

TIMBER HARVESTING PLAN

FOR ADMIN. USE ONLY

1. _____ 8. _____
 2. _____ 9. _____
 3. _____ 10. _____
 4. _____ 11. _____
 5. _____ 12. _____
 6. _____ 13. _____
 7. _____ 14. _____

STATE OF CALIFORNIA
 DEPARTMENT OF FORESTRY
 AND FIRE PROTECTION
 RM-63 (06-2018)

THP Name: Miller Vineyard

FOR ADMIN. USE ONLY

THP No. _____
 Date Rec'd: _____
 Date Filed _____
 Date Approved _____
 Date Expires _____

- If this is a **MODIFIED THP** ☐
 - Is this a **MODIFIED THP for FUEL HAZARD REDUCTION** ☐ Extension: [] Am # _____
- If THP is any one of the modified types above complete appropriate modified checklists at end of general section

This Timber Harvesting Plan (THP) form, when properly completed, is designed to comply with the Forest Practice Act (FPA) and Board of Forestry and Fire Protection rules. All rule references are from Title 14 CCR; when cited, the form text will only make reference to the rule number itself. The THP is divided into six sections. See separate instructions for information on completing this form. **NOTE: The form must be printed legibly in ink or typewritten, an online version is available at <ftp://thp.fire.ca.gov/THPLibrary/>** Additional space may be inserted, as needed, to provide required information. Please distinguish answers from questions by *font change*, **bold** or underline.

SECTION I - SIGNATURES

This THP conforms to my/our plan and upon approval, I/we agree to conduct harvesting in accordance therewith. Consent is hereby given to the Director of Forestry and Fire Protection, and his or her agents and employees, to enter the premises to inspect timber operations for compliance with the Forest Practice Act and Forest Practice Rules.

1. REGISTERED PROFESSIONAL FORESTER:

RPF Signature:  Lic. No. **1851** Date **3-25-2023**
 RPF Printed Name: **Scott R. Butler** Phone **707-468-8466**
 Address **1128 Monaghan Ct.** City **Idaho Falls** State **ID** Zip **83404**
 Email: scott.butler@sbcglobal.net

2. LICENSED TIMBER OPERATOR(S): Name **Galen Bullock** Lic. No. **A-9399**

(If unknown, so state. You must notify CAL FIRE, by amendment, of LTO prior to start of operations)

Address **P. O. Box 645**
 City **Angwin** State **CA** Zip **94508** Phone **707-324-9521**
 Email: bullockgalen@yahoo.com
 Signature: _____

3. TIMBERLAND OWNER(S) OF RECORD: Name **Henry and Bonnie Miller TR**

Address **3906 Silverado Trail**
 City **Calistoga** State **CA** Zip **94515** Phone **925-997-2088**
 Email: hank@thefreshconnection.com
 Signature: _____
 Signature: _____

4. TIMBER OWNER(S) OF RECORD: Henry and Bonnie Miller TRAddress 3906 Silverado TrailCity Calistoga State CA Zip 94515 Phone 925-997-2088Email: hank@thefreshconnection.com

Signature: _____

Signature: _____

NOTE: The Timber Owner is responsible for payment of a yield tax. Per State of California Revenue and Taxation Code sections 38104 and 38115. Timber Yield Tax information may be obtained at: Timber Tax Section, MIC: 60, California Department of Tax and Fee Administration, P.O. Box 942879, Sacramento, California 94279-0060. Phone 1-800-400-7115 OR 1-916-274-3330. For Timber Tax information, please see our website at: www.boe.ca.gov/proptaxes/timbertax.htm.

5. PLAN SUBMITTER(S): Name Henry Miller

The submitter is the person who owns, leases, contracts, or operates on timberland. If the submitter is not identified in (2), (3), or (4), above, an explanation of his/her authority to submit the plan should be provided in Section III. [1032.7(a) and 1034(e)].

Address 3906 Silverado TrailCity Calistoga State CA Zip 94515 Phone 925-997-2088Email: hank@thefreshconnection.com

Signature: _____

LTO listed under item #2 will be present on site during timber harvesting operations. The landings and skid trails, if any, will be maintained by the listed LTO until a Notice of Completion is filed. The landowner listed in item #3 will be responsible for vineyard development after the Notice of Completion is filed.

The timber operator will be responsible for the maintenance of erosion control facilities on the timber harvest plan and timberland conversion. This includes all landings, skid trails and roads, up to the time of completion. After the completion has been filed and approved, the responsible person will be the landowner. The landowner will be responsible for the installation of the vineyard.

THP Mitigation #1 Startup of operations and Completion meeting

Notification of the commencement of operations shall be provided per 1035.4 to Cal Fire, CDFW, Napa County Planning. Kim Sone kim.sone@fire.ca.gov.

There shall be a meeting at the end of timber harvesting operations between the RPF, LTO and the vineyard manager to discuss each person's responsibilities when logging is complete. This meeting may be onsite or by phone conversation. Cal Fire and any other reviewing agency may be invited.

6. ON-SITE CONTACT: Name Hank Miller

List person to contact on-site who is responsible for the conduct of the operations. If unknown, so state; name must be provided for inclusion in the THP prior to start of timber operations.

Address 3096 Silverado Trail

City Calistoga State CA Zip 94515 Phone 925-997-2088

Email: hank@thefreshconnection.com

Additional Reports Attached to the THP

Report Name	Appendix	Author
Erosion Control Plan, #P22-00153-ECPA, Submitted	A	Bartelt Engineering.
ECP Narrative and supplemental information, Napa County	A1	Bartelt Engineering
Initial Study MND #P22-00153-ECPA, under preparation	A2	Napa County Planning
Conditions of Approval, ECPA, under preparation	A3	Napa County Planning
Biological Resources Reconnaissance Survey	B	Forest Ecosystems Management
USLE worksheet	C	Bartelt Engineering
Water Availability Analysis	D	O'Connor Environmental and Bartelt Engineering
CAA Archaeological Report	E	Heather Morrison and Flahertys Cultural Resource Services
Adjacent Landowners	F	ERM
GHG	G	Montrose Environmental Solutions
State Clearing House	H	Napa County Planning
Northern Spotted Owl Report 2022	I	Forest Ecosystem Management
Timber Conversion Plan	J	ERM

Several of these documents are available on the Napa County website

<https://www.pbcs.cloud/index.php/s/cd2zz7Fy9B4MeEQ>

Section		Page
I	General Information	1
II	Direction to LTO, Mitigations	59
III	Support Documentation	63
IV	Cumulative Impacts Assessment	88
V	Attachments not required elsewhere	113
VI	Confidential Archaeological Addendum	131

SECTION II - GENERAL INFORMATION

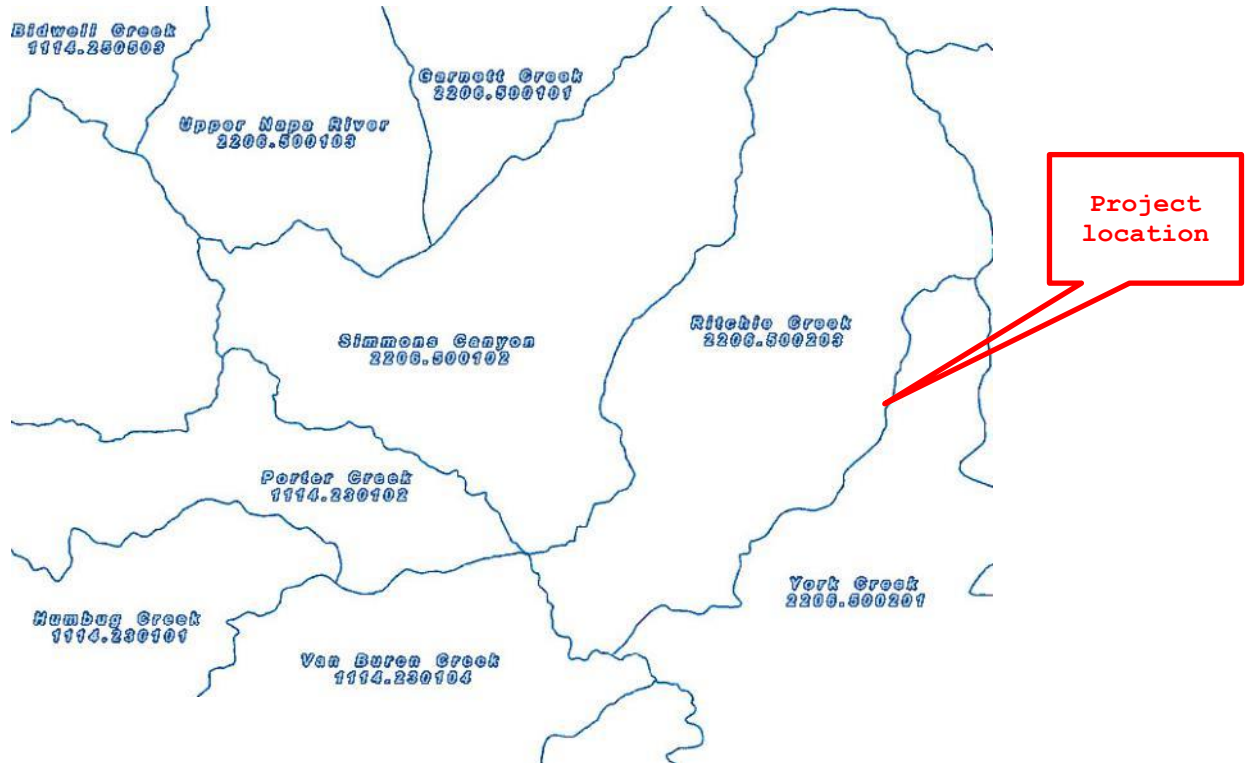
ITEM #7		LOCATION OF TIMBER OPERATIONS				
a.		Legal Description				
Meridian	Township	Range	Section	Acreage	Assessor's Parcel Number	County
MDB&M	T8N	R6W	Por 10	6	021-030-006	Napa
			TOTAL AC	6		

NOTE:

FOREST DISTRICT

b.		Forest District	
☐	COAST FOREST DISTRICT	☐	Tahoe Regional Planning Authority Jurisdiction
☐	Southern Sub District of the Coast Forest District	☐	A County with Special Regulations
☐	SOUTHERN FOREST DISTRICT	☐	Coastal Zone, no Special Treatment Area (STA)
☐	High use Sub District of the Southern Forest District	☐	STA(s): Type: Identify:
☒	NORTHERN FOREST DISTRICT	☐	Other:

c. CALWATER PLANNING WATERSHED		
Name	Watershed identification Number	CALWATER Version
York Creek	2206.500201	Cal Water 2.2.1
Ritchie Creek	2206.500203	



	York Creek	Ritchie Creek
CALWNUM:	2206.500201	2206.500203
CDFPWSNAME:	York Creek	Ritchie Creek
HANUM:	22065	22065
HANAME:	Napa River	Napa River
Coho_ESU_Status:	Outside of OSU	Outside of OSU
Chinook_ESU_Status:	Outside of ESU	Outside of OSU
Steelhead_DPS_Status:	Threatened	Threatened
Coho_Restorability:	Undetermined	Undetermined
Steelhead_Restorability:	Undetermined	Undetermined
UpStream_ASP:	ASP	ASP
Coastal_Anadromy_Zone_FPRs:	Yes	Yes
Status_303d_2010:	Present	Present
County:	Napa	Napa
Acres:	8450	8772

d. WATERSHED (ASP, 303D)			
☒	ASP Watersheds	☐	Non ASP Watersheds
☐	Upstream of ASP Watersheds	☒	303d Watersheds
☐	Exempt from ASP Watershed Rules		Reason listed: Sediment
	Reason Exempt:		

e. USGS QUADRANGLE	
Name	Date
Calistoga Quadrangle	1978

ITEM #8 MODIFIED THP REQUIRED CONDITIONS AND MITIGATIONS	
a. Modified THP	
1. ☐ Yes ☒ No	Is this THP submitted as a modified THP per 14 CCR § 1051
2. ☐ Yes ☒ No	Is this THP submitted as a modified THP for Fuel Hazard reduction per 14 CCR § 1051.3

b. Timberland Conversion	
1. ☒ Yes ☐ No	Has a Timberland Conversion been submitted?
	- Permit Number: TCP # not known at this time (if known) or - Expected approval date: late 2023
2. ☐ Yes ☒ No	Has a Timberland Conversion been approved?
	- Permit Number: - Approval date: - Expiration date:

c. Demonstration of Maximum Sustained Production (MSP) per 14 CCR § 913.11 (93.11, 953.11).	
	Not applicable, this is a timberland conversion.
MSP OPTION	
☐ (a)	THP Number Option (a) is approved under: _____
	Date Approved: _____
☐ (b)	Has a Sustained Yield Plan been approved?
	- SYP number: - Date Approved:
	Has a Sustained Yield Plan been submitted but not approved?
	- SYP number: - Date Submitted:
☐ (c)	

d. Conservation Easements / Landowner Assistant programs	
1. ☐ Yes ☒ No	Is there a conservation easement, existing, for any of the plan area?
	If "YES" provide • Conservation Easement Name: _____ • Who is the easement grantee: (Who holds the easement) _____?
2. ☐ Yes ☒ No	Is a Conservation Easement proposed or waiting approval for any portion of the plan area?
3. ☐ Yes ☒ No	Are there any landowner assistance programs associated for any portion of the proposed plan area?
	If "YES" indicate what land assistance program it is and associated identifying document number and/or name of project.

e. Habitat Conservation Plans (HCP) / Natural Communities Conservation Plans (NCCP)	
1. ☐ Yes ☒ No	Is any portion of the ownership covered by a Habitat Conservation Plan?
	☐ Aquatic ☐ Terrestrial
2. ☐ Yes ☐ No	
3. ☐ Yes ☐ No	

ITEM #9 PRESCRIBED MAINTENANCE PERIOD	
a. ☒ Yes ☐ No	Will the Licensed Timber Operator be employed for the construction and maintenance of roads and landings during the conduct of timber operations? If "NO" identify who will be responsible and provide a contact phone number. Contact name: _____ Phone number: _____
b. ☒ Yes ☐ No	Will the Licensed Timber Operator be responsible for erosion control maintenance after timber operations have ceased and until a work completion report has been certified by the department? If "NO" include a written agreement per 14 CCR 1050(c). The Timberland Owner acknowledgement form contains the necessary information and can be included as the written agreement. NOTE: Prescribed maintenance periods: • Outside ASP watersheds maintenance period is one year but can be extended 3 years at the Departments discretion. • ASP watersheds the maintenance period is three years. Other activities such as stocking, that require the use of roads, crossings, or other features requiring erosion control shall be maintained during that activity even after the prescribed maintenance period has ended.
c. ☒ Yes ☐ No	Is it anticipated timber operations will commence on the date of THP conformance as approved by the Department? If "NO" provide an expected date of commencement of timber operations: DATE _____
d. ☒ Yes ☐ No	Is it anticipated timber operations will be completed within 5 years from the date of THP conformance? If "NO" provide the expected date timber operations will be completed: DATE _____

ITEM #10	STOCKING ADJACENT PLANS
a. ☐ Yes ☒ No N/A	Is there a THP on file with CAL FIRE for any portion of the plan area for which a Report of Satisfactory Stocking has not been issued by CAL FIRE? If "YES" provide THP Number: _____
b. ☐ Yes ☒ No N/A	Is there a contiguous even aged unit with regeneration less than five years old or less than five feet tall? If "YES" provide explanation per 14 CCR 913.1 (933., 953.1)(a)(4)

ITEM #11	RESPONSIBILITIES / NOTIFICATIONS
a. ☒ Yes ☐ No	RPF has notified the Plan Submitter, in writing, of their responsibilities pursuant to 14 CCR 1035 of the Forest Practice Act and Rules. See Plan Submitter Notification in Section 5. Emailed 2-14-2023.
b. ☒ Yes ☐ No	RPF has notified the timber owner and the timberland owner of their responsibilities for compliance with the Forest Practice Act and Rules and the prescribed maintenance periods and maintenance of erosion control structures. Plan Submitter, Timberland owner and Timber owner are all the same, see notification in Section 5. Emailed 2-14-2023.
c. ☒ Yes ☐ No	RPF will provide the timber operator with a copy of the portions of the approved THP as listed in 14 CCR 1035(f). If "NO" who is responsible to provide the LTO a copy of the approved THP?
	Who will meet with the LTO prior to commencement of operations to advise of sensitive conditions and provisions of the THP per 14 CCR 1035.2 ☒ RPF ☒ Supervised Designee ☐ Both ☐ Other Additional information: I, or my supervised designee, will meet with the LTO prior to commencement of operations to advise of sensitive conditions and provisions of the plan pursuant to 1035.2.
d. ☐ Yes ☒ No	Are Archaeological or historical sites within or near the plan area that require protection? No Archaeological or historical sites are within the project area. NOTE: Archaeological information is CONFIDENTIAL, contact Cal Fire in Santa Rosa for a copy.

e. ☒ Yes ☐ No	RPF has the following authority and responsibilities for the preparation and administration for the THP and timber operations. (Including both work completed and work remaining to be done. Additional information: The RPF has prepared the THP based on information provided by the Archaeologist and Biologist, see attached reports. The property boundary has been determined by the landowner and/or his agent. There are no Class I, II or III water courses within the boundary of the project area. The boundary of the plan area has been flagged by the RPF and/or his designee. Most of the trees within the boundary were burned in the 2020 Glass Fire. Dead trees have been harvested under Emergency Notice 1-21EM-00105-NAP, no marking is needed. The Licensed Timber Operator (LTO) will be present on site during timber harvesting operations. The landings and skid trails, if any, will be maintained by the listed LTO until a Notice of Completion is filed. The landowner will be responsible for vineyard development after the Notice of Completion is filed.
f. ☒ Yes ☐ No	RPF has been retained by the plan Submitter to provide professional advice to the LTO and timberland owner upon request throughout the active timber operations regarding the THP, the Forest Practice Rules, and other associated regulations pertaining to timber operations per 14 CCR 1035(d)(1) I am responsible for the preparation of this THP and coordination with the regulatory agencies to gain its approval. I will provide any additional information needed for plan approval or amendment. I will provide field assistance to the timber owner, Cal Fire, and the Timber Operator in carrying out the provisions of the plan as requested or as required by 14 CCR 1035.1 and 2. I will be available, on request, to provide professional assistance during timber operations as required by CCR 1035 (d)(1). I will have no responsibility for the execution of the plan. I have done no survey work and have accepted the existing boundaries as represented by the landowner and/or land surveyor.
	Describe additional required work requiring an RPF, which the RPF submitting this proposed THP does not have the authority or responsibility to perform. None at this time.

ITEM #12	NOTICE OF INTENT (NOI)
Per 14 CCR 1032.7(c)(1-5) The RPF preparing the THP shall submit to the Director, with the THP, a Notice of Intent (NOI) to harvest timber if: (1) Any proposed boundary lies within 300 feet of any property not owned by the timberland owner, or (2) Plan amendments that change plan boundary so that new boundaries are within 300 feet of property not owned by the timberland owner. (3) Plan amendments change the silvicultural method if a notice was required for the Plan by condition (1) or (2) above. (4) Any overhead electrical power line, except a line from a transformer to a service panel, is present within the plan area or within 200 feet outside the Plan boundary, or (5) Plan amendments change a plan boundary so that the overhead electrical power line, except a line from a transformer to a service panel, is within the new boundary area or within 200 feet outside the Plan Boundary.	
a. ☒ Yes ☐ No	Is a Notice of Intent necessary for this THP? If "YES" include the NOI with the THP as a separate form with the THP, see the NOI at the end of this section. See NOI in Section 5 of this THP. Posted 2-16-2023.

b. ☒ Yes ☐ No	I understand the NOI is to be posted prior to submitting the THP and I will post the NOI at the conspicuous location near the project location prior to submitting this proposed THP. Posted 2-16-2023.
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ITEM #13	STATEMENT OF ENVIRONMENTAL IMPACTS
After considering the rules of the Board of Forestry and Fire Protection and the mitigation measures incorporated in this THP, I the Registered Professional Forester, have determined that the timber operations (mark all that apply)	
a. ☐	WILL HAVE A SIGNIFICANT adverse effect on the environment. Provide a statement of reasons for overriding considerations in SECTION III.
b. ☒	WILL NOT HAVE A SIGNIFICANT adverse impact on the environment.
☒	I certify that I, or my supervised designee, personally inspected the THP area, and this plan complies with the Forest Practice Act, the Forest Practice Rules, and the Professional Foresters Law.

ITEM #14**SILVICULTURE**

- Check the Silvicultural methods or treatments allowed by the Forest Practice Rules to be applied under this THP.
- If more than one method or treatment will be used identify the boundaries on a map per 14 CCR § 1034(x)(2)
- List the approximate acreage for each method identified.

a.	Evenage	ACRES	
☐	Clearcutting		EVENAGED REGENERATION METHODS (14 CCR § 913.1 [933.1, 953.1]) (All Districts) NOTE: variation by District in (a)(4)(A) and (d)(3) Shelterwood Removal Step
☐	Seed Tree Seed Step		
☐	Seed Tree Removal Step		
☐	Shelterwood Preparatory Step		
☐	Shelterwood Seed Step		
☐	Shelterwood Removal Step		
	Un-evenaged		
☐	Selection		UNEVENAGED REGENERATION METHODS (14 CCR § 913.2 [933.2, 953.2]) (All Districts) NOTE: variation by District in (a)(2)(A)(1)
☐	Group Selection		
☐	Transition		
	Intermediate Treatments		INTERMEDIATE TREATMENTS (14 CCR § 913.3 [933.3, 953.3])
☐	Commercial Thinning		
☐	Sanitation Salvage		
	Alternative		ALTERNATIVE PRESCRIPTIONS (ALL DISTRICTS) (14 CCR § 913.6 [933.6, 953.6])
☐	Alternative Prescription		
	Special Prescriptions		SPECIAL PRESCRIPTIONS (14 CCR § 913.4 [933.4, 953.4]) RPF is required to include specific information when Restoration or Oak woodland management is selected. The FPR element forms are provided at the end. Indicate the specific acreage for each type of restoration or oak area on these forms.
☐	Special Treatment Area Prescription		
☐	Rehabilitation of Understocked Area Prescription		
☐	Fuel Break / Defensible Space		
☐	Variable Retention		
☐	Restoration – Aspen, Meadow, & Wet Area		
☐	Ca. Black and Oregon White Oak Woodland Management		
	Non-regeneration		NON REGENERATION HARVESTING
☒	Conversion	4.5	
☐	Road Right-of-way		
☐	No Harvest		

TOTAL ACREAGE:

If acreage is different than acreage listed in the legal description provide explanation:

Total logging area acreage, 6 acres. Timberland 4.5 acres, Oakwoodland and grass 1.5 acres.

If Selection, Group Selection, Commercial Thinning, Sanitation Salvage or Alternative methods are selected the post-harvest stocking levels must be stated. If Site class varies then state the post-harvest stocking standard to be met by each applicable Site Class.

NOTE: Location of boundaries of timber-site classes needed for the determination of stocking standards to be applied, down to 20-acres minimum or as specified in district rules shall be mapped per 14 CCR § 1034(x)(12)

b. POST-HARVEST STOCKING TO BE MET AT THE COMPLETION OF OPERATIONS		
Silvicultural Prescription	Site Class (I, II, III, IV, V)	Post-harvest stocking standard
N/A		

c. EVENAGED REGENERATION SIZE	
☐ Yes ☒ No N/A	Will evenaged regeneration step Units be larger than those specified in the rules? ☐ 20 acres TRACTOR ☐ 30 acres AERIAL or CABLE If YES is the RPF proposing: ☐ An increase to evenaged TRACTOR Units to 30 acres because Erosion Hazards Rating is Low and the slopes are less than 30% ☐ An increase to any evenaged harvest unit up to 40 acres If YES provide substantial evidence that the THP contains measures to accomplish any one of the subsections per 14 CCR § 913.1 [933.1, 953.1](a)(2)(A) – (E) In SECTION III Operational Instruction to the LTO, needed to meet subsections (A) – (E) above shall be included in SECTION II NOTE: Oversized Units should be designated on the THP map(s) by size.

Operational instructions to the LTO:

Flagging Guidelines

THP Boundary, Pink and Blue flagging

Special Direction flagging, Pink Glow with handwritten directions

All flagging is in place.

d. TIMBER MARKING				
In the table below indicate the area requiring tree marking, the method of marking, who completed the marking and if it was an entire or sample area mark.				
Marking completed in (Specify Location(s))	Trees Marked (Harvest / Retained)	Completed By (RPF / Designee)	Area Marked (Entire / Sample area)	RPF Explanation if needed (Optional)
All trees within the entire flagged boundary will be cut, no marking is needed.				

☐ Yes ☒ No	Is the RPF requesting a waiver of required marking? If YES, provide directions explaining how the LTO will determine what trees shall be harvested or retained: All trees within the conversion boundary will be harvested. The boundary is flagged. The LTO will fall all trees within the boundary. The property was severely impacted by the 2020 Glass Fire. Cal Fire has approved an emergency notice on the property. All of the 6 acres of the vineyard conversion project have been logged under this Emergency. All dead trees have been removed. A few scattered live trees still remain.
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	If more than one silvicultural method or group selection is used, provide instructions to the LTO identifying how boundaries of the different methods or groups have been identified:
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e. FOREST PRODUCTS TO BE HARVESTED:					
☒	Saw Logs	☐	Poles	☐	Clean Chips
☐	Peeler Logs	☐	Split Wood Products	☒	Firewood
☒	Fuel Wood	☒	Fuel chips	☐	Other
☐	Burl Wood				

f. GROUP B SPECIES MANAGEMENT	
1. ☐ Yes ☒ No	Are group B species proposed for management?
2. ☐ Yes ☒ No	Are group B or non-indigenous A species to be used to meet stocking standards?
3. ☐ Yes ☒ No	Will group B species need to be reduced to maintain relative site occupancy of group A species?
If any answer is YES, list the species, describe treatment, and provide LTO felling and slash treatment guidance. See table below	

TABLE FOR LTO TREATMENT GROUP B SPECIES MANAGEMENT			
Species	Treatment Method	Felling Instruction	Slash Treatment Instructions
N/A			

1. ☐ Yes ☒ No N/A	Are follow-up treatments expected to maintain relative site occupancy of group A species? ☐ Manual Treatments Describe: ☐ Herbicide Treatments Describe: ☐ Both
	If YES who will be responsible?
1. ☐ Yes ☒ No N/A	Are follow up treatments expected to maintain relative site occupancy of group A species? ☐ Manual Treatments Describe: ☐ Herbicide Treatments Describe: ☐ Both
2. ☐ Yes ☒ No N/A	Will a Licensed Pest Control Advisor be involved in the process? If YES explain when an advisor will be needed:

g. LTO FELLING INSTRUCTIONS PLAN AREA	
	None. No watercourse or sensitive receptors within the project area.

h. REGENERATION	
☐ Yes ☒ No N/A	Will artificial regeneration be required to meet stocking standards? Describe:

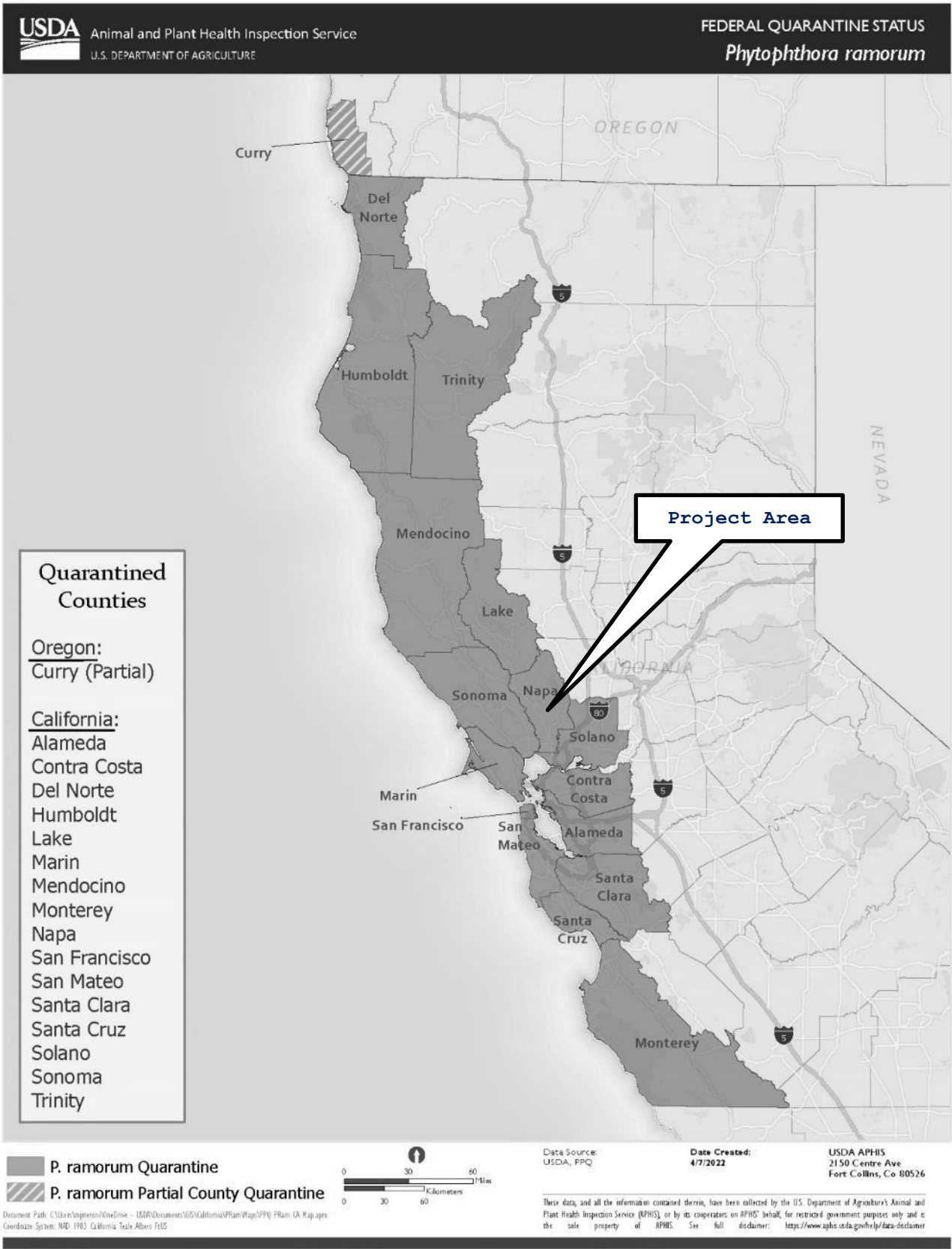
i. SITE PREPARATION	
Definition of site preparation per 14 CCR § 895.1: Site preparation means “any activity” involving mechanical disturbance of soils or burning of vegetation which is performed during or after completion of timber harvesting and is associated with preparation of any portion of a logging area for artificial or natural regeneration.	
1. ☐ Yes ☒ No	Will site preparation be used within the logging area? If YES, provide site preparation plan per 14 CCR § 915.4 [935.4, 955.4]
2. ☐ Yes ☒ No	Will site preparation be required to meet stocking?
	General method(s) of site preparation:
	Type of equipment to be used for mechanical site preparation and/or firebreak construction:
	Methods to protect desirable residual trees per 14 CCR § 917.7 [937.7, 957.7]:
3. ☐ Yes ☒ No	Are there any exceptions or alternatives proposed to the standard rules? If YES, provide an explanation and justification for the proposed exceptions:
	Provide a map identifying the boundaries of site preparation areas, if different from the logging area boundaries, and distinguish areas by type of site preparation activity.
	Prior to conducting site preparation activities provide the name of the person responsible for site preparation:
	- Name:
	- Address:
	- Phone #:
	Estimated timing of site preparation activities:

j. REGENERATION PLAN (rehabilitation of understocked areas or variable retention)	
☐ Yes ☒ No	Is a regeneration plan needed per 14 CCR § 913.4 [933.4, 953.4](b) or (d)? If YES, please provide a detailed description for Review Team to evaluate how the proposed management prescription will aid in restoring and enhancing the productivity of commercial timberland. The regeneration plan shall include but not be limited to: <u>Rehabilitation of understocked areas</u>: site preparation, method of regeneration and other information needed to evaluate the proposal by the Review team: <u>Variable Retention</u>: Trees and elements retained, objectives intended to be achieved by retention, distribution and quantity of retained trees, intended time period of retention, and potential future conditions or events the RPF believes would allow harvest of retained trees.

Regeneration plan:

N/A

ITEM #15		PESTS
PESTS / FOREST DISEASES		
Timber operations shall be conducted so as to minimize the build-up of destructive insect populations or the spread of forest Diseases. 14 CCR 917.9 [937.9, 957.9](a) – (c) (All Districts)		
a. ☒ Yes ☐ No	Is this THP within an area that the Board of Forestry and Fire Protection has declared a Zone of: 1. ☒ Infestation 2. ☐ Infection pursuant to PRC §§ 4712 - 4718? If YES, identify feasible measures being taken to mitigate adverse infestation or infection impacts from the timber operation. 917.9 (937.9, 957.9)(a) Reference Board of Forestry Technical Rule Addendum Number 3 for RPF considerations.	
Measures to mitigate adverse infestations or infections: Sudden Oak Death The proposed project is in Napa County and in a declared zone of infestation for Sudden Oak Death (SOD). See map figure below. This map shows the project location has no known locations of SOD within 5 miles of the project area. However, since the plan is within the declared zone of infestation, it has limitations placed on the shipment of vegetation from the plan area. These limitations have been placed in the THP document, see below. For a current list of Regulated Hosts and Plants proven to be associated with <i>Phytophthora ramorum</i> (SOD), see below. Neither the RPF nor the botanist found SOD on, or adjacent to, the project area. 		



Regulations

The following 15 California counties have confirmed *Phytophthora ramorum* findings and are under State and federal quarantine: Alameda, Contra Costa, Humboldt, Lake, Marin, Mendocino, Monterey, Napa, San Francisco, San Mateo, Santa Clara, Santa Cruz, Solano, Sonoma, and Trinity Counties. The organism has also been found in Curry County, southwestern Oregon. These quarantined areas are subject to regulations regarding the movement and use of susceptible plants. County Agricultural Commissioner's enforce both California and federal regulations.

Best Management Practices, BMPs for SOD

Infested forests

If possible, avoid working in areas that are known or appear to be diseased. If you cannot avoid infested areas, follow the sanitation practices below when working in the known infested areas. If you don't know if the site is infested, play it safe and assume that it is. Maps of infested areas are available online (see Resources). These maps do not note every diseased area but can give you a general idea of the infested areas in California.

Pathogen biology and risk of spread

Phytophthora ramorum prefers moist environments and cool temperatures, and can be found in living, dying, or recently dead plants. During wet periods, the organism seems to be most active and therefore most likely to start new infections. Its spores can be found in soil, water, and plant material. The risk of movement and spread of the organism is greatest in muddy areas and during rainy weather. If possible, do not work in infested forests during the wet, rainy and cool times of the year. Generally, avoid working in muddy conditions.

SOD Mitigation (Sudden Oak Death)

Timber operations which minimize or avoid the introduction, build-up, or spread of SOD are considered Best Management Practices (BMP's). Specific state and federal regulations must be followed, but BMP's should be incorporated, and could act as timber harvest plan mitigations. Infected host material (especially foliage) can be carried on logging equipment and vehicles and transferred to other sites. Mitigation measures to minimize the unintended movement of host material are recommended. The following mitigation measures shall be implemented to the extent practical and shall be required for timber operations regulated by the State. See **THP mitigation #2** below. Even if regulated articles do not move from the zone of infestation (ZOI) and are therefore not subject to state or federal regulations, CCR 937.9(a) still requires mitigation in timber harvest plans on state or private property for a pest covered by a ZOI.

THP mitigation #2, Sudden Oak Death Syndrome

1. RPF (or LTO for most Exemptions) should inform personnel that they are working in an area with Sudden Oak Death disease, unauthorized movement of plant material is prohibited, and the intent of mitigation measures is to prevent disease spread (14 CCR 1035.2). If some sites in the general operating area are found to be disease-free or have a low incidence of disease, consider initiating operations on these sites before moving to more heavily infested sites.
2. To the extent practical and feasible, route equipment away from host plants and trees, especially in areas with disease symptoms. Locate landings, log decks, logging roads, tractor roads, and other sites of equipment activity away from host plants, especially in areas with disease symptoms.
3. Each time equipment or vehicles leave the site, the equipment or vehicles should be inspected by operations personnel, under the direction of the LTO, for host plant debris (leaves, twigs, and branches). Host plant debris should be removed from equipment and vehicles prior to their departure. This applies to all equipment and vehicles associated with the operation, including logging equipment, log-hauling trucks, pick-up trucks, employee's personal vehicles, etc. An exception will be granted for equipment or vehicles that leave the site temporarily and will not be traveling to uninfested areas prior to their return.
4. Conduct operations during the dry season. Utilize paved and rocked roads and landings to the extent possible.
5. After working in an infested area, remove or wash off accumulations of soil, mud, and organic debris from shoes, boots, vehicles, and heavy equipment, etc. before traveling to an area that is not infested with Sudden Oak Death. Lysol® or a bleach solution can be used to disinfect shoes and boots after cleaning.
6. Inspect loads of logs and equipment leaving the site to ensure that no host material is being transported without a permit. This may require cleaning mud from vehicle to remove host plant material imbedded in mud, depending on conditions when the timber harvest is conducted. Consider establishing an equipment power wash station. The station should be: located within the generally infested area, paved or rocked, well drained so that vehicles exiting the station do not become contaminated by the wash water, located where wash water and displaced soil does not have the potential to carry fines to a watercourse (see "Saturated Soil Conditions" in 14 CCR 895.1), pay particular attention to sites where soil and organic debris may accumulate.

Firewood

If firewood from host material is being removed from the site for commercial or private use, a compliance agreement must be in place. The information as to where and what is being removed, how it will be transported, specifically where it will be moved to, and during what time period should be included in the harvest document if the document will act as the compliance agreement. If this information is not included in the plan, a separate compliance agreement will be necessary prior to movement of host material. Compliance agreements not associated with a Cal Fire harvest document are issued by the local County Agricultural Commissioner. Secure loads completely when transporting firewood or other materials. No unprocessed less than 4" diameter material shall be removed from the project site. All processed firewood must be free of leaves and small branches.

Compliance agreement

Host material may be moved from the plan area in the form of firewood. Destinations of firewood is limited to SOD quarantined counties (See the top of the previous page for a list of quarantined counties). Transportation will be in ten wheelers, pickup trucks and trailers, and transportation is limited to locations within the SOD quarantined counties.

Treatments

There are treatments or processing protocols that can be used to minimize the risk of spread. Removing the bark allows the wood to dry and permits movement within the state and out of state with a certificate. If bark is removed or other parts are not used, burn the excess materials if possible. If burning is done, make sure it is done in a safe and approved manner. Burning poses no risk of spread since the organism is killed in the fire. When storing material, keep it dry and out of any standing water. Kiln drying will also kill the organism.

Snag retention

As stem-infected oaks and tanoaks decline and die, they are invaded by other wood decaying organisms and bark beetles. Such trees are prone to early structural failure, often breaking off several feet above ground. When selecting snags or recruitment trees for snags as a benefit for wildlife use, do not select SOD-infected trees.

Operations personnel, as used in this section of the THP, will be under the direction of the LTO.

LTO and RPF Responsibility:

Prior to the start-up of initial operations during any given year, the LTO is responsible for reviewing current SOD hosts, regulated area and operational requirements necessary to be in conformance with this compliance agreement. SOD mitigations as proposed are valid for one year if SOD mitigations change after one year the THP will be amended by the RPF to include the most current SOD information and mitigations.

