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NORTHERN REGION HEADQUARTERS**
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OFFICIAL RESPONSE TO SIGNIFICANT ENVIRONMENTAL POINTS RAISED DURING THE TIMBER HARVESTING PLAN EVALUATION PROCESS

FROM THE DIRECTOR OF THE CALIFORNIA DEPARTMENT OF FORESTRY AND FIRE PROTECTION (CAL FIRE)

TIMBER HARVESTING PLAN (THP) No:	1-23-00099-SON
SUBMITTER:	Gualala Redwood Timber LLC
COUNTY:	Sonoma
END OF PUBLIC COMMENT PERIOD:	March 11, 2024
DATE OF RESPONSE:	April 10, 2024

The California Department of Forestry and Fire Protection (CAL FIRE) serves as the lead agency in the review of Timber Harvesting Plans. These plans are submitted to CAL FIRE, which directs an interdisciplinary review team of specialists from other governmental agencies to ensure compliance with environmental laws and regulations. As a part of this review process, CAL FIRE accepted and responded to comments, which addressed significant environmental points raised during the evaluation of the plan referenced above. This document is the Director's official response to those significant environmental points, which specifically address this Timber Harvesting Plan. Comments, which were made on like topics, have been grouped together and addressed in a single response. Remarks concerning the validity of the review process for timber operations, questions of law, or topics and concerns so remote or speculative that they could not be reasonably assessed or related to the outcome of a timber harvesting operation, have not been addressed.

PUBLIC NOTIFICATION

The following actions were taken to inform the public of the proposed Timber Harvesting Plan (THP) and to provide an opportunity to the public to voice concerns with the THP:

- Notification of the receipt of a timber harvesting plan was sent to the adjacent landowner(s).
- Notice of the receipt of the plan was submitted to the county clerk for posting with other environmental notices.
- Notice of the plan was posted at the Department's local office and also at the regional office in Santa Rosa.
- Notice of the receipt of the THP was sent to those organizations and individuals on the Department's list for notification of plans in the county.
- A "Notice of the Intent to Harvest Timber" was posted near the plan site.

THP REVIEW PROCESS

The laws that govern the Timber Harvesting Plan review process are found in the Forest Practice Act, which is contained in the Public Resources Code (PRC) and in the rules of the Board of Forestry and Fire Protection (the Forest Practice Rules) which are contained in the California Code of Regulations (CCR).

The Forest Practice Rules are specific in scope and detail and provide explicit instructions for permissible and prohibited actions that govern the conduct of timber operations in the field. The major categories covered by the rules include:

- Timber Harvesting Plan contents and the Timber Harvesting Plan review process
- Silvicultural methods
- Harvesting practices and erosion control
- Site preparation
- Watercourse and lake protection
- Hazard reduction
- Fire protection
- Forest insect and disease protection practices
- Coastal Commission Special Treatment Areas
- Use, construction and maintenance of logging roads and landings
- County-specific rules

When a THP is submitted to the Department, it undergoes an interdisciplinary review consisting of several steps. In addition to CAL FIRE, the Review Team members include representatives of the California Department of Fish and Wildlife (CDFW); the appropriate Regional Water Quality Control Board (RWQCB or RWB); California Geological Survey (CGS); the Department of Parks and Recreation (DPR); the appropriate County Planning office; and if within their jurisdiction, the Coastal Commission (CC) (14 CCR § 1037.5(a)). Once submitted the Director determines if the plan is accurate, complete, and in proper order, and if so, files the plan (14 CCR § 1037). In addition, the Review Team determines whether a Pre Harvest Inspection (PHI) is necessary, and what areas of concern are to be examined during the inspection (14 CCR § 1037.5(g)(1)).

If the plan is accepted for filing, and a PHI is determined to be needed, the PHI is conducted to evaluate the adequacy of the THP. All agency personnel who comprise the interdisciplinary Review Team are invited to attend the PHI as well as other experts and agency personnel whom the Department may request. During this field review, additional mitigations and/or recommendations may be formulated to provide greater environmental protection. These recommendations are forwarded to the RPF along with the Review Team member's PHI Report. The RPF will respond to the recommendations made and forward the responses to the Region office and Second Review Team Chair.

A Second Review Team meeting is held where members of the interdisciplinary Review Team meet to review all the information in the plan, and develop a recommendation for the Director (14 CCR § 1037.5(g)(2)). Prior to and/or during this meeting the Review Team examines all field inspection reports, considers comments raised by the public, and discusses any additional recommendations or changes needed relative to the proposed THP. These recommendations are forwarded to the RPF. If there are additional recommendations, the RPF will respond to each recommendation, and forward those responses to the regional office in Santa Rosa.

