation Measure	Timing of Action	Responsible for Implementing	Responsibility for Monitoring	Standards for Compliance	Verification of Compliance
<p>and/or ceramic refuse be encountered during onsite construction activities, earthwork within 100 feet of these materials shall be stopped and the Applicant shall consult with a professional archaeologist. Once the archaeologist has had the opportunity to evaluate the find he/she shall consult with the local CAL FIRE Archaeologist (and, if the discovery includes prehistoric/Native American cultural resource materials, shall immediately notify the appropriate person(s) at the Mishewal Wappo Tribe of Alexander Valley) regarding the results of the evaluation and appropriate site treatment options, as necessary. Said measures shall be carried out prior to any resumption of related ceased earthwork. The CAL FIRE archaeologist and the Mishewal Wappo Tribe shall be consulted regarding the appropriate assessments of significance and treatment of prehistoric/Native American cultural resource materials—if such are found during construction—which, with the Tribe’s concurrence, could include scientific analysis and professional museum curation, among other possible treatment options. All significant historic-era cultural resource materials recovered shall be subject to scientific analysis and professional museum curation. A report shall be prepared by the professional archaeologist according to current professional standards and a copy of the draft report shall be provided to the local CAL FIRE Archaeologist for review and approval prior to finalization of it.</p>					
<p>4.4-3: In the event that human remains are discovered, the provisions of the California Health and Safety Code Section 7050.5 (b) shall be followed, including contacting the Napa County Coroner within 24 hours of the find. Upon determining the remains as being Native American in origin, the Coroner would be responsible for contacting the Native American Heritage Commission (NAHC) within 24 hours. The NAHC has various powers and duties to provide for the ultimate disposition of any Native American remains, as does the assigned Most Likely Descendant (MLD), who is designated by the NAHC.</p>	<p>During construction</p>	<p>Applicant</p>	<p>Applicant</p>	<p>California Health and Safety Code Section 7050.5 (b)</p>	
<p>4.4-4: To further ensure protection of the archaeological site identified on the property, photographs will be taken of all site boundaries staked with orange safety fencing during construction and will be dated accordingly. Photo documentation will be submitted to the Mishewal Wappo Tribe of Alexander Valley.</p>	<p>During construction</p>	<p>Applicant</p>	<p>Applicant</p>	<p>Photo documentation will be submitted to the Mishewal Wappo Tribe of Alexander Valley.</p>	
<p>4.6 GREENHOUSE GAS EMISSIONS</p>					
<p>4.6-1: The Applicant shall implement the following mitigation measures to reduce criteria pollutant emissions during the</p>	<p>During construction</p>	<p>Applicant</p>	<p>Applicant</p>	<p>BAAQMD</p>	

Mitigation Measure	Timing of Action	Responsible for Implementing	Responsibility for Monitoring	Standards for Compliance	Verification of Compliance
--------------------	------------------	------------------------------	-------------------------------	--------------------------	----------------------------

construction of the Proposed Project:

1. The Applicant shall maintain all construction equipment in accordance with manufactures' specifications.

The Applicant shall limit construction equipment idling to less than five minutes.

4.7 HAZARDOUS MATERIALS

4.7-1: In addition to the erosion control measures that are shown in **Figure 3-4c**, personnel shall follow written SOPs for filling and servicing construction equipment and vehicles. The SOPs, which are designed to reduce the potential for incidents involving hazardous materials, shall include:

During construction

Applicant

Applicant

Consistent with California Department of Toxic Substance Control guidance

- Refueling shall be conducted only with approved pumps, hoses, and nozzles.
- Catch-pans shall be placed under equipment to catch potential spills during servicing.
- All disconnected hoses shall be placed in containers to collect residual fuel from the hose.
- Vehicle engines shall be shut down during refueling.
- No smoking, open flames, or welding shall be allowed in refueling or service areas.
- Refueling and all construction work shall be performed outside of any onsite stream buffer zones to prevent contamination of water in the event of a leak or spill.
- Service trucks shall be provided with fire extinguishers and spill containment equipment, such as absorbents.
- A spill containment kit that is recommended by the DEM or local fire department will be onsite and available to staff if a spill occurs.

In the event that contaminated soil and/or groundwater or other hazardous materials are generated or encountered during construction, all work shall be halted in the affected area and the type and extent of the contamination shall be determined. Should a spill contaminate soil, the soil shall be put into containers and disposed of in accordance with federal, state, and local regulations. If containment and size of the spill is beyond the scope of the contractor, proper authorities shall be notified. The

Mitigation Measure	Timing of Action	Responsible for Implementing	Responsibility for Monitoring	Standards for Compliance	Verification of Compliance
potential release of hazardous materials during construction of the Proposed Project is reduced to less than significant with the implementation of the mitigation measure above.					
<p>4.7-2: In the event pesticides are used onsite, personnel shall follow SOPs when applying pesticides to the vineyard. SOPs for pesticide use, shall include the following:</p> <ul style="list-style-type: none"> • Purchase only enough pesticide that would be used per season. • Utilize IPM techniques where feasible, such as the use of a permanent cover crop, beneficial insects, and minimal to no use of pesticides except when found necessary from monitoring and for fungicides. • All pesticides will be stored in their original containers. Labels on the containers will not be removed. • Pesticides will be kept in a well-ventilated locked area. • Pesticide storage areas will be 100 feet from any drainage area, stream, or groundwater well. • The best way to dispose of a small amount of pesticide is to use it. If a pesticide must be disposed of, contact the Napa County Agricultural Commissioner to locate a hazardous waste facility for proper disposal. • Pesticides will never be poured down the sink, toilet, or stream. • Proper personal protection equipment will be utilized when working with pesticides. 	During construction	Applicant	Applicant	Consistent with California Department of Toxic Substance Control guidance	
<p>4.7-3: In addition to Mitigation Measures 4.7-1 and 4.7-2, fuel loading and chemical mixing areas should be established outside the proposed setbacks and away from any areas that could potentially drain off-site or potentially affect surface and groundwater quality. When farm equipment is cleaned at the existing facility, only rinse water that is free of gasoline residues, pesticides and other chemicals, and waste oils should be allowed to diffuse back into vineyard areas. In the event pesticides, herbicides or fungicides are used, all rinse water from farm equipment and rinse water from application equipment used to apply chemicals should be collected and stored in containers that are of sufficient size to contain the water until a hazardous materials transporter can remove the rinse water. No rinse water shall be drained to a septic system or discharged to ground or</p>	During construction	Applicant	Applicant	Consistent with California Department of Toxic Substance Control guidance	

5.0 Mitigation Monitoring and Reporting Plan

Mitigation Measure	Timing of Action	Responsible for Implementing	Responsibility for Monitoring	Standards for Compliance	Verification of Compliance
surface water to prevent the release of hazardous materials into the environment during operation and maintenance of the Proposed Project. Impacts after mitigation would be less than significant.					
Source: AES, 2012					