APHIS Lists of Proven Hosts of and Plants Associated with
Phytophthora ramorum
 September 2022

Proven Host Plants of *Phytophthora ramorum*

Scientific Name	Common Name(s)	Koch's Postulates Reference
<i>Abies grandis</i> §	Grand fir	LeBoldus et al., 2018
<i>Abies magnifica</i> §	Red fir	Chastagner and Riley, 2010
<i>Acer circinatum</i> §	Vine maple	DiLeo et al., 2008
<i>Acer macrophyllum</i> *	Bigleaf maple	Garbelotto et al., 2003†
<i>Acer pseudoplatanus</i>	Planetree maple	COMTF, October 2006
<i>Adiantum aleuticum</i> *	Western maidenhair fern	Vettraino et al., 2006a
<i>Adiantum jordanii</i> *	California maidenhair fern	Vettraino et al., 2006a
<i>Aesculus californica</i> *	California buckeye	Garbelotto et al., 2003†
<i>Aesculus hippocastanum</i>	Horse chestnut	COMTF, October 2006
<i>Arbutus menziesii</i> *	Madrone	Garbelotto et al., 2003†
<i>Arbutus unedo</i> §	Strawberry tree	Moralejo et al., 2008
<i>Arctostaphylos columbiana</i> §	Hairy manzanita	DiLeo et al., 2008
<i>Arctostaphylos glauca</i> §	Bigberry manzanita	Rooney-Latham et al., 2020
<i>Arctostaphylos hooveri</i> §	Santa Lucia manzanita	Garbelotto et al., 2020
<i>Arctostaphylos manzanita</i> *	Manzanita	DiLeo et al., 2008
<i>Arctostaphylos montereyensis</i> §	Monterey manzanita	Garbelotto et al., 2020
<i>Arctostaphylos morroensis</i> §	Morro manzanita	Garbelotto et al., 2020
<i>Arctostaphylos pilosula</i> §	La Panza manzanita	Garbelotto et al., 2020
<i>Arctostaphylos pumila</i> §	Sandmat manzanita	Garbelotto et al., 2020
<i>Arctostaphylos silvicola</i> §	Silverleaf manzanita	Garbelotto et al., 2020
<i>Arctostaphylos viridissima</i> §	White haired manzanita	Rooney-Latham et al., 2020
<i>Berberis aquifolium</i> § (≡ <i>Mahonia aquifolium</i>)	Oregon grape	Elliott et al., 2021b
<i>Calluna vulgaris</i> *	Scotch heather	C Orlikowski and Szkuta, 2004
<i>Camellia</i> spp.*	Camellia - all species, hybrids and cultivars	Beales et al., 2004a
<i>Castanea sativa</i> *	Sweet chestnut	Denman et al., 2005b
<i>Ceanothus thyrsiflorus</i> §	Blue blossom Ceanothus	DiLeo et al., 2008
<i>Chamaecyparis lawsoniana</i> §	Port Orford cedar	Brasier and Webber, 2012
<i>Chrysolepis chrysophylla</i> §	Golden chinquapin	Rooney-Latham et al., 2022
<i>Cinnamomum camphora</i> *	Camphor tree	Rooney-Latham et al., 2013
<i>Corylus cornuta</i> §	Beaked hazelnut	DiLeo et al., 2008
<i>Fagus sylvatica</i>	European beech	Harris et al., 2021

Scientific Name	Common Name(s)	Koch's Postulates Reference
<i>Frangula californica</i> * (= <i>Rhamnus californica</i>)	California coffeeberry	Garbelotto et al., 2003†
<i>Frangula purshiana</i> * (= <i>Rhamnus purshiana</i>)	Cascara buckthorn	Vettraino et al., 2006b
<i>Fraxinus excelsior</i>	European ash	COMTF, August 2005
<i>Gaultheria procumbens</i> *	Eastern teaberry	Osterbauer et al., 2014
<i>Gaultheria shallon</i> §	Salal	Elliott et al., 2021b
<i>Griselinia littoralis</i> *	Kapuka	Giltrap et al., 2007
<i>Hamamelis virginiana</i> *	Witch hazel	Giltrap et al., 2004
<i>Heteromeles arbutifolia</i> *	Toyon	Garbelotto et al., 2003†
<i>Kalmia</i> spp.*	Mountain laurel - all species, hybrids and cultivars	Tooley and Browning, 2009†
<i>Larix × eurolepis</i> §	Hybrid larch	Harris and Webber, 2016†
<i>Larix decidua</i> §	European larch	Harris et al., 2021†
<i>Larix kaempferi</i> §	Japanese larch	Harris and Webber, 2016
<i>Laurus nobilis</i> *	Sweet bay	COMTF, September 2004
<i>Lonicera hispidula</i> *	California honeysuckle	Davidson et al., 2003†
<i>Lophostemon confertus</i> §	Brisbane box	Blomquist et al., 2020
<i>Loropetalum chinense</i> §	Chinese fringe flower	Blomquist et al., 2012
<i>Magnolia × loebneri</i> §	Loebner magnolia	Giltrap et al., 2007
<i>Magnolia doltsopa</i> * (= <i>Michelia doltsopa</i>)	Sweet michelia	COMTF, October 2006
<i>Magnolia stellata</i> §	Star magnolia	Giltrap et al., 2007
<i>Maianthemum racemosum</i> * (= <i>Smilacina racemosa</i>)	False Solomon's seal	Hüberli et al., 2005
<i>Notholithocarpus densiflorus</i> (= <i>Lithocarpus densiflorus</i>)*	Tanoak	Hansen et al., 2005
<i>Parrotia persica</i> *	Persian ironwood	Hughes et al., 2006
<i>Phoradendron serotinum</i> subsp. <i>Macrophyllum</i> §	Big-leaf mistletoe	Riley and Chastagner, 2011
<i>Photinia × fraseri</i> *	Red tip photinia	Orlikowski and Szkuta, 2004‡
<i>Pieris</i> spp.*	Andromeda, Pieris - all species, hybrids and cultivars	Parke et al., 2004
<i>Prunus laurocerasus</i>	Cherry laurel	Elliott et al., 2020
<i>Pseudotsuga menziesii</i> var. <i>menziesii</i> *	Douglas fir	LeBoldus et al., 2018
<i>Quercus agrifolia</i>	Coast live oak	Rizzo et al., 2002
<i>Quercus cerris</i>	European turkey oak	COMTF, August 2006
<i>Quercus chrysolepis</i>	Canyon live oak	Murphy and Rizzo, 2003
<i>Quercus falcata</i>	Southern red oak	Brasier et al., 2004b;

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Scientific Name	Common Name(s)	Koch's Postulates Reference
<i>Quercus ilex</i> *	Holly oak	Denman et al., 2005a
<i>Quercus kelloggii</i>	California black oak	Garbelotto et al., 2003†
<i>Quercus parvula</i> var. <i>shrevei</i>	Shreve's oak	Rizzo et al., 2002
<i>Rhododendron</i> spp.*	Rhododendron (including azalea) – all species, hybrids and cultivars	Hansen et al., 2005
<i>Rosa gymnocarpa</i> *	Wood rose	Hüberli et al., 2004
<i>Salix caprea</i> *	Goat willow	COMTF, August 2006
<i>Sequoia sempervirens</i> *	Coast redwood	Maloney et al., 2002
<i>Syringa vulgaris</i> *	Lilac	Beales et al., 2004b
<i>Taxus baccata</i> *	English yew	Lane et al., 2004
<i>Trientalis latifolia</i> *	Western starflower	Hüberli et al., 2003†
<i>Umbellularia californica</i> *	California bay laurel	DiLeo et al., 2009
<i>Vaccinium myrtillus</i> §	Whortleberry	Herrero et al., 2011
<i>Vaccinium parvifolium</i> §	Red huckleberry	Elliott et al., 2021b
<i>Vaccinium ovatum</i> *	Evergreen huckleberry	Hansen et al., 2005
<i>Viburnum</i> spp.*	Viburnum – all species, hybrids and cultivars	Parke et al., 2004
<i>Vinca minor</i> §	Periwinkle	Elliott et al., 2021a

§New additions to the proven host list

*Unmanufactured wood and wood products, including firewood, logs, and lumber of species listed above are **not** regulated. See [Federal Regulations, 7 CFR 301.92 - 301.92-2](#).

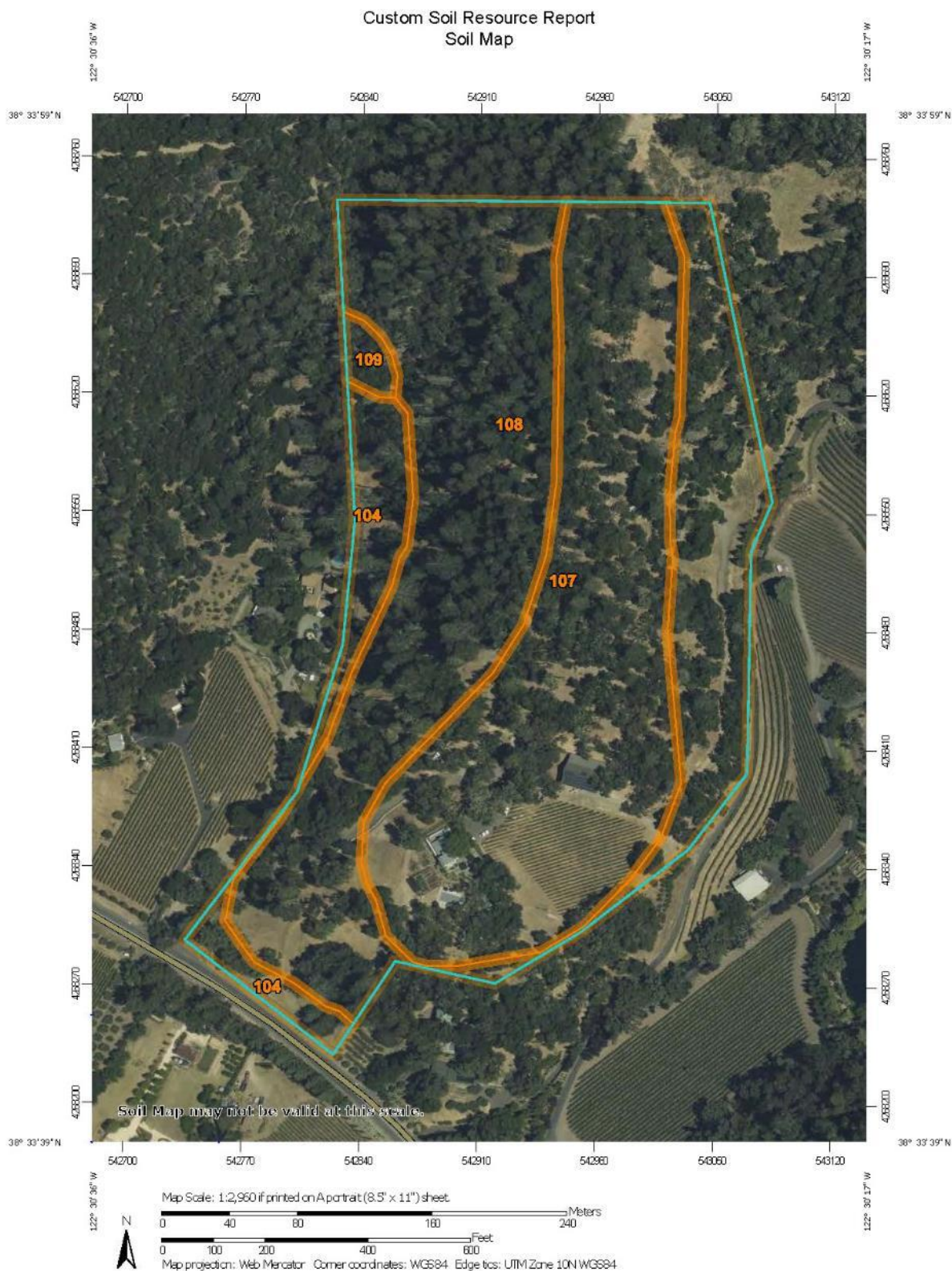
b. ☐ Yes ☒ No	Are there any other significant insect or forest disease problems within the THP area if outside a declared zone? 1. ☐ Insect(s) 2. ☐ Disease(s) 3. ☐ Pest problems 4. ☐ Other (provide description of the forest problem) If YES, describe proposed measures to improve the health, vigor, and productivity of the stand(s).
Proposed measures: N/A	

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ITEM #16 HARVESTING PRACTICES					
YARDING SYSTEM AND EQUIPMENT TO BE USED					
	GROUND BASED (Tractor, skidder, Forwarder)		CABLE		OTHER (Special)
☒	Tractor, including end/long lining	☐	Cable, ground lead	☐	Helicopter
☒	Rubber tire skidder, forwarder	☐	Cable, High lead	☐	Animal
☐	Feller buncher	☐	Cable, skyline	☐	Other (describe below)
☐	Shovel yarding				
** All Tractor operations restrictions apply to ground based equipment Reference 14 CCR 914.2 [934.2, 954.2] (All Districts)					

ITEM #17 EROSION HAZARD RATING					
EROSION HAZARD RATING (EHR)					
See Worksheet and map on the next two pages					
		Per 14 CCR 914.6 [934.6, 954.6](c) Waterbreaks Road and/or Trail Gradients Waterbreak Spacing by trail/road gradient			
		10 or less	11-25	26-50	>50
☐	LOW	300	200	150	100
☒	MODERATE	200	150	100	75
☐	HIGH	150	100	75	50
☐	EXTREME	100	75	50	50
NOTE: - If more than one rating is checked, areas must be identified on a THP map down to 20 acres in size. - COASTAL DISTRICT with a High or extreme EHR(s) must be mapped to 10 acres. - If ratings checked do not match the EHR Worksheet clarify the discrepancy:					
EHR rating discrepancy:					

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NRCS Web Soil Report				Note: <u>the project is on less than 30% slopes.</u>			
Estimated surface soil erosion hazard rating. State of California Board of Forestry							
RM-87 (4/84)							
Napa County Soils		MAP UNIT		SOIL SERIES NAME			
A		107		Boomer Loam 2-35 % slopes			
B		108		Boomer Gravely Loam 11-43% slopes			
				FACTOR RATING BY AREA			
I. SOIL FACTORS							
A. SOIL TEXTURE		FINE		MEDIUM		COURSE	
1. Detachability		Low		Moderate		High	
Rating	1-9	10-18		19-30		18	18
2. Permeability		Slow		Moderate		Rapid	
Rating	5-4	3-2		1		2	2
B. DEPTH TO RESTRICTIVE LAYER OR BEDROCK							
		Shallow		Moderate		Deep	
		1" - 19"		20" -39"		40" - 60" (+)	
Rating	15-9	8-4		3-1		3	3
C. PERCENT SURFACE COURSE FRAGMENTS GREATER THAN 2MM IN SIZE INCLUDING ROCKS OR STONES							
		Low		Moderate		High	
		(-) 10-39%		40-70%		71-100%	
Rating	10-6	5-3		2-1		8	8
II. SLOPE FACTOR							
Slope	5-15%	16-30%	31-40%	41-50%	51-70%	71-80% +	
Rating	1-3	4-6	7-10	11-15	16-25	26-35	5 6
III. PROTECTIVE VEGETATIVE COVER REMAINING AFTER DISTURBANCE							
		Low		Moderate		High	
Percent		0-40%		41-80%		81-100%	
Rating	15-8	7-4		3-1		15	15
IV. TWO-YEAR, ONE – HOUR RAINFALL INTENSITY (Hundredths Inch)							
		Low		Moderate		High	
Inches		(-) 30-39		40-59		60-69	
Rating	1-3	4-7		8-11		12-15	
				TOTAL SUM OF FACTORS		57	58
EROSION HAZARD RATING							
		<50		50-65		66-75	
		LOW (L)		MODERATE (M)		HIGH (H)	
						>75	
						EXTREME (E)	
				THE DETERMINATION IS		M	M

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ITEM #18	SOIL STABILIZATION / EROSION CONTROL
Per 14 CCR 923.5, 943.5, 963.5 – Erosion Control for Logging Roads and Landings [All Districts] – All logging road and landing surfaces shall be adequately drained through the use of logging road and landing surface shaping, in combination with the installation of drainage structures or facilities and shall be hydrologically disconnected from watercourses and lakes to the extent feasible. Per 14 CCR 914, 934, 954 – Harvesting practice and erosion control [All Districts] – Timber operations shall be conducted to: Meet the goal... to prevent degradation of the quality and beneficial uses of water and maintain site productivity by minimizing soil loss Guidance on methods for hydrologic disconnection may be found in “Board of Forestry Technical Rule Addendum Number 5: Guidance on Hydrologic Disconnection, Road Drainage, Minimization of Diversion Potential, and High Risk Crossings” (1st Edition, revised 10/27/14) 14 CCR 923.5, 943.5, 963.5(b), (c), (d), (e), (f), (g), (h), (j), (k), (p) contain standard Forest Practice Operational rules pertaining to the timing and specifics for the installation of erosion control structures for Roads and Landings. 14 CCR 914.6, 934.6, 954.6(a) (1-2), (b), (c), (d), (e), (f), (g), additional Coast areas (h), (i) contain standard Forest Practice Operational rules pertaining to the timing and specifics for the installation of erosion control structures for harvesting practices, tractor and cable operations. THE LTO SHALL BE FAMILIAR WITH THESE STANDARD OPERATIONAL REQUIREMENTS, PRIOR TO OPERATIONS.	
a. ☐ Yes ☒ No	Are there any exceptions proposed to the above listed standard operational requirements? If YES, please provide the specific operational instruction to the LTO.
☒ ☐ ☒ ☐ ☐ ☐ ☐ ☐	Methods of stabilization to be used: (check all that apply) STRAW Mulch Depth (inches): <u>2</u> Percent coverage: <u>100</u> <u>Straw mulch shall be noxious free and weed free straw.</u> SLASH Mulch ☐ Scattered Depth (inches): _____ Percent coverage: _____ ☐ Packed Depth (inches): _____ Percent coverage: _____ Grass Seeding LTO Instructions: <u>100 lbs per acre of grass seed shall be spread over all disturbed soils. The Erosion control plan lists this as “Le Ballisters Quick Cover Crop”, Annual Rye 50%, Soft Chess 20%, Crimson Clover 25%, Rose Clover 5%.</u> Rock Armoring Size: _____ Installation instructions: _____ Replanting LTO instructions if needed _____ Installation of commercial erosion devices Describe commercial devise and provide instructions to the LTO: _____ Other Describe method and provide LTO instructions: _____
Per 14 CCR 914.9[934.9, 954.9] the RPF may develop on a site-specific basis alternative practices that will achieve environmental protection at least equal to the standards set forth in 914.1-914.8 [934.1-934.8, 954.1-954.8]	
b. ☐ Yes ☒ No	Are there any alternative practices to the standard harvesting or erosion control rules proposed? If YES, the information as required per 914.9 [934.9, 954.9] shall be provided in SECTION III. Provide instructions to the LTO in SECTION II.

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<u>All WATERSHEDS</u>				
Logging roads / Landings	N/A	Description of Treatments	Protection Measures	Timing
c. 923.5[943.5, 963.5](i): treatments to prevent significant discharge where features cannot be hydrologically disconnected.	X	This project will not develop any roads, skid trails or landings. The average slope of the ground is approximately 22%. All hydrologic flow will be sheetflow.		
d. 923.5[943.5, 963.5](l) & m): treatments for sidecast or fill; cuts and fills associated w/ approaches to watercourse crossings; bare areas w/in WLPZ.	X	No fills or sidecast will be created, no watercourses exist within the project boundary.		
e. 923.5[943.5,963.5](n): When the natural ability of ground cover in WLPZ is inadequate to filter sediment.	X	No WLPZ within the project area.		
f. 923.5[943.5,963.5](o): Exceptions to soil stabilization treatment timing.	X			
Watercourse crossings on logging roads				
g. 923.9[943.9,963.9] (t)(1)-(3): Bare soil on fills, sidecast, timing of treatment.	X	No fills or sidecast		

Forest Practice Rules (FPR) require Specific Erosion Control / Soil Stabilization measures to be addressed within the proposed THP addressing. WLPZ & Protected ELZ & EEZs within a Non ASP and exempt ASP watersheds. Please address the following table and the specific rule. If not applicable, so state.

<u>Non ASP & Exempt ASP watersheds</u> WLPZ & Protected ELZ & EEZ	N/A	Description of Treatments	Protection Measures	Timing
h. 916.7[936.7,956.7] Stabilization measures for WLPZ of CI & C II.	X	No WLPZ activities proposed.		

MILLER VINEYARD THP

Forest Practice Rules (FPR) require Specific Erosion Control / Soil Stabilization measures to be addressed within the proposed THP addressing WLPZ & Protected ELZ & EEZ, Roads and Landings and Watercourse Crossings, within an ASP Watershed or Immediately upstream of an ASP Watershed. Please address the following table and the specific rule. If not applicable, so state.				
ASP WATERSHEDS				
Logging roads / Landings	N/A	Description of Treatments	Protection Measures	Timing
i. 916.9[936.9,956.9](n)(1)-(7): WLPZ, & protected ELZ & EEZs.	X	The project is within an ASP watershed. There are no watercourses within, or adjacent to, the project boundary.	No WLPZ	
j. 923.5[943.5,963.5](q)(3): as it pertains to roads, landings, etc.	X	All existing roads are paved. The project area is a conversion to vineyard. No new roads will be constructed. The project area was logged under Emergency Notice 1-21EM-00105 NAP.		
k. 923.9[943.9,963.9](t)(4): as it pertains to watercourse crossings.	X			

ITEM #19 – 21: GROUND BASED EQUIPMENT		GROUND BASED EQUIPMENT
a. ☐ Yes ☒ No	Per 14 CCR 895.1 a layout is a prepared bed in which a tree is felled, generally constructed by a tractor or other ground based equipment. Are tractor or skidder constructed layouts to be constructed? If YES, specify the location (consider mapping) and the extent of use. NOTE: winter operations and soil stabilization measures apply to tractor or skidder constructed layouts.	
	Per 14 CCR 914.3 [943.3, 954.3](e) Tractors shall not be used in areas designated for cable yarding except: - To pull trees away from streams - To yard logs in areas where deflection is low - Where swing yarding is advantageous - To construct firebreaks and/or layouts - To provide tail-holds Such exception(s) shall be explained and justified in the THP, and require Director's approved	
b. ☐ Yes ☒ No	Will ground based equipment be used within area(s) designated for cable yarding: (CHECK all that apply)	
☐	Pulling trees away from watercourses	
☐	Yarding logs from areas with low deflection	
☐	Swing yarding	
☐	Construct fire breaks	
☐	Construct layouts	
☐	Providing tail-holds	
☐	Other Describe:	
	If YES, specify the location (consider mapping) and provide LTO instructions.	

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c. ☐ Yes ☒ No	Are any exceptions proposed for ground based operations within cable areas outside of the exceptions listed above? If YES, provide the required explanation and justification in SECTION III of the THP and provide operations instructions for the LTO in SECTION II below.
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Per 14 CCR § 914.9 [934.9, 954.9](a) Alternatives to Standard Rules: (a) Alternative practices may be developed by the RPF on a site-specific basis provided the following conditions are complied with and the alternative practices will achieve environmental protection at least equal to that which would result from using measures stated in 14 CCR §§ 914.1-914.8, 934.1-934.8, 954.1-954.8. (1) Environmental impacts with potential for significant adverse effects on the beneficial uses of water, on the residual timber, and on the soil productivity are identified and measures proposed to mitigate such impacts are included in an approved THP. The THP shall also contain a clear statement as to why alternative harvesting and erosion control measures are needed. (2) The alternative practice(s) must be explained in sufficient detail and standards provided in the THP so that they can be adequately evaluated and enforced by the Director and implemented by the licensed timber operator. (3) On a THP in which alternatives covering harvesting and erosion control measures have been incorporated, the timber operator shall agree to the alternative specifications by signing and filing with the Director a copy of the plan, the amended plan or a facsimile thereof, prior to beginning or continuing operations on the portion of the plan to which the alternatives apply. (b) <u>The Director shall not except for inclusion in a THP alternative harvesting and erosion control measures proposed under this section which do not meet the standard of subsection (a) of this section. In the event that there is more than one written negative position showing that the alternative practice(s) does (do) not meet the standard of subsection (a) received from among the agencies listed in 14 CCR 1037.3 and the Department which participated in the review of the plan including on-the-ground inspection, the Director shall reject the proposed alternative.</u> (c) Alternative practices stated in an approved THP shall have the same force and authority as those practices required by the standard rule.	
d. ☐ Yes ☒ No	Is the RPF proposing any Alternative Practices to the standard rule on a site-specific basis? If "YES" provide clear instruction to the LTO in Section II advising LTO how the Alternative is to be implemented to maintain equal protection of the standard rule. In Section III explain how the alternative practice proposed achieves environmental protection at least equal to that what which would result from using measures stated in 14 CCR §§ 914.1-914.8, 934.1-934.8, 954.1-954.8.

LTO Instructions: N/A
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14 CCR 914.2 [934.2, 954.2](a-k) Identifies the Forest Practice Rule requirements for the use of ground based equipment within the harvesting area. • (b) Tractor, or other heavy equipment equipped with a blade, SHALL NOT operate on skid roads or slopes that are so steep as to require the blade to be used for breaking. • (c) Tractor roads SHALL be limited in number and width to the minimum necessary for removal of logs. - When less damage to the resources specified in 14 CCR 914[934, 945] will result, existing tractor roads shall be used instead of constructing new tractor roads. - [NORTHERN only] RPF may propose exceptions for silvicultural reasons when explained and justified within the plan. • (e) Slash and debris from timber operations SHALL not be bunched adjacent to residual trees required for silvicultural or wildlife purposes or placed in a location where they could discharge into a Class I or II watercourse, or Lake. • (g) where tractor roads are constructed only those roads shall be used for the skidding of logs to landings • (h) Desirable residual trees and seedlings will not be damaged or destroyed by tractor operations. • (i) where water breaks cannot effectively disperse surface runoff, other erosion controls shall be installed as needed. • Slope restriction are identified in subsection (d), (f) [Coastal, Northern], (j) [Southern] The LTO shall be aware of these rule requirements prior to operations.

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e. ☐ Yes ☒ No	Will new tractor roads be constructed?
f. ☒ Yes ☐ No	Will tractor road use be limited to existing tractor roads? Due to the gentle 0-30% slope of the project area, there will be no skid trails constructed. There are no skid trails present now. As such, tractors will use the existing slopes without the need to create skid trails. All disturbed ground will become part of the vineyard and be treated with erosion control as directed by Napa County permits.
ASP NOTE: per 14 CCR 916.9 (k)(1) – Year-around tractor road limitations, Tractor roads shall not be used when operations may result in significant sediment discharge and (m) Tractor Road Drainage Facility Installation - All tractor roads shall have drainage and/or drainage collection and storage facilities installed as soon as practical following yarding and prior to either (1) the start of any rain which causes overland flow across or along the disturbed surface within a WLPZ or within any ELZ or EEZ designated for watercourse or lake protection, or (2) any day with a National Weather Service forecast of a chance of rain of 30 percent or more, a flash flood warning, or a flash flood watch.	
Will ground based equipment be used on:	
g. ☐ Yes ☒ No	Unstable areas? (Only allowed if unavoidable) If YES, the RPF SHALL develop specific measures to minimize the effect of operations on slope stability. Provide the required justification and explanation in SECTION III and operational instructions to the LTO in SECTION II.
h. ☐ Yes ☒ No	Slope's steeper than 65% if YES, provide site specific instructions to the LTO in SECTION II and provide the required explanation and justification in SECTION III.
i. ☐ Yes ☒ No	Slope's steeper than 50% where the erosion hazard rating (EHR) is HIGH or EXTREME. if YES, provide site specific instructions to the LTO in SECTION II and provide the required explanation and justification in SECTION III.
j. ☐ Yes ☒ No ☐ ☐ ☐	Slopes between 50% and 65% with a MODERATE EHR at: (percentage based on average slope on sample areas of 20 acres) Existing tractor roads that do not require reconstruction. [NORTHERN and SOUTHERN only] New tractor roads that have been flagged by an RPF or supervised designee prior to use. [COASTAL only] New tractor roads at a location that has been shown on the THP map, flagged by an RPF or supervised designee prior to the pre-harvest inspection, or prior to the start of timber operations if a PHI was not required. if YES, provide site specific instructions to the LTO in SECTION II.
k. ☐ Yes ☒ No	Slopes over 50% which lead without flattening to sufficiently dissipate water flow and trap sediment before it reaches a watercourse or lake? If YES, provide site specific instructions to the LTO in SECTION II and provide the required explanation and justification in SECTION III.
NOTE: - Per 14 CCR 1034(x)(15) all exceptions must be located on a map. - If any question above is answered YES then tractor road locations must be flagged on the ground prior to the PHI or the start of timber operations if a PHI is not required.	

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ITEM # 23 – WINTER OPERATIONS

Per 14 CCR 895.1:

- **“Winter period”** means the period between November 15 and April 1, Except under special County Rules per 14 CCR:
 - 925.1 (Santa Clara)
 - 926.18 (Santa Cruz)
 - 927.1 (Marin)
 - 965.5 (Monterey)
- **“Extended wet weather period”** means the period from October 15 to May 1.
- Tractor roads (except as otherwise provided in the rules):
 - All waterbreaks shall be installed no later than the beginning of the winter period of the current year of timber operations.
 - Installation of drainage facilities and structures is required from October 15 to November 15 and April 1 to May 1 on all constructed skid trails and tractor roads prior to sunset if the National Weather Service forecast is a “chance” (30% or more) of rain within the next 24 hours per 14 CCR 914.6[934.6, 954.6](a).
- Logging roads and landings used for timber operations shall have adequate drainage:
 - Upon completion of use for the year or by October 15, whichever is earlier.
 - An exception is that drainage facilities and drainage structures do not need to be constructed on logging roads and landings in use during the extended wet weather period provided that all such drainage facilities and drainage structures are installed prior to the start of rain that generates overland flow. 923.5[943.5, 963.5](j).
- When the term **“WPOP”** (Winter Period Operating Plan) is used below, all the requirements per 14 CCR 914.7[934.7, 954.7] (b) must be addressed.

ITEM #23	WINTER OPERATIONS
If timber operations are proposed within the winter period the RPF may propose to operate under a: • Winter Period Operating Plan (WPOP) per 14 CCR 914.7, 934.7, 954.7(b) • In-lieu winter operating plan per 14 CCR 914.7 [934.7, 954.7](c)	
a. ☒ Yes ☐ No	Will timber operations occur during the winter period?
WINTER PERIOD OPERATING PLAN (WPOP)	
A Winter Period Operating Plan (WPOP) is required when winter operations will occur under the following conditions: • Site preparation. • Road and landing construction. • Temporary logging road watercourse crossings will not be removed. • At tractor watercourse crossings. • Temporary logging roads or landings. • Roads to be abandoned or deactivated. • Operations are proposed in an ASP watershed or immediately upstream.	
Winter Period Operating Plan (WPOP)	
	“Winter period” means the period between November 15 and April 1, except as noted under special County Rules at 925.1, 926.18, 927.1, and 965.5. 1. The erosion hazard rating for the project area is moderate. 2. No mechanical site preparation is allowed during the winter period. This is a timberland Conversion and is not subject to regeneration and or site preparation. 3. No skid trails will be built under this THP. 4. The operating period for winter operations on the THP is November 15 to February 1 and are limited by the following. a) Timber falling may be conducted during the winter period. b) No heavy equipment is allowed at any time, except an excavator to assist in pile burning. c) Faller's vehicles must operate on rocky and or stable road surfaces at all times. d) Where applicable, trees shall be felled to lead in a direction away from WLPZ and fencing and shall not be

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	allowed to fall outside of the project area. e) Where applicable trees shall be felled in conformance with watercourse and lake protection measures incorporated in the timber harvesting plan and consistent with Article 6 of the rules. f) Timber falling activities must cease prior to February 1st and cannot resume until NSO protocols have been met in the spring. g) Operations must cease if saturated soil conditions occur, see definition below. h) Vehicle operations are only allowed on stable operating surface, see definition below. 5. All erosion control facilities associated with the ECP and THP must be in place by October 15th. See ECP Appendix A 6. Consideration of form of precipitation, rain, or snow. All disturbed areas must have erosion control treatment completed prior to the start of any rain that causes overland flow across or along the disturbed surface. Skidding, loading, and trucking operations will cease for 24 hours after the last precipitation exceeding 1" is recorded at Calistoga, CA. The probable form of precipitation during this period in this operating area will be a low intensity short duration rainstorm of approximately 1 inch of rainfall. If precipitation is in the form of snow, 10" of snow will equate to 1" of rainfall. 7. Ground conditions (soil moisture condition, wet or frozen) Use of logging roads, tractor roads, or landings shall not take place at any location where saturated soil conditions exist, where a stable logging road or landing operating surface does not exist, or when visibly turbid water from the road, landing, or skid trail surface or inside ditch may reach a watercourse or lake. 8. Silvicultural system-ground cover. Due to the limitation of no equipment operating during the WPOP and operations limited to falling only, disturbance to soils are not expected. The project area is equivalent to the silviculture of a clear cut since it is being converted from a forest (clear cut) to a vineyard. Any soil disturbance on the THP will be addressed as described in section 18 of the THP and by the installation of ECP measures outlined by the Erosion Control Plan, see Appendix A. 9. Operations within the WLPZ. No operations are proposed or allowed in the WLPZ, no equipment is allowed to operate and no vehicles are allowed off of rocky roads and or roads containing a stable operating surface. 10. Equipment use limitations. No equipment is allowed to operate and no vehicles are allowed off of rocky roads. No ground disturbance will take place. An excavator may be used for pile burning. 11. Known unstable areas. No unstable areas present. See ECP, Appendix A. 12. Logging roads and Landings. No heavy equipment is allowed to operate during the winter period, except to assist in pile burning. Activities proposed during the winter period is limited to falling and associated vehicle access. Road use is limited to roads having a stable operating surface.
Wet Weather Operating Plan (WWOP)	
	Wet Weather Operating Plan (WWOP) The wet weather operating plan applies to timber operations in the non-winter period (April 1st through November 15th). The following practices will take place in the event that the Weather Service predicts 30% chance of rain, at Calistoga CA, in the next 24-hour period. 1. Erosion control facilities will be installed on all skid trails and logging roads prior to the end of the day if the U.S. Weather Service forecast is for a chance (30%) of rain. Rainfall prediction shall be secured from the U.S. Weather Service forecast, internet, radio, television, or newspapers, by the Licensed Timber Operator. Internet site location https://weather.com/weather/tenday/l/2fe5abc1ed7df403e44df8cadc0f3e4bfac9dea579aec25b98bfe54e1fed3696 2. All landings and truck roads will have appropriate erosion control facilities installed. 3. Routine use of roads and landings shall not take place when, due to general wet conditions, equipment cannot be operated under its own power. Log hauling on the associated roads may take place when the roads are generally firm and passable. 4. All haul roads will be out-sloped and berms breached to keep water from accumulating and causing erosion in the event of

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	rainfall occurring during the non-winter period. 5. If an excess of one inch of precipitation falls as measured at Calistoga CA, all harvesting operations will cease for 24 hours after the last precipitation is recorded and the requirements of 14 CCR 943.6 and 936.9(k)(1) is met. <i>Excerpt from the Forest Practice Rules</i> <u>MAXIMUM DISTANCE BETWEEN WATERBREAKS</u> <table border="1"> <thead> <tr> <th rowspan="2">Estimated Erosion Hazard Rating</th><th colspan="4">Log Truck Road or Skid Trail Gradient</th></tr> <tr> <th>10% or less</th><th>11% - 25%</th><th>26% - 50%</th><th>>50%</th></tr> </thead> <tbody> <tr> <td>Extreme</td><td>100'</td><td>75'</td><td>50'</td><td>50'</td></tr> <tr> <td>High</td><td>150'</td><td>100'</td><td>75'</td><td>50'</td></tr> <tr> <td>Moderate</td><td>200'</td><td>150'</td><td>100'</td><td>75'</td></tr> <tr> <td>Low</td><td>300'</td><td>200'</td><td>150'</td><td>100'</td></tr> </tbody> </table> <u>Guidelines for the LTO to use during waterbar installation</u> <u>THP Mitigation #3, Winter Weather Operating Plan (WWOP) and timber falling.</u> 1. No heavy equipment is allowed at any time, except an excavator used for pile burning. 2. Fallers' vehicles will operate on rocked road surfaces at all times. 3. All aspects of the winter weather operating period plan are in effect. 4. Trees shall be felled to lead in a direction away from WLPZ and fencing and shall not be allowed to fall outside of the project area. 5. Trees shall be felled in conformance with watercourse and lake protection measures incorporated in the timber harvesting plan and consistent with Article 6 of the rules. 6. Timber falling activities must cease prior to February 1st and cannot resume until NSO protocols have been met in the spring.	Estimated Erosion Hazard Rating	Log Truck Road or Skid Trail Gradient				10% or less	11% - 25%	26% - 50%	>50%	Extreme	100'	75'	50'	50'	High	150'	100'	75'	50'	Moderate	200'	150'	100'	75'	Low	300'	200'	150'	100'
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Moderate	200'	150'	100'	75'																										
Low	300'	200'	150'	100'																										
b. ☐ Yes ☒ No	Will mechanical site preparation be conducted during the winter period? If YES, then a WPOP is required per 14 CCR 914.7 [934.7, 954.7](b)																													
c. ☐ Yes ☒ No	Will roads be constructed during the winter period? If YES, a WPOP is required per 14 CCR 914.7 [934.7, 954.7] addressing logging road and landing construction and reconstruction per 14 CCR 923.4 [943.4, 963.4](l). Provide operational instructions to the LTO in SECTION II																													
d. ☐ Yes ☒ No	Will landings be constructed during the winter period? If YES, a WPOP is required per 14 CCR 914.7 [934.7, 954.7] addressing logging road and landing construction and reconstruction per 14 CCR 923.4 [943.4, 963.4](l).). Provide operational instructions to the LTO in SECTION II																													
e. ☐ Yes ☒ No	Will temporary logging road watercourse crossings be left in place during the winter period? If YES, a WPOP is required per 14 CCR 923.9 [943.9, 963.9](r). Provide specific measures to be taken during operations by the LTO in SECTION II																													
f. ☐ Yes ☒ No	Will tractor watercourse crossings be used during the winter period? If YES, a WPOP is required per 14 CCR 914.8 [934.8, 954.8](d). Provide operational instructions and stabilization measures in SECTION II. If an exception is proposed provide an explanation and justification in SECTION III.																													

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g. ☐ Yes ☒ No	Will temporary logging roads be used during the winter period? If YES, a WPOP is required per 14 CCR 923.6 [943.6, 963.6](f) and 923.8 [943.8, 963.8](d). Provide specific measures to be taken during operations for the LTO in SECTION II.
h. ☐ Yes ☒ No	Will temporary landings be used during the winter period? If YES, a WPOP is required per 14 CCR 923.6 [943.6, 963.6](f) and 923.8 [943.8, 963.8](d). Provide specific measures to be taken during operations for the LTO in SECTION II.
i. ☒ Yes ☐ No	Will logging roads to be abandoned or deactivated, be open (not blocked) during the winter period? If YES, a WPOP is required per 14 CCR 923.6 [943.6, 963.6](f) and 923.8 [943.8, 963.8](d). Provide specific measures to be taken during operations for the LTO in SECTION II.

ASP WATERSHEDS OR IMMEDIATELY UPSTREAM

Extended Wet Weather Period:	
j. ☒ Yes ☐ No	Are timber operations proposed during the extended wet weather period – October to May 1? If YES, then a WPOP is required per 14 CCR 916.9 [936.9, 963.9](l) and (l)(1)
k. ☐ Yes ☒ No	Will <u>logging roads construction or reconstruction</u> occur within the extended wet weather period? If YES, provide specific measures to be taken during operations per 14 CCR 923.6 [943.6, 963.6] (h)(6) and 923.4 [943.4, 963.4](s)(2) In SECTION II
l. ☐ Yes ☒ No	Will <u>logging road use</u> occur within the extended wet weather period? If YES, provide specific measures to be taken during operations per 14 CCR 923.6 [943.6, 963.6] (h)(6) and 923.4 [943.4, 963.4](s)(2) In SECTION II
m. ☐ Yes ☒ No	Will <u>landing construction or reconstruction</u> occur within the extended wet weather period? If YES, provide specific measures to be taken during operations per 14 CCR 923.6 [943.6, 963.6] (h)(6) and 923.4 [943.4, 963.4](s)(2) In SECTION II
n. ☒ Yes ☐ No	Will <u>landing use</u> occur within the extended wet weather period? If YES, provide specific measures to be taken during operations per 14 CCR 923.6 [943.6, 963.6] (h)(6) and 923.4 [943.4, 963.4](s)(2) In SECTION II
o. ☐ Yes ☒ No	Will any watercourse crossing drainage structures be <u>CONSTRUCTED</u> during the extended wet weather period? If YES, provide specific measures to be taken during operations per 14 CCR 923.9 [943.9, 963.9](s) In SECTION II
p. ☐ Yes ☒ No	Will any watercourse crossing drainage structures be <u>RECONSTRUCTED</u> during the extended wet weather period? If YES, provide specific measures to be taken during operations per 14 CCR 923.9 [943.9, 963.9](s) In SECTION II
q. ☒	If any of the questions above are answered YES then WPOP is required: RPF chooses to prepare a WPOP per 14 CCR 914.7 [934.7, 954.7](b)(1-12) See the WPOP on page 30 of this THP.

IN-LIEU WINTER PERIOD OPERATION PLAN

r. ☐	RPF chooses the in-lieu winter operating plan option as allowed per 14 CCR 914.7 [934.7, 954.7](c)(1-3)
N/A	Specify the procedures listed in subsections (1) and (2) and list the site specific measures for operations in the WLPZ and unstable areas as required by subsection (3).
s. ☐ Yes ☐ No	Will the in-lieu winter operating plan include operations within WLPZ(s) or unstable area(s) during the winter period?
N/A	If YES, provide site specific measures per 14 CCR 914 [934, 954] to protect the beneficial uses of water in SECTION II as instructions to the LTO.
Hauling and heavy equipment use roads and landings	

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t. ☐ Yes ☒ No	Will <u>ROADS</u> be used for log hauling and heavy equipment use during the winter period where there will not be a stable operating surface or surfaced with rock to a depth and quantity sufficient to maintain a stable operating surface? If YES, the required explanation and justification should be provided in SECTION III per 14 CCR 923.6 [943.6, 963.6](g) and 914.7[934.7,954.7].
u. ☐ Yes ☒ No	Will <u>LANDINGS</u> be used for log hauling and heavy equipment use during the winter period where there will not be a stable operating surface or surfaced with rock to a depth and quantity sufficient to maintain a stable operating surface? If YES, the required explanation and justification should be provided in SECTION III per 14 CCR 923.6 [943.6, 963.6](g) and 914.7[934.7,954.7].
Hauling and heavy equipment use on hydrologically disconnected or saturated soils.	
v. ☐ Yes ☒ No	Will <u>ROADS</u> be used for log hauling and heavy equipment use during the winter period on roads that are NOT hydrologically disconnected and exhibit saturated soil conditions? If YES, provide a required explanation and justification in SECTION III. per 14 CCR 923.6 [943.6, 963.6](g) and 914.7[934.7,954.7].
w. ☐ Yes ☒ No	Will <u>LANDINGS</u> be used for log hauling and heavy equipment use during the winter period on roads that are NOT hydrologically disconnected and exhibit saturated soil conditions? If YES, provide a required explanation and justification in SECTION III. per 14 CCR 923.6 [943.6, 963.6](g) and 914.7[934.7,954.7].
Watercourse crossing removal	
x. ☐ Yes ☒ No	Will any logging road watercourse crossing proposed for removal and/or stabilization be left in place during the winter period? If YES, provide operational instructions to the LTO addressing the specifics of the applicable CDFW 1600 agreement, Lake and Streambed alteration agreement or otherwise specify in the plan. Per 14 CCR 923.9[943.9, 963.9](p)(4) In SECTION II

ITEM #24 ROAD CONSTRUCTION	
a. ☐ Yes ☒ No	Will any road(s) be CONSTRUCTED?
	PROVIDE: The classification and approximate length of each of the following logging road segment categories: 1034(o) Road classification: Approximate length Feet: ☐ Permanent _____ ☐ Seasonal _____ ☐ Temporary _____
b. ☐ Yes ☒ No	Will new road construction be wider than single lane with turnouts? If YES, address pursuant to 14 CCR 923 [943, 963](c) & 923.2 [943.2, 963.2](d)(1)
c. ☐ Yes ☒ No	Will any new Logging Road(s) cross? ☐ Unstable areas ☐ Connected headwall swales (14 CCR 895.1 "Connected Headwall Swale") ☐ Both If YES, address pursuant to 14 CCR 923.1 [943.1, 963.1](d)
d. ☐ Yes ☒ No	Will any new roads? ☐ Exceed a grade of 15% ☐ Have grades greater than 15% for distances greater than 500 feet ☐ Both

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	NOTE: per 14 CCR 1034(x)(5)(A) new road construction or reconstruction segments exceeding 15% for 200 feet shall be mapped. If YES, address pursuant to 14 CCR 923.2 [943.2, 963.2](d)(2). See 923 [943, 963](c).
e. ☐ Yes ☒ No	Will any logging roads be constructed within? ☐ 150 feet of a Class I Watercourse and Lake Transition Line (WLTL) ☐ 100 feet of a class II WLTL on slopes greater than 30% ☐ Class I Watercourse or Lake ☐ Class II Watercourse or Lake ☐ Class III Watercourse or Lake ☐ Class IV Watercourse or Lake ☐ A Watercourse and Lake Production Zone (WLPZ) ☐ Other (Examples; marshes, wet meadows, wet areas) If "OTHER" is selected describe the type of feature referenced below. NOTE: Exceptions are permitted per 14 CCR 923.1 [943.1, 963.1](b)(1) – (3) at: - Existing logging road crossing(s) - Logging road watercourse crossing(s) to be constructed that are approved as part of a Fish and Game Code process (F&GC 1600 et seq.) - Logging road watercourse crossings of class III watercourses that are dry at the time of use. If YES, address per 14 CCR 923 [943, 963](c)
f. ☐ Yes ☒ No	Will any constructed road be located across 100 feet or more lineal distance on? ☐ Slopes over 65% ☐ Slopes over 50% which are within 100 feet of the boundary of a WLPZ that drains toward the zoned watercourse or lake If YES, address per 14 CCR 923.2 [943.2, 963.2](a)(7) and 923.4 [943.4, 963.4](n)
g. 1. ☐ Yes ☒ No 2. ☐ Yes ☒ No	Will any road(s) be deactivated? Will any road(s) be abandoned? Road classification: Approximate length Feet: ☐ Permanent _____ ☐ Seasonal _____ ☐ Temporary _____ The project area is under 22% slopes. Due to slope, no landing will need to be constructed. The area used to load logs will be incorporated into the proposed vineyard. No excavation or fills will be involved. All disturbed areas will be grass seeded and straw mulched.
3. ☐ Yes ☒ No 4. ☐ Yes ☒ No	Will any watercourse crossing(s) be deactivated? Will any watercourse crossing(s) be abandoned? If YES, describe specific measures to prevent significant sediment discharge. per 14 CCR 923.8 [943.8, 963.8] et seq. and 923.9 [943.9, 963.9](e) and (p) If Logging Road(s) are to be abandoned provide the blockage design Per 14 CCR 923.8 [943.8, 963.8](d)
h. ☐ Yes ☒ No	Is there any exception to flagging or otherwise identifying the location of any road(s) to be constructed? If YES, address per 14 CCR 923.3 [943.3, 963.3](c)

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ROAD RECONSTRUCTION	
i. ☐ Yes ☒ No	Will any roads be RECONSTRUCTED?
	PROVIDE: The classification and approximate length of each of the following logging road segment categories: 1034(o) Road classification: Approximate length Feet: ☐ Permanent _____ ☐ Seasonal _____ ☐ Temporary _____
j. ☐ Yes ☒ No	Will new road reconstruction be wider than single lane with turnouts? If YES, address pursuant to 14 CCR 923 [943, 963](c) & 923.2 [943.2, 963.2](d)(1)
k. ☐ Yes ☒ No	Will any logging roads be reconstructed within? ☐ Class I Watercourse or Lake ☐ Class II Watercourse or Lake ☐ Class III Watercourse or Lake ☐ Class IV Watercourse or Lake ☐ A Watercourse and Lake Zone (WLPZ) ☐ Other (Examples; marshes, wet meadows, wet areas) If "OTHER" is selected describe the type of feature referenced below. NOTE: Exceptions are permitted per 14 CCR 923.1 [943.1, 963.1](b)(1) – (3) at: - Existing logging road crossing(s) - Logging road watercourse crossing(s) to be constructed that are approved as part of a Fish and Game Code process (F&GC 1600 et seq.) - Logging road watercourse crossings of class III watercourses that are dry at the time of use. If YES, address per 14 CCR 923 [943, 963](c)
l. ☐ Yes ☒ No	Will any reconstructed road be located across 100 feet or more lineal distance on? ☐ slopes over 65% ☐ Slopes over 50% which are within 100 feet of the boundary of a WLPZ that drains toward the zoned watercourse or lake. If YES, address per 14 CCR 923.2 [943.2, 963.2](a)(7) and 923.4 [943.4, 963.4](n)
m. ☐ Yes ☒ No	Is there any exception to flagging or otherwise identifying the location of any road(s) to be reconstructed? If YES, address per 14 CCR 923.3 [943.3, 963.3](c)
LANDING CONSTRUCTION	
n. ☐ Yes ☒ No	Will any Landing(s) be CONSTRUCTED?
o. ☐ Yes ☒ No	Will any landing(s) be constructed within? ☐ 150 feet of a Class I Watercourse and Lake Transition Line (WLTL) ☐ 100 feet of a class II WLTL on slopes greater than 30% ☐ Class I Watercourse or Lake ☐ Class II Watercourse or Lake ☐ Class III Watercourse or Lake ☐ Class IV Watercourse or Lake ☐ A Watercourse and Lake Protection Zone (WLPZ) ☐ Other (Examples; marshes, wet meadows, wet areas) If "OTHER" is selected describe the type of feature referenced below. NOTE: Exceptions are permitted per 14 CCR 923.1 [943.1, 963.1](b)(1) – (3) at: - Existing crossing(s) - Logging road watercourse crossing(s) to be constructed that are approved as part of a Fish and Game Code process (F&GC 1600 et seq.) - Logging road watercourse crossings of class III watercourses that are dry at the time of use. If YES, address per 14 CCR 923 [943, 963](c)

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p. ☐ Yes ☒ No	Will any landing(s) exceed one half acre in size? NOTE: per 14 CCR 1034(x)(5)(D) if any landing exceeds ¼ acre in size or requires substantial excavation, the location shall be mapped. If YES, address per 14 CCR 923 [943, 963](c) and 923.2 [943.2, 963.2](e)(2)
q. ☐ Yes ☒ No	Will any Landing(s) be located on? ☐ Unstable areas ☐ Connected headwall swales (14 CCR 895.1 "Connected Headwall Swale") ☐ Both If YES, address pursuant to 14 CCR 923.1 [943.1, 963.1](d)
r. ☐ Yes ☒ No	Will any landing construction be located across 100 feet or more lineal distance on? ☐ Slopes over 65% ☐ Slopes over 50% which are within 100 feet of the boundary of a WLPZ that drains toward the zoned watercourse or lake. If YES, address per 14 CCR 923.2 [943.2, 963.2](a)(7) and 923.4 [943.4, 963.4](n)
s. ☐ Yes ☒ No ☐ Yes ☒ No	Will any Landing(s) be deactivated? Will any Landing(s) be abandoned? If YES, describe specific measures to prevent significant sediment discharge. per 14 CCR 923.8 [943.8, 963.8] et seq. and 923.9 [943.9, 963.9](e) and (p)

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LANDING RECONSTRUCTION	
t. ☐ Yes ☒ No	Will any Landing(s) be RECONSTRUCTED?
u. ☐ Yes ☒ No	Will any logging roads be reconstructed within? ☐ Class I Watercourse or Lake ☐ Class II Watercourse or Lake ☐ Class III Watercourse or Lake ☐ Class IV Watercourse or Lake ☐ A Watercourse and Lake Protection Zone (WLPZ) ☐ Other (Examples; marshes, wet meadows, wet areas) If "OTHER" is selected describe the type of feature referenced below. NOTE: Exceptions are permitted per 14 CCR 923.1 [943.1, 963.1](b)(1) – (3) at: - Existing logging roads crossing(s) - Logging road watercourse crossing(s) to be constructed that are approved as part of a Fish and Game Code process (F&GC 1600 et seq.) - Logging road watercourse crossings of class III watercourses that are dry at the time of use. If YES, address per 14 CCR 923 [943, 963](c)
v.1. ☐ Yes ☒ No	Will any landing reconstruction be located across 100 feet or more lineal distance on? ☐ Slopes over 65% ☐ Slopes over 50% which are within 100 feet of the boundary of a WLPZ that drains toward the zoned watercourse or lake. If YES, address per 14 CCR 923.2 [943.2, 963.2](a)(7) and 923.4 [943.4, 963.4](n)

SIGNIFICANT EROSION SITE(S)	
w. ☐ Yes ☒ No	Are there any significant erosion sites? ☐ Existing ☐ Potential ☐ Both Associated within the logging area at? ☐ Logging road(s) ☐ Landing(s) ☐ Watercourse crossing(s) in the logging area? Per 14 CCR 923.1 [943.1, 963.1](e)(1) – (5). Also see 923.9 [943.9, 963.9](a) If YES, for each significant existing or potential erosion site, provide the following: ➤ Describe current condition of the site. ➤ Identify which sites can be feasibly treated, and which sites cannot. ➤ Specify mitigations for those sites that can be feasibly treated. ➤ Indicate logical order of treatment for those which have feasible treatments NOTE: Consider providing a MAP POINT TABLE which identifies the erosion site by mapped referenced identifier consistent with mapped locations.

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MAP POINT (MP) Identifier	SITE DESCRIPTION (SD) (See Key)	Watercourse CLASS (WC) or feature	EXISTING Culvert Diameter Size (EC)	PROPOSED Culvert Diameter Size (PC)	Geologist used? Yes or No	1600? Yes or No	Potential Sediment Discharge (PSD) in cu. yds. (See Key)	Implement ation Priority (IP) (See Key)
MITIGATION AND/OR MANAGEMENT MEASURES: If needed, provide additional details of site; and/or describe proposed treatment								

Map points are not applicable. There is no watercourses within or adjacent to the boundary.

ITEM #25	ASP WATERSHEDS
NOTE: If any item listed above is checked "YES" Provide:	
- Operations Instructions to the LTO, in accordance with the respective rule requirement(s) in SECTION II of the THP. - Any required explanation and justification should be included in SECTION III	
Operation instructions to the LTO:	
N/A	

ONLINE SYSTEM WILL HAVE A BOX TO ALLOW FOR THE EXPLANATION AND EXPLANATION TO BE COMPLETED IN SECTION II BUT WILL POPULATE IN SECTION THREE WHEN PRINTED

No Items were checked yes above.

Project is upstream from an ASP Watershed. The project is within an unnamed tributary of Biter Creek and flows into the Napa River in Napa County.

ASP WATERSHEDS	
a. ☒ Yes ☐ No	Will hauling on roads and landings be limited to those which are Hydrologically disconnected from watercourses to the extent feasible, and exhibit a stable operating surface? If NO, address the exception pursuant to 923.6 [943.6,963.6] (h)(3).
ADDRESS THE FOLLOWING AS IT APPLIES TO ASP WATERSHEDS OR IMMEDIATELY UPSTREAM AND CONTIGUOUS TO, ANY WATERSHED WITH LISTED ANADROMOUS SALMONIDS	
- When logging road(s) or landing(s) construction or reconstruction is proposed identify: - How the proposed operations will fit into the systematic layout pattern. Per 14 CCR 923.1 [943.1. 963.1](g) - What, if any, offsetting mitigation measures (including but not limited to, abandonment of logging road(s) and landing(s) are needed to minimize potential adverse impacts to watersheds from the road system. Per 14 CCR 923.1 [943.1. 963.1](g) - Provide specific provisions for the protection of salmonid habitat for all logging road(s) construction: - On slopes, greater than 50% with access to a watercourse or lake. Per 14 CCR 923.4 [943.4, 963.4](s)(1) - Provide specific erosion control measures for all permanent and seasonal roads: - With a grade of 15% or greater which extends 500 feet or more. Per 14 CCR 923.5 [943.5, 963.5](q)(2)	

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ITEM #26– WATERCOURSE LAKE PROTECTION ZONE (WLPZ) PROTECTION MEASURES**WATERCOURSES**

Per 14 CCR 916, 936, 956 – Intent of Watercourse and Lake Protection [ALL DISTRICTS] – The purpose of this article is to ensure that timber operations do not potentially cause significant adverse site-specific and cumulative impacts to the beneficial uses of water, native aquatic and riparian-associated species, and the beneficial functions of riparian zones; or result in an unauthorized take of listed aquatic species; or threaten to cause violation of any applicable legal requirements. This article also provides protection measures for application in watersheds with listed anadromous salmonids and watersheds listed as water quality limited under Section 303(d) of the Federal Clean Water Act.

It is the intent of the Board to restore, enhance, and maintain the productivity of timberlands while providing appropriate levels of consideration for the quality and beneficial uses of water relative to that productivity. Further, it is the intent of the Board that the evaluations that are made, and the measures that are taken or prescribed, be documented in a manner that clearly and accurately represents those existing conditions and those measures.

a. ☐ Yes ☒ No	Are there any watercourses or lakes classified as a CLASS I through CLASS IV within or adjacent to the plan area? (Check all that apply)		
	☐ Class I: ☐ Class II: ☐ Class III: ☐ Class IV: ☐ Lakes: ☐ Other (Springs, Seeps)	<u>Within plan area</u> ☐ ☐ ☐ ☐ ☐ ☐	<u>Adjacent to plan area</u> ☐ ☐ ☐ ☐ ☐ ☐

If YES, to above question list:

- Class of the water feature
Class III watercourse is over 200' outside of the project.
- Associated WLPZ or ELZ and width.
No WLPZ needed, the watercourse is too far away.
- Protection measures; determined from 14 CCR 916.5[936.5, 956.5], Table I. and/or 14 CCR 916.9[936.9, 956.9] et seq.
N/A
- Specify if Class III or IV watercourses will have a WLPZ or ELZ.
N/A

b. ☐ Yes ☐ No	Will Class III or IV watercourses be protected with a WLPZ or ELZ?
	If YES, describe below. N/A

LTO instructions:

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Watercourse description and protection measures to be applied: (14 CCR 916.5)

N/A

c. ☐ Yes ☒ No	Is there any tractor road watercourse crossings that require mapping per 14 CCR 1034(x)(7)
☐ Yes ☒ No N/A	Will TRACTOR Road watercourse crossings involve the use of a culvert? If YES, per 14 CCR 914.8[934.8, 954.8](e) state the minimum diameter and length for each culvert.

Map Reference Points (MRP)	Culver Diameter	Culvert Length
N/A		

d. ☐ Yes ☒ No	Is there a Master Agreement for Timber Operations (MATO) for Streambed Alteration Agreement (SAA) approved by the Department of Fish and Wildlife for any portion of this plan? MATO or SSA Number: _____ If YES, provide a list of the crossings, water drafting sites, or other water features to be used during operations and provide the conditions to be utilized and or consider from the MATO or SAA as operational instruction to the LTO in SECTION II.
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MATO or SAA INSTRUCTIONS TO LTO

Specific water feature under MATO or SAA (Crossings, drafting sites, etc.)	Conditions of MATO or SAA to be utilized at each specific feature
N/A	

e. ☐ Yes ☒ No N/A	Is this THP Review Process to be used to meet Department of Fish and Wildlife CEQA review requirements? If YES, attach the required 1611 Addendum at the end of SECTION II and include any supporting information and analysis in SECTION III. List instructions to the LTO in SECTION II for installation, protection measures, and mitigation measures, per THP from instructions or Cal Fire Mass Mailing (07/02/1999) "Fish and Game Code 1611 Agreements and THP Documentation."
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LTO INSTRUCTIONS:**None**

f. ☐ Yes ☒ No	Are any exceptions provided under F & G code 1600 et seq., and made an enforceable part of plan? If YES, per 14 CCR 923 [943,963](d) identify the exceptions and provide the enforceable standards as instructions to the LTO in SECTION II.
g. ☐ Yes ☒ No	Will new drainage structures and facilities on watercourses that support fish or listed aquatic species be constructed? If YES, per 14 CCR 914.8[934.8, 954.8](c) and 923.9 [943.9, 963.9](c). Structures and facilities shall be fully described and allow unrestricted passage of all life stages of fish or listed aquatic species, and natural movement of bedload. Provide operational instructions to the LTO in SECTION II.

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This table is not applicable to this project.

Map point / reference	Watercourse Class / feature	Existing culvert (Diameter size OR other drainage structure)	Proposed culvert (Diameter size or other drainage structure)	CDFW 1600 requested	Implementation priority (high, medium, low)
	Site Description:				
	Mitigation measures:				
	Site Description:				
	Mitigation measures:				
	Site Description:				
	Mitigation measures:				
	Site Description:				
	Mitigation measures:				
	Site Description:				
	Mitigation measures:				
	Site Description:				
	Mitigation measures:				
	Site Description:				
	Mitigation measures:				

Implementation Priority:

- High – Mitigation completed the 1st year after THP approval.
- Medium – Mitigation completed concurrently with operations which affect the site.
- Low – Mitigation completed prior to the final completion of the THP.

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Per 14 CCR 923.9(e) – The location of all NEW permanent constructed and reconstructed, and temporary logging road watercourse crossings, including those crossings to be abandoned or deactivated, SHALL be shown on a map. If the structure is a culvert intended for permanent use, the minimum diameter of the culvert and the method(s) used to determine the culvert diameter SHALL be specified in the plan,	
h. ☐ Yes ☒ No	Are there any NEW PERMANENT constructed logging road watercourse crossings requiring mapping?
☐ Yes ☒ No	Are there any NEW RECONSTRUCTED logging road watercourse crossings requiring mapping?
☐ Yes ☒ No	Are there any watercourse crossings to be ABANDONED or DEACTIVATED?
	If YES, to the above questions these crossing shall be shown on a map in section II
	Per 14 CCR 923.9(e) If any watercourse crossing has a culvert intended for permanent use, the minimum diameter of the culvert and the method(s) used to determine culvert diameter shall be stated in the plan.
	Per 14 CCR 923.9(f) permanent watercourse crossings that are constructed or reconstructed SHALL accommodate the estimated 100-year flood flow, including debris and sediment loads.
	Method for sizing crossing:
i. ☐ Yes ☒ No	Is there any exception to flagging or otherwise identifying the location of any constructed or reconstructed road watercourse crossing prior to the pre-harvest inspection? If YES, per 14 CCR 923.9[943.9, 963.9](j) provide the explanation and justification in SECTION III.
j. ☐ Yes ☒ No N/A	Will other methods for diversion of overflow at culver crossings be utilized (<u>other than critical dips</u>) in the construction or reconstruction of logging road watercourse crossings which culverts? If YES, per 14 CCR 923.9[943.9, 963.9](j) provide instructions to the LTO in SECTION II identifying the methods to be used for the diversion of overflow at watercourse crossings.
Per 14 CCR 923.9[943.9, 963.9](k) watercourse crossings and associated fills and approaches SHALL be constructed and maintained to prevent diversion of stream overflow down the road, and to minimize fill erosion should the drainage structure become obstructed.	
k. ☐ Yes ☒ No	Are there any existing watercourse crossings that are located on logging roads within the logging area?
☐ Yes ☒ No	Are there any watercourse crossing proposed for construction located on logging roads within the logging area?
	If YES, per 14 CCR 923.9[943.9, 963.9](k) identify the crossing and provide the methods to mitigate or address the diversion of stream overflow at the crossing.
l. ☐ Yes ☒ No N/A	Will rock be used to stabilize crossing outlets? If YES, per 14 CCR 923.9[943.9, 963.9](k) Rock used to stabilize outlets of crossings shall be adequately sized to resist mobilization of soil and significant sediment discharge. The range of rock size shall be described within the plan as instruction to the LTO in SECTION II indicate the range of the rock dimensions to be used.
m. ☐ Yes ☒ No N/A	Watercourse crossing proposed to be reconstructed or removed, are there any significant volumes of sediment accumulated upstream of the watercourse crossing? If, YES per 14 CCR 923.9[943.9, 963.9](n) provide instructions to the LTO, in SECTION II, describing how the material will be stabilized, removed (the extent feasible), and in conformance with CDFW agreements, where applicable.

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n. ☐ Yes ☒ No N/A	Do logging road watercourse crossing drainage structures and other erosion control features have a high historical fail rate within the project area?
☐ Yes ☒ No N/A	Do/will existing watercourse crossings utilizing a culvert have large amounts of fill material covering the culvert making up the crossing?
	If, YES per 14 CCR 923.9[943.9,963.9](o) drainage structures and erosion control features shall be oversized, designed for low maintenance, reinforced, or removed before the completion of timber operations or as specified in the approved plan. Provide instructions to the LTO in SECTION II identifying these crossings, providing instruction of how these crossings will be treated.
Guidance on reducing the potential for failure at high risk watercourse crossings may be found in "Board of Forestry Technical Rule Addendum Number 5: Guidance on Hydrologic Disconnection, Road Drainage, Minimization of Diversion Potential, and High Risk crossings" (1 st Edition, revised 10/27/14)	
o. ☐ Yes ☒ No N/A	Will any logging road watercourse crossing be removed? If YES, provide instructions to the LTO, in SECTION II, describing the removal plan pursuant to the standards per 14 CCR 923.9[943.9, 963.9](p)(1)-(4)

FOR PLANS LOCATED WITHIN AN ASP WATERSHED

p. ☐ Yes ☒ No	Will timber operations occur within a class I WLPZ?
☐ Yes ☒ No	Will timber operations occur within a WLPZ adjacent to a restorable Class I watercourse?
	If YES, Address per 14 CCR 916.9[936.9, 956.9](f)(2)(A)-(E).
Per 14 CCR 916.9[936.9, 956.9](e)(1)(A)-(E) there shall be NO timber operations within a channel zone with the exception of those conditions listed within 916.9[936.9, 956.9](e)(1)(A)-(E)	
q. ☐ Yes ☒ No	Will there be any timber operations within the channel zone of any watercourse? If YES, Indict the location and type of timber operations to be conducted and provide instructions to the LTO in SECTION II.
Per 14 CCR 923.1[943.1, 963.1](h) NO logging road(s) or landing(s) shall be planned for construction or reconstruction in the CMZ or Core Zone of a Class I watercourse or within 150 feet of a watercourse transition line. with the exception of those conditions listed within 916.9[936.9, 956.9](e)(1)(A)-(E) and 916.9[936.9, 956.9](v)	
☐ Yes ☒ No	Will there be any logging road(s) or landing(s) constructed in the CMZ or Core Zone of a Class I?
	If YES, indicate the location and provide instructions to the LTO in SECTION II.
Per 14 CCR 923.9[943.9, 963.9](d) Watersheds with listed anadromous salmonids. A description of all existing permanent Class I watercourse crossings shall be provided, where fish are always or seasonally present or fish passage is restorable.	
r. ☐ Yes ☒ No	Are there existing permanent Class I crossings where fish are always present?
☐ Yes ☒ No	Are there existing permanent Class I crossings where fish are seasonally present?
☐ Yes ☒ No	Are there existing permanent Class I crossings where fish passage is restorable?
	If YES, provide a description of the existing permanent Class I watercourse crossings. Indicate in the description where the current crossing conditions may be adversely affecting fish passage and identify the proposed measures, if feasible, to address the conditions.

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s. ☐ Yes ☒ No	Will water drafting occur in association with the timber operations?
	If YES, timber operations shall comply with Fish and Game Code Section 1600, et seq.
t. ☐ Yes ☒ No	Is there a Fish and Game Code Section 1600 Mater Agreement for Timber Operations which addresses water drafting? If YES, provide the operational restrictions from the Master Agreement in SECTION II as instructions to the LTO. If NO, describe the water drafting site conditions and proposed water drafting activity in the plan. Per 14 CCR 923.7[943.7, 963.7](l)(2)(A)-(F) (See Below)

Per 14 CCR 923.7[943.7, 963.7](l)(2)(A)-(F) the description of water drafting site conditions and proposed water drafting activity shall include: N/A	
General description of proposed site:	
Watercourse Classification:	
Drafting parameters including:	
Month(s) of use -	
Estimated volume needed per day -	
Estimated maximum instantaneous drafting rate and filling time -	
Other water drafting activities in same watershed -	
Drainage area (acres) above point of diversion -	
Estimated:	
Unimpeded stream flow -	
Pumping rate -	
Drafting duration -	
A discussion of the effects on aquatic habitat downstream from the drafting site(s) of single pumping operations, or multiple operations at the same location, and at other locations in the same watershed:	

Forest Practice Definitions, Section 936.9, Water and Lake Protection Zone widths.

WATERCOURSE	< 30% Slope	30 – 50% Slope	>50% Slope	Onsite?
Class I WLPZ	75'	100'	150'	None
Class IIs WLPZ	50'	75'	100'	None
Class III WLPZ	30'	50	75	None
Class IV WLPZ	20'	Variable	Variable	None

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ITEM #27– WLPZ IN-LIEU OR ALTERNATIVE PRACTICES	
WLPZ IN-LIEU OR ALTERNATIVES	
Per 14 CCR 916.1[936.1, 956.1] (In-Lieu Practices) – In rule sections where provision is made for site specific practices to be proposed by the RPF, approved by the Director, and included in the THP in lieu of a standard rule, the RPF shall: • Reference the standard rule • Explain and describe each proposed practice. • Explain how it differs from the standard practice, • Explain and justify how the protection provided by the proposed practice is at least equal to the protection provided by the standard rule. • Identify the specific location where it shall be applied. 14 CCR 1034(x)(15) and (16) Per 14 CCR 916.6[936.6, 956.6] (Alternatives) – Alternative prescription for the protection of watercourses and lakes may be developed by the RPF or proposed by the Director on a site specific basis provided the following conditions are complied with and the alternative prescription will achieve compliance with the standards set forth in 14 CCR 916.3[936.3, 956.3] and 916.4[936.4, 956.4](b) The alternative prescription shall include in the THP information per 14 CCR 916.6[936.6, 956.6]a)(1)-(3)	
a. ☐ Yes ☒ No N/A	Are there any site-specific practices proposed in-lieu of, or as an alternative, to the prohibition of the construction or use of tractor roads listed below? Per 14 CCR 916.3[936.3, 956.3](c) Timber operators shall not construct or use tractor roads in a Class I, II, III, IV watercourses, wet meadows and other wet areas unless explained and justified in the plan by the RPF. Except at: • Prepared tractor crossing described in 14 CCR 914.8[934.8, 954.8](b) • Class III watercourse crossings dry at the time of use • At new and existing tractor road crossings approved as part of a Fish and Game Code Process (F&GC 1600 et seq.) If YES, provide operational information to the LTO under each item selected YES, in SECTION II. Provide the explanation and justification in SECTION III, (see table below)
b. ☐ Yes ☒ No N/A	Are there any site-specific practices proposed in-lieu of, or as an alternative, to the retention of non-commercial vegetation bordering and covering meadows and wet areas? 14 CCR 916.3[936.3, 956.3](d) If YES, provide operational information to the LTO under each item selected YES, in SECTION II. Provide the explanation and justification in SECTION III, (see table below)
c. ☐ Yes ☒ No N/A	Are there any site-specific practices proposed in-lieu of, or as an alternative, to the Directional felling of trees within any WLPZ away from the watercourse or lake? 14 CCR 916.3[936.3, 956.3](e) If YES, provide operational information to the LTO under each item selected YES, in SECTION II. Provide the explanation and justification in SECTION III, (see table below)
d. ☐ Yes ☒ No N/A	Are there any site-specific practices proposed in-lieu of, or as an alternative, to the standard WLPZ(s) width(s) identified in 14 CCR 916.5[936.5, 956.5], Table I? If YES, provide operational information to the LTO under each item selected YES, in SECTION II. Provide the explanation and justification in SECTION III, (see table below)
e. ☐ Yes ☒ No N/A	Are there any site-specific practices proposed in-lieu of, or as an alternative, to the protection of Class IV watercourse(s)? 14 CCR 916.4[936.4, 956.4](c) and 916.5[936.5, 956.5], Table I If YES, provide operational information to the LTO under each item selected YES, in SECTION II. Provide the explanation and justification in SECTION III, (see table below)
f. ☐ Yes ☒ No	Are there any site-specific practices proposed in-lieu of, or as an alternative, to the exclusion of heavy equipment from the WLPZ except at those locations listed below?

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N/A	Per 14 CCR 916.4[936.4, 956.4(d)&(f) – Heavy equipment shall not be used in timber falling, yarding, or site preparation within the WLPZ unless such use is explained and justified in the THP and approved by the Director. Except at: • Prepared tractor crossing described in 14 CCR 914.8[934.8, 954.8](b) • Class III watercourse crossings dry at the time of use • Existing road crossings • New tractor and road crossings approved as part of a Fish and Game Code Process (F&GC 1600 et seq.) If YES, provide operational information to the LTO under each item selected YES, in SECTION II. Proved the explanation and justification in SECTION III, (see table below)
g. ☐ Yes ☒ No N/A	Are there any site-specific practices proposed in-lieu of, or as an alternative, to the establishment of ELZ(s) for Class III watercourses unless side slopes are, 30% and EHR is low? 14 CCR 916.4[936.4, 956.4](c)(1) If YES, provide operational information to the LTO under each item selected YES, in SECTION II. Proved the explanation and justification in SECTION III, (see table below)
h. ☐ Yes ☒ No N/A	Are there any site-specific practices proposed in-lieu of, or as an alternative, to the Retention of at least 50% of the overstory canopy in the WLPZ? 14 CCR 916.5[936.5, 956.5](e)“G” If YES, provide operational information to the LTO under each item selected YES, in SECTION II. Proved the explanation and justification in SECTION III, (see table below)
i. ☐ Yes ☒ No N/A	Are there any site-specific practices proposed in-lieu of, or as an alternative, to the Retention of at least 50% of the understory in the WLPZ? 14 CCR 916.5[936.5, 956.5](e)“G” If YES, provide operational information to the LTO under each item selected YES, in SECTION II. Proved the explanation and justification in SECTION III, (see table below)
j. ☐ Yes ☒ No N/A	Are there any additional in-lieu or alternative practices proposed for watercourse or lake protection? If YES, provide operational information to the LTO under each item selected YES, in SECTION II. Proved the explanation and justification in SECTION III, (see table below)

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Explanation and justification table for in-lieu WLPZ practices. SECTION III This table is consistent with the table provided in the CalTREES online submission.				
Map reference point	Standard rule	Describe each proposed practice	Explain how proposed practice differs from the standard practice	How is the proposed practice equal to the standard rule?
None				

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ITEM #28 DOMESTIC WATER NOTIFICATIONS	
DOMESTIC WATER NOTIFICATIONS	
Per 14 CCR 1032.10 – The THP submitter shall provide notice by letter to all other landowners within 1,000 feet downstream of the THP boundary whose ownership adjoins or includes a Class I, II, or IV watercourse(s) which receives surface drainage from the proposed timber operations. The notice shall request that the THP submitter be advised of surface domestic water use from the watercourse, within the THP or within 1,000 feet downstream of the THP boundary. When required to notice by letter, publication shall also be given one time by the THP submitter in a newspaper of general circulation in the area affected by the proposed project. Such letter and publication shall notify the adjoining party: • of the proposed timber operation. • describe its legal location. • identify the name, if any, of the watercourse it may affect. • request a response by the property owner within ten days of the post-marked date on the letter or the date of publication as appropriate. The RPF may propose, with justification and explanation, an exemption to such notification requirements, and the Director may agree. Copies of either notice, proof of service and publication, and any responses shall be attached to the THP (SECTION V) when submitted. If domestic use is noted, the plan shall contain mitigations necessary to protect domestic water use. THE PLAN SHALL NOT BE SUBMITTED UNTIL <u>TEN DAYS</u> AFTER THE ABOVE NOTIFICATION(S) HAVE BEEN COMPLETED	
a. ☒ Yes ☐ No	Are there any landowners with 1,000 feet downstream of the THP boundary whose ownership adjoins or includes a class I, II or IV watercourse(s) which receive surface drainage from the proposed timber operations? If YES, the requirement of 1032.10. Proof of letter notification shall be included in THP SECTION V. If NO, notification exemption request below need not be answered. See letter to downstream landowners and adjacent landowners in Section V. Mailed 2-15-2023. No response has been received. 3-20-2023.
b. ☐ Yes ☒ No ☐ Letter ☐ Newspaper ☐ Both	Is an exemption to the notification requirements requested? (Check notification requesting to be exempted) If YES, provide the explanation and justification for the exemption request in SECTION III of the THP.

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c1. ☐ Yes ☒ No	Was any information received in response to domestic water notifications indicating domestic water supplies may be present within or downstream of the project area? Notification was mailed 2-15-2023, no response was received, 3-20-2023. See THP Section V.
c2. ☐ Yes ☒ No	If YES, are there any additional mitigation measures needed beyond that required by standard watercourse and lake protection rules? If YES, provide the site-specific instruction to the LTO in SECTION II.

ITEM #29		SENSITIVE WATERSHEDS	
☐ Yes ☒ No N/A		Is any part of the THP area within a Sensitive Watershed as designated by the Board of Forestry and Fire Protection? If YES, identify the watershed and list the special rules, operating procedures or mitigation that will be used to protect the resources identified at risk.	
WATERSHED	SPECIAL RULE	MITIGATION MEASURES PROTECTING RESOURCES IDENTIFIED AT RISK	

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ITEM #30 – HAZARD REDUCTION	
HAZARD REDUCTION	
Per 14 CCR 917, 937, 957 - Hazard reduction shall provide standards for the treatment of snags and logging slash in order to reduce fire and pest safety hazards in the logging area, to protect such area from potential insect and disease attack, and to prepare the area for natural or artificial reforestation while retaining wildlife habitat. Per 14 CCR 917.2, 937.2, & 957.2 – The following standards shall apply to the treatment of slash created by timber operations within the plan area and on roads adjacent to the plan area.	
a. ☐ Yes ☒ No	Will slash treatment occur within 100 feet of the edge of the traveled surface of a PUBLIC road?
b. ☐ Yes ☒ No	Will slash treatment occur within 50 feet of the edge of the traveled surface of PERMANENT private roads open for public use where permission to pass is not required?
c. ☐ Yes ☐ No N/A	[SOUTHERN only] Will slash treatment occur within 50 feet of the edge of the traveled surface of SEASONAL private roads open for public use where permission to pass is not required?
	If YES to any of the above, slash created, or trees knocked down by road construction or timber operations shall be treated by: (Select all that apply) ☐ lopping for Fire hazard reduction per (14 CCR 895.1) ☐ Piling and burning per (14 CCR 917.2, 937.2, 957.2(a)(1-3)) ☐ chipping ☐ burying ☐ removal ☐ Other (explain)
d. ☒ Yes ☐ No	Are there any permanently located structures maintained for human habitation in the project area requiring slash treatment? If YES, identify distance slash treatment will occur and indicate the method of treatment. ☐ Within 100 feet of permanent structure ☒ Removed. ☐ Piled and burned per (14 CCR 917.2, 937.2, 957.2(a)(1-3)) ☐ Other (explain) ☐ Between 100-200 feet of permanent structure ☐ Lopped for fire hazard reduction (per 14 CCR 895.1) ☒ removed. ☐ chipped ☐ Piled and burned per (14 CCR 917.2, 937.2, 957.2(a)(1-3)) ☐ Other (explain) All slash will be removed, burned and or chipped within the project area. The project area will be a vineyard.
e. ☐ Yes ☒ No	Has the RPF or Director determined there is an unusual fire risk or other hazard exists within the proposed project area? If YES then lopping is required within 200-500 feet of permanent structures.

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f. ☐ Yes ☒ No	Is the RPF proposing any alternatives to treating slash along roads and within 200 feet of structures. If YES, the RPF shall explain and justify in the plan how equal fire protection will be provided. The explanation and justification shall include:
	Description of the alternative treatment(s):
	Estimated amount / distribution of slash:
	Type of remaining vegetation:
	Topography:
	Climate:
	Degree of public exposure fire history:
	Provide a description of where the alternative will be used: (mapping area(s) is suggested)

g. ☒ Yes ☐ No	Will piling and burning be used for hazard reduction? If YES, refer to 14 CCR 917.2, 937.2, 957.2(a)(1-3). (Select all that apply) ☒ Piles created prior to September 1 shall be treated not later than April 1 of the year following its creation, or within 30 days following climatic access after April 1 of the year following its creation. ☒ Piles created on or after September 1 shall be treated not later than April 1 of the second year following its creation, or within 30 days following climatic access after April 1 of the second year following its creation.
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h. ☐ Yes ☒ No	Is the RPF proposing any alternatives to piling and burning from those required in 14 CCR 917.2, 937.2, 957.2(a)(1-2)? If YES, the RPF shall provide an explanation and justification in the plan to be approved by the director.
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ITEM # 32 – BIOLOGICAL RESOURCES	
LISTED PLANT or ANIMAL SPECIES INCLUDING HABITAT	
a. ☒ Yes ☐ No	Are there any ANIMAL SPECIES, including their habitat(s), which are listed as rare, threatened or endangered under Federal or state law, or a sensitive species by the Board of Forestry associated with the THP area? If YES, identify the animal species and the provisions to be taken for the protection of the species.

Listed and Sensitive Animal Species Table					
Animal Species	Species type Mammal / bird / reptile / amphibian / fish / Invertebrate	FEDERAL Threatened / endangered /	STATE Threatened / endangered / candidate	BOF Sensitive	Protection measures
Northern Spotted Owl	Bird	Threatened, federally listed under the Endangered Species Act	Threatened, State-listed in California	Listed as sensitive	THP Mitigation #4, NSO protocol. Recommendation: Northern Spotted Owl surveys are required. The protocol survey requires a minimum of 2 years of surveys prior to tree removal when harvesting within northern spotted owl habitat, with surveys required in each year harvest activities are to occur. Two years of protocol surveys have been completed (2020 and 2021 breeding seasons) with no northern spotted owls or barred owls detected. A separate northern spotted owl assessment report has been completed specifically for this Project and can be found in Appendix I.
Gray Wolf <i>Canis lupus</i>	Mammal	Endangered			If a suspected gray wolf den/rendezvous site is discovered during the course of operations, the LTO will immediately cease all vegetative disturbance operations within 200 feet of the potential den/rendezvous site. If a gray wolf is detected, the LTO shall contact the RPF, who will then notify biology staff and the California Department of Fish and Wildlife (CDFW). A consultation with CDFW and CAL FIRE will be requested by the RPF to evaluate the need to implement additional protection measures, and if necessary, amend those into the plan.
Western Bumble Bee (<i>Bombus occidentalis occidentalis</i>), Crotch bumble bee (<i>bombus crotchii</i>)			California Endangered Species candidate		The project property and plan area do not have meadows and grasslands capable of supporting bumble bees. The Biological report, Appendix B, lists Avena spp.-Bromus spp. Herbaceous Semi Natural Alliance as being present on a portion (3.3 acres) of the property. The landowner mows all areas of the property with weed whackers and a mowing machine. He also uses goats to maintain the grasses. As such habitat for the bumble bee is not present. This maintenance of the grasslands and forest lands, on an annual basis helped save most of the property and all of the buildings from the 2020 Glass Fire.

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Should a listed species (plant and/or animal) be found within or adjacent to the THP area, the RPF will complete and submit a Native Species Occurrence form to the California Natural Diversity Database (CNDDB) to document any positive detection of rare, threatened, or endangered species.

b. ☐ Yes ☒ No	Are there any <u>PLANTS</u>, including their habitat(s), which are listed as rare threatened or endangered under Federal or state law, or a sensitive species by the Board of Forestry associated with the THP area? If YES, identify the plant species and the provisions to be taken for the protection of the species.
	A Biological Resource Reconnaissance Survey was prepared by Forest Ecosystem Management, See Appendix B. The biology report did not find any listed plants within, or adjacent to, the proposed project. The report did make the following recommendation that, “The Study Area should be revisited by the Biologist/Botanist after the Emergency Timber Operations have been completed to assess post-fire logging habitat. To address Napa County’s request of results of post logging field visit”, See appendix B page 33. This was done on July 12, 2022; Heather Morrison (Botanist) visited the Miller Project Area. “This site visit took place after the CalFire Emergency Notice of Timber Operations. The purpose of the visit was to determine what, if any, of the overstory canopy remained post fire/post logging. Approximately 40% of the overstory canopy cover was removed due to logging dead/dying trees within the Project Area, with 20% of the overstory canopy covered removed outside the Project Area (per Scott Butler, RPF). The entire property had little to no ground vegetation (shrubs and forbs) both pre and post fire and logging. There have been sheep grazing on the property, which removes ground vegetation. Within the Project Area footprint, the site has always and still is “park-like”, with a little more multi-tied vegetation on the steeper slopes (outside the project area), although the sheep did have access to this area as well.”

Plant Species Table				
Plant Species	FEDERAL Threatened / endangered	STATE Rare / Threatened / Endangered	CRPR (1A, 1B, 2A, 2B, 3, 4)	Protection measures
N/A				

Non-listed species impacts		
c. ☐ Yes ☒ No	Are there any NON-LISTED species which will be significantly impacted by the operation? If yes, identify the species and the provisions to be taken for the protection of the species.	
Non-Listed Species Table		
Species	Species type Mammal / bird / reptile / amphibia / fish / Invertebrate	Protection measures
N/A		

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Animal Species Table		
Species	Species type Mammal / bird / reptile / amphibia / fish / Invertebrate	Protection measures
Nesting Raptors	Bird	THP mitigation #5, Raptor and Nesting Bird Surveys Recommendation: If tree removal is anticipated during primary bird nesting season (15FEB – 15AUG) Raptors (15FEB-15SEP), a preconstruction nesting bird survey will be necessary. The preconstruction survey shall consider all potential nesting habitat for birds within 500' of earthmoving activities and related project construction activities. A qualified surveyor shall conduct the surveys, which shall determine through field inspection whether occupied nests are present within the proximity of the Project site. Survey should focus primarily on nesting raptors, but also include nesting songbirds (purple martins, olive-sided flycatchers). Surveys for nesting birds should be conducted within 14 days prior to tree removal or groundbreaking on the Project site. If an active nest is located near the Project Area or Project Area access routes, and there is the potential to affect breeding success; the biologist will establish an appropriate exclusion zone around the nest (often a 500' no disturbance buffer zone for raptors). This exclusion zone may be modified depending upon the species, nest location, disturbance history, and existing visual buffers. This no-disturbance buffer zone will be effective until the end of the breeding season or until it is determined by the biologist that all the young have fledged or the nest has failed.
Purple Martins Olive Sided Flycatcher	Bird	THP Mitigation #5 Raptor and Nesting Bird Surveys Recommendation: If tree removal is anticipated during primary bird nesting season (15FEB – 15AUG) Raptors (15FEB-15SEP), a preconstruction survey will be necessary. The preconstruction survey can be combined with the nesting bird survey recommended above. To include the purple martin and olive-sided flycatcher, the nesting survey should be completed by a surveyor familiar with their vocalizations. Snags and cavity trees should be searched for evidence of potential nesting birds.
Roosting Bats	Mammal	THP Mitigation #6, Bat survey Recommendation: If initial ground disturbance occurs during the bat maternity roosting season (15MAR – 15SEP), a preconstruction potential bat roosting tree survey will be necessary. The preconstruction survey shall consider all potential bat roosting trees within 500' of earthmoving activities and related project construction activities. The surveyor will flag and map trees that could potentially be used by roosting bats. If no suitable tree roosting habitat is detected, then no further surveys will be warranted. If a maternal roosting site is found within or immediately adjacent to the Project boundary, then those trees shall be removed between 15AUG – 15OCT or before evening temperatures fall below 45-degree Fahrenheit and/or more than 1" of rainfall within 24 hours occurs; OR remove trees between 28FEB and 15MAR. If a maternal roosting site is found during the pre-construction Bat Survey, additional consultation with CDFW will occur prior to removal. If potential roosting trees are found and subject to removal as part of the proposed project, they should be removed over the course of two days. On the first day, as late in the day as possible, some limbs may be removed (if there are any) as well as other nearby trees not flagged as potential bat roosting habitat. This amount of disturbance should cause any roosting bats to find another roost during their nighttime foraging. As the potentially roosting bats will have left over the course of the night, the rest of the tree can be harvested on the second day, as late in the day as possible. Due to the distance (300') and topography, the large rock outcrop to the west of Block B does not require bat surveys. The site will not be disturbed by Project activities.

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Fencing		
		Recommendation: Deer fencing should be designed with at least 2 gates and limited to vineyard blocks to allow larger wildlife species to freely move through the area. Any additional deer fencing should use 6" square mesh at the base instead of the traditional 3" X 6" rectangular openings to allow smaller mammals and birds to move through the fence. All of the property is presently fenced, no additional fencing is proposed.

ITEM # 33 – SNAGS	
SNAGS	
Per 14 CCR 919, 939, 959 – Timber operations shall be planned and conducted to maintain suitable habitat for wildlife species as specified by the provisions of Article 9 of the Forest Practice Rules. Within the logging area all snags shall be retained to provide wildlife habitat with the exception of snags for safety reasons Per 14 CCR 919.1, 939.1, 959.1(a)-(f)	
a. ☐ Yes ☒ No	Are there any snags which must be felled for fire protection or safety reasons? All snags required to be felled for fire protection and safety issues were felled under the Cal Fire Emergency notice.
b. ☐ Yes ☒ No	Will snags over 20 feet in height and 16 inches dbh be felled within 100 feet of a main ridge that is suitable for fire suppression? If YES, ridge shall be delineated on a THP map.
c. ☐ Yes ☒ No	Will snags over 20 feet in height and 16 inches dbh be felled within 100 feet of all public roads, permanent roads, landings, and railroads? (Select all that apply) ☐ Public road(s) ☐ Permanent road(s) ☐ Landing(s) ☐ Railroad(s) The project area is on private property and is not accessible to the public.
d. ☐ Yes ☒ No N/A	Will snags be felled where federal and state safety laws and regulations require the felling of snags?
e. ☐ Yes ☒ No N/A	Will snags be felled within 100 feet of structures maintained for human habitation?
f. ☐ Yes ☒ No N/A	Will merchantable snags be felled in any location as provided for in the plan?
g. ☐ Yes ☒ No	Will snags be felled as required to control insect or disease concerns?

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ITEM # 34 LATE SUCCESSIONAL FOREST STANDS	
LATE SUCCESSIONAL FOREST STANDS	
a. ☐ Yes ☒ No	Are any Late Successional Forest stands proposed for harvest? If YES, describe measures to be implemented by the LTO to avoid long-term significant adverse effects on fish, wildlife and listed species known to be primarily associated with late successional forests.

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ITEM # 35 –OTHER WILDLIFE PROTECTION REQUIRED BY FOREST PRACTICE RULES	
a. ☐ Yes ☒ No	Are there any other provisions for wildlife protection required by the rules? If YES, describe.
Description:	

SOUTHERN FOREST DISTRICT ONLY	
Per 14 CCR 959.15(a) Protection of Wildlife Habitat (a) Where present at time of timber harvest, 400 sq. ft. basal area of oak per 40 acres should be retained and protected, giving preference to deciduous oaks. Oaks should be retained on areas designated by <u>CDFW</u> as deer migration corridors, holding areas, or key ranges when consistent with good forestry practices.	
b. ☐ Yes ☒ No N/A	Will timber operations occur where the pre-harvest stand consists of 400 square feet basal area of oak per 40 acres?
c. ☐ Yes ☒ No	Is any of the proposed harvest area within an area designated by CDFW as deer migration corridors, holding areas, or key ranges?
	If YES, to one or both questions above provide direction to the LTO identifying oak retention shall occur to comply with 14 CCR 959.15. Provide site-specific instructions to the LTO indicating how Oak tree protection will be accomplished. (if necessary provide a map of these areas for the LTO)

ITEM # 36 – CULTURAL RESOURCES	
ARCHAEOLOGICAL / HISTORICAL	
a. ☒ Yes ☐ No	Has an archaeological / historical survey been made for the THP area?
b. ☒ Yes ☐ No	Has a current archaeological / historical records check been conducted for the THP area? See Appendix E, Confidential Archaeological Addendum <u>THP Mitigation #7, Archaeology, Post Review Site Discovery</u> No cultural resources sites were discovered as a result of the survey; however, the possibility of buried or obscured cultural resources does exist. Should archaeological materials be discovered during future development, we recommend that all activity be temporarily halted in the vicinity of the find(s), and that a qualified archaeologist be retained to evaluate the find(s) and to recommend mitigation procedures, if necessary. Prehistoric archaeological materials include, but are not limited to, obsidian, chert, and basalt flakes and artifacts, groundstone (such as mortars and pestles) and human graves. Historic archaeological materials include, but are not limited to, glass bottles, privys, and ceramics. Post Review Site Discovery Procedures: 14 CCR 949.3 If a person discovers a potentially significant archaeological or historical site after a plan, Emergency Notice, or Exemption is accepted by the Director, the following procedures apply: - The person who made the discovery shall immediately notify the Director, LTO, RPF, or timberland owner of record. - The person first notified in (a) shall immediately notify the remaining parties in (a). - No timber operations shall occur within 100 feet of the identified boundaries of the new site until the plan submitter proposes, and the Director agrees to, protection measures pursuant to 14 CCR Sec. 929.2 (949.2,969.2).

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	d. A minor deviation shall be filed to the plan. The minimum information provided shall include: 1. A statement that the information is confidential. 2. The mapped location of the site. 3. A description of the site. 4. Protection measures, and 5. Site records, if site records are required pursuant to 14 CCR Sec. 929.1 (g) (Z) (b) and 929.5 (a) (4) (b), 969.51. e. Upon receipt, the Director shall immediately provide the proposed minor deviation or portions of the minor deviation, to Native Americans when Native American archaeological or cultural sites are involved. <u>THP Mitigation #8, Archaeology, discovery of human remains.</u> In accordance with the California Health and Safety Code, if human remains are uncovered during ground-disturbing activities, work within 50 feet shall be halted, and the project proponent and lead agency shall be immediately contacted; in turn, they shall immediately contact the County Coroner to determine the nature of the remains. If the coroner determines that the remains are those of a Native American, he or she must contact the NAHC by phone within 24 hours of making that determination (Health and Safety Code Section 7050[c]). Following the coroner's findings, the property owner, contractor or project proponent, an archaeologist, and the NAHC-designated Most Likely Descendent (MLD) shall determine the ultimate treatment and disposition of the remains and take appropriate steps to ensure that additional human interments are not disturbed. The MLD shall have 48 hours to complete a site inspection and make recommendations after being granted access to the site. A range of possible treatments for the remains, including nondestructive removal and analysis, preservation in place, relinquishment of the remains and associated items to the descendants, or other culturally appropriate treatment may be discussed. The landowner or their authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance if the NAHC is unable to identify a MLD or the MLD fails to make a recommendation within 48 hours after being granted access to the site. The landowner or their authorized representative may also re-inter the remains in a location not subject to further disturbance if they reject the recommendation of the MLD, and mediation by the NAHC fails to provide measures acceptable to the landowner.
c. ☐ Yes ☒ No	During pre-field research and surveys were archaeological or historical sites identified within the plan area? If YES, THIS INFORMATION IS CONFIDENTIAL AND NOT AVAILABLE TO REVIEW AGENCIES, OTHER THAN CAL FIRE, AND THE GENERAL PUBLIC. RPF is advised to complete the Confidential Archaeological Addendum (CAA) and place in Section VI of the THP.

MILLER VINEYARD THP**ITEM # 37 – GROWTH AND YIELD INFORMATION**

☐ Yes ☒ No	Has any inventory or growth and yield information designated “TRADE SECRET” been submitted in a separate confidential envelope in Section VI of this THP? If YES, THIS INFORMATION IS CONFIDENTIAL AND NOT AVAILABLE TO REVIEW AGENCIES.
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SECTION II**ITEM # 38 – SPECIAL INSTRUCTIONS OR CONSTRAINTS for LTO**

Mitigation Measure Number	THP page #	INSTRUCTION
1	2	<u>THP Mitigation #1 Startup of operations and Completion meeting</u> Notification of the commencement of operations shall be provided per 1035.4 to Cal Fire, CDFW, Napa County Planning. Kim Sone kim.sone@fire.ca.gov .
2	17	<u>THP mitigation #2. Sudden Oak Death Syndrome</u> 1. RPF (or LTO for most Exemptions) should inform personnel that they are working in an area with Sudden Oak Death disease, unauthorized movement of plant material is prohibited, and the intent of mitigation measures is to prevent disease spread (14 CCR 1035.2). If some sites in the general operating area are found to be disease-free or have a low incidence of disease, consider initiating operations on these sites before moving to more heavily infested sites. 2. To the extent practical and feasible, route equipment away from host plants and trees, especially in areas with disease symptoms. Locate landings, log decks, logging roads, tractor roads, and other sites of equipment activity away from host plants, especially in areas with disease symptoms. 3. Each time equipment or vehicles leave the site, the equipment or vehicles should be inspected by operations personnel, under the direction of the LTO, for host plant debris (leaves, twigs, and branches). Host plant debris should be removed from equipment and vehicles prior to their departure. This applies to all equipment and vehicles associated with the operation, including logging equipment, log-hauling trucks, pick-up trucks, employee's personal vehicles, etc. An exception will be granted for equipment or vehicles that leave the site temporarily and will not be traveling to uninfested areas prior to their return. 4. Conduct operations during the dry season. Utilize paved and rocked roads and landings to the extent possible. 5. After working in an infested area, remove or wash off accumulations of soil, mud, and organic debris from shoes, boots, vehicles, and heavy equipment, etc. before traveling to an area that is not infested with Sudden Oak Death. Lysol® or a bleach solution can be used to disinfect shoes and boots after cleaning. 6. Inspect loads of logs and equipment leaving the site to ensure that no host material is being transported without a permit. This may require cleaning mud from vehicle to remove host plant material imbedded in mud, depending on conditions when the timber harvest is conducted. Consider establishing an equipment power wash station. The station should be: located within the generally infested area, paved or rocked, well drained so that vehicles exiting the station do not become contaminated by the wash water, located where wash water and displaced soil does not have the potential to carry fines to a watercourse (see “Saturated Soil Conditions” in 14 CCR 895.1), pay particular attention to sites where soil and organic debris may accumulate. See Detail page 17 of the THP.

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3	32	<u>THP Mitigation #3, Winter Weather Operating Plan and Timber Falling</u> 1. No heavy equipment is allowed at any time, except an excavator used for pile burning. 2. Fallers' vehicles will operate on rocky road surfaces at all times. 3. All aspects of the winter weather operating period plan are in effect. 4. Trees shall be felled to lead in a direction away from WLPZ and fencing and shall not be allowed to fall outside of the project area. 5. Trees shall be felled in conformance with watercourse and lake protection measures incorporated in the timber harvesting plan and consistent with Article 6 of the rules. 6. Timber falling activities must cease prior to February 1st and cannot resume until NSO protocols have been met in the spring. See detail page 32 of the THP.
4	53	<u>THP Mitigation #4 Northern Spotted Owl Surveys</u> Recommendation: Northern Spotted Owl surveys are required. The protocol survey requires a minimum of 2 years of surveys prior to tree removal when harvesting within northern spotted owl habitat, with surveys required in each year harvest activities are to occur. Two years of protocol surveys have been completed (2020 and 2021 breeding seasons) with no northern spotted owls or barred owls detected. A separate northern spotted owl assessment report has been completed specifically for this Project and can be found in Appendix I. NSO surveys must be completed and submitted to Cal Fire prior to the start of operations. See Detail page 53 of the THP.
5	55	<u>THP mitigation #5, Raptor and Nesting Bird Surveys</u> Recommendation: If tree removal is anticipated during primary bird nesting season (15FEB – 15AUG) Raptors (15FEB-15SEP), a preconstruction nesting bird survey will be necessary. The preconstruction survey shall consider all potential nesting habitat for birds within 500' of earthmoving activities and related project construction activities. A qualified surveyor shall conduct the surveys, which shall determine through field inspection whether occupied nests are present within the proximity of the Project site. Survey should focus primarily on nesting raptors, but also include nesting songbirds (purple martins, olive-sided flycatchers). Surveys for nesting birds should be conducted within 14 days prior to tree removal or groundbreaking on the Project site. If an active nest is located near the Project Area or Project Area access routes, and there is the potential to affect breeding success; the biologist will establish an appropriate exclusion zone around the nest (often a 500' no disturbance buffer zone for raptors). This exclusion zone may be modified depending upon the species, nest location, disturbance history, and existing visual buffers. This no-disturbance buffer zone will be effective until the end of the breeding season or until it is determined by the biologist that all the young have fledged or the nest has failed. See Detail page 55 of the THP.
6	55	<u>THP mitigation #6, Bat survey</u> Recommendation: If initial ground disturbance occurs during the bat maternity roosting season (15MAR – 15SEP), a preconstruction potential bat roosting tree survey will be necessary. The preconstruction survey shall consider all potential bat roosting trees within 500' of earthmoving activities and related project construction activities. The surveyor will flag and map trees that could potentially be used by roosting bats. If no suitable tree roosting habitat is detected, then no further surveys will be warranted.. If a maternal roosting site is found within or immediately adjacent to the Project boundary, then those trees shall be removed between 15AUG – 15OCT or before evening temperatures fall below 45-degree Fahrenheit and/or more than 1" of rainfall within 24 hours occurs; OR remove trees between 28FEB and 15MAR. If a maternal roosting site is found during the pre-construction Bat Survey, additional consultation with CDFW will occur prior to removal.

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		If potential roosting trees are found and subject to removal as part of the proposed project, they should be removed over the course of two days. On the first day, as late in the day as possible, some limbs may be removed (if there are any) as well as other nearby trees not flagged as potential bat roosting habitat. This amount of disturbance should cause any roosting bats to find another roost during their nighttime foraging. As the potentially roosting bats will have left over the course of the night, the rest of the tree can be harvested on the second day, as late in the day as possible. Due to the distance (300') and topography, the large rock outcrop to the west of Block B does not require bat surveys. The site will not be disturbed by Project activities. <u>See detail page 56 of the THP</u>
7	58	<u>THP Mitigation #7, Archaeology, Post Review Site Discovery</u> No cultural resources sites were discovered as a result of the survey; however, the possibility of buried or obscured cultural resources does exist. Should archaeological materials be discovered during future development, we recommend that all activity be temporarily halted in the vicinity of the find(s), and that a qualified archaeologist be retained to evaluate the find(s) and to recommend mitigation procedures, if necessary. Prehistoric archaeological materials include, but are not limited to, obsidian, chert, and basalt flakes and artifacts, groundstone (such as mortars and pestles) and human graves. Historic archaeological materials include, but are not limited to, glass bottles, privys, and ceramics. Post Review Site Discovery Procedures: 14 CCR 949.3 If a person discovers a potentially significant archaeological or historical site after a plan, Emergency Notice, or Exemption is accepted by the Director, the following procedures apply: - The person who made the discovery shall immediately notify the Director, LTO, RPF, or timberland owner of record. - The person first notified in (a) shall immediately notify the remaining parties in (a). - No timber operations shall occur within 100 feet of the identified boundaries of the new site until the plan submitter proposes, and the Director agrees to, protection measures pursuant to 14 CCR Sec. 929.2 (949.2,969.2). - A minor deviation shall be filed to the plan. The minimum information provided shall include: - A statement that the information is confidential. - The mapped location of the site. - A description of the site. - Protection measures, and - Site records, if site records are required pursuant to 14 CCR Sec. 929.1 (g) (Z) (b) and 929.5 (949.5, 969.51). - Upon receipt, the Director shall immediately provide the proposed minor deviation or portions of the minor deviation, to Native Americans when Native American archaeological or cultural sites are involved. <u>See detail page 58 of the THP.</u>
8	59	<u>THP Mitigation #8, Archaeology, discovery of human remains .</u> In accordance with the California Health and Safety Code, if human remains are uncovered during ground-disturbing activities, work within 50 feet shall be halted, and the project proponent and lead agency shall be immediately contacted; in turn, they shall immediately contact the County Coroner to determine the nature of the remains. If the coroner determines that the remains are those of a Native American, he or she must contact the NAHC by phone within 24 hours of making that determination (Health and Safety Code Section 7050[c]). Following the coroner's findings, the property owner, contractor or project proponent, an archaeologist, and the NAHC-designated Most Likely Descendent (MLD) shall determine the ultimate treatment and disposition of the remains and take appropriate steps to ensure that additional human interments are not disturbed. The MLD shall have 48 hours to complete a site inspection and make recommendations after being granted access to the site. A range of possible treatments for the remains, including nondestructive removal and analysis, preservation in place, relinquishment of the remains and associated items to the descendants, or other culturally appropriate treatment may be discussed.

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		The landowner or their authorized representative shall reburial the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance if the NAHC is unable to identify a MLD or the MLD fails to make a recommendation within 48 hours after being granted access to the site. The landowner or their authorized representative may also re-inter the remains in a location not subject to further disturbance if they reject the recommendation of the MLD, and mediation by the NAHC fails to provide measures acceptable to the landowner. See Detail page 59 of the THP.
9	65	<u>THP mitigation #9 Best Management Practices (BMP)</u> Implementation of Napa County BMPs associated with the approved ECP and Initial Study will reduce sediment transport and hydrological run off associated with the project area. See Appendix A and A.1, associated with the installation of the vineyard. The permit holder shall monitor the site during the rainy season (Oct 15 – May 15), including post-installation, application of BMP's, erosion maintenance, and other improvements as needed. See Detail page 68 of the THP
10	113	<u>Mitigation #10 Road use limitations and restrictions.</u> Access to the project area is over the Silverado Trail, Hwy 128, and private access roads. Due to the rural nature of the road, the project proposes the following vehicular limitations and restrictions. 1. The LTO is to advise the drivers of all large vehicles to use extreme caution when transporting equipment, agricultural products, and/or people, especially in areas of limited site visibility. 2. Log Trucks and larger vehicles are to operate with headlights on for safety and are not to exceed posted speed limits. 3. Oversized vehicles are not to use Jake brakes in the immediate vicinity of residential neighborhoods. 4. Signs indicating slow trucks entering the roadway will be placed at a distance of 300 feet in both directions of the project site if warranted. See Detail page 116 of the THP
11	117	<u>THP mitigation #11 GHG Best Management Practices (BMP)</u> The following BMPs will be implemented during construction. • All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) will be watered two times per day. • All haul trucks transporting soil, sand, or other loose material off-site will be covered. • All visible mud or dirt track-out onto adjacent public roads will be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited. • All vehicle speeds on unpaved roads will be limited to 15 mph. • All roadways, driveways, and sidewalks to be paved will be completed as soon as possible. • Idling times will 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 CCR). Clear signage will be provided for construction workers at all access points. • All construction equipment will be maintained and properly tuned in accordance with the manufacturer's specifications. All equipment will be checked by a certified mechanic and determined to be running in proper condition prior to operation. • A publicly visible sign with the telephone number and name of the appropriate Applicant representative regarding dust complaints will be posted. This person will respond and take corrective action within 48 hours. The Air District's phone number will also be visible to ensure compliance with applicable regulations." See detail page 120 of the THP

Environmental Resource Management
 Scott R. Butler, RPF 1851
Miller Vineyard
 General Location Map

Location as marked

Scale 1:24,000
 Calistoga Quad

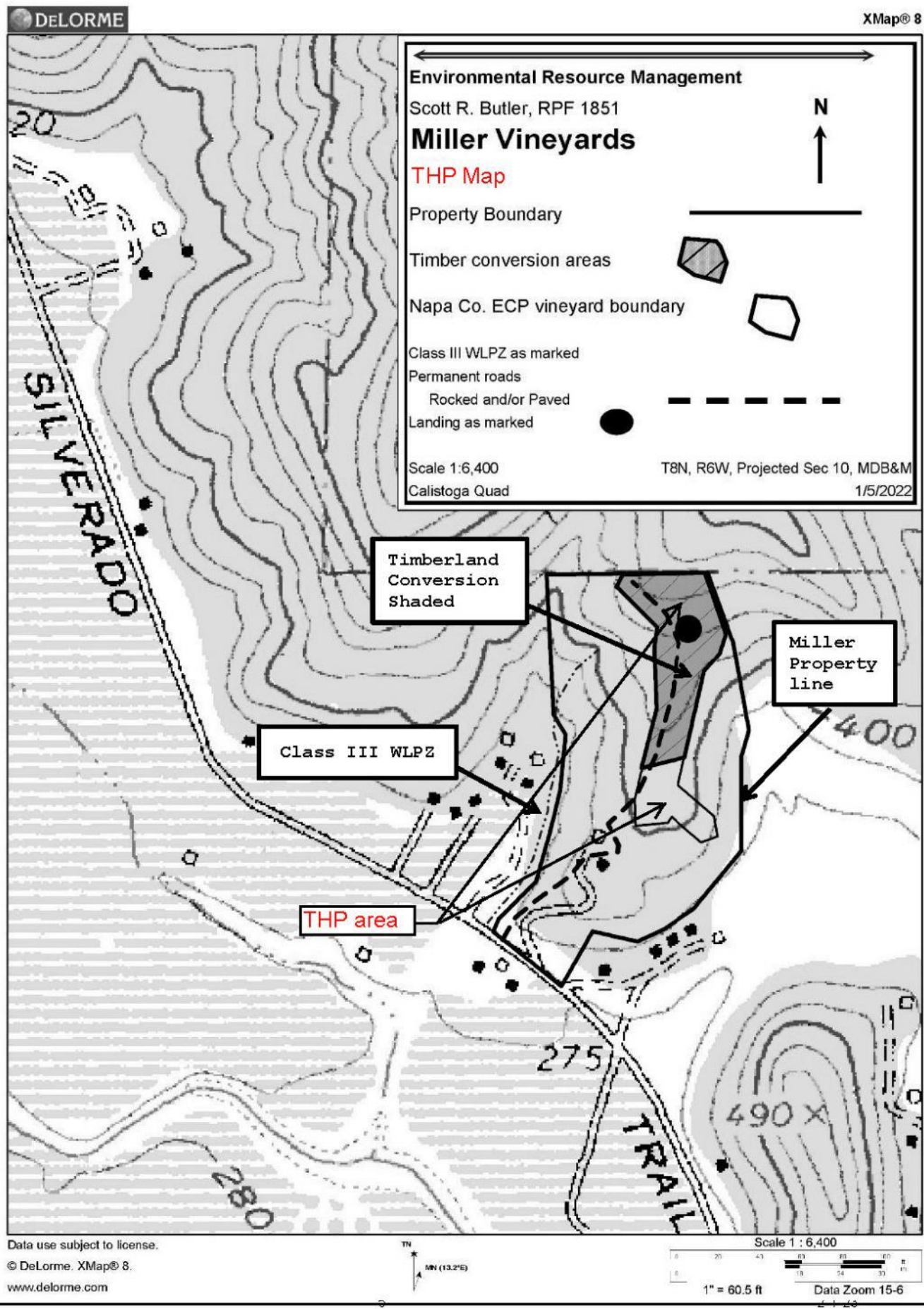
T8N, R6W, Projected Sec 10, MDB&M
 1/5/2022

General Location

Map features include: Silverado Lake, Larkmead Winery, Bale Mill Historical Monument, Glass Mountain, Pratt Valley, and various roads and trails.

Scale: 1" = 227.0 ft
 Data Zoom 14-0

MILLER VINEYARD THP



SECTION III SUPPORT DOCUMENTATION

Non-operational information helpful or required for review.

MILLER VINEYARD THP**Miller Vineyard Development**

The Proposed Project would convert approximately 4.5 acres of timberland to a commercial vineyard within a 28 +/- acre property. The 4.5 acres constitute the timberland conversion area, an additional 1.5 acres of oak woodland will all also be converted to vineyard. The total project size is 6 acres. The property presently has a home, two barns, outbuildings, and existing 1 acre vineyard.

The remaining acreage of the property will not be impacted by the project. The vineyard blocks will include wine grapes as well as internal farm avenues. The net area of the vineyard will be approximately 5 acres. The establishment of the vineyard as part of the Proposed Project is consistent with the current Napa County zoning designation of Agricultural Watershed (AW).

The Project Site is not located within a Timberland Protection Zone (TPZ). However, since the Proposed Project would convert “non-TPZ timberland to a non-timber growing use” through timber operations, in which “future timber harvests will be prevented or infeasible because of land occupancy and activities thereon,” a Timber Conversion Plan (TCP) and approval is required from CAL FIRE, consistent with the Z'berg-Nejedly Forest Practice Act (Division 4, Chapter 8, Public Resources Code) and California Forest Practice Rules (Title 14, California Code of Regulations). The TCP has been submitted to Cal Fire.

Chapter 18.108 of the Napa County Code (Conservation Regulations) requires an Erosion Control Plan be prepared by a Licensed Civil Engineer for the Proposed Project and approved by Napa County because slopes on the Project Site are greater than 5 percent. See the ECP **Appendix A**. Napa County will act as the lead agency and will determine the level of CEQA analysis needed to approve the ECP. The ECP has been submitted and is under county review (P22-00153-ECPA).

Harvested timber would be shipped to receiving locations within the state. All non-merchantable trees and vegetation would be removed, chipped, and/or burned on-site. This process will be consistent with CAL FIRE, Napa County, and San Francisco Bay Area Air Quality Management District standards. Suitable forest products such as lumber, sawlogs, chips, etc. would be marketed as is economically feasible. No new roads, except internal farm avenues within the new vineyard, would be built. As a result of implementation of the Erosion Control Plan (required by Napa County) and the Forest Practice Rules, post-project sediment erosion and peak hydrological runoff are projected to be below pre-project conditions; these aspects are detailed in the hydrological report and sediment report that have been prepared for the Proposed Project and are included as attachments. See **Appendix C and D**.

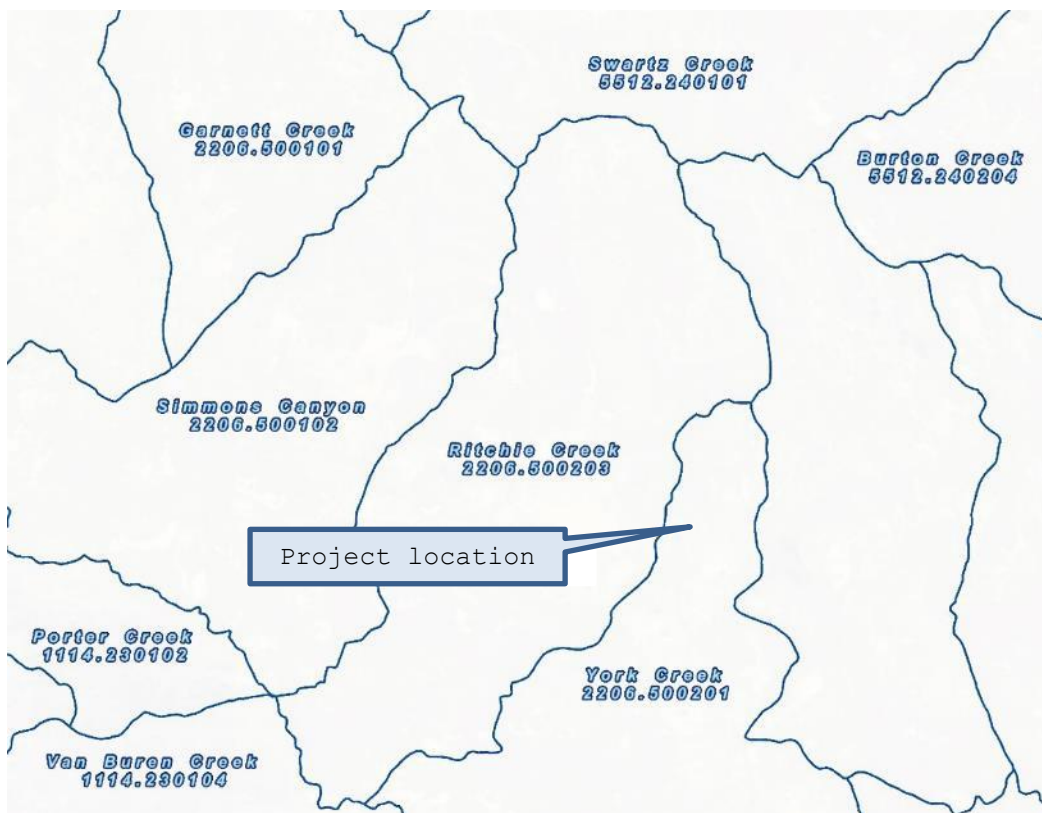
As a result of implementation of the approved Erosion Control Permit, the TCP, the Forest Practice Rules, and implementation of Best Management Practices, sediment transport and hydrological run off will not exceed natural background levels. See the approved Erosion Control Plan and Initial Study, **Appendix A and A.1**.

THP mitigation #9 Best Management Practices (BMP)

Implementation of Napa County BMP's associated with the approved ECP and Initial Study will reduce sediment transport and hydrological run off associated with the project area. See **Appendix A and A.1**, associated with the installation of the vineyard. The permit holder shall monitor the site during the rainy season (Oct 15 – May 15), including post-installation, application of BMP's, erosion maintenance, and other improvements as needed.

MILLER VINEYARD THP**Project Setting**

The Project Site is located on a 29 acre property within a portion of projected Section 10, Township 8 North, Range 6 West MDB&M. Napa County Assessor has designated the parcel number as 021-030-006. The property is located at 3906 Silverado Trail, Calistoga CA 94515, approximately four miles east of downtown Calistoga, Napa County, California. Land uses in the vicinity of the property include vineyards, rural residences, and open space. The property is located on a ridge between York Creek and Richie Creek Watersheds, (Calwater 2206.500201 and Calwater 2206.500203).



The property has several small Class III watercourses, none are adjacent to the proposed project. The one Class III watercourse that is below the project area is well back from any required setback. A map of the property with the Project Site identified is included, see map on page 63.

MILLER VINEYARD THP

The following studies have been developed for the project area and incorporated into the project applications: Biology and Botanical Report, Hydrological Analysis, Water Availability Analysis, and Archaeological Report. The following permits are applicable to the project permit: Erosion Control Plan with Napa County, Timber Conversion Plan with Cal Fire, Timber Harvest Plan with Cal Fire, CEQA document developed by Napa County.

Physical conditions

Topography and Soils: The overall topography of the Study Area is relatively flat to over 60% slopes, ranging from approximately 300 to 530 feet above sea level. According to the Soil Survey (USDA 2021), the Study Area is underlain by four soil mapping units: Bale clay loam (0 – 2% slopes); Boomer loam, volcanic bedrock (2 – 35% slopes, MLRA 15); Boomer gravelly loam, volcanic bedrock (11 – 43% slopes, MLRA 15); and Boomer gravelly loam, volcanic bedrock (14 – 60% slopes, MLRA 15) (Attachment #7).

Bale Clay Loam: The parent material is alluvium derived from rhyolite and/or alluvium derived from igneous rock. The drainage class is somewhat poorly drained with a low runoff class. The depth to the water table is about 48 to 72 inches. This is a prime farmland if irrigated.

Boomer Loam, Volcanic Bedrock: The parent material is residuum weathered from volcanic rock. The drainage class is well drained with a medium runoff class. The depth to the water table is more than 80 inches. This is listed as farmland of statewide importance.

Boomer Gravelly Loam, Volcanic Bedrock: The parent material is residuum weathered from volcanic rock. The drainage class is well drained with a high runoff class. The depth to the water table is more than 80 inches. This is listed as not prime farmland.

Climate and Hydrology: The local watershed is characteristically Mediterranean with cool to warm, dry summers and cool, moist winters. Precipitation occurs exclusively as rainfall with the majority of the annual precipitation falling in October through April. The average annual high temperature for Calistoga is 75 degrees Fahrenheit, with a record high of 106 degrees Fahrenheit, with multiple days exceeding 100 degrees Fahrenheit in 2021 due to “heat domes” and drought conditions (Weather and Climate 2021). The average minimum monthly low temperature is 44 degrees Fahrenheit. Precipitation falls as rain with an annual average of 40.87 inches. Precipitation-bearing weather systems are usually from the west and south with the majority of the rainfall between November and March (US Climate Data).

The primary hydrology for the Study Area is precipitation and surface runoff. During heavy winter/spring rainfall events, evidence of ephemeral directional flow is evident in the form of two ephemeral-intermittent streams, one on the eastern boundary of the property and one on the western boundary (Map #10). No wetlands or other streams are mapped in the Study Area in USFWS National Wetlands Inventory (USFWS NWI 2018) or on the Calistoga 7.5-minute topographic quadrangle (USGS 1993). The Napa River; Ritchey Creek, York Creek and Mill Creek tributaries to the Napa River; Biter Creek a tributary to Dutch Henry Creek; and Dutch Henry Creek a tributary to Napa River in addition to numerous agricultural ponds occur within the Biological Resources Evaluation Area.

Land Cover and Land Use:

The landscape consists of a mosaic of different habitat types including conifers, (Douglas-fir, Knobcone Pine, and Redwoods), hardwoods (Valley Oak, Live Oak, White Oak, Blue Oak, and Black Oak), xeric chaparral, annual grassland, urban, agricultural (mostly vineyard), and lacustrine/riverine varying elevations. The Study Area is along the edge of the highly developed Napa Valley bottom.

MILLER VINEYARD THP

In September 2020, the Glass Wildfire swept through portions of the Napa Valley Watershed, with a portion of this landscape within the wildfire perimeter. The landscape is now a mosaic of severely blacken burned areas to patches of unscathed areas.

The Study Area is a mix of buildings and landscaping, a single 1-acre vineyard block, access roads, and mixed hardwood/conifer forest type all surrounded by a perimeter deer fence. The Glass Wildfire appears to have impacted portions of the forested areas within the property boundary, with the buildings and vineyard still intact. Portions of the property were subject to a severe ground burn, where organic materials were completely combusted, leaving a thick ash layer and stump and root holes that were created where the fire burned the tree root system. Many overstory trees were killed by flame or heat and most of the ground cover and shrubs were burned. An Emergency Notice of operations was applied in the Fall of 2021 to remove the dead and dying trees. Per Scott Butler, RPF, the Emergency Notice will remove approximately 40% of the overstory within the Project Area and 20% of the overstory outside the project area. (Cal Fire Emergency Notice, 1-21EM-00105-NAP)

Vegetation within the project area

See Biological Assessment (Appendix B page 50). Vegetation within the project area is comprised of Douglas Fir Alliance, Coast Live Oak Alliance, and Wild Oak Grassland Alliance.

Pseudotsuga menziesii (Douglas-fir) Alliance – dominant or co-dominant in the tree canopy with *Arbutus menziesii* and *Quercus agrifolia*. Trees are generally less than 75 meters tall and the canopy is intermittent to continuous and may be two tiered. Shrubs are infrequent or common. Herbaceous layer is sparse or abundant. Within the survey area this Alliance was dominated by Douglas-fir with occasional scattering of coast live oak (*Quercus agrifolia*). This Alliance had a moderate to severe burn severity because of the 2020 Glass Fire. Douglas-fir in general do not fare well in intense fires on their shallow root systems, nor to intense heat which can destroy their canopy. Most of these conifers succumbed to the fire and many are subject to removal from the Cal Fire Emergency Notice salvage logging permit that was submitted in 2021.

Quercus agrifolia (coast live oak) Alliance - dominant or co-dominant in the upland tree canopy with *Arbutus menziesii*, *Quercus douglasii*, *Quercus kelloggii*, *Quercus lobata* and *Umbellularia californica*. Trees are generally less than 30 meters tall and the canopy is open (>10%) to continuous, or savanna-like (<10%, but evenly distributed). Shrubs are sparse to intermittent and the herbaceous layer is sparse or grassy. Within the survey area, this Alliance was dominated by coast live oak with listed co- dominants as well as gray pine, *Pinus sabiniana*. This Alliance was heavily burned in the 2020 Glass Fire, but many trees survived and those that did not have subsequently resprouted.

Avena – Bromus (grasslands) Alliance - dominant or co-dominant with other non-natives in the herbaceous layer such as *Atriplex semibaccata* and *Hordeum* spp. This Alliance includes *Avena barbata*, *Avena fatua*, *Brachypodium distachyon*, *Briza maxima*, *Bromus diandrus*, *Bromus hordeaceus* and/or *Hordeum murinum*. Emergent trees and shrubs may be present at low cover. Herbs are generally less than 1.2 meters tall and the cover is open to continuous.

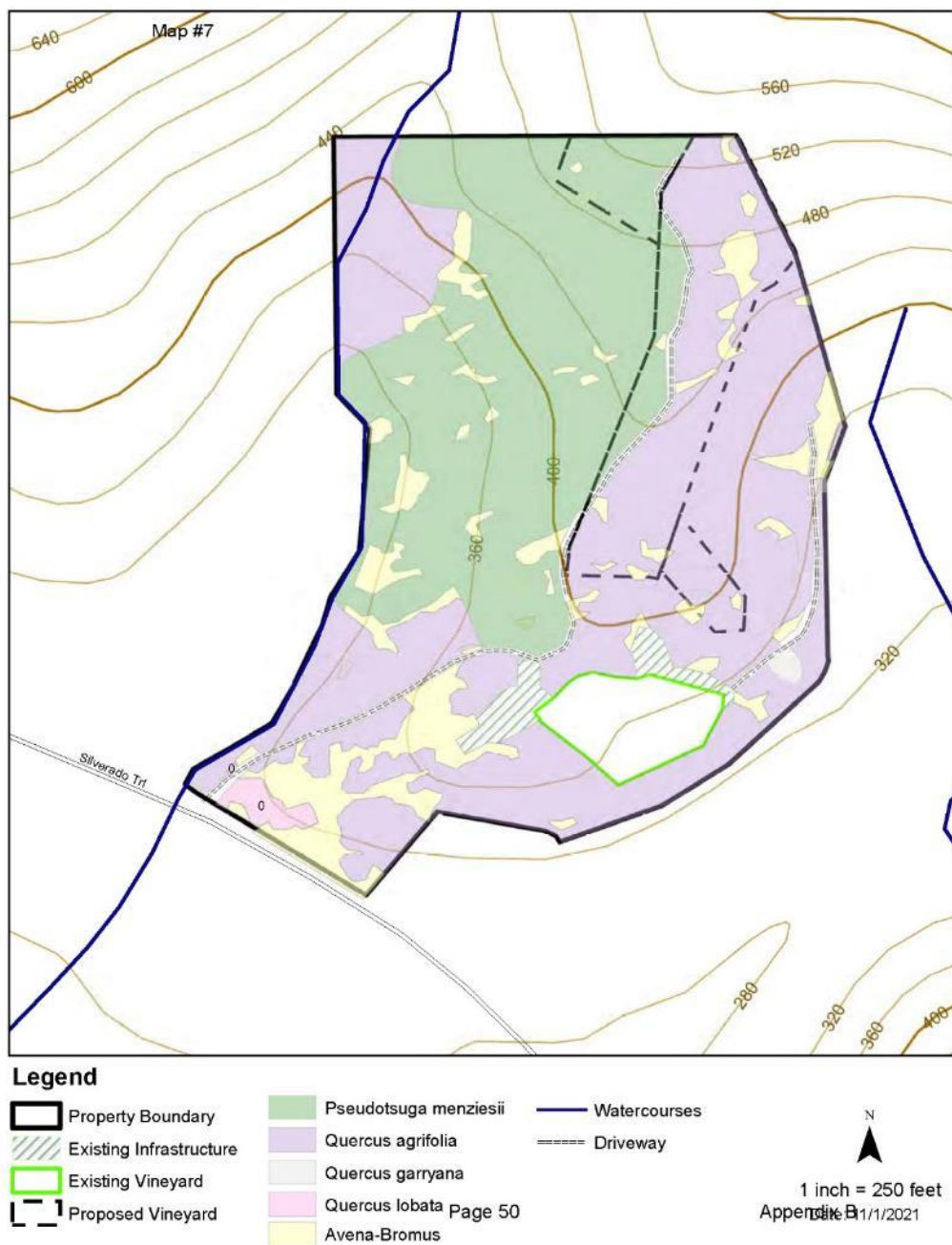
Fire impacts Vegetation on the site has been significantly influenced by past fire events and represent a succession of chaparral to oak woodland to conifer forest. Vegetation age is 50 to 100 years old with some minor components of mature Douglas Fir. Vegetation condition is good, with no significant evidence of decadence or over mature forest vegetation. Plant succession is evident in the understory as oaks and conifers replace understory vegetation.

MILLER VINEYARD THP

The Glass fire has burned most of the Study Area, including the area proposed for this THP, Conversion, and vineyard. The fire killed approximately 30% of the overstory and completely consumed the understory. Hardwoods are resprouting, the conifers have been harvested using an Emergency Notice permit with Cal Fire, 1-21EM-00105-NAP.

Streams in the plan area are seasonal intermittent ephemeral drainages and do not contain instream riparian vegetation but have limited riparian vegetation as an overstory which provides shade. None of the streams or drainages on the property would support fish and are not tributary to fish bearing streams. The vegetation associated with these ephemeral drainages is no different than the upland vegetation (typical riparian trees, shrubs and herbs are not present).

Bio Report map page 50



MILLER VINEYARD THP**Assessment.**

The project proposes 4.5 acres of timberland and 1.5 acres of oak woodland be harvested on the property under a Timber Harvest Plan (THP) consistent with Forest Practice Rules. A separate CEQA process will be undertaken by Napa County acting as the lead agency. This CEQA document will be used by Napa County to approve an Erosion Control Plan, and by Cal Fire to approve the TCP. Subsequent to the timber harvest, a Timber Conversion Permit (TCP) for the 4.5 acres has been submitted to CAL. The TCP and ECP are the direct components through which discretionary actions by Napa County and Cal Fire are subject to analysis.

Due to Fire impacts on the property and the THP area, an emergency notice of timber operations has been filed and completed with Cal Fire (1-21EM-00105 NAP).

As described above, the timber harvest is the part of the Proposed Project, which consists of two direct elements: the conversion of timberland to vineyard, and installation of the ECP. All of these actions affect the development of the Proposed Project on the property and would occur in the following order:

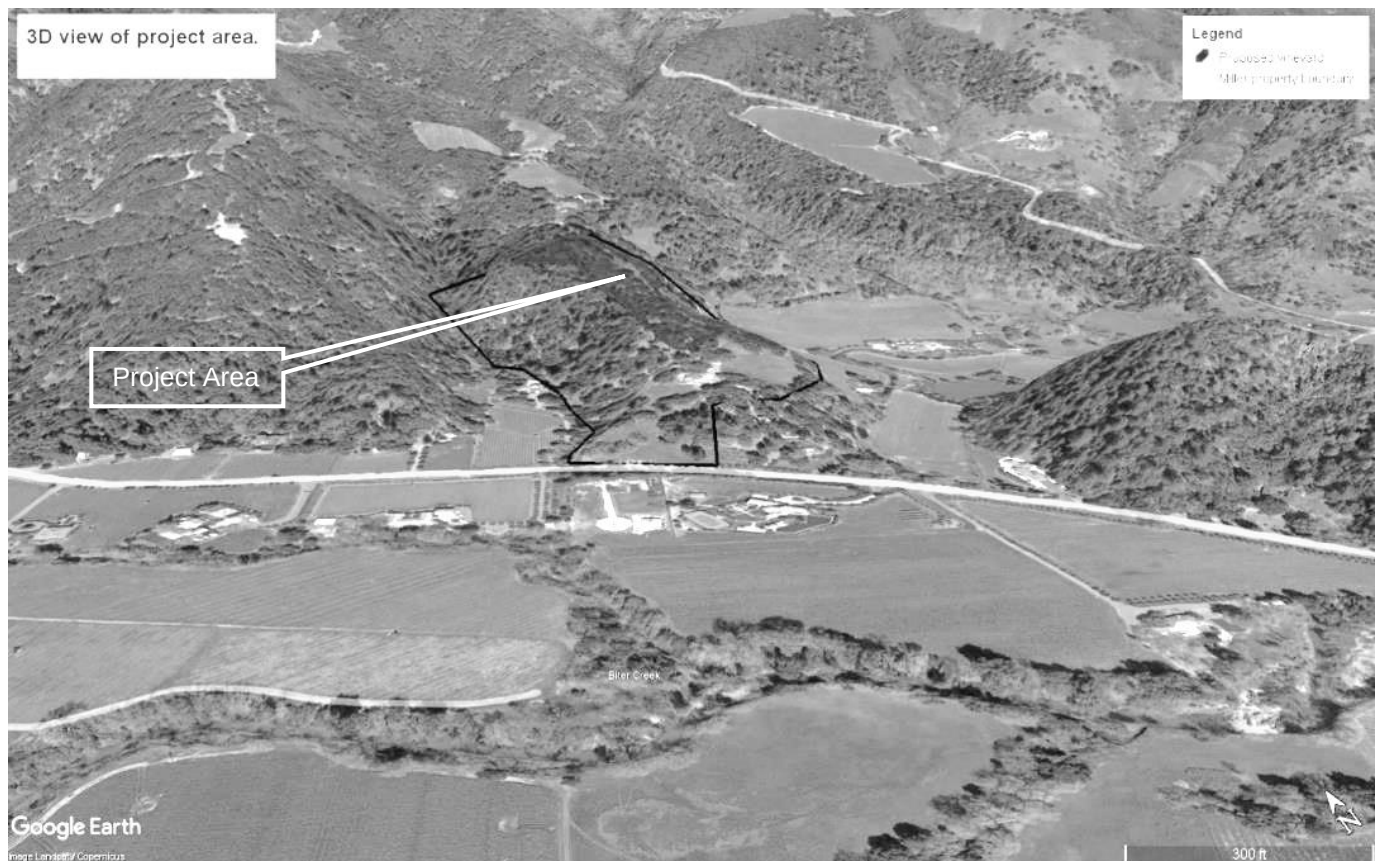
- 1) Harvest of all dead and dying commercial timber on the property, completed.
- 2) The harvest of 4.5 acres of timberland and 1.5 acres of oak woodland on the property permitted under a THP approved by CAL FIRE.
- 3) The conversion of 4.5 acres to a vineyard; and
- 4) The implementation of a County-approved ECP for 6 acres. The ECP is CEQA document required by Napa County for the vineyard development on slopes exceeding five percent.

MILLER VINEYARD THP**Surrounding Land Uses**

The area surrounding the proposed vineyard is rural with scattered residences and vineyards. Each of the residences are associated with an existing vineyard. Most of the area was burned in the 2020 Glass fire. Some of the forest adjacent to the residences did not burn. Several of the residences were consumed in the fire. The vineyards survived basically intact. Approximately 12 homes exist within a ¼ mile radius of the project area.



Google 2020 image

MILLER VINEYARD THP

3 Dimensional Google image

North

This area contains forested oak woodlands, mountainous terrain, one residence and a vineyard. The area was completely burned in the 2020 Glass fire. The home and vineyard survived the fire. Due to topography, the one residence would be able to see the proposed project vineyard. This one residence has an existing vineyard next to it.

West

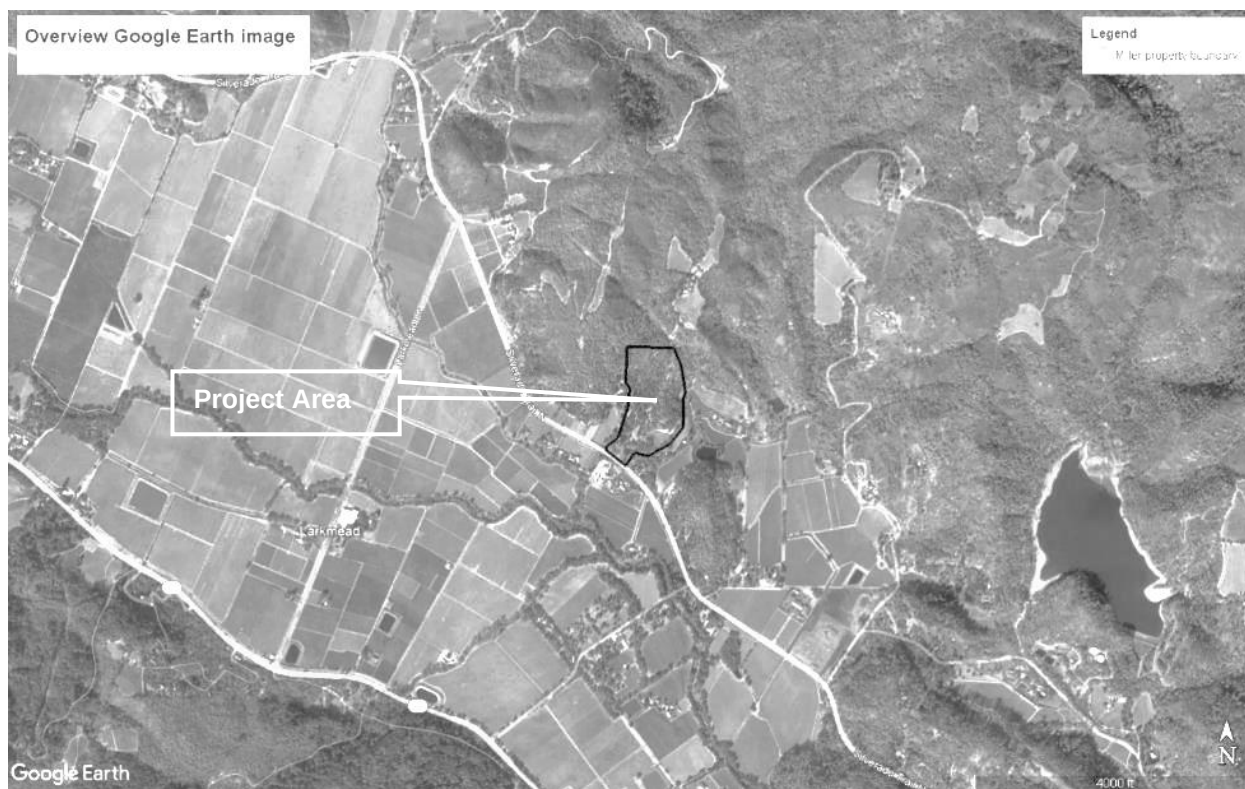
Most of the forested area to the west was burned in the 2020 Glass fire. A portion of the forest below the proposed vineyard did not burn too hot and is intact. Four residences adjacent to the Silverado Trail have view of the slope below the proposed project. Due to the existing live trees on this slope, the proposed vineyard would not be visible. All four of these homes are associated with existing vineyards.

South

The Silverado trail is below the project area. Due to topography and retained unburned trees, it is unlikely that traffic would be able to see the project area. Seven homes exist along the Silverado Trail. All of the homes are associated with an existing vineyard. Some of them may have a view of the proposed project.

East

The area to the east is composed of rolling forested hills and one residence. All of the area, except around the residence, was burned in the Glass fire. The one residence can view the project area. This residence is associated with an existing vineyard.

MILLER VINEYARD THP

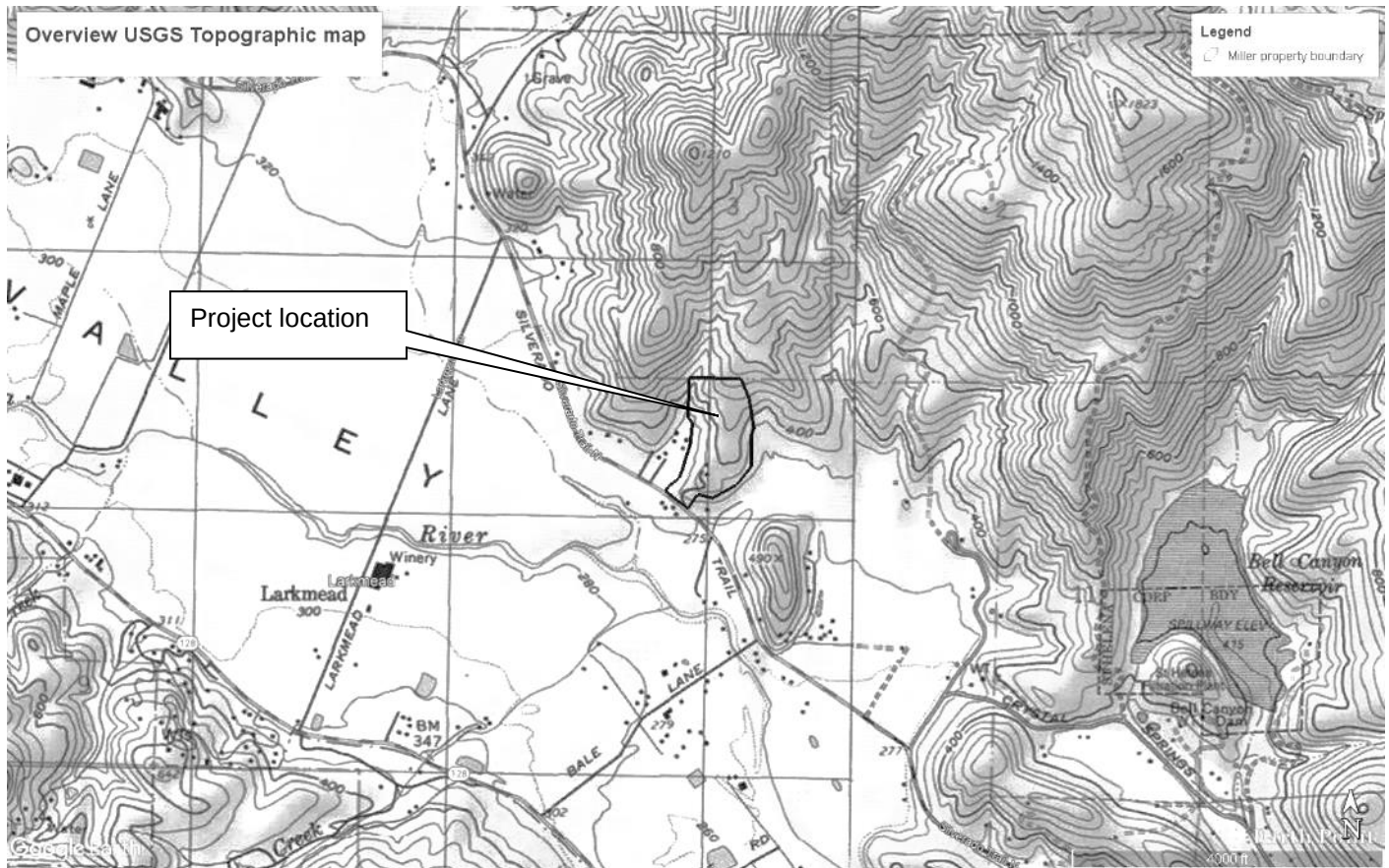
Overview of project property Google 2020 image

Proximity to residences, communities, and towns: The project is located in a rural part of Napa County, see the Google earth photo above. Within a ¼ mile radius of the project boundary are 12 homes, all associated with existing vineyards. The project is within an unincorporated area of Napa County and is 4 miles E of the town of Calistoga. See maps above.

Adjacent ownership (public, private, industrial, etc.): See the description above, north, south, east, and west. There are no public or industrial ownerships adjacent to the proposed project. Rural residences, vineyards and wineries are within a ¼ mile of the project parcel. Agriculture in the form of vineyards along with some grazing being practiced in the general area. See aerial photo above.

Parkland, open space, etc.: There is no parkland adjacent to the proposed project.

How does the proposed use fit the neighboring landscape? The project is similar to other vineyards and residences in the area (see photo on previous page). No significant change in the landscape will take place. The project is located on a gentle ridge above and adjacent to the Napa Valley.

MILLER VINEYARD THP

Overview of project area USGS topographic map

In conclusion, the area surrounding the proposed project is composed of the same vineyard and associated residence as the proposed project. This THP/conversion as proposed will not increase the vistas of the general public driving on county roads. The present views will remain the same along rural county roads in the Napa Valley area. No significant adverse impacts are expected to occur.

MILLER VINEYARD THP**REQUIREMENTS UNDER CEQA**

As a certified regulatory program under CEQA, the THP process is exempt from the requirement to prepare Environmental Impact Reports (EIRs) and related provisions of CEQA. However, a THP must include "a description of the proposed activity with alternatives to the activity, and mitigation measures to minimize any significant adverse effect on the environment of the activity." PRC § 21080.5(d)(3)(A); 14 CCR §§15250-15253.

Cal Fire has informed RPFs that they must submit an alternatives analysis with proposed THPs and has given RPFs guidance in preparing that analysis, based on the CEQA guidelines that control the alternatives analysis in EIRs (14 CCR §15126.6). Those CEQA guidelines are not directly applicable to the THP process as a certified regulatory program. However, they provide the only available guidance on preparing an alternatives analysis. Nevertheless, there are some important differences between the THP process and the EIR process that make the EIR guidelines difficult to apply.

The THP is a functional equivalent to the CEQA's Environmental Impact Report (EIR).

The THP process is based on the Forest Practice Rules, which reflect a layer of analysis that is not utilized in the EIR process. That is, the Forest Practice Rules are developed and adopted by the Board of Forestry and Fire Protection as programmatic prescriptions and best management practices. These are designed to mitigate or avoid significant impacts of timber harvesting, road building and other timber operations as they are applied by the RPF in preparing a THP. In addition to requiring RPFs to apply these prescriptions in preparing THPs, the Forest Practice Rules require plan submitters to conduct a site-specific analysis of potentially significant individual and cumulative effects that may not have been avoided or mitigated by simply applying the prescriptions contained in the Forest Practice Rules. The RPF must incorporate feasible measures in the THP to avoid or mitigate such effects.

In preparing this THP, the RPF has applied the prescriptive standards of the Forest Practice Rules. In addition, the RPF has adopted additional measures in the plan as necessary to mitigate or avoid potentially significant site-specific individual and cumulative effects identified during THP preparation. Accordingly, the RPF has submitted a THP that already serves CEQA's objective of avoiding or substantially lessening significant environmental effects.

Applying the EIR-related alternatives requirements to the THP process, the RPF faces the paradox of identifying alternatives to the THP that will avoid or substantially lessen any of the significant environmental effects of the THP where none has been identified. The RPF has, as required by the Forest Practice Rules, already incorporated measures into the THP that will avoid or substantially lessen potentially significant effects.

Although no potentially significant environmental effects have been identified in the THP as proposed, the RPF has analyzed alternatives that could avoid or substantially lessen environmental effects that are typically identified in the preparation and review of THPs in this region. As discussed above, many, if not all, such effects are addressed in the THP when first submitted for review. The RPF has used CEQA's EIR-related guidelines as well as Cal Fire's guidance dated June 10, 1997, for addressing alternatives in the THP process.

CEQA does not require any fixed number of alternatives, and does not require inclusion of every conceivable alternative, 14 CCR 15126.6 (a). Further, CEQA does not require the consideration of alternatives whose effect cannot reasonably be ascertained and whose implementation is remote and speculative. Instead, the CEQA Guidelines provide that a "reasonable range" of alternatives must be selected for discussion, applying a rule of reason. 14 CCR 15126.6 (a)(c)(f). In accordance with CEQA's principles, the alternatives selected for detailed examination in this THP are limited to ones that would avoid or substantially lessen any of the significant effects of the project, assuming that such impacts had been identified, and that could feasibly attain most of the basic objectives of the project. Finally, under CEQA, the alternatives considered need only relate to the project as a whole, not to its various parts. *Big Rock Mesas Property Owners Assoc. v. Board of Supervisors* (1977), 73 Cal.App.3d 218, 227.

The THP describes the rationale for selecting the alternatives to be discussed, including an explanation of why some alternatives were considered but not selected for detailed discussion in the THP.

MILLER VINEYARD THP**ALTERNATIVES TO THE PROPOSED PROJECT****STATEMENT OF ALTERNATIVES**

No potentially significant environmental effects have been identified in the TCP/THP as proposed. The RPF has analyzed alternatives that could avoid or substantially lessen environmental effects that are typically identified in the preparation and review of a timber harvest. In accordance with CEQA principles, the alternatives selected for detailed examination in this TCP/THP are limited to ones that would avoid or substantially lessen the significant effects of the project.

Project description, purpose and need.

The Proposed Project would convert approximately 4.5 acres of timberland to a commercial vineyard within a 29 acre property. The 4.5 acres constitutes the timberland conversion area. An additional 1.5 acres of oak woodland will all also be converted to vineyard. The total project size is 6 acres. The property presently has a home, two barns, outbuildings, and an existing 1 acre vineyard. Harvesting and slash cleanup will take place with ground-based equipment. Planting of premium quality grapes will take place immediately following slash cleanup. There are no watercourses or WLPZ adjacent to the project boundary. The project is adjacent to a public road system.

Landowner objectives:

The project as proposed will:

- Harvest 4.5 acres of commercial timberland.
- Convert 4.5 acres of commercial timberland to a vineyard.
- Convert 1.5 acres of oak woodland forest canopy to a vineyard.
- Provide financial support of the property and residence.
- Produce premium quality grapes.
- Minimize the visual and environmental impacts of the timber harvest and conversion.
- Reduce sediment transport, hydrological runoff and erosion from the property.
- Follow all county, state, and federal laws in protecting the environment.
- Justify the financial ownership of the property.
- Maintain long-term ownership of the property.

MILLER VINEYARD THP

The following alternatives to this proposed timber harvest have been considered by the landowner and include:

1. Sale of the property.

Advantage: This would give immediate cash flow.

Disadvantage: The owners live in a residence on the property and maintain an existing vineyard. Sale of the property would mean selling their existing home and vineyard. Selling the property would eliminate the owner's current production of premium quality grapes.

Impact: The environmental constraints placed on the property as a result of the sale of the property to a new buyer would be speculative and may or may not lessen environmental impact. Future impacts to the environment would be dependent on the future purchaser and their intended land use practices. These potential land uses, subdivision, and or additional homes, may or may not be of greater impact than the impacts proposed under this project.

Alternative #1 is speculative and was rejected due to the intended use of the additional vineyard to support ownership of the property.

2. Sale of a conservation easement:

Advantage: This would generate some cash flow; the amount would depend on the payment schedule of the easement. Habitat modification would be expected to be reduced; however, depending on the extent and type of the easement, the impact to habitat could vary significantly. The habitat modification proposed with this timberland conversion would not be implemented. No change in the current erosion rate would take place.

Disadvantage: No group has expressed a desire to develop a conservation easement on the property. Any sale of a conservation easement would have to deal with the existing home, barn and out buildings. This option would be expected to limit the future uses on the property and therefore affect its future value. Even with compensation for an easement, it would be expected to reduce the net value of the property. This alternative would not provide high quality wine grapes to provide financial support for the property ownership. The landowner's goal to retain ownership of the property and generate a positive cash position would be lost. Loss of the potential vineyard would defeat the justification of the project to increase grape production and associated financial support.

Impact: Analysis of this alternative would depend on the type and scope of an easement. Its ability to lessen environmental impacts would be directly related to the type of restrictions placed on the property. The ability to harvest timber may be restricted, but the ability to build rural housing may still be available. Long-term impacts could be reduced due to the fact that any change in land use would be regulated and monitored by several State, County, and Federal agencies.

Alternative #2 was rejected due to the reduced total net return on the property, the speculative nature of potential environmental impacts, and the loss of the owner's goal of producing high quality grapes to financially support the property and residence.

3. Retain the property in its present condition.

Advantage: This option would eliminate the cost of permits associated with the timberland conversion. Habitat modification would be minimized.

Disadvantage: An increase in the long-term value of the property would not be realized without the proposed development. This alternative would not provide high quality wine grapes to the landowners to help support the property ownership and residence. The landowner's goal to retain ownership of the property and generate a positive cash position would be lost. The erosion savings incorporated in the County ECP would be lost.

Impact: This alternative would reduce the modification of habitat associated with the conversion. This loss of 6 acres of habitat would not have a significant impact in this area. Potential sediment production as a result of implementation of the project has been addressed and minimized by implementing Best Management Practices (BMPs) as required by Napa County and implementation of County Conservation Regulations. Future impacts to the environment would be dependent on the future land use practices necessitated by economics of land use management.

MILLER VINEYARD THP

Alternative #3 was rejected due to a lack of long-term cash flow and related property values. Environmental impacts are mitigated by application of the Initial Study, Erosion Control Plan, Timber Harvest Plan and Timberland Conversion Plan. This alternative also does not meet the owner's goal of producing high quality grapes helping to financially support the property and residence.

4. Alternative silvicultural systems.

Advantage: Alternative silvicultural systems have been considered. A selection harvest would be allowed over the entire parcel. The timber harvest would yield a cash flow in the year it occurred. Under the direction of the THP, long term growth and therefore future harvests would also be improved. This would save the cost of the current proposal's permit system, TCP, THP and Erosion Control Plan.

Disadvantage: Logging would reduce the short-term value of the property due to its appearance after logging and the loss of timber. Competing vegetation would need to be reduced. Short term costs associated with the selection harvest would be offset by the sale of logs, however the present costs of permitting a timber harvest would significantly exceed any economic value achieved by the sale of the logs. Habitat modification would take place over the entire property. Although future growth of potential harvestable volume would increase, the long term economic benefits would be significantly less than the alternative agricultural crop of premium grapes. Long-term cash flow from a timber harvest would never be positive due to the cost of the Cal Fire permitting system and value of logs produced.

Impact: Overall, short term negative impacts to the habitat would be increased due to the disturbance to a larger area. Impacts to soils would also be increased due to the additional size of the disturbed area. Although the cash flow demands would be less than that of converting and planting a vineyard, the return on investment would be nonexistent. Short term sediment production may increase above existing levels but would stabilize rapidly.

Alternative #4 was rejected. The landowner's long term investment potential is not met with this alternative. This alternative would not provide high quality wine grapes to help support the property and residence. The landowner's goal to retain ownership of the property and generate a positive cash position would be lost.

5. Delay project construction for economic and environmental concerns

Advantage: Conversion of the site at this time is economically advantageous since forest products are not an economically viable alternative compared to high quality wine grapes. Implementation of the BMPs required in the ECP will reduce sediment production in the future.

Disadvantage: The initial investment required to develop this proposed agricultural crop is significant. Future economic downturns in the wine industry would not be beneficial to the landowner's financial position. Putting off the conversion into the future will not reduce the concerns over habitat modification, sediment production, or investment risks; these concerns will remain a constant.

Impact: Timing and implementation of the project as proposed will not have a significant impact on the environment. Concerns over habitat modification and sediment production remain constant. Requirements and mitigations proposed in the permits will mitigate these concerns.

Alternative #5 was rejected, as the landowner's goals are not met. Impacts related to putting off the permit until some future date is highly speculative. The THP/Conversion will begin as soon as the permits allow. No improvement or significant environmental impacts can be seen if the project were to be put off into the future. A significant impact on the economics of land ownership can be seen if the project is not completed in a timely manner.

6. Conversion of forestlands to a vineyard.

Advantage: The landowner's goal of producing premium quality grapes to help support the property and residence will be met. Long term future cash flows will be the highest if the forest is converted to alternative agricultural crops. In Napa County this alternative crop is high quality grapes. Timber crops in California are not cost effective to own nor operate at this time and no change is expected in the foreseeable future. Present timber market conditions are a good example of the long-term downward trend in the forest products

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market within the highly regulated state of California. The cost of operating in the forest products business and dealing with environmental regulation (THP, etc.), in the state of California, produces a product (lumber) that is more expensive than that purchased from other markets around the world.

Disadvantage: The increases in permit applications, permit costs and stress is significant when converting the timberland to vineyards. Potential impacts to wildlife habitat and soils are similar to other alternatives. These concerns would be mitigated with implementation of Napa Counties Erosion Control Plan and application of the Forest Practice Rules.

Impact: The long-term impacts to soil erosion, wildlife habitat and water quality have been addressed with the application of the Erosion Control Plan and the Timber Harvest Plan. Sediment production and hydrological flow will be controlled by the use of Best Management Practices and mitigations contained in these permits. Stress and the financial burden of the permit system are part of the economics of the investment. The potential cash flow benefit will offset these stresses and financial hardships.

Alternative #6 was chosen due to the mitigated impact on the environment with the ECP and THP, the long-term investment potential of this alternative agricultural crop and meeting the goals of the landowner.

Conclusion:

Considering these alternatives, it is the conclusion of the landowners and their advisors that this project, the conversion of forestland to a vineyard, is their best alternative. Adverse environmental effects have been considered and have been mitigated to levels of insignificance. The project as proposed is the least damaging alternative given the objectives of the landowner.

MILLER VINEYARD THP**Analysis of project impacts on**

- (a) Habitat loss .
- (b) Habitat fragmentation .
- (c) Streamside impacts.
- (d) Timber production.
- (e) Economics of Napa County.

Each of these impacts has been addressed below as they relate to non-threatened, endangered, or listed species. Impacts to listed species can be found in the Biological Report, **Appendix B** and section I item 32 of this document.. Other potential impacts related to sediment transport, watershed production and aesthetics have been addressed elsewhere in this document. Implementation of this project as proposed will reduce these potential impacts to a level of insignificance.

a. Habitat Loss

The property contains 28 +/- acres, the proposed project will effectively convert 6 acres of forest land to vineyard. The project property is presently fenced. No additional fencing is proposed with the conversion. There are no watercourses associated with the project area. The project area is similar to adjacent lands surrounding the proposed project.

Large animal movement in the area is currently impacted by existing fencing associated with neighboring vineyards and residences. Large animal movement occurs using roads and watercourse channels in the area. Traffic impacts associated with Silverado Trail are significant. This main access road is wide, with bike lanes and low roadside vegetation, allowing animals using the road way to escape vehicular traffic. Traffic associated with the neighboring residences and agriculture is minimal. The current infrastructure has some limited impact on the acreage of habitat available. No listed species were found to be impacted by this infrastructure or the proposed project. See the Biological report, **Appendix B**.

"Currently the study area (property) is fenced, so movement of larger terrestrial wildlife species is already prohibited. Coyote scat was identified to the north of the Study Area, outside the perimeter fence. Birds, small mammals, insects, and plant seed can move through the deer fence. It is anticipated that no new fences will be installed as a result of this vineyard project. The residences in the area have existing fences and associated infrastructure." Excerpt from **Appendix B**..

No additional fencing will be installed for the proposed project. Large animals present in the area are defined as deer, bear, and mountain lions. Gates exist around the perimeter fence for vehicle access points and to allow trapped animals a safe avenue for escape. Small animals, birds and rodents are not impacted by the existing vineyard fence. The loss of forest habitat to large animals and their movement will continue to be minimal.

Small animals, birds and rodents will not be significantly impacted by the vineyard conversion. They are presently able to move through the fencing and vineyard. Additionally the vineyard also proposes a cover crop. This vegetation in conjunction with the leaf cover of the grapes, drip irrigation and fruit will provide additional habitat for small animals and birds. This new habitat is beneficial for small animals, birds, and rodents in several ways including.

- 1) Lowering vegetation to the ground and making it more accessible.
- 2) By providing younger more tender vegetation.
- 3) By providing more grasses and a wider distribution of seeds.
- 4) By providing grapes as a fruit that was not present previously.

MILLER VINEYARD THP**b. Habitat Fragmentation**

The project is located in a rural area of central Napa County. As can be seen by the aerial photo above, **page 71**, the subject property is surrounded by agricultural areas interspersed with forests and residences.. This photo shows 13 residences around the proposed project property. Although impacted by vineyards and residences, wildlife is able to move around these activities in vegetative buffers.

- **Fire:** In the past, large fires that were annually lit by Native Americans kept the valley and surrounding areas open, with grasses and younger seral stages of vegetation. With the reduction in Native American occupation of the area, these fires have been eliminated. The removal of these fires has allowed native vegetation to develop and significantly increase on the site. Some fires have burned through the immediate area as recently as 60 to 100 years ago. Napa county fires have covered extensive areas of the county in recent years. These fires burned much hotter than those set by Native Americans and therefore had a much more significant impact on the intensity of the burn and impacts to wildlife. Due to modern fire suppression efforts and the reduction in the use of fire within the landscape, fuel levels and vegetation density have increased. This increase has allowed wildlife associated with this type of vegetation to increase. Wildlife associated with open areas of grass and brush have diminished in population. As vegetation levels have increased, vegetation ages and structure has also increased. This has allowed oak woodland and conifer forests to develop from grasslands and brush lands of the past. The fragmentation of habitat as a result of fires suppression is being reduced as the developing forest is becoming more homogeneous, and with older age classes developing over time. The recent Glass Fire (2020) is an example of this process. The fire consumed several residences in the area, consumed most of the ladder fuels and severely impacted the forest crowns throughout the county. The majority of the vegetation within the project area was impacted. Hardwoods are sprouting and will eventually recapture their site. Douglas Fir, which require seed to reestablish, will be retained on the site as a local seed source is present on the property.
- **Agriculture:** The primary use of the foothills during the late 1800 and early 1900 was for the use of farming, primarily in the form of grazing. Some of the more open areas with gentle topography were planted to orchards. During the last three decades, planting of vineyards and conversion of orchards to vineyards has increased. As property values have increased, and as plant succession has reduced the grass lands of Napa County, grazing has significantly decreased. Very little large scale grazing takes place within the vegetated areas of the foothills of Napa County. The loss of this grazing pressure has allowed open areas to become revegetated and resume the cycle of plant succession. As a result, more open areas of the county are revegetating into brush, and then forest. The recent Glass fire has reversed much of this succession process. This plant succession has had impacts on plant and animal species associated with the open grasslands of the past. This type of habitat modification has been increasing since the middle of the last century, it will begin a new cycle as a result of the recent fire.
- **Rural residences:** As pressure on land use increased due to the increase in the population centers of the Bay area, so have land values. This increase in land values has been part of the impact on grazing as mentioned above. Although these land values have increased in Napa County, they have been significantly less than that found within the heavily populated areas of the Bay area. As a result more and more residences have moved to the rural areas to get out of the big city and live in areas more rural and less expensive. This increased pressure in the residential nature of the area has had a significant impact on the fragmentation of wildlife habitat. Homes, driveways, gardens, fencing, noise, waterlines, power lines, septic tanks and traffic have all increased to the deterrent of many wildlife species. As this pressure increased, parcel sizes have decreased, allowing more and more residences to be built in the area. The overall impact of the increased infrastructure associated with these rural residences has been to increase the fragmentation of the native wildlife habitat. This impact continues today. As the value of these residential areas increase and if the Bay area continues to increase in affluence, we may see additional residential subdivision with the increase in demand and values associated with a fixed land resource. For the present, this fragmentation will continue.
- **Intensive land use:** The preservationist and antagonistic attitudes of the general public toward commercial timber harvest has significantly reduced the use of this land management tool in Napa County. The increase in land values and lack of increase in timber values has also reduce the application of timber harvests as a land management tool. The use of properly applied silvicultural practices can increase the mosaic of vegetation associated with a watershed, thereby increasing the type, diversity, and availability of wildlife habitat. Commercial timber harvest is not anticipated to be viable in the present

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or near future in this area or in Napa County. Agricultural activities have also intensified during the last century. Areas that were previously used for cattle production, grazing, and to a lesser degree orchards, are now producing grapes for the wine industry of Napa County and the greater bay area. This increase in intensity has led to much more environmentally sensitive land management practices through education and increased state and county regulation of the industry.



Google Image 1993.



Google Image 2022 post fire.

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- **Vegetation changes from 1993 to 2022 (29 years of change):** See the two Google images above. The lack of color in the 1993 photo makes it hard to compare. The 1993 photo shows less agricultural activities compared to the present 2022 photo. The increase in agriculture is primarily in the form of vineyards. The current photo also shows the impact of the Glass fire.

Interpretation

The intensity level of the agricultural changes is the result of vineyard development. The modern agricultural practice of vineyard management is greater than that used during the turn of the century. Some of the areas that may have been cleared for grazing in the past are now used for more intensive agriculture. The present awareness of, and attention paid to, sediment control is much greater due to permit processes and education. The erosion control measures used early in the last century were significantly lacking. Today's modern erosion control measures and best management practices are a significant improvement over the excessive sediment losses of previous decades.

A detailed analysis of the aerial photos shows improvement in forest density, a result of natural plant succession and the increase in fire suppression efforts of the past 100 years. The changes are evident in many areas. The impact of the recent Glass fire will take time to develop. As the burned vegetation deteriorates, grass and brush will replace much of the forest and brush that has developed over the past 60 to 80 years. The following general assumptions can be applied to the larger assessment area.

1. Generally speaking, agricultural acreages are equal to those of the late 1900's.
2. Agriculture is more intensively managed today.
3. Erosion control practices are significantly improved over previous decades.
4. Brush and Forest vegetation are more developed than previous due to fire suppression and plant succession.
5. The impacts of the Glass Fire will significantly increase the grass and brush, and decrease the forest canopy of the county.
6. More rural residential housing exists in the rural forested and brush areas of the county.
7. Sediment transport due to poor management practices has been reduced due to increased awareness by the landowner and regulatory agencies..

c. Streamside Impacts

There are no watercourses within or immediately adjacent to the project area. The approved ECP has placed mitigations on the development of the vineyard that requires sediment and hydrologic impacts to be less than or equal to pre fire and pre project levels.

MILLER VINEYARD THP**d. Timber Production**

The project area consists of 4.5 acres of Douglas Fir Forest and 1.5 acres of Oak woodland and grass. The Douglas fir vegetation meets the definition of commercial timberland. The biological report (**Appendix B page 20**), states:

The following Natural Communities are found within the Survey Area prior to the 2020 Glass Fire. A * delineates a Sensitive Natural Community.

- *Pseudotsuga menziesii* (Douglas-fir) Forest Alliance G5, S4 – 9.8 acres
- *Quercus agrifolia* (coast live oak) Alliance G5, S4 – 12.5 acres
- **Quercus lobata* (valley oak) Alliance, G3, S3 - .23 acres
- **Quercus garryana* (white oak) Alliance, G4, S3 - .08 acres
- *Avena bromus* (Wild Oak and Annual Grassland) Alliance, 3.29 acres
- Existing Vineyard, Structures & Infrastructures – 1.8 acres

Post fire and after implementation of the Emergency notice of timber operations with Cal Fire, all dead and dying vegetation was removed within the project area. And to a degree, the surrounding area. It is estimated that 6 MBF of live Douglas Fir still remains. The timber removed as a result of the fire was estimated at 16 MBF. This would equate to approximately 22 MBF on the 4.5 acres pre fire. At present estimated values (\$100 per mbf standing in the forest) will amount to a net value of \$2,200.00. This figure is considered a stumpage value and takes into account the costs of logging and trucking. This also represents the growth of conifer trees that has occurred on the property over the past 40 +/- years. All of the trees were burned in the 2020 Glass Fire have been removed, the remaining will be removed under this THP.

There are no figures available for actual growth in Napa County. Growth in this area can be assumed to be at most 3% and possibly as low as 2%. If we consider the volume per acre of the pre fire condition, 22MBF/4.5 acres = +/- 5 MBF/acre. This acreage would have an annual growth on 5 MBF of 3% or 150 bd ft per acre per year.

Assuming a potential grape harvest of 4 tons per acre and an acreage of 4.0 acres, the potential annual yield would be 18 tons. The potential dollar return to the local economy from the proposed vineyard will far exceed (over 2000 times) any return from the growth of trees. See the chart below.

Comparisons of dollar values in annual growth of Grapes vs. Timber.			
	Grapes		Timber
	Tons per acre		MBF
Annual Growth (per acre)	4		0.150
Unit Value (\$)	\$	12,000	\$ 100
Acreage (Net)	4		4.5
Total Value	\$	192,000	\$ 68
Percent increas compared to present use.	284444%		100%

Due to the moderate amount of timber resource harvested annually in Napa County, no impact can be expected to the harvest volumes and the economic values of Napa County or the State of California.

MILLER VINEYARD THP**Timberland Management Potential**

Land values in the area are some of the highest in the State. These values are high for several reasons: the close proximity to the high population densities of the bay area, the neighboring Napa Valley & high priced vineyard land, and the desirable rural hillsides of a mild Mediterranean climate. The timberland value of property purchased in Napa County is not recognized, nor is it considered in property appraisal values. These high land values cannot be supported by timber production. Landowners do not recognize any economic incentive to manage the timberland base of their property.

The potential timber value on the property is significantly less and overshadowed by the high land values and aesthetic values attributed to the forest environment. The harvesting impacts in these high priced areas significantly reduces the overall land value attributed to aesthetics by much more than the value realized from the timber harvest.

By using the legal system and government regulation, neighboring property owners and environmental groups have also brought tremendous pressures on timberland owners to preserve forest habitat and not utilize wood products and their economic value.

Napa County ordinance requires landowners to place a conservation easement on 3 acres of ground for every 1 acre converted from forest to agricultural use, based on the 2018 aerial survey of Napa County. The acreage limitations proposed in this project are consistent with these Napa County ordinances. This vegetation retention requirement does not prohibit timber harvesting in the future but it does insure long-term forest habitat and the growth of forest products within the property boundary.

The ability to harvest timberland in Napa County is no longer economically feasible. Although harvesting will take place on a small scale, Napa County does not have an economically viable commercial timberland base. The 2020 Glass fire has exacerbated this problem.

Future Timber Growth

The reoccurrence of past fires on the landscape of Napa County can be seen throughout the area. These past fires maintained a younger vegetation compatible with this reoccurrence. As such, the larger forest tree species were not able to flourish and actually declined as a percentage of vegetation type. Since the middle part of the last century fire has been noticeably absent from the environment. This has allowed numerous vegetation types to mature and maintain a larger component of mature forest tree species. Overall this has had a significant impact on the percentage increase of commercial forest tree species in the vegetation types of the County. Also, the lack of cattle and sheep grazing during the past ½ century has had a significant impact on the grazing lands of the county. Many of the previously grazed areas are reestablishing habitat composed of brush and conifer species. Although no one has performed a detailed analysis of these vegetative changes for the county as a whole, it can be assumed (and is seen in aerial photography) that the forest component of these vegetation types is increasing significantly and similar to the analysis done (above) for the surrounding area around the project.

Catastrophic Fires

Within the past few years a significant amount of Napa and surrounding counties have seen catastrophic fire events. These fires have burned very hot and have had a significant impact on the landscape of Napa County. The magnitude of the fires and the intense heat is directly related to a lack of vegetation management, very high fuel loads, and dry weather events. The lack of management has allowed the landscape to reach extremely high fuel loads, which in turn

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supports burning very large areas, including rural residential homes and, in some cases, city streets. Due to the intense heat and magnitude of these burned areas, they will not return to a forest habitat for several generations and in some areas may take centuries. The rapidly developing brush and large amount of dead and dying vegetation from these fires will continue to plague the area for at least the next decade. After that, the brush will once again support large fire events if the local communities do not make efforts to manage vegetation and fuel loads on a landscape level.

e. Economic

Employment Opportunity: The impact on increased employment due to the establishment of the vineyard is significant. Review of the estimate of vineyard values vs. timber values as shown in the chart above shows a significant increase in potential cash flow. The ability to harvest timber from this location is such that harvesting would be expected to take place once every 50 to 60 years and might employ 3 individuals for two weeks, compared to the vineyard maintenance and grape harvest taking place every year employing 3 to 4 individuals for two+ months every season.

The county tax base is also significantly increased due to the increase in the value of the agricultural product and the labor payrolls used to produce the grapes and associated wine.

Balance of the project area property: The remaining undeveloped area of the project property will be retained as forest woodland. The balance of the property, approx. 20 acres, will be available for forest dwelling wildlife species and future timber harvests depending on the economic and political conditions supported by the County, State, and local community.

MILLER VINEYARD THP**Summary:**

- Large animal habitat loss is minimal due to the existing rural nature of the area surrounding the project area and agricultural infrastructure proposed for this project. All of the property is currently fenced and excludes large wildlife. The existing fencing offers escape gates to ensure a safe escape for trapped large animals. Small animal habitat is not severely impacted since they are able to use the new vineyard habitat as well as they did the previous habitat associated within the existing fence.
- Habitat fragmentation is significant in the area. Fencing associated with this property is very similar to existing fencing associated with the neighboring residences and vineyards. Wildlife movement around the current neighboring infrastructure will not change with this project. Wildlife movement is limited by existing road access and the animal's size. Maintenance of cover crops and the vineyard will minimize disturbance to small animal habitat. The presence of the drip irrigation, grasses, leaf cover of the vines and fruit may provide more habitat for small animals, birds and rodents than previously existed.
- Future timber harvests (if economically feasible) would be directed under a THP on the retained acreage of the property. The retained habitat of the property will ensure the lands ability to provide forest habitat into the future.
- The loss of commercial timber land is minimal if not negligible since it is not part of the commercial timberland base of the state. The project timberland area is composed of 4.5 acres. No significant impact to the States production of commercial timber or future commercial timber will occur.
- The land values of the county will continue to increase with this type of intensive agricultural practice. The increases in jobs and the local economy is significant. The revenue and job potential is many thousand times higher with the installation of the proposed vineyard than timberland.
- Napa County ordinance requires landowners in county defined sensitive watersheds to maintain a three for one forested area of the parcel based on the 1993 aerial survey of Napa County. The acreage proposed for this project is consistent with Napa County ordinances concerning these limitations. This vegetation retention requirement does not prohibit timber harvesting but it will insure long-term forest habitat retention and the growth of forest products within the property boundary.

Considering all of the above, the project as proposed will have a less than significant impact.

MILLER VINEYARD THP**Cal Fire List of Species of Special Concern within the Assessment Area:**

Sensitive Species means those species designated by the Board pursuant to 14 CCR 898.2(d). These species are the Bald eagle, Golden eagle, Great blue heron, Great egret, Northern goshawk, Osprey, Peregrine falcon, California Condor, Great gray owl, Northern spotted owl, and Marbled Murrelet

The Great Blue Heron, Northern Goshawk, Osprey, California Condor, Great Gray Owl and Marbled Murrelet are not shown on the CNDDB to be present in the project area. Habitat to support these species does not exist within the project area and does not exist within the landscape (**Appendix B**) surrounding the project. Onsite review by the landowner, Biologist and RPF has not revealed the presence of these species.

***Haliaeetus leucocephalus* (Bald Eagle)**

Bald Eagles are found near ocean shorelines, lakes, reservoirs, river systems, and coastal wetlands. Suitable foraging habitat consists of large bodies of water or rivers with abundant fish and adjacent perching sites such as large, stoutly limbed trees or snags. They nest in large trees usually less than 2 km to water that offers foraging opportunities. Neither the RPF, Biologist nor the landowner has observed any Bald Eagles in or near the project area. See the biology report **Appendix B**. The necessary habitat elements for this species are lacking within the project site, and this operation is not expected to have an adverse impact on Bald Eagles.

***Aquila chrysaetos* (Golden Eagle)**

Golden Eagles use rolling foothills, mountain areas, and sage-juniper flats, and deserts. They nest on cliffs of all heights or in large trees in open areas. Nests are a platform nest, often around 10' across. Neither the RPF, Biologist nor the landowner has observed any Golden Eagles in or near the project area. See the biology report **Appendix B**. As this species nests in large trees in the open or on cliffs, and these habitat elements are lacking within the project, this operation is not expected to have an adverse impact on Golden Eagle.

***Ardea herodias* (Great Blue Heron)**

Great Blue Herons perch and roost in secluded tall trees isolated from human activities, near aquatic foraging areas. They are colonial nesters, using tall live trees or snags, where numerous stick nests are built/maintained, that are close to shallow-water feeding areas. Suitable habitat for the great blue heron is lacking in the project site. This operation is not expected to have an adverse impact on Great Blue Heron. See the biology report **Appendix B**.

***Ardea alba* (Great Egret)**

Great Egrets perch and roost in secluded tall trees isolated from human activities, near aquatic foraging areas. They are colonial nesters, using tall live trees or snags, where numerous stick nests are built/maintained, that are close to shallow-water feeding areas. Suitable habitat for the great egret is lacking in the project site. This operation is not expected to have an adverse impact on Great Egrets. See the biology report **Appendix B**.

***Accipiter gentilis* (Northern Goshawk)**

Northern Goshawks use dense mature and old-growth stands of conifer and deciduous habitats interspersed with meadows or other openings. Nesting often occurs on north-facing slopes near water in the densest parts of the forested stand. Suitable habitat for the

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Northern Goshawk is lacking in the project site. This operation is not expected to have an adverse impact on Northern Goshawks. See the biology report **Appendix B**.

***Pandion haliaetus* (Osprey)**

Osprey occur along rivers, lakes, reservoirs, bays, estuaries and surf zones. They nest in large trees, snags, and dead topped trees in open forests habitats near fish bearing waters. Suitable habitat for the Osprey is lacking in the project site. This operation is not expected to have an adverse impact on Osprey. See biology report **Appendix B**.

***Falco peregrinus anatum* (Peregrine Falcon)**

Peregrine falcons require protected cliffs and ledges for cover. Peregrines often breed near wetlands, lakes, rivers, or other water on high cliffs, banks, dunes or mounds (Zeiner et al. 1990a); however, they will nest on human-made structures and will occasionally use snag cavities or old nests of other raptors. Suitable habitat in the form of cliffs over 70' high do not exist on the property. Peregrine falcons were not observed during this field survey within the project area." See the biology report **Appendix B**. Suitable habitat is lacking. The operation is not expected to have an adverse impact on Peregrine Falcon.

***Gymnogyps californianus* (California Condor)**

This Project is outside the range of the California Condor. Suitable habitat for the California Condor is lacking in the project site. This operation is not expected to have an adverse impact on California Condor.

***Strix nebulosa* (Great Gray Owl)**

This Project is outside the range of the Great Gray Owl. Suitable habitat for the Great Gray Owl is lacking in the project site. This operation is not expected to have an adverse impact on Great Gray Owl.

***Strix occidentalis caurina* (Northern Spotted Owl)**

See NSO discussion and mitigation proposed in the THP on **page 53, see Appendix I**.

***Brachyramphus marmoratus* (Marbled Murrelet)**

This Project is outside the range of the marbled murrelet. Suitable habitat for the Marbled Murrelet is lacking in the project site. This operation is not expected to have an adverse impact on Marbled Murrelet.

***Oncorhynchus kisutch* (Coho Salmon)**

The (Central California Coast Evolutionary Significant Unit) Coho salmon does not exist within the project area. Mitigation to reduce sediment transport downstream that could conceivably impact fishery habitat has been incorporated into this project and into the approved Napa County ECP. With mitigation for sediment reduction, the project is not expected to have an adverse impact on Coho Salmon or other fisheries habitat.

***Oncorhynchus mykiss* (Steelhead)**

The (Central California Coast Evolutionary Significant Unit) Steelhead does not exist within the project area. Mitigation to reduce sediment transport downstream that could conceivably impact fishery habitat has been incorporated into this project and into the approved Napa County ECP. With mitigation for sediment reduction, the project is not expected to have an adverse impact on Steelhead or other fisheries habitat.

MILLER VINEYARD THP***Emys marmorata* (Western Pond Turtle)**

A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation. Needs basking and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying. Suitable habitat for the Western Pond Turtle is lacking in the project site. This operation is not expected to have an adverse impact on Western Pond Turtle.

See **Appendix B**.

***Rana draytonii* (California Red-legged Frog)**

California Red-Legged Frogs are found in lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. They require 11 to 20 weeks of permanent water for larval development. Suitable habitat for the California Red-legged Frog is lacking in the project site. This operation is not expected to have an adverse impact on California Red-legged Frogs. See **Appendix B**. The Study Area lacks aquatic for this species.

***Rana boylei* (Foothill yellow legged frog)**

Foothill Yellow Legged Frogs are found in rocky streams and are rarely far from permanent water sources. Tadpoles need water for at least 3 to 4 months. Suitable habitat for the Foothill yellow legged Frog is lacking in the project site. This operation is not expected to have an adverse impact on Foothill yellow legged Frog. See **Appendix B**. The Study Area's stream courses lack the structure and hydro-period for breeding.

Pallid Bat (Antrozous pallidus)

The Pallid Bat occupies a wide variety of habitats, such as grasslands, shrublands, and forested areas of oak and pine, but prefer rocky outcrops with desert scrub. The pallid bat roosts in caves, mines, crevices, and occasionally in hollow trees or buildings. They forage over open country and in woodland areas. Roosting habitat for the Pallid bat is lacking within the project area. The project area was severely burned in the 2020 Glass Fire. The emergency notice of timber operations filed with Cal Fire has removed most of the dead trees from the project area. The operation is not expected to have any adverse impact on Pallid Bats. See **Appendix B**.

Townsend's Big-Eared Bat (*Corynorhinus townsendii*): Townsend's big-eared bats are more abundant in mesic habitats such as riparian woodland. They require caves, mines, tunnels, bridges, or other man-made structures for roosting. There is no potential habitat in the form of cabins, barns, and other structures within the assessment area. The project area was severely burned in the 2020 Glass Fire. The emergency notice of timber operations filed with Cal Fire has removed most of the dead trees from the project area. Habitat for the Townsend Big-eared bat is lacking within the project area. The operation is not expected to have any adverse impact on Townsend big-eared bats.

Gray Wolves (Canis lupus)

The gray wolf (*Canis lupus*) was listed as endangered under the California Endangered Species Act (CESA) by the California Fish and Game Commission on June 4, 2014. Gray wolves are habitat generalists and the historic distribution and abundance in the state are unknown. Sightings of wolves and detection of den/rendezvous sites should be reported to the California Department of Fish and Wildlife (CDFW) and acknowledged in the THP. Protection measures for any sighted wolves and identified den and rendezvous sites should be included in Section II of a THP. Consultation with CDFW will be required due to presence of wolves or known wolf den

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and/or rendezvous sites and the results of that consultation shall be amended into any timber harvesting plan that is affected. Gray wolf dens consist of sheltered locations such as hollow logs, stumps, rock crevices, or holes in the ground.

The RPF has spent a significant amount of time on the project area, as have the biologist and vineyard manager. No potential den locations were identified and CDFW database does not find Gray Wolf in the quadrangle maps nor in surrounding area. The presence of the Gray Wolf is unlikely.

Pacific Fisher (*Martes pennanti*)

The project area is not within the present range nor the historic range of the species.

Western Bumble Bee (*Bombus occidentalis occidentalis*), Crotch bumble bee (*bombus crotchii*)

The western bumble bee (*Bombus occidentalis occidentalis*) and Crotch bumble bee (*Bombus crotchii*) are California Endangered Species Act (CESA) candidate species as of September 30, 2022. During CESA candidacy, a species is afforded the same protections as a listed species and take is prohibited unless authorized by CDFW pursuant to Fish and Game Code section 2080.1, 2081, subdivision (a) or (b), 2089.6, or 2835, or by the Commission pursuant to Fish and Game Code section 2084. For more information, see CDFW's Evaluation of the petition from the Xerces Society, Defenders of Wildlife, and the Center for Food Safety to list four species of bumble bees as endangered under the California Endangered Species Act, available on CDFW's document library: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=166804&inline>

All bumble bees have three basic habitat requirements: suitable nesting sites for the colonies, availability of nectar and pollen from floral resources throughout the duration of the colony period (spring, summer, and fall), and suitable overwintering sites for the queens. In addition, their populations can be negatively affected by both pathogens and pesticides; thus, they may require habitat that is free from exposure to high levels of both native and exotic pathogens, and pesticides that cause harm to colonies. Bumble bees are found in a wide variety of natural, agricultural, urban, and rural habitats, although species' richness tends to peak in flower-rich meadows of forests and subalpine zones. The western bumble bee and Crotch bumble bee both nest, forage, and overwinter in meadows and grasslands with abundant floral resources and may be found in some natural areas within urban environments (Williams et al, 2014).

According to CNDDDB records, western bumble bee has been reported adjacent to the plan area (CDFW file information). The THP has been evaluated for bumble bee habitat. The project property and plan area do not have meadows and grasslands capable of supporting bumble bees. The Biological report, Appendix B, lists *Avena* spp.-*Bromus* spp. Herbaceous Semi Natural Alliance as being present on a portion (3.3 acres) of the property. The landowner mows all areas of the property with weed whackers and a mowing machine. He also uses goats to maintain the grasses. As such habitat for the bumble bee is not present. This maintenance of the grasslands and forest lands, on an annual basis helped save most of the property and all of the buildings from the 2020 Glass Fire.

SECTION IV CUMULATIVE IMPACTS ASSESSMENT

Technical Rule Addendum #2

Assessment areas

Projects approved by Cal Fire within the last 12 years

- A. Watershed
- B. Soil productivity
- C. Biological
- D. Recreation
- E. Visual
- F. Traffic
- G. Green House Gas GHG
- H. Wildfire Risk and Hazard

List of resources used

MILLER VINEYARD THP**ASSESSMENT AREAS**

A and B: The **Watershed** and **Biological** assessment area as it relates to this plan, is the York Creek and Ritchie Creek Watersheds. These Watersheds are listed as Calwater ID #2206.500201, 8450 acres and Calwater ID #2206.500203, 8772 acres respectively, in size. In order to assess the movements of raptors an additional 1 mile radius surrounding the plan area was also assessed. This 17,222 acre area lies within the two watersheds. It should be pointed out that this plan submitter owns and controls a very minor portion of this assessment area. As such, the RPF, Biologist, Botanist and plan submitter are limited to assessments within their control and knowledge. Reasonable efforts have been made to research and access additional information from local, state and federal agencies. See watershed assessment map, below. This area was chosen because it represents the watershed surrounding the area influenced by this THP/Conversion. The biological assessment area represents the area that contains the wildlife that frequents the THP/Conversion (project site), watershed, and 1.5 mile radius surrounding the proposed project area. The activities of the wildlife that frequent this area are not limited to the ridges that represent the boundary of the watershed unit. Bird activity in the area is assessed by visual observation, CNDDDB reference, discussion with local people in the area, consultation with biologists and review of adjacent THP's, if any. All of these activities have been taken into account.

C: Soil productivity assessment is limited to the area of operations (i.e. the THP/Conversion). This area was chosen because it represents the area actually disturbed by this activity and is controlled by this landowner.

D: Recreational assessment area is the THP and surrounding property under control of this landowner. This area was chosen because it represents the area actually disturbed by this activity and is controlled by this landowner. Technical Rule Addendum #2 states that "the recreational assessment area is generally the area that includes the logging area plus 300 feet." It also states that the assessment is to "Identify the recreational activities involving significant numbers of people in and within 300 ft. of logging area (e.g., fishing, hunting, hiking, picnicking, camping)." The property surrounding the THP is private property. As such the RPF has used the THP area and the project parcel as the assessment area.

E: Visual assessment area is limited to the area that is readily visible to significant numbers of people who are no further than three miles from the Project area. The project area is on a gentle flat ridge, adjacent to the Napa Valley floor. The project area is approximately 4 miles East of the town of Calistoga CA. The area surrounding the proposed vineyard is rural with scattered residences and vineyards. Each of the residences are associated with an existing vineyard. Most of the area was burned in the 2020 Glass fire. Some of the forest adjacent to the residences did not burn. Several of the residences were consumed in the fire. The vineyards survived basically intact. Approximately 12 homes exist within a ¼ mile radius of the project area. All of the neighboring residences are associated with existing vineyards. Views from the valley floor and the neighboring residences will remain the same.

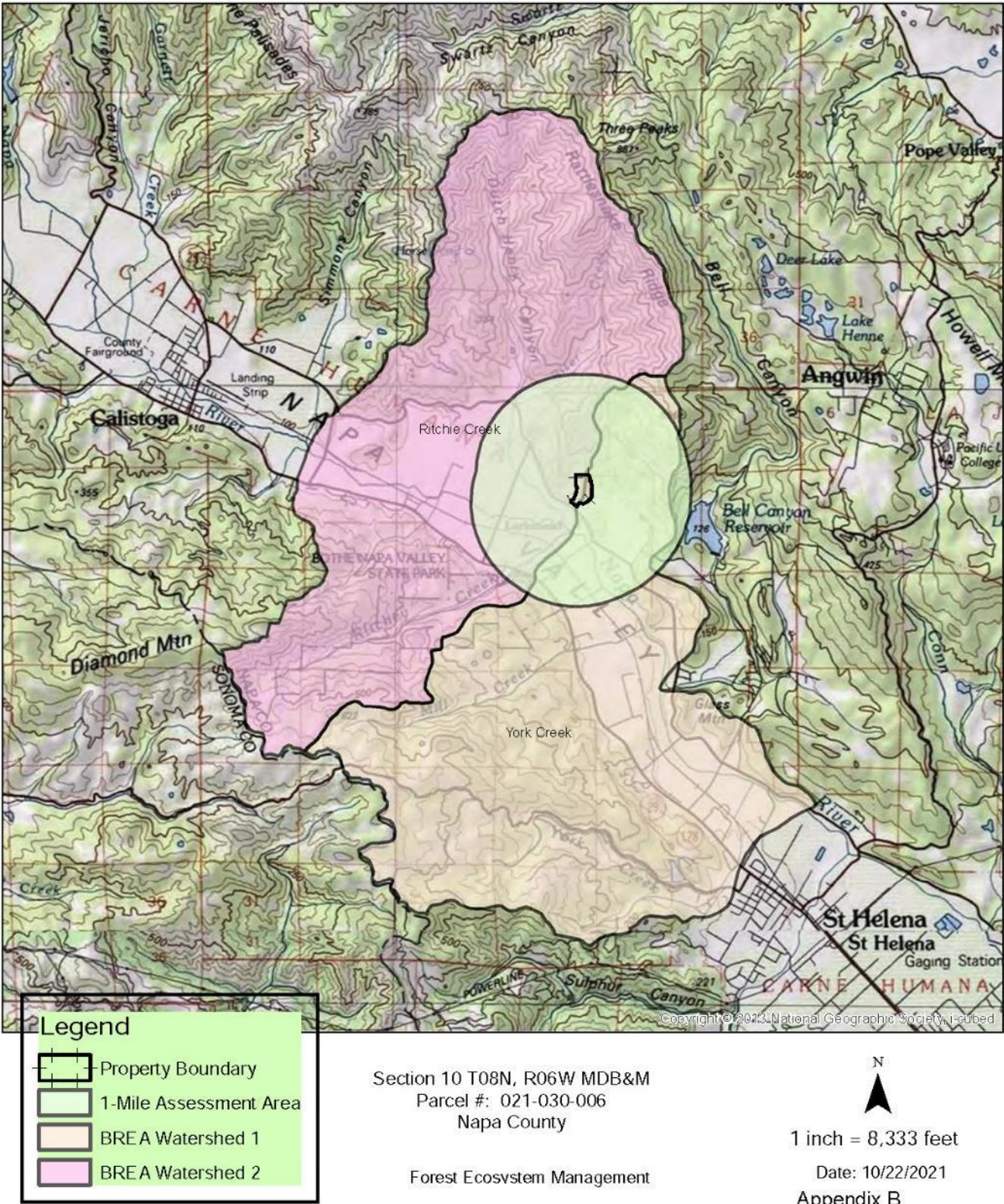
F: Traffic assessment issues are assessed as they apply to the private access road and The Silverado Trail through the Napa Valley. This was chosen because it is the area impacted by the traffic associated with this THP/Conversion.

G: Green House Gas GHG assessment area is at the project scale. The beneficial impacts on carbon sequestration and the project-related CO₂ emissions related to global warming are negligible and undetectable at the global scale. The CO₂ emissions from vehicles used to implement the project over several weeks or months are dwarfed by the CO₂ emissions from other routine daily activities engaged in by all Californians such as a single morning commute for even one city. Impacts from transportation will be mitigated by the implementation of new standards for diesel engines recently adopted by the CARB (CARB 2008), these also apply at the project scale.

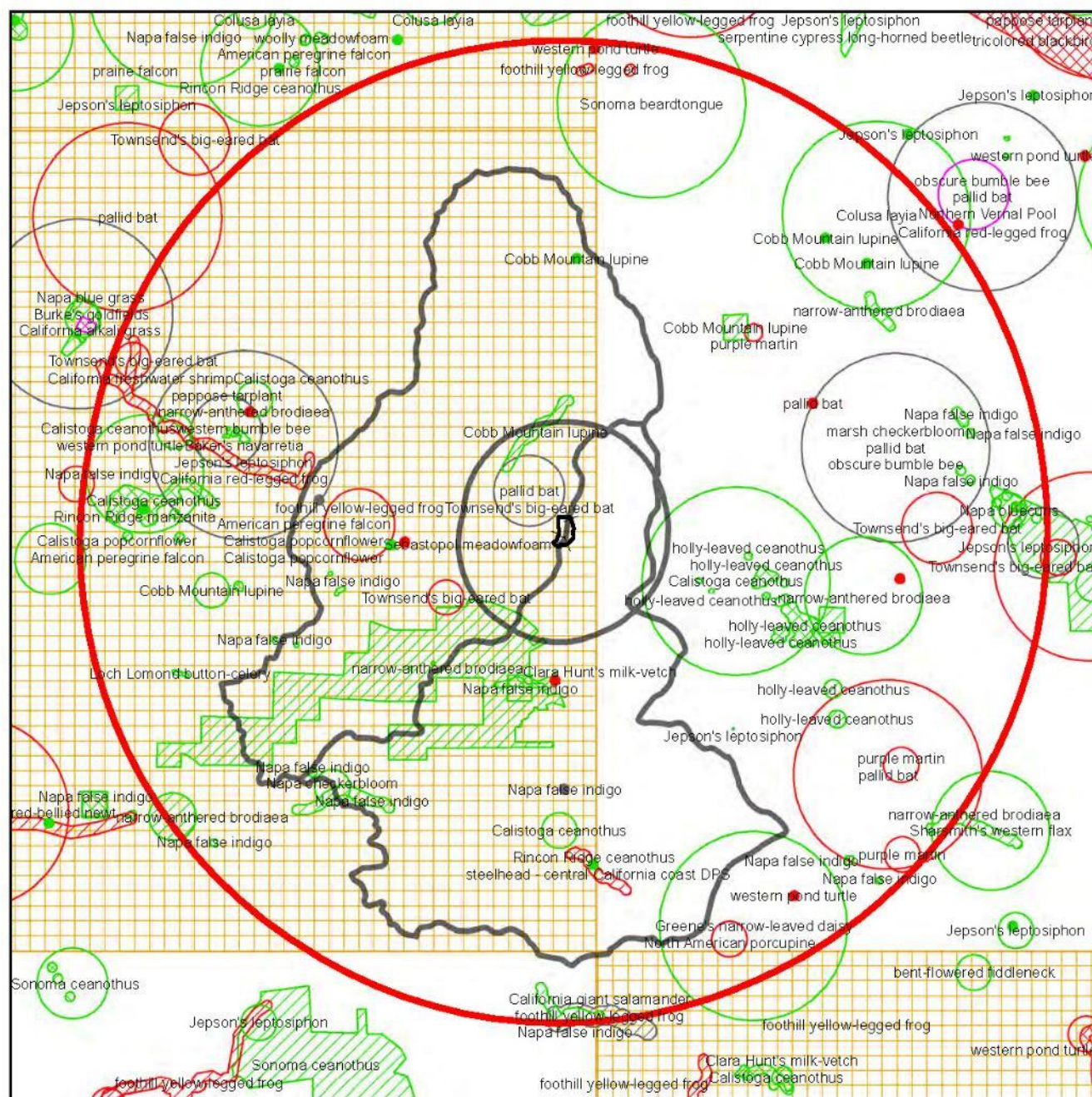
H: Wildfire Risk and Hazard is the project scale and immediate surrounding area.

MILLER VINEYARD THP

BREA - Miller



Miller Project Area - cnddb



Section 10 T08N, R06W MDB&M
Parcel #: 021-030-006
Napa County

Forest Ecosystem Management
Salix Natural Resource Management



1 inch = 9,583 feet

Date: 11/2/2021

Appendix B

MILLER VINEYARD THP**Article 2 Preparation and Review of Timber Harvesting Plans****898 Feasibility Alternatives**

"After considering the rules of the Board and any mitigation measures proposed in the plan, the RPF shall indicate whether the operation would have any significant adverse impact on the environment. On TPZ lands, the harvesting per se of trees shall not be presumed to have a significant adverse impact on the environment. If the RPF indicates that significant adverse impacts will occur, the RPF shall explain in the plan why any alternatives or additional mitigation measures that would significantly reduce the impact are not feasible.

Cumulative impacts shall be assessed based upon the methodology described in Board Technical Rule Addendum Number 2, Forest Practice Cumulative Impacts Assessment Process, and shall be guided by standards of practicality and reasonableness. The RPF's and plan submitter's duties under this section shall be limited to closely related past, present and reasonably foreseeable probable future projects within the same ownership and to matters of public record. The Director shall supplement the information provided by the RPF and the plan submitter when necessary to ensure that all relevant information is considered.

When assessing cumulative impacts of a proposed project on any portion of a waterbody that is located within or downstream of the proposed timber operation and that is listed as water quality limited under **Section 303(d)** of the Federal Clean Water Act, the RPF shall assess the degree to which the proposed operations would result in impacts that may combine with existing listed stressors to impair a waterbody's beneficial uses, thereby causing a significant adverse effect on the environment. The plan preparer shall provide feasible mitigation measures to reduce any such impacts from the plan to a level of insignificance, and may provide measures, insofar as feasible, to help attain water quality standards in the listed portion of the waterbody.

The Director's evaluation of such impacts and mitigation measures will be done in consultation with the appropriate RWQCB."

MILLER VINEYARD THP**State of California Board of Forestry cumulative impacts assessment**

- 1) Do the assessment areas of resources that may be affected by the proposed project contain any past, present, or reasonably foreseeable probable future projects?

Yes ☒ No ☐

If the answer is yes, identify the projects and affected resource subjects.

The present family has owned the property for many years. The property presently has one home, two barns and an existing 1 ac vineyard. Napa County is in receipt of an erosion control plan (ECP) for this 6 acre vineyard project. The THP/TCP address the conversion of forest to vineyard. The proposed project and any future project will receive the same agency input and resulting environmental mitigations. It should be pointed out that these two watersheds straddle the Napa River, with a portion of each being north of the river and both being south of the river. There is one timber harvesting operation, during the past 10 year period, on the south side of the Ritchie Creek watershed and none on the south side of the York Creek watershed. There has been no harvesting operations on the north side of either watersheds during the past 10 years.

10 Year Assessment History of Timber Harvesting Operations in the Ritchie Creek Watershed

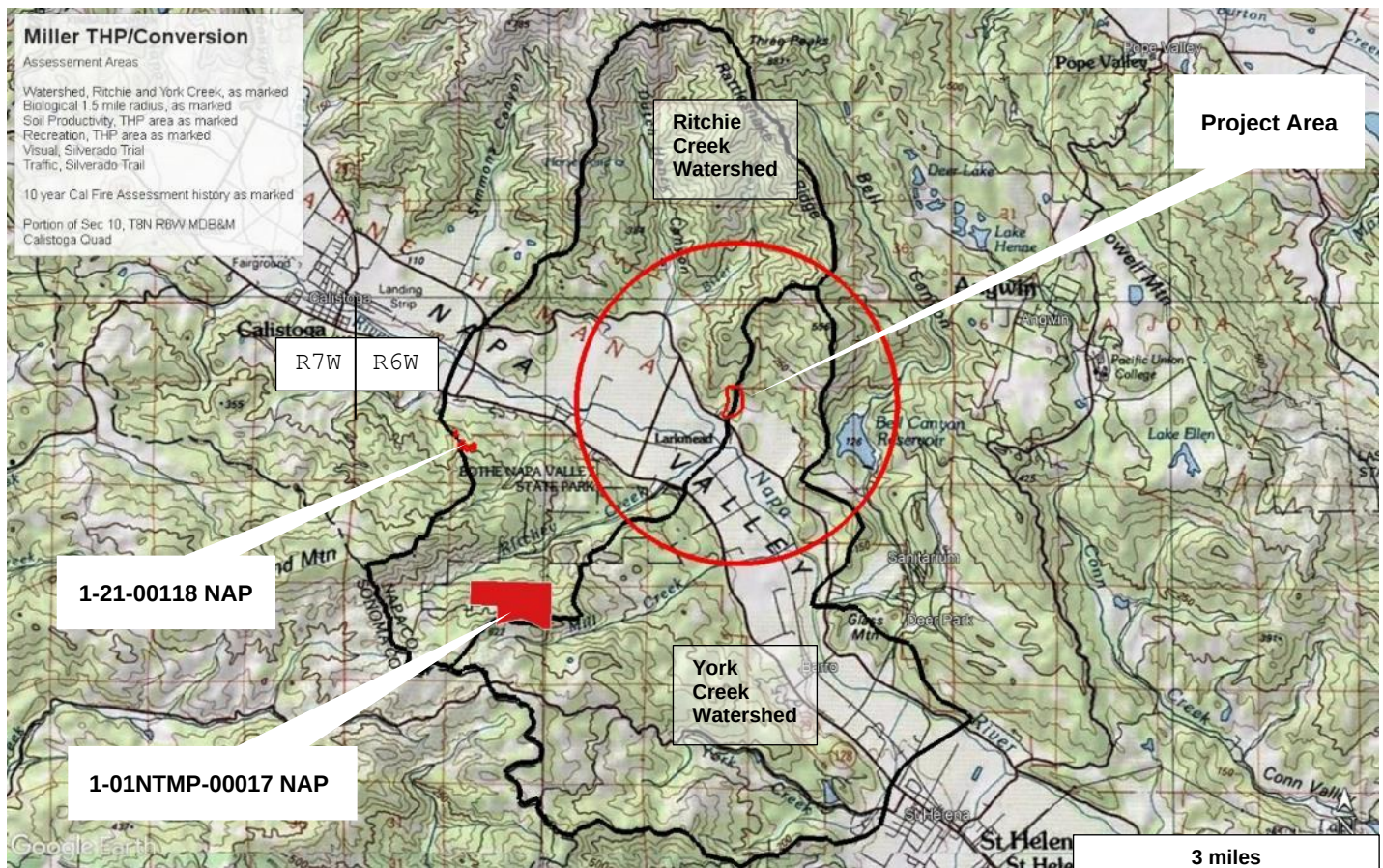
<u>Year</u>	<u>THP Number</u>	<u>Silviculture</u>	<u>Landowner</u>	<u>Acres</u>	<u>Watershed</u>
2001	1-01NTMP-017	Selection	Cooks Flat Associates	154	Ritchie Creek
2018	1-21-00118 NAP	Timberland conversion	Chris Teachworth	7	Ritchie Creek

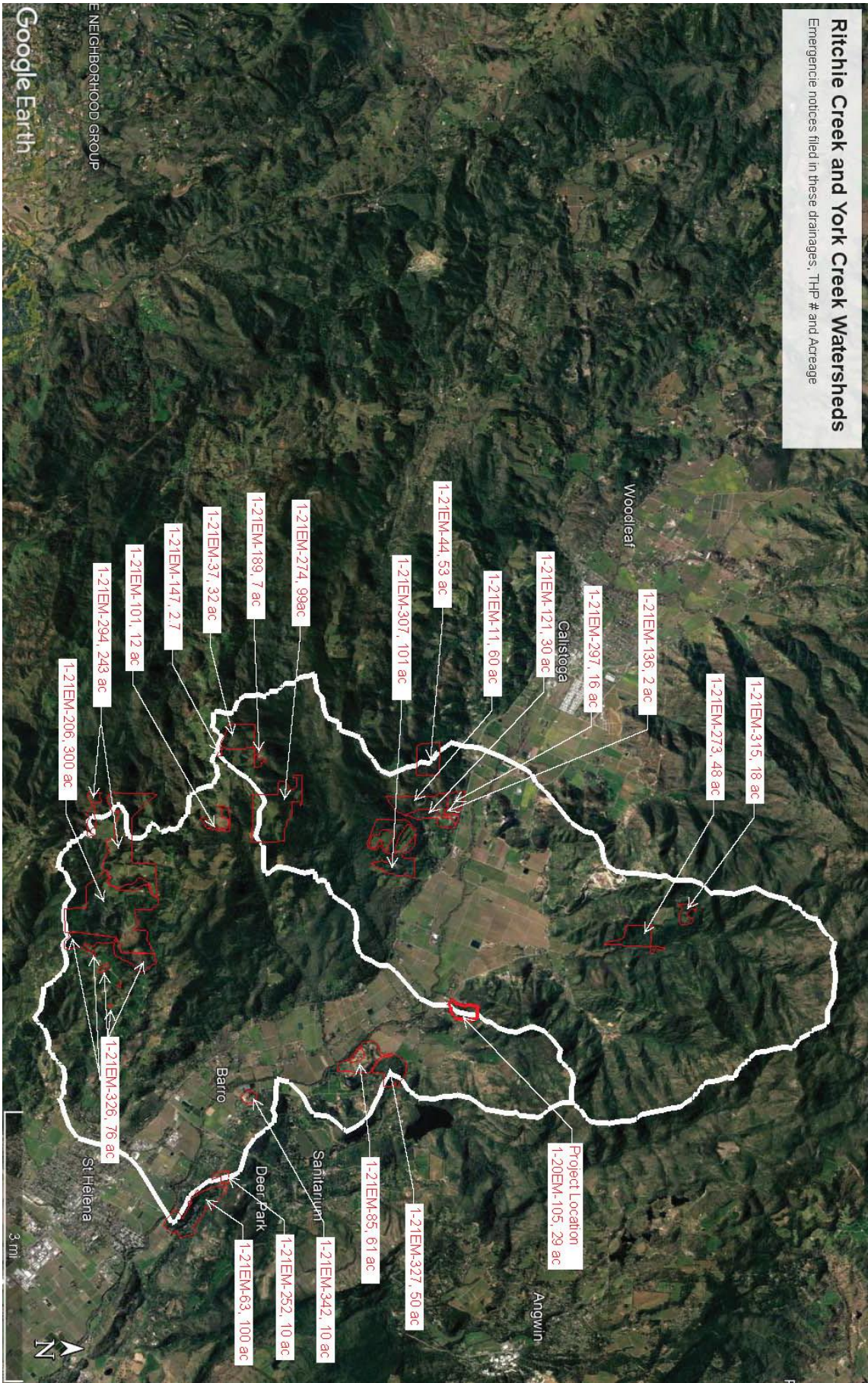
10 Year Assessment History of Timber Harvesting Operations in the York Creek Watershed

<u>Year</u>	<u>THP Number</u>	<u>Silviculture</u>	<u>Landowner</u>	<u>Acres</u>	<u>Watershed</u>
N/A					

Data Source, Timber Harvest Plans, data from Cal Fire Watershed Mapper https://egis.fire.ca.gov/watershed_mapper/

Cal Trees <https://caltreesplans.resources.ca.gov/Caltrees/Default.aspx>





MILLER VINEYARD THP**Ex Assessment History of Timber Harvesting Operations in the Ritchie Creek Watershed**

<u>Year</u>	<u>THP Number</u>	<u>Acres</u>	<u>Emergency</u>	<u>Landowner</u>	<u>Watershed</u>
2021	1-21EN-315 NAP	18	Dead and Dying	Paul Nikolau	Ritchie Creek
2021	1-21EN-273 NAP	48	Dead and Dying	Dan German	Ritchie Creek
2021	1-21EN-136 NAP	2	Dead and Dying	Martini	Ritchie Creek
2021	1-21EN-297 NAP	16	Dead and Dying	APA Partners	Ritchie Creek
2021	1-21EN-121 NAP	30	Dead and Dying	Morris	Ritchie Creek
2021	1-21EN-11 NAP	60	Dead and Dying	Morris	Ritchie Creek
2021	1-21EN-44 NAP	53	Dead and Dying	Teachworth	Ritchie Creek
2021	1-21EN-307 NAP	101	Dead and Dying	Schramsberg Vineyards	Ritchie Creek
2021	1-21EN-274 NAP	99	Dead and Dying	Cook Flat Associates	Ritchie Creek
2021	1-21EN-189 NAP	7	Dead and Dying	Lisa Behrens	Ritchie Creek
2021	1-21EN-37 NAP	32	Dead and Dying	Minor	Ritchie Creek
2021	1-21EN-147 NAP	2.7	Dead and Dying	Robert Lagorio	Ritchie Creek
2021	1-21EN-101 NAP	12	Dead and Dying	Schweiger	York Creek
2021	1-21EN-294 NAP	243	Dead and Dying	York Creek Vineyards	York Creek
2021	1-21EN-206 NAP	300	Dead and Dying	York Creek Vineyards	York Creek
2021	1-21EN-326 NAP	76	Dead and Dying	Spring Mtn Vineyards	York Creek
2021	1-21EN-63 NAP	100	Dead and Dying	Meadowood Resort	York Creek
2021	1-21EN-252 NAP	10	Dead and Dying	Trainor Builders	York Creek
2021	1-21EN-342 NAP	10	Dead and Dying	Carol Miller	York Creek
2021	1-21EN-85 NAP	61	Dead and Dying	Glass Ridge	York Creek
2021	1-21EN-327 NAP	50	Dead and Dying	Spunglass Associates	York Creek
2021	1-21EN-105 NAP	29	Dead and Dying	Project location, Miller	York Creek

Data Source, Timber Harvest Plans, data from Cal Fire Watershed Mapper https://egis.fire.ca.gov/watershed_mapper/

Cal Trees <https://caltreesplans.resources.ca.gov/Caltrees/Default.aspx>

MILLER VINEYARD THP**Past Historical Activities**

Since the later part of the 1800's, agriculture, and to a lesser degree timber harvesting, have been the primary activity in the area. Most of the timber harvesting activities occurred late in the 1800s and sporadically during the early part of the last century.

Poor agricultural practices, poor road building techniques and poor timber harvesting activities conducted prior to modern day regulations and the Forest Practice Act had significant impacts on and contributed to the bed load of the streams within the Assessment Area. A significant amount of time has elapsed and many of the problems relating to these types of operations have naturally corrected themselves. Recent agricultural practices, road building practices, and timber harvesting techniques have utilized modern and environmentally sensitive practices to avoid deleterious effects to watercourses and the environment.

The early agricultural activities of the late 1800s and early 1900s were primarily in the form of grazing and orchards. These practices dwindled during the later 1900s and have been replaced with grape production as wine making has become more profitable in the past few decades. In many areas of Napa County, agricultural acreage levels are approaching those that existed early in the 1900s. Although many of the erosion problems created early this century have been corrected, some have not. These areas are being corrected as new permit applications are applied for and landowners are educated in modern, environmentally sensitive erosion control practices. Scrutiny by county, state and federal permitting agencies has and will continue to correct these problems. This increase in attention paid to erosion control activities and related land use has significantly reduced the amount of sediment transport to downstream watercourses. It has also helped to reduce the impact of habitat modification and loss due to the fragmentation created by the increased infrastructure associated with agricultural and residential practices. Many of these impacts have also been reduced by education of landowners toward the requirements of wildlife.

Stabilization and recovery of these habitats and watercourses is an ongoing process. Due to the rules and mitigation proposed for this Timber Harvest Plan/Conversion and approved Erosion Control Plan, it is not anticipated that this plan will combine with past, present, and/or reasonably foreseeable future projects to create significant adverse impacts or to impede the recovery of the Assessment Area.

Non-Timber Harvesting Activities:

Non-timber harvesting activities conducted in the Watershed Assessment Area consist of residential housing, rural housing, extensive agricultural production, wineries, and open space in the form of brush and timberlands. Camping, hiking, fishing, cattle and equine management also occur within the Assessment Area.

Timber Harvesting Activities:

Due to the vegetation types present in the assessment area, commercial timberland management is primarily focused/ around vineyard management activities and emergency logging associated with the recent 2020 Glass Fire. Portions of the assessment area have been used as commercial timberland since late in the 19th century. During the past 10 years there has been one timber harvest plan filed and one Non-Industrial Timber Management plan (**see page 100**). NTMP's are used to harvest timber over extended periods of time using selection logging or uneven age timber management. The NTMP has been logged in the past 20 years. The ability to file future timber harvests in this area may be severely impacted by high land values and the incursion of rural residences.

Due to the catastrophic Glass Fire in 2020, 21 Emergencies were filed with Cal Fire to removed dead and dying trees and correct erosion control problems associated with the fire and tree removal. See page 100.1 and 100.2 for details

MILLER VINEYARD THP**Present Operations**

Harvesting activities in the assessment area are limited due to present land use economics and vegetation. The economics are directed toward watershed management, agriculture and rural housing. These types of activities include some of the following management practices within the assessment area.

- Maintaining and/or recruiting late seral habitat characteristics adjacent to watercourses to provide habitat for wildlife and fisheries resources.
- Protection of watershed values, including water quality, associated with the sub-watersheds of the assessment area.
- Locating new roads on ridge tops or mid-slope instead of near sensitive riparian areas and the inner gorge.
- Use of excavators to construct roads in sensitive areas.
- Engineering of road fills in stable locations and compaction of disturbed material.
- Improved drainage facilities, including culvert sizes, rocked fjords and bridges.
- Maintaining vegetative buffers and restrictive measures within water and lake protection zones.
- Applications of erosion control measures designed by licensed civil engineers.
- Erosion control practices that meet Napa County ordinance and county Best Management Plans.
- Enhancing wildlife habitat by improving habitat, recruiting snags, protecting watercourse zones, etc.
- Protecting sensitive species through state, local and federal regulation.

Vineyard Management

Vineyard conversions have seen a significant increase in recent decades. Early in the last century, agriculture was the primary activity in the watershed. This included grazing and some intensive agricultural activities such as orchards and vineyards. Due to fluctuating market conditions and the high demand on rural properties, some of these agriculture practices have ceased. Many areas previously cleared have reverted to their natural vegetation. Today, the high price of grapes has encouraged the reestablishment of vineyards. Due to the existing vegetation, topography, and land use constraints, county and state regulations require conversion permits and Erosion Control Plans to develop new projects on vegetated slopes. This permit system ensures environmentally friendly practices and reduced impact on the environment as new vineyards are established in previously brush and forested areas.

Rural Roads

Poor road construction practices, installation of undersized culverts and poor culvert spacing increased erosion on rural county roads early in the last century. In addition, unpaved rural roads in the assessment area that are used year-round for residential access and agriculture have contributed to sediment production into downstream watercourses. These impacts have been reduced to some degree, compared to 40 years ago, by increasing the awareness of county road departments and small landowners through education, and the implementation of better road building and maintenance practices through permit regulation. As this process continues, it is expected that the production of these sediments will continue to be reduced. The regulatory input on these roads by city, county and state planning processes has also caused many roads to be upgraded with culverts, rock and/or asphalt. This ongoing process is continually improving road caused erosion and reducing downstream sediment transport.

Proposed Future Projects

The assessment area has seen more intensive land use practices with increases in residential housing and agriculture occurring during the later quarter of the last century and the first part of this century. These increases have impacted wildlife and fisheries resources with loss of habitat and increases in sediment transport. The increase in agriculture is primarily in the form of vineyards. The number of acres

MILLER VINEYARD THP

converted annually to vineyard has been decreasing over the last decade and will likely continue to decrease for the foreseeable future. This is being driven by the high grape values and high land values of neighboring counties. The rural nature of Napa County and the inexpensive land values compared to neighboring counties lends itself to further agricultural crop production. Residential housing demands will be increasing as the high values of the Bay area impact outlying communities. All of these land use activities are monitored and controlled by local, state and federal agencies interested in protecting environmental resources. This monitoring, in the form of permits, county regulation and state law, will control, reduce, and mitigate future demands on the environment. In combination with recent past activities and expected future activities, impacts to the environment related to sediment transport and habitat modification will continue to be reduced over time.

The impact of the Glass fire will be felt for the next few decades. The cleanup of burned residences and wildland resources will be ongoing for at least the next 10 years. Sediment and related hydrological issues have increased over background levels due to the loss of the burned vegetation and equipment disturbance associated with this cleanup. County and State regulations will help control some of the activities, but as a result of the magnitude of the fire, impacts will be significant in the short term. Long term impact reduction will take place as natural process of revegetation occurs.

Rural residences are found throughout the assessment area. Urbanization is increasingly impacting the resources required to be evaluated under addendum #2. Residential development on small parcels and large lots continues throughout the assessment area. Competition between residential interests and agricultural interests for land with suitable topographical characteristics is currently at a moderate level. Future growth in these areas will continue. State and County regulations will minimize future impacts to the environment much better than past practices of the late 20th century.

Wildfire has played a significant role in the development of vegetation on a landscape level. The lack of sound land management practices within private and public land holding of Napa County has allowed vegetation to reach extreme levels of biomass in many wild areas. The recent fires have demonstrated the consequence of this protected land management and the damage that results from very high fuel levels. The increase of homes and related infrastructure within these wildlands has significantly increased the devastating impacts associated with wildland fire. Future management will consider this when developing permit applications within these areas. Consideration needs to be given to, building practices, road access, road density, housing proximity to flammable vegetation, management of vegetation and associated fuel levels. The preservation of vegetation over large areas must consider the fact that fire is and has always played a necessary part in vegetation management on a landscape level.

MILLER VINEYARD THP

- 2) *Are there any continuing, significant adverse impacts from past land use activities that may add to the impacts of the proposed project?*

Yes ☒ No ☐

If the answer is yes, identify the activities, describing their location, impacts and affected resource subjects.

Activities identified within the THP area.

The following activities are associated with present land management and the proposed THP/Conversion. Their impacts are related to the production of sediment and the modification of habitat located in the THP. These activities impact soil, water quality and wildlife habitat.

Each of the listed activities identifies mitigation proposed in this THP to minimize or eliminate the impact.

- **Present land management activities**

An Emergency Notice of timber operations was approved by Cal Fire and completed last year. The Emergency covered the property as a whole. The impact of the 2020 Glass fire is being dealt with. An Erosion Control Plan (ECP) has been submitted to Napa County for this 4.5 acre timberland conversion. These activities are under the direction of Cal Fire and Napa County regulations. Napa County is the lead agency.

- **Soil and vegetation disturbance of the planned THP/Conversion**

The planned project area is composed of Douglas Fir forest and related vegetation. All of the vegetation killed in the Glass fire has been removed under the Emergency Notice with Cal Fire. Slash has been piled and burned. The project will be implemented once the THP and ECP have been approved. The area will then be ripped, and all woody debris will be handpicked and removed. Once the vineyard infrastructure has been installed, all disturbed soils will be grass seeded and straw mulched. See **Appendix A** for the Napa County Erosion Control Plan and support information..

- **Wildlife habitat modification associated with the THP/Conversion. See Appendix B for more details**

The wildlife habitat associated with the existing Douglas Fir forest will be replaced with a vineyard. The property is presently fenced. No additional fencing is proposed. Exit gates presently exist to allow escape routes for large animals.. Small animals will be allowed access to the new vineyard as a result of mitigation requiring fencing to have a minimum of 6' opening along the ground.

- **Erosion control and sediment production**

Erosion control measures in the form of straw mulch and grass seeding will be installed prior to the first winter after project development. The Napa County ECP and this Timber Harvest Plan will control sediment to less than significant levels.

Activities identified outside of the THP area.

See the Analysis of project impacts below.

MILLER VINEYARD THP

- 3) Will the proposed project, as presented, in combination with past, present, and reasonably foreseeable, probable, future projects identified in items (1) and (2) above, have a reasonable potential to cause or add to significant cumulative impacts in any of the following resources?

Resource	Yes, after mitigation	No, after mitigation	No reasonable potential for significant effects
I. Watershed	_____	<u> X </u>	_____
II Soil Productivity	_____	<u> X </u>	_____
III Biological	_____	<u> X </u>	_____
IV Recreational	_____	_____	<u> X </u>
V Visual	_____	_____	<u> X </u>
VI Traffic	_____	<u> X </u>	_____
VII Green House Gases GHG	_____	_____	<u> X </u>
VIII Wildfire Risk and Hazard	_____	_____	<u> X </u>

- a) **Yes**, means that potential significant adverse impacts are left after application of the forest practice rules, mitigations or alternatives proposed by the plan submitter.
- b) **No, after mitigation** means that any potential for the proposed timber operation to cause significant adverse impacts has been substantially reduced or avoided by mitigation measures or alternatives proposed in the THP and application of the forest practice rules and or erosion control plan.
- c) **No reasonable potential significant effects**, means that the operations proposed under the THP do not have reasonable potential to join with the impacts of any other projects to cause cumulative impacts.

I. WATERSHED

Please refer to the Assessment Area Map at the beginning of Section IV

The **Watershed** assessment area as it relates to this plan, is the York Creek and Ritchie Creek Watersheds. These Watersheds are listed as Calwater ID #2206.500201, 8450 acres and Calwater ID #2206.500203, 8772 acres respectively, in size.

Land use activities within the assessment area include agriculture, grazing, vineyards, orchards, and wineries along with rural residents. These rural residences continue to develop in the watershed under the direction of permitting of local, county and state agencies. Grazing activities are found in open and gentle sloped areas not limited by heavy vegetation, rock and steep slopes. Grazing is decreasing throughout the assessment area as land values encourage more intensive land uses such as rural residences and agriculture. Timber harvesting is presently a minor activity taking place as a result of the 2020 Glass fire and the permitting process of Napa County and Cal Fire permits. Recreation is generally associated with the tourism of the numerous vineyards and wineries located throughout Napa County.

Water supplies in this portion of the assessment area are deemed to be adequate. The project area is not within a ground water deficit area of Napa County. The project property has two producing wells. The new vineyard will receive drip irrigation from these water sources.

MILLER VINEYARD THP**Summary of Water Availability Report, Appendix D, OEI 1-24-2023**

“The proposed 4.7 acres of vineyard will increase the vineyard acreage to 5.9 acres on the project parcel. This increase in vineyard will increase water demand on the project parcel by 2.82 acre ft/ yr supplied by Well 1 which is constructed in Sonoma Volcanics.

As a result of this project, water demand on the project parcel is estimated to increase from 1.57 to 4.39 acre-ft/yr. Analysis of the averaged 10-year period of precipitation for Water Years 2012 to 2021 resulted in recharge of 16.4 acre-ft/yr across the project parcel and 130.3 acre-ft/yr across the recharge/impact area. Proposed project use represents 27% of the mean annual recharge across the project parcel while use across the larger recharge/impact area is estimated to be 46% of average annual recharge for the WY 2012-2021 period. The analysis of groundwater recharge in relation to groundwater demand on the project parcel and in a larger groundwater recharge/impact area concluded that the project is unlikely to result in significant declines in groundwater elevations or depletion of groundwater resources over time.

There are several neighboring wells to the project well (Well 1) located within 500 ft. Bartelt Engineering conducted an analysis of well interference per Tier 2 WAA criteria indicating potential drawdown in area wells much less than the maximum recommended drawdown. An analysis of potential interaction between groundwater in the project aquifer accessed from Well 1 and surface water in Dutch Henry/Biter Creek and the Napa River concluded that hydrogeologic conditions create significant vertical separation between the aquifer and surface water such that significant streamflow depletion is not expected to occur.”

Summary of Water Availability Report, Appendix D, Bartelt Engineering Jan 2023

“The groundwater demand generated as a result of the proposed development is estimated to increase from 1.57 acre-feet per year (see Table 2A) to 4.39 acre-feet per year (see Table 2B). The available water for the subject parcel is the estimated groundwater recharge for the entire parcel area that is located in All Other Areas and underlain with Sonoma Volcanics.

Results of the Precipitation and Groundwater Recharge analysis is presented in the supplemental Water Availability Analysis prepared by O'Connor Environmental, Inc.

CONCLUSION

This analysis demonstrates that the groundwater demand for the proposed project can feasibly be sourced without any negative impact to the surrounding neighboring wells and satisfies the Tier 2 Water Use Criterion of the Napa County Water Availability Analysis.”

MILLER VINEYARD THP**Existing Beneficial uses:**

The primary beneficial uses of water within the assessment area are residential, agriculture, downstream riparian habitat, recreation and groundwater recharge. Additional uses are wildlife habitat, visual recreation and water storage. Impacts to these beneficial uses have been reduced and/or eliminated with the proposed mitigation and implementation of the Forest Practice rules and Erosion Control Plan.

Watershed effects produced by timber harvest operations may include one or more of the following.

- Sediment
- Water Temperature
- Organic Debris
- Chemical Contamination
- Peak Flow

Sediment: The proposed project area does not increase sediment runoff compared to pre project conditions. Onsite review of pre project conditions did not reveal any significant erosion problems within the project area. The implementation of the Napa County ECP, use of BMP as required in **mitigation #9**, and implementation of the Forest Practice Rules will not generate sediment transport greater than the existing pre project conditions. Review of the Bartelt Engineering USLE **Appendix C** indicates a significant reduction in sediment production as a result of implementation of the proposed project. Implementation of the ECP will reduce sediment transport from the proposed vineyard blocks by an average of 90%. The project will have a positive impact after mitigation.

Water Temperature Effects: The project does not remove any shade canopy associated with any watercourse or body of water. The project will have no impact.

Organic Debris Effects: The project does not propose to impact any stream channel or body of water. As such it cannot impact large wood debris in stream or body of water. The project will not impact dissolved oxygen or increase water temperature. The project will have no impact.

Chemical Contamination Effects: The THP does not propose to use any chemicals other than those associated with mechanics of timber removal and clearing. The plan proposes best management practices and commits to following state and county rules when operating all equipment. The project will have less than significant impact after mitigation.

Peak Flow Effects: The project does not increase hydrological flow as a result of implementing the project. The project replaces a forest canopy with a vineyard canopy and maintained annual ground cover. This ground cover provides denser ground cover vegetation than is present in the existing forest habitat.. All of the conversion area will also be ripped to a depth of 2' to 5'. Together these mitigations will allow increased infiltration of water. Implementation of the ECP along with hydrologic engineering, straw mulch and cover crop will also impede the overland flow of water. The project will have less than significant impact after mitigation.

Aquatic & Near-Water Habitat Conditions:**a. Pools, Riffles & Large Organic Debris (L.O.D.)**

The project is located on a ridge between two major watersheds. The project is not close to any watercourses. Impacts to streams within the assessment area have taken place due to past agricultural activities. These impacts are being reduced as more importance is being placed on streamside riparian and instream habitat. Downstream areas contain pools formed by Large Organic Debris (LOD) and bedrock.

MILLER VINEYARD THP

Future LOD recruited through application of current environmental regulations and continued protection of riparian vegetation will increase pool habitat through natural mortality of adjacent vegetation. The location of the project area on a ridge between two watersheds will not impact the creation of LOD, pools and or riffles.

b. Gravel Bars

Some gravel bars do occur within the assessment area. Adjacent to these gravel bars it is not uncommon for the river to be diverted into the opposite bank, resulting in undercutting and minor bank erosion. These areas are small and isolated in occurrence. The THP as proposed will not impact any removals or creation of additional stream gravels. The location of the project area on a ridge between two watersheds precludes the area having stream associated gravel production that would impact downstream watercourses..

c. Stream Temperatures

Stream temperatures can be impacted by removal of streamside shade canopy on watercourses flowing water during summer months. No change is expected to occur as a result of the proposed project. No operations are proposed within or near any Class I, II or III WLPZ. No stream shade canopy will be impacted by the project. No offsite flow of water will take place during the high summer temperatures which can cause stream temperatures to increase.

The present pattern of rural land holding in conjunction with the increase in environmental controls will encourage future shade canopy retention levels along watercourses within the watershed assessment area. A decrease in future stream temperatures can be expected as a result of these environmental controls.

d. Sedimentation

Sediment transport is recognized as a significant potential impact within any watershed. It is a natural process for the erosion of soils to take place during the rainy season. This natural process can be significantly influenced by land management activities to increase or decrease the natural transport of sediments into watercourses. This proposed project includes several efforts to ensure that no additional sediment over and above that which would naturally be produced enters the watercourse system of the assessment area. This includes the County approved Erosion Control Plan (**Appendix A**), use of BMP's and implementation of the Forest Practice rules. Analysis of erosion control proposed by Bartelt Engineering indicates an approximate 90% reduction in sediment production as a result of implantation of this project. **See Appendix C.**

The project soils, with a moderate erosion hazard rating, high infiltration capacities and permeable soil structure, in conjunction with the sediment control measures of the THP and ECP, will significantly reduce the overland flow of water that initiates sediment transport.

No additional roads have been proposed for this project. See THP maps at the end of **Section II**. Skid trails will not need to be built due to the gentle contour of the proposed projects less than 30% slopes. A temporary erosion control seeding will occur over the entire project area if it must overwinter after harvest and prior to the startup of the installation of the vineyard and its ECP. An annual cover crop will be seeded after clearing. Straw mulching will be applied to landings and all bare soil areas exceeding 100 square feet created by harvesting. Mass wasting does not appear to be probable due to the gentle topography and stable soils. No active unstable areas have been observed on or adjacent to the project site. Should any sedimentation transport occur it would be trapped by the erosion control measures, straw mulch, cover crop, silt fence and vegetative buffer adjacent to the project area. These substantial undeveloped areas containing undisturbed vegetation will serve as infiltration and sediment traps. The existing road system on the property is adequately maintained with pavement, rock, waterbars and outsloped surfaces.

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Past standards of land use associated with agriculture and rural residential housing have resulted in a high background level of unnatural sediment yield. Sedimentation from past projects does not presently appear to be overwhelming the system nor significantly degrading the beneficial uses of water. However, all future efforts to reduce sedimentation should be considered when proposing a project. This THP/Conversion recognizes the impact sediment has had on the fisheries and aquatic habitat of the watershed resource. Efforts have been made within this THP/Conversion, to control, reduce and/or eliminate all sediment production and transport.

An inventory of controllable sediments produced the following.

- The THP area does not have any active unstable areas. As such they are not adding to the production of sediment.
- The project area was recently burned in the 2020 Glass fire. Implementation of the erosion control practices of the ECP and THP will reduce potential sediment production, as the result of the recent fire, by installing ground cover and erosion control throughout the project.
- The present road system in the proposed project area is minimal; present drainage does not produce large amounts, if any, of sediment. The paved and rocked roads on the property are drained and/or waterbared.
- Erosion potential could develop with the proposed vineyard resulting from the conversion. However proper installation of the approved ECP will eliminate this potential. See **Appendix A**.

Corrective work proposed in this THP to correct present and/or potential sediment problems

Since no sediment problem is presently ongoing, all corrective work is oriented toward prevention.

Proposed work to be implemented under this THP/ECP to reduce future sedimentation problems.

- No proposed activities on or adjacent to any watercourse.
- No equipment is proposed to operate within any water and lake protection zone.
- Maintain vegetative buffers, by ensuring that equipment does not enter the buffer areas adjacent to the project.
- Install permanent erosion control facilities as per the County ECP and the THP.
- Maintenance of annual cover crop and best management vineyard practices outlined in the ECP.
- No new road construction.
- Out slope road and avenue surfaces whenever possible to avoid water accumulation and related erosion potential or as directed by BMP's.
- No construction of skid trails and related soil disturbance.
- Log hauling is limited to dry months of the year. Conditions will be monitored during wet weather conditions and suspension of operations will occur if ground surface conditions become saturated.
- Road surfaces will be watered regularly to abate dust and protect the road surface.

All of the above are proposed to avoid soil disturbance and stabilize any soil that is disturbed. The overall impact on the assessment area will be a reduction in soil loss and an improvement in downstream aquatic habitat.

MILLER VINEYARD THP**e. Peak Flows**

The project does not increase hydrological flow as a result of implementing the project. See the Hydrological Analysis, **Appendix D**. Based on the analysis, there are no predicted net runoff increases, and no negative hydrologic impacts are expected as a result of the project. The project as proposed is in compliance with Napa County's General Plan policy requiring no net increase in runoff. The project replaces a forest canopy with a vineyard canopy and maintained annual ground cover. This ground cover provides denser vegetative cover than is present in the existing forest habitat. All of the conversion area will also be ripped to a depth of 3' to 5'. Together these mitigations will allow increased infiltration of water. The straw mulch and cover crop will also impede the overland flow of water. The project will have no impact after mitigation.

f. Organic Debris

Accidental depositions of organic debris, soil or sediment into Class I, II or III watercourses shall be removed pursuant to 14CCR Sec. 916.3(b) (936.3(b), 956.3(b)). All I Class I, II and III watercourses are outside of the project area. All have a WLPZ buffers adjacent to them. No operations and no vegetation removal is being proposed in these buffers, as such all organic debris will be maintained within these buffers.

g. Chemical Contamination

The THP does not propose the use of any chemicals. The project area is surrounded by a forested landscape. Sensitive receptors to chemical contamination would be in the form of rural residences and watercourses in or adjacent to the project area. There are no rural residences or Class I, II or III watercourses adjacent to the project area. If chemicals are used in the development of the future vineyard they will be controlled by Napa County BMP's and Regulations adopted by the County Ag Commissioners office. Any future use of restricted chemicals would also be under the direction of a licensed pest applicator.

No chemical contamination is expected to occur as a result of the harvest operation. Standard Rule 936.3 states that the LTO shall not allow petroleum products to enter watercourses in amounts deleterious to the beneficial uses of water. Roads are not proposed to have dust abatement applied other than water. Petroleum products associated with the heavy equipment operations will be used; no other chemicals will be present during the timber harvest operation.

Chemical contamination as a result of heavy equipment operating under the THP

The accidental deposition of chemicals, into adjacent watercourses, associated with the equipment used for the conversion and installation of the vineyard could occur. The following practices are intended to reduce and or eliminate this potential. The THP does not propose equipment use within any water and lake protection zones. No storage of petroleum products associated with the heavy equipment is proposed. No storage of petroleum products is proposed for this project. All petroleum products associated with equipment entering the project area are limited to those transported in appropriate containers designed for that purpose in each vehicle. Any accidental deposition of petroleum products will be immediately contained and disposed of with approved hazardous materials procedures.

936.3(b) The quality and beneficial uses of water shall not be unreasonably degraded by timber operations. During timber operations, the timber operator shall not place, discharge, or dispose of or deposit in such a manner as to permit to pass into the water of this state, any substances, or materials, including, but not limited to, soil, silt, bark, slash, sawdust, or petroleum, in quantities deleterious to fish, wildlife, or the quality and beneficial uses of water. All provisions of this article shall be applied in a manner which complies with this standard.

MILLER VINEYARD THP**h. Shade**

No shade canopy is proposed to be removed within any Class I, II or III watercourse. No vegetation removal that will affect water temperature is involved.

i. Fog Drip

Fog drip is not a significant source of water production. While there may be a slight reduction in fog drip (water input) as a result of this operation, it is not expected to be significant. The location of the project area on a gentle side slope near a ridge top means that the area has very little fog that could contribute to water production. No significant decrease in water yield is expected from a decrease in fog drip.

J. Fire

Due to the rural nature of the general area surrounding the proposed project location, the risk of a wildfire is significant. The 2020 Glass fire is an example of this. Forest fires in the past have burned over the entire area and will do so in the future. See aerial photo of surrounding land uses **page 71**. Fuel loading, associated with the adjacent timberland has been reduced by the recent fire. Installation of the vineyard, fuel reduction and the fuel management will increase the ability to control wildfire in the future. The project will not increase the potential for wildland fire, to the contrary, management of vegetation within the project boundaries will significantly reduce the potential for wildland fire. The addition of vineyard avenues and water storage facilities will also improve firefighting access and water availability.

MILLER VINEYARD THP**II. SOIL PRODUCTIVITY**

As a result of implementation of the Forest Practice Regulations and its mitigations, no significant adverse impacts are expected to occur.

Organic Matter Loss:

The THP area will have a protective organic matter cover consisting of straw mulch and grass seed following the completion of operations. "Organic matter" refers to material, both living and dead, which protects soils from raindrop impact and/or overland flow. Although the forest related organic material larger than one inch will be removed due to the conversion, organic material related to sediment retention and the permanent cover crop proposed with vineyard, and annual maintenance will increase. Most of the organic matter was consumed in the 2020 fire. The straw mulch and cover crops will begin to replace that lost by the fire.

Surface Soil Loss:

Surface soil is most readily lost when mineral soil is exposed to rain drop impact and accelerated overland flow during storm events. The exposure of bare soil will be minimized by the following practices.

- All exposed soil surfaces will be straw mulched and grass seeded prior to the onset of the winter period
- Erosion control facilities will be installed throughout the vineyard as designed by a licensed Civil Engineer.
- Road blockages, fences and gates will be used to reduce damage to drainage control structures by trespassers and wildlife.
- Implementation of soil stabilization measures and cover crops associated with Napa County ECP and BMP's.
- Limitations posed on conversion locations to slopes averaging less than 30%.

Soil Compaction:

The soil compacted in association with this harvest plan has been minimized by the lack of any well-defined skid trail system. This is the due to the gentle slopes of the proposed project site. Any potential compaction will also be eliminated by ripping of the site in preparation to planting of the vineyard. Limiting heavy equipment operations to rainless periods when significant soil compaction will not occur and eliminating equipment operation within any WLPZ will also minimize soil compaction.

Conifer Growing Space Loss:

Growing space loss will occur as it relates to conifer production due to the removal of the 4.5 acres of conifer trees. Growing space will be increased for agricultural crops as a result of this proposed operation. This modification in habitat will increase the overall agricultural productivity of the property. The amount of forest growing space lost is minimal. Although there will be a loss of commercial timber species associated with this vineyard conversion, the 4.5 acres lost is not part of the productive timberland of Napa County.

This parcel is not zoned TPZ by Napa County and does not represent a significant timber resource, see page 80, Timber Production. The vegetation modified under this THP/Conversion is not a significant source of commercial timber. Commercial timber harvesting is not a compatible use due to the small number of timbered acres and their location in Napa County or in the state of California. Local, state, and Federal regulations are overburdening the landowner to the point of making commercial timber harvest economically impractical on this size property in this county. See the discussion of analysis of timber production impact **page 84**.

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III. BIOLOGICAL

As a result of implementation of the Forest Practice Regulations and its mitigations, no significant adverse impacts are expected to occur. A detailed scoping process has been performed for the assessment of impacts related to the proposed project. See Biological Report, **Appendix B**, the scoping process included, a CNPS online electronic inventory analysis, the California natural diversity database, California Department of Fish and Game Wildlife Habitat Analysis, Wildlife Assessment, and a biological field survey.

Summary of Biological and Environmental Mitigations implemented under this THP/Conversion can be found in **Section 2, item 32, page 53**.

Excerpt from Executive summary, **Appendix B page 4**.

“Biological Resource Studies and Assessments are conducted to determine the presence or absence of listed animal and plant species, and the effects of a proposed vineyard or orchard site development on those species.

This report details the regulatory background, methods, results, and recommendations of a Biological Resources Reconnaissance Survey (BRRS) for the conversion of 6 acres of mixed forest to 4 separate vineyard blocks. The Project Area is located in the 27.76-acre parcel (APN 021-030-006) of the Miller Property Ownership at 3906 Silverado Trail; Calistoga, California (Map #1). The property ownership occurs within Napa County.

Portions of the Project Area is considered Timberland as defined by the California Forest Practice Rules, with approximately 6 acres of forest (Douglas-fir Forest and oak woodland) to be converted to grapes (Map #2). The entire Project Area is within the 2020 Glass Wildfire Perimeter (Map #3) with the majority of mid-story (shrubs) and ground cover (forbs) being burned, or removed prior to the wildfire for fuel hazard reduction; with some overstory trees burned or dying due to intense heat, while some green overstory trees remain post fire (Attachment #1). Biological surveys were completed pre and post wildfire, and prior to an Emergency Notification Exemption logging operations to remove the dead and dying material post wildfire.

The Project Area is intentionally situated to avoid watercourses within the parcel. There will be no impacts to wetlands or watercourses within the Study Area as a result of this project. To address the concerns of Napa County's 10JUN22 Informational Request (Attachment #8), a Hydrological Study and Report will be completed to address concerns regarding distance to Napa River and other major creeks.

A protocol-level rare plant survey identified no special status plants and 2 sensitive natural communities [White Oak Alliance (*Quercus garryana*), and Valley Oak Alliance (*Quercus lobata*)] within the Study Area.

There is one special-status bird (Northern Spotted Owl) with marginal foraging habitat present; and 8 non-status species with baseline legal protections (Olive-Sided Flycatcher, Purple Martin, Pallid Bat, Townsend's Big-Eared Bat, Western Red Bat, Hoary Bat, Fringed Myotis, and Long-Legged Myotis) that might be found residing on or immediately adjacent to the Study Area.

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Mitigation measures, in the form of additional bird and bat surveys prior to tree removal and groundbreaking operations as outlined within the Project Recommendation Section; and best management practices throughout the permitting process, have been developed and provided herein to avoid impacts to these species and their habitat.”

Fisheries

The project area is not in an ASP watershed. The project is located on a ridge between the York Creek and Ritchie Creek Calwater watersheds. Both watersheds eventually flow into the Napa River. There is no evidence to suggest that past, present or reasonably foreseeable operations proposed in this THP/Conversion will create any adverse impacts to potential downstream watercourses. The quality of riparian habitat will increase over time with future projects being impacted by regulations affecting the watershed assessment areas. These projects will contain mitigations similar to the following.

- Some of the snags, outside of the conversion area will be left standing except for safety reasons. This will increase large wood debris (LWD).
- Large organic debris (LOD) are being recruited naturally through windfalls and retention of unmerchantable LOD near Class I, II and III watercourses within the assessment area as a result of environmental regulations.
- Upgrading of drainage facilities in conjunction with future operations within the assessment area will help to minimize sedimentation.
- Implementations of BMP's on activities throughout the assessment area.
- Increased shade retention requirement associated with WLPZ within Class I, II and III's of the assessment area.
- Maintenance of a multistory stand and related vegetation characteristics within WLPZ's of the assessment area.
- Retention of large trees within Class I and II watercourses of the assessment area that can become LWD in the future.
- Maintenance of pool and riffle habitat on downstream watercourses.

Snags/Den Trees

Snags and potential den trees exist throughout the property as a result of the recent Glass fire. Current timber operations related to the Emergency will retain snags throughout the property. Biological surveys performed on the project parcel did not find snags or potential den trees that needed specific protection.

Downed Large Woody Debris

Downed large woody debris (LWD) will be retained within the balance of the project property. This unmerchantable, large organic debris (LOD) will serve as wildlife habitat and aid in nutrient recycling. This LOD will also help minimize raindrop erosion by combining with other organic debris to form a dense vegetative ground cover. No LOD will be disturbed near any watercourses. LOD within the THP/Conversion area will be removed and chipped or burned. The lack of wildfire during the recent past has allowed fuel to build up in most of the surrounding area. Most if not all of this fuel was consumed in the 2020 fire event. Evidence exists in the area to indicate that fire played a major role in the area in the past, consequently most of the hardwood/conifer forest is young. Throughout the Watershed Assessment Area the amount of large woody debris appears to be low. This is a result of present land management, agriculture, fire, vegetation types and younger age classes of the vegetation.

MILLER VINEYARD THP**Multistory canopy**

The project area is composed of Douglas Fir Forest with scattered hardwoods and Oak woodland. The watershed assessment area has a wide variety of habitat types due to the presence of agriculture, grass, brush, hardwood and conifer forest. The lack of fencing in the area and scattered nature of agricultural activities will facilitate the connectivity of forest canopy.

Road Density

The project area is rural with moderately large parcel sizes composed of brush, forest and some agriculture. There is a scattering of residential homes in the area. Road density is moderate to low around the project area. Due to the large size of the watershed assessment area there is a wide diversity of road densities associated with residential, agriculture and wildland areas. No new roads are being proposed with this project. The existing paved road and some rocky roads and jeep trails are found on the property. These roads and jeep trails are found on moderate slopes and do not produce significant amounts of sediment nor do they exhibit bank instability.

Late Seral Stands

A majority of the forested areas within the Assessment Area has been harvested or burned over the last 120 years. Late Seral Stands as defined by 14CCR 895.1 are increasing due to a reduction in fire and retention of Late Seral Habitat adjacent to watercourses. Little if any forest habitat exists in this area of the valley floor. While older vegetation is developing in some of the watercourses most of the area is open agriculture. The hillside areas to the west and east of the valley contain a forested landscape; however this forest was severely impacted by the 2020 fire event. The presence of larger landowners found in these foothills along with current conservation practice are increasing the late seral habitat of the assessment areas. Although the recent fire has had an impact on these forests, late seral habitat will begin again to improve and increase with the retention of larger decadent trees, snags, cavity trees, and organic debris within WLPZ's associated with the watershed. Fire will, and always has, continue to be a major part of vegetation development within these watersheds.

IV. RECREATION

No significant adverse impacts are expected to occur.

The recreational assessment area is the THP area under control of this landowner. This area was chosen because it represents the area actually disturbed by this activity and is controlled by this landowner.

Tourism, hunting, hiking, cycling and camping are the anticipated recreational activities, which exist within the assessment area. These activities are controlled by and limited by the landowner. These activities are not expected to change as a result of this proposed project. The landowner controls the private use of his property, trespassing is not allowed. Access to the property from the county road is behind a locked gate and is not expected to change. Access from neighboring properties is controlled by private property rights and fencing. This is not expected to change. The landowner along with adjacent property owners have posted their property prohibiting trespass.

Due the location size and restrictive control of this property this conversion is not expected to have a significant adverse impact on the recreation activity within the assessment area. The general public does not have access to the area, the proposed project will not change this condition. The project will not no impact.

V. VISUAL

No significant adverse impacts are expected to occur. See the assessment of Surrounding land uses on **page 71** for more detail.

"In conclusion, the area surrounding the proposed project is composed of the same vineyard and associated residence as the proposed project. This THP/conversion as proposed will not increase the vistas of the general public driving on county roads. The present views will remain the same along rural county roads in the Napa Valley area. No significant adverse impacts are expected to occur."

MILLER VINEYARD THP**VI. TRAFFIC AND ROADS**

Traffic assessment issues are assessed as they apply to the Silverado Trail through Napa County. This was chosen because it is the area impacted by the traffic associated with this THP/Conversion. See mitigations proposed on **page 60-63**. These roads presently support heavy truck traffic similar to the truck traffic proposed in this project.

These county and state roads have been used for agricultural products for well over a century, they are maintained by the county and the state for agricultural and residential use. Residential use has increased significantly during the last century compared to agricultural use, which has possibly decreased or remained the same. This additional agricultural crop transport is not a significant increase in traffic or traffic load on these roads. Due to the nature of large trucks that might be used to haul logs, equipment and materials to and from the proposed project, limitations have been placed on their operation. Large trucks are defined as 5 axels or more.

Mitigation #10, Road use limitations and restrictions (see mitigation #10 page 63)

Access to the project area is over the Silverado Trail, Hwy 128, and private access roads. Due to the rural nature of the road, the project proposes the following vehicular limitations and restrictions.

1. The LTO is to advise the drivers of all large vehicles to use extreme caution when transporting equipment, agricultural products, and/or people, especially in areas of limited site visibility.
2. Log Trucks and larger vehicles are to operate with headlights on for safety and are not to exceed posted speed limits.
3. Oversized vehicles are not to use Jake brakes in the immediate vicinity of residential neighborhoods.
4. Signs indicating slow trucks entering the roadway will be placed at a distance of 300 feet in both directions of the project site if warranted.

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VII. GREEN HOUSE GASES GHG

See the Air Quality and Greenhouse Gas Analysis for the Miller Vineyard Project dated 11-10-2022, **Appendix G**. Excerpt shown below.

“Greenhouse Gas Emissions**Construction**

Given that the BAAQMD has not provided a construction-related climate impact threshold in the 2022 Thresholds, the nearest adopted numerical threshold will be used to determine significance, in accordance with the Newhall Ranch Decision. Consistent with the significance criteria used in the 2019 DEIR, the nearest jurisdiction with an adopted GHG significance threshold for construction is Sacramento Metropolitan Air Quality Management District (SMAQMD). On October 23, 2014, the SMAQMD adopted a 1,100 MT CO₂e per year GHG significance threshold for the construction phase of projects.

The SMAQMD adopted its most recent thresholds of significance for GHGs in April 2020. The SMAQMD report, *Greenhouse Gas Thresholds for Sacramento County*, established new operational thresholds for the air district but acknowledged that the report is not intended to replace SMAQMD’s existing thresholds for construction emissions, as those thresholds were adopted by the SMAQMD with substantial evidence and documented through staff reports. Therefore, construction-related climate impacts of the Proposed Project will be evaluated according to the SMAQMD thresholds of 1,100 MT CO₂e per year.

As shown in **Table 7**, GHG emissions associated with construction of the Proposed Project are estimated to be approximately 348 MT of CO₂e. Construction GHG emissions are a one-time release and are typically considered separate from operational emissions, as global climate change is inherently a cumulative effect that occurs over a long period of time and is quantified on a yearly basis. As shown in **Table 7**, project construction emissions would be below the SMAQMD threshold of 1,100 MT of CO₂e per year. Therefore, construction-related GHG impacts are considered less than significant.

TABLE 7. GHG EMISSIONS (excerpt from **Appendix G**)

Source	GHG
	MT of CO ₂ e
Construction	
Construction Activities	241
Loss in Carbon Sequestration Capacity	107
Construction Total	348
Operation	
Mobile	5
Off-road	152
Water	0
Operational Total	157
Source: Attachment 1 . See GHG Appendix G	

MILLER VINEYARD THP***Operation***

As described above, the 2022 BAAQMD Thresholds establish operational project design elements that, if incorporated, allow a lead agency to conclude that the project will not make a cumulatively considerable contribution to global climate change.

Buildings

The project design elements related to buildings involve the exclusion of natural gas connections and a determination that the project will not result in any wasteful, inefficient, or unnecessary energy usage as determined by the analysis required under CEQA Section 21100(b)(3) and Section 15126.2(b) of the State CEQA Guidelines.

The Proposed Project does not include any buildings or infrastructure involving the connection or use of natural gas appliances or plumbing. Additionally, there are no unusual characteristics that would necessitate the use of construction equipment that would be less energy efficient than at comparable construction sites in the region or State. As described in **Mitigation Measure AQ-1 (See THP mitigation #10 below and on page 60)**, the Applicant shall maintain construction equipment in accordance with manufacturing specifications and limit construction equipment idling time to less than five minutes. These measures would further reduce fuel and energy use during all stages of construction and avoid the wasteful, inefficient, or unnecessary consumption of fuel energy. Therefore, construction and operation of the Proposed Project would not result in inefficient, wasteful, or unnecessary consumption of fuel energy or conflict with a State or local plan for renewable energy or energy efficiency.

Transportation

The project design elements related to transportation involve achieving consistency with locally adopted Senate Bill 743 VMT targets. Regarding operational emissions, as part of the statewide implementation of Senate Bill (SB) 743, the Governor's Office of Planning and Research (OPR) settled upon automobile vehicle miles of travel (VMT) as the preferred metric for assessing passenger vehicle-related impacts under CEQA and issued revised CEQA Guidelines in December 2018, along with a Technical Advisory on Evaluating Transportation Impacts in CEQA to assist practitioners in implementing the CEQA Guidelines revisions. The CEQA Guidelines and the OPR Technical Advisory concluded that, absent substantial evidence otherwise, the addition of 110 or fewer daily trips could be presumed to have a less than significant VMT impact.

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

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

MILLER VINEYARD THP

by at least 15%, the conclusion would be that the project would cause a significant environmental impact.

The Proposed Project is estimated to contribute 4 vehicle trips per day during peak seasons. Therefore, as the number of additional trips generated by the Proposed Project is below the 110-trip screening threshold for VMT impacts contained in the County's TIS, the Proposed Project can be assumed to cause a less-than-significant transportation impact related to vehicle miles traveled.

The 2022 BAAQMD Thresholds require projects to achieve compliance with the off-street electric vehicle requirements in the most recently adopted version of CAL Green Tier 2. The 2019 CAL Green Tier 2 currently requires the installation of electric vehicle supply equipment (EVSE) in parking lots at the time of construction for commercial buildings. The Proposed Project does not include construction of commercial buildings or parking lots and would occur entirely on residential property. Therefore, the CAL Green Tier 2 electric vehicle requirements would not apply to the Proposed Project and no mitigation is required.

Accordingly, the Proposed Project would be consistent with operational project design elements required by the 2022 BAAQMD Thresholds; and therefore, the Proposed Project would have a less-than-significant cumulatively considerable contribution to global climate change.

Cumulative Impacts

Past, present, and future development projects contribute to a region's air quality conditions on a cumulative basis; therefore, by its very nature, air pollution is largely a cumulative impact. If a project's individual emissions contribute toward exceedance of the NAAQS or the CAAQS, then the project's cumulative impact on air quality would be significant. In developing attainment designations for criteria pollutants, the USEPA considers the region's past, present, and future emission levels.

AQMDs determine suitable significance thresholds based on an area's designated nonattainment status. These thresholds provide a tool by which the districts can achieve attainment for a particular criteria pollutant that is designated as nonattainment. Therefore, the BAAQMD's significance thresholds consider the region's past, present, and future emissions levels.

Implementation of the Proposed Project combined with future development within the project area could lead to cumulative impacts to air quality. Construction of the Proposed Project would result in the generation of CAPs that when combined with future growth within the Project area could lead to cumulative impacts to air quality. As discussed in detail above, emissions resulting from the Proposed Project would not exceed the BAAQMD's thresholds, and construction would be in conformance with the applicable SIP developed to address cumulative emissions of CAPs in the SFBAAB. Therefore, the Proposed Project would have a less-than-significant cumulative impact on local and regional air quality."

MILLER VINEYARD THP**THP mitigation 11 GHG Best Management Practices**

The following BMPs will be implemented during construction.

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) will be watered two times per day.
- All haul trucks transporting soil, sand, or other loose material off-site will be covered.
- All visible mud or dirt track-out onto adjacent public roads will be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved roads will be limited to 15 mph.
- All roadways, driveways, and sidewalks to be paved will be completed as soon as possible.
- Idling times will 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 CCR). Clear signage will be provided for construction workers at all access points.
- All construction equipment will be maintained and properly tuned in accordance with the manufacturer's specifications. All equipment will be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- A publicly visible sign with the telephone number and name of the appropriate Applicant representative regarding dust complaints will be posted. This person will respond and take corrective action within 48 hours. The Air District's phone number will also be visible to ensure compliance with applicable regulations."

MILLER VINEYARD THP**VIII. WILDFIRE RISK AND HAZARD**

Cumulative increase in wildfire risk and hazard can occur when the effects of two or more activities from one or more projects combine to produce a significant increase in forest fuel loading in the vicinity of residential dwellings and communities.

The following elements may be considered in the assessment of potential Cumulative Impacts:

1. Fire hazard severity zoning.

The project area is within an area of very high fire hazard (FRAP SRA maps <https://egis.fire.ca.gov/FHSZ/>). This is primarily due to the dense second growth Douglas Fir and brush surrounding the project area. The recent 2020 Glass Fire and associated impact has proven this point. There had not been a fire through the area during the past few decades, and as a result, the vegetation was very dense and contained a significant amount of ladder fuels. All of the 6 acre project area and all of the property parcel were burned in the Glass Fire. The fire substantially damaged portions of the timberland by consuming forest canopy. Most of the ladder fuels were consumed in the fire. The landowner has been cleaning up the burned material and continues to control ladder fuels.

Additional fire hazard severity is related to the surrounding residential housing units in the area. Although this density is not high, it does represent a potential for fire starts due to human activity in a rural area. As a result of the recent Glass Fire, most if not all of the ladder fuels have been reduced. Several of the existing homes were also consumed in this fire.

2. Existing and probable future fuel conditions including vertical and horizontal continuity of live and dead fuels.

Fuel conditions outside of the project area will redevelop, with density and dead fuels increasing over time. This is a function of the natural development of the natural ecosystem and its fire adaptive environment.

The fuel conditions within the project area have been substantially reduced. All slash developed as a result of implementation of the Emergency Notice of timber operations and implementation of the timberland conversion will be burned and or chipped. The future vineyard will be pruned of dead wood annually. Fuel buildup of both dead and green vegetation outside of the project area are being managed by the landowner and will be managed on into the future. Also a drip irrigation system will be installed to water the grape plants and reduce fire susceptibility during the dry summer months of California. In addition, water storage tanks for the drip irrigation system and for fire suppression efforts are available onsite.

3. Location of known existing public and private fuel breaks and fuel hazard reduction activities.

There are no major fuel breaks adjacent to the project area except for the Silverado Trail. The fuel management associated with this road will help manage future fire events. If maintained, this will increase the ability to manage future fire events.

4. Road access for fire suppression resources.

The existing road system on the project property will provide access to the water storage associated with the vineyard development. This water can be used in case of a fire emergency and for fire protection.

MILLER VINEYARD THP**List of Resources Used in Compilation of this Document:**

1. Theodore Wooster, Consulting Wildlife Biologist, 6645 Yount Street, Yountville CA 94599, (707) 944-8451
2. Pam Town, Consulting Wildlife Biologist, 1692 East Road; Deary, ID 83823, (406) 490-7427
3. Heather Morrison, RPF and Botanist
4. CCR 912.9 (932.9, 952.9), Technical Rule Addendum No. 2, Cumulative Impacts Assessment
5. California Department of Forestry and Fire Protection Guidelines for Assessment of Cumulative Impacts
6. 14 CCR 912.5 (932.5, 952.5) Technical Rule Addendum No. 1. Estimating Surface Soil Erosion Hazard Rating
7. Napa County Assessors Records
8. Napa County GIS records
9. Napa County General Plan
10. Napa County Zoning Ordinance
11. California Department of Transportation: http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/index.htm
12. Various THP records maintained by Cal Fire Santa Rosa
13. California Natural Diversity Data Base
14. Soil maps of Napa County (Soil Conservation Service)
15. Cumulative impact for Foresters Handbook CLFA
16. California Wildlife Habitat Relationships System
17. California Wildlife Pub. CDFW 1990
18. California Department of Fish and Wildlife personnel onsite review.
19. Various reports written and attached as appendices to this application.
20. Communication with Matt O'Connor, PHD, GES, O'Connor Environmental, P. O. Box 794 Healdsburg, CA (707) 431-2810
21. Communication with Lou Gilpin, Gilpin Geosciences, Inc. 3228 Silverado Trail, St. Helena, Ca 94574, (707) 251-8543
22. Communication with Tom Origer, Origer and Associates, P. O. Box 1531, Rohnert Park, CA 94927
23. California Oak Mortality Task Force, <http://www.suddenoakdeath.org/>
24. Bast, J. and Taylor, J.M. (2007) Scientific consensus on global warming.
25. The Stern Review of the Economics of Climate Change 2006, text, Cambridge University Press.
26. AB 32 Climate Change Scoping Plan. <https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan>

SECTION V ATTACHMENTS

Attachments not required elsewhere

MILLER VINEYARD THP



Environmental Resource Management
 Scott R. Butler, RPF #1851
 1128 Monaghan Ct.
 Idaho Falls, ID 83404
 Office: (707) 468-8466 Fax: (707) 220-0111
 email: scott.butler@sbcglobal.net

Hank and Bonnie Miller
 3906 Silverado Trail
 Calistoga, CA 94515
hank@thefreshconnection.com

2-14-2023
 Emailed 2-14-2023

Dear Hank,

I am required by the California Department of Forestry to inform you of the following Forest Practice Rule requirements. I have made some footnotes below to try to explain if needed. Please contact me if you still have questions.

Erosion Control responsibilities

Per Page 4, item 5(c) of the THP. As the landowner you are responsible for erosion control operations after timber operations have ceased and after the work completion report has been filed. The prescribed maintenance period for erosion is one to three years. You are also responsible for all vineyard development as outlined in the county permit and the Timber Harvest Plan.

Prescribed Maintenance Period means the period, beginning with filing of the Timber Harvest Plan (THP) work completion report, provided the report is approved, during which time erosion control facilities which are required and constructed as part of a timber operation must be maintained in a functional condition. The period shall not exceed three years from the filing of the work completion report provided that the report is subsequently approved by the director.

The following are excerpts from the California Forest Practice Rules. I have made comments at the end of each as to how they apply to your conversion project. You can view the Forest Practice Act in its entirety at this website.
<https://bof.fire.ca.gov/regulations/bills-statutes-rules-and-annual-california-forest-practice-rules/>

912.7, 932.7, 952.7 Resource Conservation Standards for Minimum Stocking

[All Districts, note (b)(1)(D)]

The following resource conservation standards constitute minimum acceptable stocking in the Coast [Northern, Southern] Forest District after timber operations have been completed.

- (a) Rock outcroppings, meadows, wet areas, or other areas not normally bearing commercial species shall not be considered as requiring stocking and are exempt from such provisions.
 - (b) An area on which timber operations have taken place shall be classified as acceptably stocked if either of the standards set forth in (1) or (2) below are met within five (5) years after completion of timber operations unless otherwise specified in the rules.
- (1) An area contains an average point count of 300 per acre on Site I, II and III lands or 150 on site IV and V lands to be computed as follows:
 - (A) Each countable tree [Ref. PRC § 4528(b)] which is not more than 4 inches d.b.h. counts 1 point.
 - (B) Each countable tree over 4 inches and not more than 12 inches d.b.h. counts 3 points.
 - (C) Each countable tree over 12 inches d.b.h. counts as 6 points.
 - (D) [Coast] Root crown sprouts will be counted using the average stump diameter 12 inches above average ground level of the original stump from which the sprouts originate, counting one sprout for each foot of stump diameter to a maximum of 6 per stump.
 - (2) The average residual basal area measured in stems 1 inch or larger in diameter, is at least 85 square ft. per acre on Site I lands, and 50 square ft. per acre on lands of Site II classification or lower. Site classification shall be determined by the RPF who prepared the plan.

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- (3) To the extent basal area standards are specified in the rules in excess of 14 CCR § 912.7(b)(2) [932.7(b)(2), 952.7(b)(2)], up to 15 square feet of basal area of those standards higher than the minimum may be met by counting snags, and decadent or deformed trees of value to wildlife in the following sizes:
- (A) 30 inches or greater d.b.h and 50 feet or greater in height on site I and II lands;
 - (B) 24 inches or greater d.b.h and 30 feet or greater in height on site III lands; and
 - (C) 20 inches or greater d.b.h and 20 feet or greater in height on site IV and V lands.
- (c) The substitution provided for in 14 CCR § 912.7(b)(3) [932.7(b)(2), 952.7(b)(2)] may only be done when the potential spread of insects and diseases will not have a significantly adverse impact on long term productivity or forest health.
 - (d) The resource conservation standards of the rules may be met with Group A and/or B commercial species. The percentage of the stocking requirements met with Group A species shall be no less than the percentage of the stand basal area they comprised before harvesting. The site occupancy provided by Group A species shall not be reduced relative to Group B species. When considering site occupancy, the Director shall consider the potential long term effects of relative site occupancy of Group A species versus Group B species as a result of harvest. If Group A species will likely recapture the site after harvest, Group B species do not need to be reduced. The time frames for recapturing the site shall be consistent with achieving MSP. The Director may prohibit the use of Group A and/or B commercial species which are non-indigenous or are not physiologically suited to the area involved. Exceptions may be approved by the Director if the THP provides the following information and those exceptions are agreed to by the timberland owner:
 - (1) Explain and justify with clear and convincing evidence how using Group A nonindigenous, or Group B species to meet the resource conservation standards will meet the intent of the Forest Practice Act as described in PRC § 4513. The discussion shall include at least:
 - (A) The management objectives of the post-harvest stand;
 - (B) A description of the current stand, including species composition and current stocking levels within the area of Group B species. The percentage can be measured by using point-count, basal area, stocked plot, or other method agreed to by the Director.
 - (C) The percentage of the post-harvest stocking to be met with Group B species. Post-harvest percentages will be determined on the basis of stocked plots. Only the methods provided by 14 CCR §§ 1070-1075 shall be used in determining if the standards of PRC § 4561 have been met.
 - (D) A description of what will constitute a countable tree, as defined by PRC § 4528 for a Group B species and how such a tree will meet the management objectives of the post-harvest stand. The Director, after an initial inspection pursuant to PRC § 4604, shall approve use of Group B species, as exceptions to the pre-harvest basal area percentage standard, if in his judgment the intent of the Act will be met, and there will not be an immediate significant and long-term harm to the natural resources of the state..

Comments: These are the conifer tree planting standards Cal Fire will hold you to if you do not complete the conversion process. This means complete the whole process, including the installation of the vineyard and associated infrastructure. This would not go into effect until operations have been started and or you decided to not follow through on the vineyard installation.

923, 943, 963 Intent for Logging Roads, Landings, and Watercourse Crossings. [All Districts]

(a) All Logging Roads, Landings, and Logging Road Watercourse crossings in the logging area shall be planned, constructed, Reconstructed, used, maintained, removed, abandoned, and deactivated in a manner that:

- (1) Is consistent with long-term enhancement and maintenance of the forest resource.
- (2) Accommodates appropriate Yarding systems.
- (3) Is economically feasible.

(b) Such planning, construction, reconstruction, use, maintenance, removal, Abandonment , and deactivation shall occur in a manner that considers safety and avoids or substantially lessens significant

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adverse impacts to, among other things:

- (1) Fish and wildlife habitat and listed species of fish and wildlife.
- (2) Water quality and the beneficial uses of water.
- (3) Soil resources.
- (4) Significant archeological and historical sites.
- (5) Air quality.
- (6) Visual resources.
- (7) Fire hazard.

(c) The RPF may propose exceptions to the Rules of this Article if explained and justified in the Plan and found by the Director not to result in a significant adverse impact on the environment.

(d) Exceptions may also be provided through application of Fish and Game Code Section 1600 et seq. and shall be made an enforceable part of the Plan in accordance with 14 CCR §§ 1039, 1040, 1090.14, 1092.26, or 1092.27, 1094.23, or 1094.24, as appropriate.

(e) For watersheds with listed anadromous salmonids and for planning watersheds immediately upstream of, and contiguous to, any watershed with listed anadromous salmonids all Logging Roads, Landings, and Logging Road Watercourse crossings shall be planned, designed, constructed and Reconstructed, used, maintained, abandoned, deactivated, and removed in accordance with 14 CCR § 916.9, subsections (a) and (c) [936.9 (a) and (c), 956.9 (a) and (c)].

(f) The provisions of Article 12 [Article 11 for Northern District] that apply in watersheds with listed anadromous salmonids and in planning watersheds immediately upstream of, and contiguous to, any watershed with listed anadromous salmonids shall not apply to a plan that is subject to:

- (1) A valid incidental take permit issued by CDFW pursuant to Section 2081(b) of the Fish and Game Code that addresses anadromous salmonid protection; or
- (2) A federal incidental take statement or incidental take permit that addresses anadromous salmonid protection, for which a consistency determination has been made pursuant to Section 2080.1 of the Fish and Game Code; or
- (3) A valid natural community conservation plan that addresses anadromous salmonid protection approved by CDFW under Section 2835 of the Fish and Game Code; or
- (4) A valid Habitat Conservation Plan (HCP) that addresses anadromous salmonid protection, approved under Section 10 of the federal Endangered Species Act of 1973; or
- (5) Project revisions, guidelines, or take avoidance measures pursuant to a memorandum of understanding or a planning agreement entered into between the plan submitter and CDFW in preparation of obtaining a natural community conservation plan that addresses anadromous salmonid protection.

Comments: These are the requirements for locating roads. In your case they don't apply since no roads are being built. All roads are existing. Avenues are not considered roads.

1035 Plan Submitter Responsibility

The plan submitter, or successor in interest, shall:

- (a) Ensure that an RPF conducts any activities which require an RPF.
- (b) Provide the RPF preparing the plan or amendments with complete and correct information regarding pertinent legal rights to, interests in, and responsibilities for land, timber, and access as these affect the planning and conduct of timber operations.
- (c) Sign the THP certifying knowledge of the plan contents and the requirements of this section.
- (d) (1) Retain an RPF who is available to provide professional advice to the LTO and timberland owner upon request throughout the active timber operations regarding:
 - A) the plan,
 - B) the Forest Practice Rules, and
 - C) other associated regulations pertaining to timber operations,

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(2) The plan submitter may waive the requirement to retain an RPF to provide professional advice to the LTO and timberland owner under the following conditions:

- A) the plan submitter provides authorization to the timberland owner to provide advice to the LTO on a continuing basis throughout the active timber operations provided that the timberland owner is a natural person who personally performs the services of a professional forester and such services are personally performed on lands owned by the timberland owner;
- B) the timberland owner agrees to be present on the logging area at a sufficient frequency to know the progress of operations and advise the LTO, but not less than once during the life of the plan; and
- C) the plan submitter agrees to provide a copy of the portions of the approved THP and any approved operational amendments to the timberland owner containing the General Information, Plan of Operations, THP Map, Yarding System Map, Erosion Hazard Rating Map and any other information deemed by the timberland owner to be necessary for providing advice to the LTO regarding timber operations.

(3) All agreements and authorizations required under 14 CCR § 1035(d)(2) shall be documented and provided in writing to the Director to be included in the plan.

- (e) Within five working days of change in RPF responsibilities for THP implementation or substitution of another RPF, file with the Director a notice which states the RPF's name and registration number, address, and subsequent responsibilities for any RPF required fieldwork, amendment preparation, or operation supervision. Corporations need not file notification because the RPF of record on each document is the responsible person.
- (f) Provide a copy of the portions of the approved THP and any approved operational amendments to the LTO containing the General Information, Plan of Operations, THP Map, Yarding System Map, Erosion Hazard Rating Map and any other information deemed by the RPF to be necessary for timber operations.
- (g) Notify the Director prior to commencement of site preparation operations. Receipt of a burning permit is sufficient notice.
- (h) Disclose to the LTO, prior to the start of operations, through an on-the-ground meeting, the location and protection measures for any archaeological or historical sites requiring protection if the RPF has submitted written notification to the plan submitter that the plan submitter needs to provide the LTO with this information.

Comments: As the plan submitter you will have this responsibility. As long as everything is going well these technicalities are not a problem. But if something goes wrong this is where individuals get into trouble.

1035.1 Registered Professional Forester Responsibility

- (a) Upon submission of a THP, the RPF who prepares and signs a plan is responsible for the accuracy and completeness of its contents.
 - (1) The RPF preparing the plan shall state in the THP the work which will be performed by the RPF plan preparer (beyond preparation of the THP and attending the pre-harvest inspection if requested by the Director), and any additional work requiring an RPF which the plan preparer does not intend to perform. This may include, but is not limited to, field work in identifying watercourse and lake protection zones or special treatment areas, marking trees, or other activities. The RPF is only responsible for the activities set forth in the plan when employed for that purpose or required by the rules of the Board. The RPF shall state whether or not he or she has been retained to provide professional advice throughout the timber operations.
 - (2) The RPF preparing the plan shall in writing, inform the plan submitter(s) of their responsibility pursuant to Section 1035 of this Article, and the timberland owner(s) of their responsibility for compliance with the requirements of the Act and where applicable, Board rules regarding site preparation, stocking, and maintenance of roads, landings, and erosion control facilities.
- (b) Upon entering into an agreement to accept responsibility for any part of the preparation or implementation of a plan or any work beyond the preparation of a plan, including providing professional advice; all responsible RPFs shall disclose to the real party of interest for whom the RPF is providing professional forestry services any known current or potential conflict of interest the RPFs have with regard to the timber or land that is subject to operations under the plan. All responsible RPFs shall disclose to the timberland owner and plan submitter whether they are the real party of interest for whom the RPF is providing professional forestry services.
- (c) Disclosure of newly discovered conflicts of interest an RPF has with regard to the plan submitter, timberland owner, timber owner, the LTO and timber purchaser, pertaining to the timber or land that is subject to operations under the plan, shall be

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required as long as an RPF has responsibilities relative to a plan. The disclosure shall include identification of the real party of interest for whom the RPF is providing professional forestry services.

- (d) All disclosures made between an RPF and an affected party pursuant to this section may be kept confidential.
- (e) An RPF retained by the plan submitter to provide professional advice throughout the timber operations shall be present, or ensure that the RPF's supervised designee is present, on the logging area at a sufficient frequency to know the progress of operations and advise the LTO and timberland owner, but not less than once during the life of the plan.
- (f) An RPF retained by the plan submitter to provide professional advice throughout the timber operations shall inform the LTO during operations of any mitigation measures incorporated into the plan that are intended to address operations that have a high likelihood of resulting in immediate, significant and long-term harm to the natural resources of the State if such mitigation measures are not strictly applied to minimize such impacts.
- (g) The RPF shall without delay notify in writing the LTO, the plan submitter, and the Department of a decision to withdraw professional services from the plan.
- (h) The RPF shall without delay notify in writing the LTO, the plan submitter, and the Department of a decision to withdraw professional services from the Plan.

Comments: These are my responsibilities, unless the landowner and/or plan submitter take them over.

1035.2 Interaction Between RPF and LTO

(a) After approval of the Plan preparation process but before commencement of Timber Operations by each LTO assigned to the Plan, the responsible RPF or Supervised Designee, shall meet with either the LTO, or their representative, who will be on the ground and directly responsible for Timber Operation. The purpose of the meeting shall be for the RPF to familiarize the LTO with the Plan, the Plan area, and specific applicable requirements of the Plan. The meeting shall be on-site if requested by either the RPF or LTO. An

on-site meeting is required between the RPF or supervised designee familiar with on-site conditions and LTO to discuss protection of any archaeological or historical sites requiring protection if any such sites exist within the Site Survey Area pursuant to Section 929.2[949.2,969.2](b).

(b) The RPF shall notify the LTO of any amendment to the Plan, affecting Timber Operations. An on-site

Comments: These are my responsibilities, unless the landowner and/or plan submitter take them over.

1035.3 Licensed Timber Operator Responsibilities

Each affected LTO shall:

- (a) Sign the Plan and major amendments to the Plan, or sign and file with the Director a facsimile of such Plan or amendments, agreeing to abide by the terms and specifications of the Plan. This shall be accomplished prior to implementation of the following; which the affected LTO has responsibility for implementing:
 - (1) those operations listed under the Plan and
 - (2) those operations listed under any amendments proposing substantial deviations to the Plan.
- (b) Inform the responsible RPF or plan submitter, either in writing or orally, of any site conditions which in the LTO's opinion prevent implementation of the approved Plan including amendments.
- (c) Keep a copy of the applicable approved Plan and amendments available for reference at the site of active Timber Operations. The LTO is not required to possess any confidential addenda to the Plan such as the Confidential Archaeological Addendum, nor is the LTO required to keep a copy of such confidential Plan addenda at the site of active Timber Operations.
- (d) Comply with all provisions of the Act, Board Rules, the applicable approved Plan and any approved amendments to the Plan.
- (e) An LTO shall not be held responsible for Forest Practice Rule violations that result from work required of and/or performed by an RPF, under Board Rules, that is determined by the Director to be inaccurate or inadequate.
- (f) Provide the RPF responsible for professional advice throughout the Timber Operations an on-site contact employee authorized by the LTO to receive RPF advice.

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(g) Keep the RPF responsible for professional advice throughout the Timber Operations advised of the status of timber operation activity.

(1) Within five days before, and not later than the day of the start-up of a timber operation, the LTO shall notify the RPF of the start of Timber Operations.

(2) Within five days before, and not later than the day of the shutdown of a timber operation, the LTO shall notify the RPF of the shutdown of Timber Operations.

(A) The notification of the shutdown of Timber Operations is not required if the period of the shutdown does not extend beyond a weekend, including a nationally designated legal holiday.

(h) Upon receipt of written notice of an RPF's decision to withdraw professional services from the Plan, the LTO or on-site contact employee shall cease Timber Operations, except for emergencies and operations needed to protect water quality, until the LTO has received written notice from the plan submitter that another RPF has visited the Plan site and accepts responsibility for providing advice regarding the Plan as the RPF of record.

Comments: These are the responsibilities of the Licensed Timber Operator, LTO.

1104 Operations Requiring Conversion

Except as exempted by Sec. 1104.1 and 1104.2 of this article, a timberland conversion permit issued by the Director is required for conversion of timberland as defined in Sec. 1100. Issuance of the Timberland Conversion Permit to the timberland owner must be completed before conversion operations begin. "Conversion operations" include final immediate rezoning of timberland production zone lands, and timber operations as defined in PRC 4527 on nontimberland production zone timberlands.

Comments: I think this is straight forward. You do not have Timberland Production Zoning (TPZ), so no zoning change is required.

1104.3 Timberland Conversion Permit Fees

The applicant shall pay an application fee in the amount of \$600 [NOTE: The fee is \$700 if the land is zoned TPZ, see 1105.1. Also, there are DFG fees.] for the cost of processing an application for the conversion of timberland to a non-timber growing use. Where the land proposed to be converted lies within a TPZ the applicant shall also follow the requirements of Section 1105.1. The fee(s) shall be submitted with the application to the appropriate regional headquarters. Where actual state cost exceeds the application fee, the additional charge equal to the excess cost will be computed using State Administrative Manual Sections 8752.1 and 8740 (dated March 1990). The Department will keep the applicant informed of any additional charges and will advise the applicant of any estimated future costs. All additional charges shall be paid by the applicant to the Department's Accounting Office before the issuance of the Timberland Conversion Permit. Costs of recording the documents pursuant to this article shall be paid by the applicant.

Comments: Again, no TPZ. The \$600 is no longer charged. The California Department of Fish and Wildlife (CDFW) fee is around \$2300, they keep changing it so we won't know until Cal Fire (acting in CDFW's behalf) tells us.

All of the following are somewhat self-explanatory.

1105 Application

The conversion permit application shall be in a form prescribed by the Director and shall require but not be limited to the following information:

The name and address of the applicant;

The name and address of the timberland owner of record;

The name and address of the timber owner;

The legal description, general plan designation, and zoned status of the proposed conversion area;

The proposed future use or uses of said area;

The dates when conversion is to be commenced and completed;

The approximate number of acres to be converted;

The zoned status of adjacent property;

A description of other land owned by the applicant in the surrounding area which could accommodate the proposed use or used; Together with a copy of the conversion plan.

The application shall be executed under penalty of perjury.

MILLER VINEYARD THP**1105.1 Application Fees**

In addition to the requirements of Section 1104.3, the applicant shall pay a fee in the amount of \$100 for the cost of processing an application for conversion where the land proposed to be converted lies within a TPZ. *[NOTE: The total of Cal Fire fees is \$700. There may be additional fees from DFG.]* Fees for the recording of documents pursuant to this article shall be borne by the applicant.

1105.2 Director's Determination

The Director shall determine the applicant's bona fide intention to convert in light of the present and predicted economic ability of the applicant to carry out the proposed conversion; the environmental feasibility of the conversion, including, but not limited to, suitability of soils, slope, aspect, quality and quantity of water, and micro-climate; adequacy and feasibility of possible measures for mitigation of significant adverse environmental impacts; and other foreseeable factors necessary for successful conversion to the proposed land use.

1105.3 Conversion Plan

A conversion plan in a form prescribed by the Director shall become a part of the application. The plan conversion shall set forth in detail information pertaining to present and future use, soils, topography, conversion techniques, conversion time schedule and such other information as may be required and is applicable to the particular future use to which the land will be devoted.

1105.4 Additional Proof

The Director or the Board upon appeal may require that the applicant provide such further or additional proof or information as in the Director's or Board's judgment is necessary to allow him to decide whether or not to issue a conversion permit pursuant to PRC 4621.2 and 4623.

1106 Conversion Permit Issuance

(a) The Director shall issue a conversion permit if:

- (1) In his judgment the bona fide intent of the applicant to convert is established;
- (2) He makes the written findings pursuant to PRC 4621.2, when applicable;
- (3) He makes the written findings pursuant to PRC 21081, if an environmental impact report has been prepared;
- (4) He finds that necessary and feasible mitigation measures have been incorporated into the proposed conversion; and
- (5) He finds that no other proximate and suitable land not within a TPZ is available for the proposed alternative use for

lands within a TPZ, if PRC 4621.2 applies.

(b) The Board upon appeal shall apply the same standards as the Director in subsection (a) above in determining whether to issue a conversion permit.

1106.1 Contents of Conversion Permit

The conversion permit shall include, but not be limited to, the name of the permittee, identification of code section of the forest practice rules and regulations from exempt, description of the lands to which the conversion permit is applicable, and the period of time during which the conversion permit is valid.

1106.2 Timber Harvesting Plan Processing

Prior to the start of timber operations, the applicant shall submit to the Director a Timber Harvesting Plan applicable to timber operations set forth in the conversion plan. The THP may be submitted concurrently with the Timberland conversion Permit application but the Director may not approve the THP until the Timberland Conversion Permit is issued.

1106.3 Recordation, Renewal, Transferability

- (a) The permittee shall submit the conversion permit to the County Recorder for recording in each county in which the property is located before beginning any operations contemplated under said permit. Amendments, suspensions, revocations, and cancellations of conversion permits shall be recorded in the same manner.
- (b) A conversion permit may be renewed by the Director upon a proper showing of cause and necessity by the permittee. The Director may deny renewal and require a new application if he finds that circumstances have substantially changed.
- (c) The privilege granted to the permittee is nontransferable and nonassignable for any purpose without written approval of the Director.

1106.4 Conversion Permit Denial

(a) The Director shall deny a conversion permit:

- (1) For any of the reasons set forth in PRC 4624;
- (2) If, in the Director's judgment, the applicant has failed to provide satisfactory proof of his bona fide intent to convert;

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- (3) If the Director cannot make the findings required by PRC 21801, if an environmental impact report has been prepared;
- (4) If the Director finds that necessary and feasible mitigation measures have not been incorporated into the proposed conversion; or
- (5) For lands within a TPZ, if PRC 4621.2 applies and the Director finds that other proximate and suitable land not within a TPZ is available for the proposed alternative use.

(b) The Board upon appeal shall deny a conversion permit for any of the reasons specified in subsection (a) above.

1106.5 Denial, Suspension, Revocation

- (a) Except as provided in subsection (b), the Director may deny, suspend or revoke a conversion permit in accordance with the requirements of Article 9 (commencing with Sec. 4621) of Chapter 8, Part 2, Division 4 of the PRC, provided that all proceedings in connection with such action shall be conducted in accordance with the provisions of Chapter 5 (commencing with Sec. 11500) of Part 1, Division 3, Title 2 of the Gov. C.
- (b) The Director may deny a conversion permit pursuant to PRC 4621.2(d) provided that all proceedings in connection with such action shall be conducted in accordance with the provisions of subsection (a) above, except that the applicant must request a hearing before the Board within 15 days of service of the denial. The hearing shall be commenced within 60 days from the filing of the appeal unless a later hearing date is mutually agreed upon by the applicant and the Board.

1107 Cancellation by Permittee

Upon application by the permittee for cancellation, the conversion permit may be cancelled by the Director upon such terms and conditions as he may set forth. Upon cancellation of the conversion permit, an agreement of cancellation, executed by the permittee and the Director, shall be recorded by the permittee in those counties in which the permit was originally recorded. Upon such recording, the subject land shall revert back to timberland and stocking shall be established pursuant to PRC 4561 and 4561.3. The Director shall provide a copy of the cancellation agreement to the county assessors and the county planning directors of those counties in which the property is located.

Contact me if you have further questions.

Sincerely



Scott R. Butler, RPF #1851

MILLER VINEYARD THP

Adjacent landowners within 300' and 1000' downstream of the project boundary. Updated 2-13-2023 • **mailed 2-15-2023.**
No Response 3-27-2023

Henry and Bonnie Miller
3906 Silverado Trail
Calistoga, CA 94515

James Treanor
5 Hill Avenue
San Carlos, ca 94070 •

Frank Cafferata
3880 Silverado Trail
Calistoga, CA 94515

Benjamin Jorgensen
3888 Silverado Trail
Calistoga, CA 94515

Ladera Trail North LLC
P. O. Box 27917
Scottsdale, AZ 85255

Robert Mowat
90 Mossbridge Lane
Orinda, CA 94563

Koerner Rombauer
P. Box 1196
St Helena, CA 94574

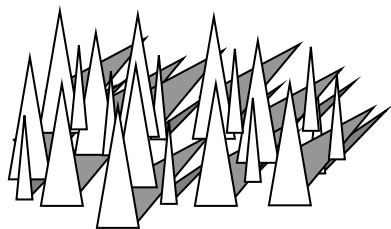
Bruce Strombom
3939 Silverado Trail
Calistoga, CA 94515

Jackson Mosher
3918 Silverado Trail
Calistoga, CA 94515

RYLA Holdings LLC
929 Douglas Ave.
Modesto, CA 95350

Richard Jones
3884 Silverado Trail
Calistoga, CA 94515

MILLER VINEYARD THP



Environmental Resource Management
Scott R. Butler, RPF #1851
1128 Monaghan Ct.
Idaho Falls, ID 83404
Office: (707) 468-8466 Fax: (707) 220-0111
email: scott.butler@sbcglobal.net

Adjacent Landowner and or downstream water user

2-13-2023

**Biter Creek
Napa County, California**

Mailed 2-15-2023.
No Response 3-27-23

To Whom It May Concern:

You are listed as an adjacent landowner of a proposed timber harvest. Your property is within 300 feet, or within 1,000 feet downstream, and has the potential to receive surface drainage from the proposed timber harvest. State law requires that I notify you of this activity.

The Proposed Project would convert approximately 6 acres of forest land to a commercial vineyard within a 40-acre property. The 6 acres constitute the Project Site and the total area to be disturbed.

The project is located on a small ridge between York Creek and Ritchie Creek watersheds (Calwater #2206.500201 and #2206.500203). There are no watercourses on or adjacent to the proposed project. The intersection of Biter Creek and the Napa River is approximately 1000' south of the project property. The driveway entrance is approximately 8/10 of a mile south of the intersection of Silverado Trail and Larkmead Lane, Calistoga CA.. Legal description: A portion of the Carne Humana Rancho, projected portion of section 10, T8N R6W MDB&M. The project is 4 miles E of the town of Calistoga, CA. See the attached map, a portion of the Calistoga quadrangle, for the exact location.

Harvesting is expected to take place later this year or early next year. This area was burned in the 2020 Glass fire.

Napa County is presently developing an Initial Study and Erosion Control Plan for this project.

This letter is an official request for information. You (the property owner) are requested to advise the plan submitter of surface domestic water use from the watercourse, within the THP or within 1,000 feet downstream of the THP boundary. Respond within ten days of the post-marked date on this letter. You may contact the plan submitter at the address below in writing or by email. You may also contact myself at the address and or email above.

Sincerely,

Scott R. Butler, RPF 1851

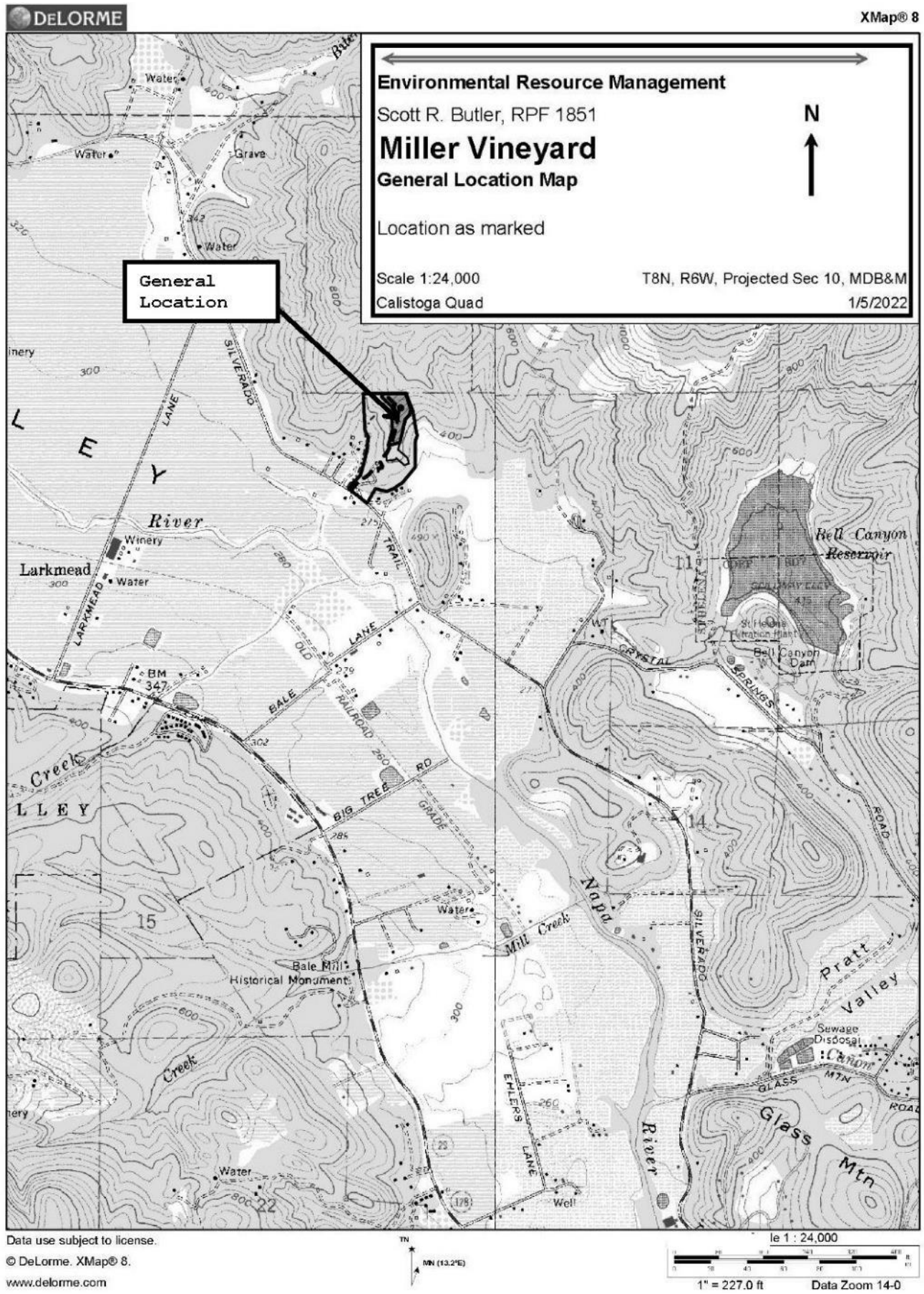
Plan submitter

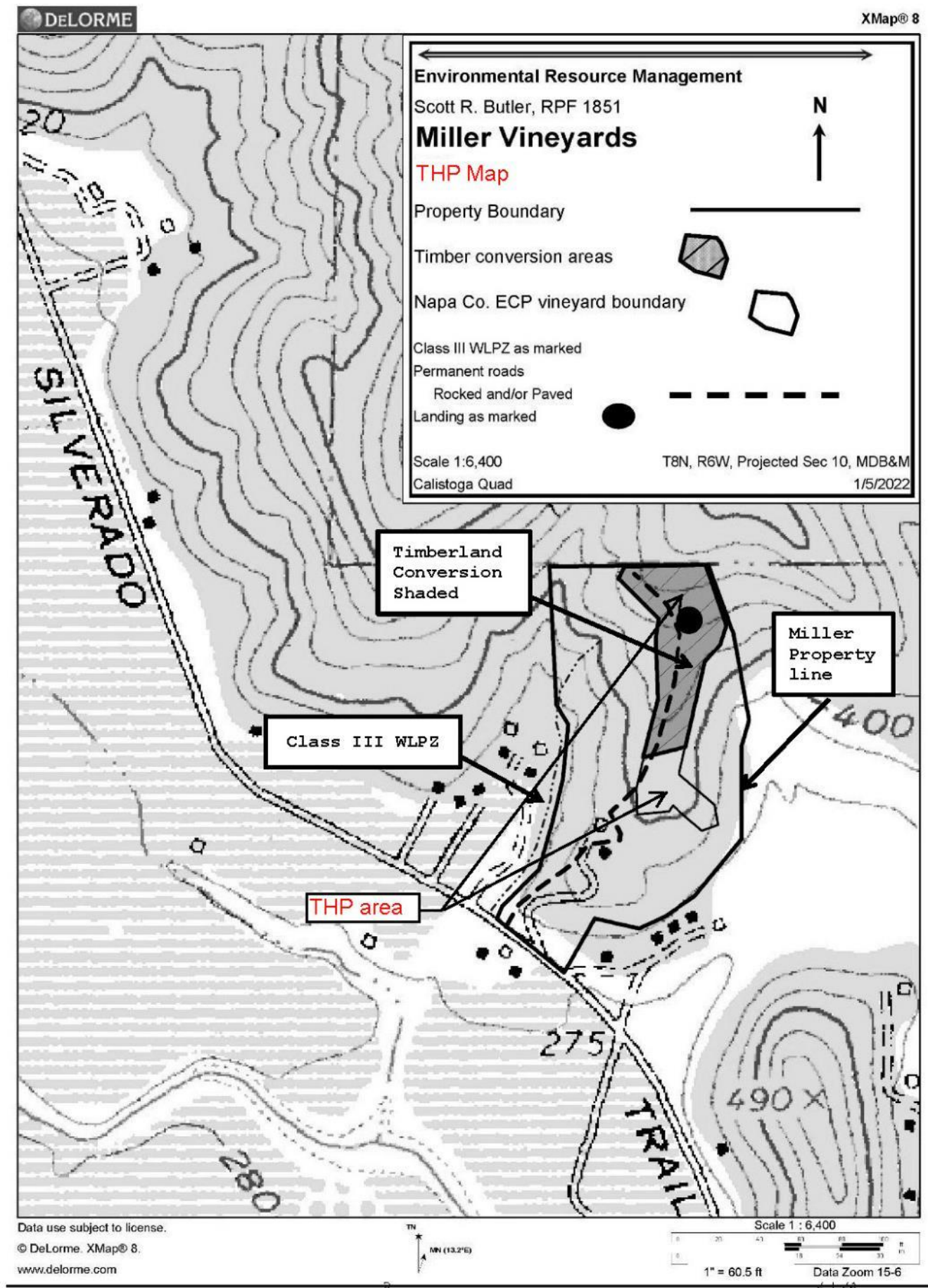
Hank Miller
3096 Silverado Trail
Calistoga, CA 94515

Attached, Notice of intent.
General Area Map
Project Area Map

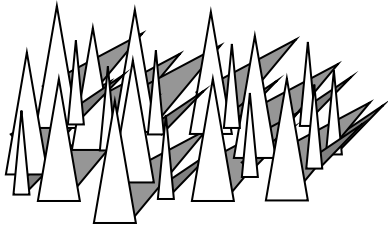
Email address: hank@thefreshconnection.com

MILLER VINEYARD THP





MILLER VINEYARD THP



Environmental Resource Management

Scott R. Butler, RPF #1851

1128 Monaghan Ct.

Idaho Falls, ID 83404

Office: (707) 468-8466 Fax: (707) 220-0111

email: scott.butler@sbcglobal.net

Napa Valley Register

Attn: Legal notices

P. O. Box 150

Napa, CA 94559

Fax 707-256-0743

Emailed 2-13-2023

Published 2-17-23

Email: nvrlegals@napanews.com

To Whom It May Concern:

Please place the following Legal notice in the Napa Valley Register on the earliest date possible.

*This is a request for information of surface domestic water use located within 1,000 feet downstream from a proposed 6 acre forest harvest and conversion to vineyard. The proposed project consists of a 6 acre harvest and installation of a 6 acre vineyard. The project is located on a small ridge between York Creek and Ritchie Creek watersheds (Calwater #2206.500201 and #2206.500203). There are no watercourses on or adjacent to the proposed project. The intersection of Biter Creek and the Napa River is approximately 1000' south of the project property. The driveway entrance is approximately 8/10 of a mile south of the intersection of Silverado Trail and Larkmead Lane, Calistoga CA.. Legal description: A portion of the Carne Humana Rancho, projected portion of section 10, T8N R6W MDB&M. The project is 4 miles E of the town of Calistoga, CA
Send information within 10 days of the publication of this notice to: Environmental Resource Management 1128 Monaghan Ct., Idaho Falls, ID 83404 or email scott.butler@sbcglobal.net*

Please call me, at the number listed above, or email to confirm, thank you for your assistance.

Sincerely

Scott R. Butler

MILLER VINEYARD THP

Customer Ad Proof

237-60008238 Environmental Resources Management

Order Nbr 151348

Publication Napa Valley Register

Contact Environmental Resources Management
 Address 1 1128 MONAGHAN CT.
 Address 2
 City St Zip IDAHO FALLS ID 83404
 Phone 7074688466
 Fax

PO Number
 Rate Legal Open
 Order Price 115.48
 Amount Paid 0.00
 Amount Due 115.48

Section Legals
 SubSection
 Category 901 Public Notices

Start/End Dates 02/17/2023 - 02/17/2023
 Insertions 1
 Size 34

Ad Key 151348-1
 Keywords PUBLIC NOTICE This is a request

Salesperson(s) Gracie Solano
 Taken By Maria Solano

Notes

Ad Proof

PUBLIC NOTICE

This is a request for information of surface domestic water use located within 1,000 feet downstream from a proposed 6 acre forest harvest and conversion to vineyard. The proposed project consists of a 6 acre harvest and installation of a 6 acre vineyard. The project is located on a small ridge between York Creek and Ritchie Creek watersheds (Calwater #2206.500201 and #2206.500203). There are no watercourses on or adjacent to the proposed project. The intersection of Biter Creek and the Napa River is approximately 1000' south of the project property. The driveway entrance is approximately 8/10 of a mile south of the intersection of Silverado Trail and Larkmead Lane, Calistoga CA.. Legal description: A portion of the Carne Humana Rancho, projected portion of section 10, T8N R6W MDB&M. The project is 4 miles E of the town of Calistoga, CA. Send information within 10 days of the publication of this notice to: Environmental Resource Management 1128 Monaghan Ct., Idaho Falls, ID 83404 or email scott.butler@sbcglobal.net 2/17/2023 #151348

*** Proof of Publication ***

I CERTIFY (OR DECLARE) UNDER PENALTY OF PERJURY THAT

THE FOREGOING IS TRUE AND CORRECT.

DATED AT NAPA COUNTY, CALIFORNIA,

THIS 17 DAY OF February 2023

SIGNATURE

Gracie Solano

MILLER VINEYARD THP

NOTICE OF INTENT TO HARVEST TIMBER**Posted 7-12-2023.**

A Timber Harvesting Plan (Plan) or Amendment has been submitted to the California Department of Forestry & Fire Protection (CAL FIRE). CAL FIRE will be reviewing the proposed timber operation for compliance with State law and rules of the Board of Forestry and Fire Protection. The following briefly describes the proposed timber operation and where and how to get more information. In accordance with the timeline stated under Public Resources Code Section 4582.7, you may submit written public comments on the Plan or Amendment for CAL FIRE to consider.

This notice applies to (select one below):☒ New Timber Harvesting Plan☐ Amendment to an Approved Timber Harvesting Plan

Applicant Information (Timberland Owner(s), Registered Professional Forester who prepared the plan and Plan Submitter should match those listed in the plan or amendment.)

1. The name(s) of the Timberland Owner(s) where timber operations are to occur: **Hank and Bonnie Miller**
2. Registered Professional Forester who prepared the plan or amendment: **Scott R. Butler**
Registered Professional Forester Phone (optional): **707 468-8466**
3. The name of the Plan or Amendment Submitter: **Hank Miller**

Project Summary (County, legal description, acres proposed to be harvested and treatments to be used should match those listed in the plan or amendment.)

4. Location of the proposed timber operation (county, legal description, approximate direction & approximate distance of the timber operation from the nearest community or well-known landmark): **Napa County California. Legal description: A portion of the Carne Humana Rancho, projected portion section 10, T8N R6W MDB&M. The project is 4 miles E of the town of Calistoga, CA.**
5. The name of, and distance from, the nearest perennial stream and major watercourse flowing through or downstream from the timber operation: **The project is located on a small ridge between York Creek and Ritchie Creek watersheds (Calwater #2206.500201 and #2206.500203). There are no watercourse's on or adjacent to the proposed project. The intersection of Biter Creek and the Napa River is approximately 1000' south of the project property. The driveway entrance is approximately 8/10 of a mile south of the intersection of Silverado Trail and Larkmead Lane, Calistoga CA.**
6. The regeneration methods and intermediate treatments to be used:
Timberland Conversion of 6 acres and installation of a Vineyard.
7. The regeneration methods and intermediate treatments to be used: **Timberland Conversion**
Powerlines: 14CCR 1032.7(d)(10) & (e) (provide name and mailing addresses of the utilities for department distribution)
Pacific Gas and Electric, 77 Beale Street, P. O Box 770000 San Francisco, CA 94177
8. ☐ Yes ☒ No Is there a known overhead power line, except lines from transformers to service panels, within the plan area?
9. ☐ Yes ☒ No Is there a known overhead power line within 200' outside of the plan boundary?

Public Information: The review times allowed for CAL FIRE to review the proposed timber operation are variable in length but limited. To ensure CAL FIRE receives your comments please read the following:

The estimated earliest possible date CAL FIRE may **APPROVE** the Plan or Amendment is: **Fall of 2023, assuming approval of Napa County ECP by 8-1-2023. THP to be submitted to Cal Fire 7-12-2023**

(This date is 15 calendar days from receipt of the Plan or Amendment by CAL FIRE, except in counties for which special rules have been adopted where the earliest date is 45 calendar days after receipt.)

NOTE: THE ESTIMATED EARLIEST APPROVAL DATE IS PROBABLY NOT THE ACTUAL APPROVAL DATE. Normally, a much longer period of time is available for public comment and preparation of CAL FIRE's responses to public comments. Please check with CAL FIRE, prior to the above listed date, to determine the actual date that the public comment period closes.

The public may review, or purchase a copy of, the Plan or Amendment at the CAL FIRE Review Team Office shown below. The cost to obtain a copy is 37 cents for each page, \$2.50 minimum per request. The cost to obtain a copy of this plan or amendment is: _____ (to be completed by CAL FIRE upon receipt of plan).

Questions or concerns regarding this plan should be directed to the CAL FIRE Review Team Office shown below or emailed to SantaRosaPublicComment@fire.ca.gov for incorporation into an Official Response Document. Please include the plan number on all correspondence.

Forest Practice Program Manager, CAL FIRE, 135 Ridgway Avenue, Santa Rosa, CA 95401, phone (707) 576-2959

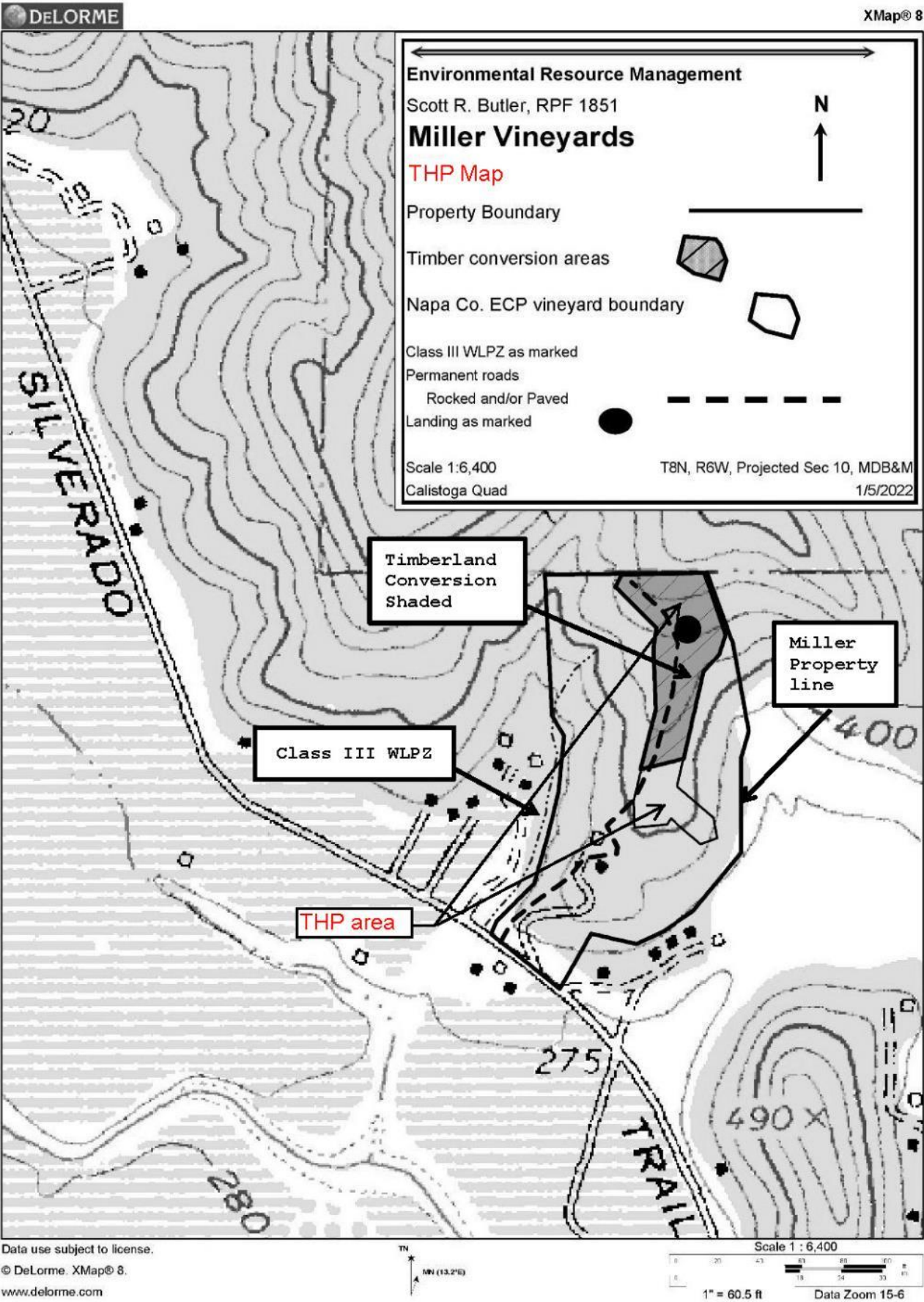
The plan may be viewed online at <https://caltreesplans.resources.ca.gov/caltrees/>

A map showing the approximate boundary of the THP area, a map legend, and a scale is attached to help in locating where the proposed timber operation is to occur.

For CAL FIRE Use Only

Timber Harvest Plan Number:

Date of Receipt



NOI posting 2-16-2023 and picture.



Reposted 7-12-2023.