The representative of the Director of the Department reviews all documents associated with the proposed THP, including all mitigation measures and plan provisions, written correspondence from the public and other reviewing agencies, recommendations of the interdisciplinary Review Team, and the RPF's responses to questions and recommendations made during the review period. Following consideration of this material, a decision is made to approve or deny a THP.

If a THP is approved, timber operations may commence, provided that the conditional requirements for commencement of timber operations in the plan and the rules have been satisfied. The THP is valid for up to five years, and may be extended under special circumstances for a maximum of two more years, for a total of seven years.

Prior to commencing logging operations, the RPF must meet with the licensed timber operator (LTO) to discuss the THP (14 CCR § 1035.2); a CAL FIRE representative may attend this meeting. The Department makes periodic field inspections to check for THP and rule compliance. The number of inspections depends upon the plan size, duration, complexity, and the potential for adverse impacts. Inspections include, but are not limited to, inspections during operations pursuant to PRC § 4604(a), inspections of completed work pursuant to PRC § 4586, erosion control monitoring per PRC § 4585(a), and stocking inspection as per PRC § 4588.

The contents of the THP, the Forest Practice Act and the Forest Practice Rules, provide the criteria which CAL FIRE inspectors use to determine compliance. While the Department cannot guarantee that there will be no violations, it is the Department's policy to vigorously pursue the prompt and positive enforcement of the Forest Practice Act, the Forest Practice Rules, related laws and regulations, and environmental protection measures that apply to timber operations on non-federal land in California. This enforcement is directed primarily at preventing forest practice violations, and secondarily at prompt and adequate correction of violations when they occur.

The general means of enforcement of the Forest Practice Act, the rules, and other related regulations range from the use of violation notices, which require corrective action, to criminal proceedings through the court system. Timber operator and RPF licensing action may also be

pursued. Most forest practice violations are correctable and the Department's enforcement program assures correction. Where non-correctable violations occur, criminal, civil, or administrative action is usually taken. Depending on the outcome of the case and the venue in which the case is heard, some sort of environmental corrective work is usually done. This is intended to offset non-correctable adverse impacts.

Once harvesting operations are finished, a completion report must be submitted certifying that the area meets the requirements of the rules. CAL FIRE inspects the area to verify that all aspects of the applicable rules and regulations have been followed, including erosion control work. Depending on the silvicultural system used, the stocking standards of the rules must be met immediately or in certain cases within five years. A stocking report must be filed to certify that the requirements have been met.

CEQA Compliance

THPs, as activities that involves the issuance to a person a permit by one or more public agencies, satisfy the definition of a Project (PRC § 21065) pursuant to the California Environmental Quality Act (CEQA)(PRC § 2100 *et seq.*) and, as such, are subject to the provisions and requirements of CEQA. The THP review and approval process, as described above and within the Forest Practice Act and Rules, is a certified regulatory program, as described within CEQA (PRC § 21080.5, 14 CCR § 15251(a)), and the THP satisfies the requirements in CEQA for the preparation of an Environmental Impact Report (*Ebbetts Pass Forest Watch v. California Dept. of Forestry and Fire Protection (2008)* 43 Cal. 4th 936, 944 (*Ebbetts Pass II*)).

Although a THP differs from an EIR due to the prescriptive requirements of the FPRs, a THP still must still comply with all other elements of CEQA, including an evaluation of the project's contribution to potential cumulative impacts. (See 14 CCR. §§ 898, 932.9, *East Bay Mun. Util. Dist. v. Dep't of Forestry & Fire Prot.* (1996) 43 Cal.App.4th 1113, 1127 (*EBMUD*)). The FPRs require those impacts to "be assessed based upon the methodology described in Board Technical Rule Addendum Number 2 ["Cumulative Impacts Assessment"] ... [and] be guided by standards of practicality and reasonableness." (14 CCR § 898.) The FPRs limit the assessment "to closely related past, present and Reasonably Foreseeable Probable Future Projects within the same ownership and to matters of public record." (14 CCR § 898.) CAL FIRE must also "supplement the information provided by the . . . Plan submitter when necessary to ensure that all relevant information is considered." (14 CCR § 898) "[CAL FIRE], as lead agency, shall make the final determination regarding assessment sufficiency and the presence or absence of significant adverse Cumulative Impacts . . . based on a review of all sources of information provided and developed during review of the Plan." (14 CCR § 932.9, Add. 2.)

Technical Rule Addendum No. 2 (TRA 2) provides a comprehensive checklist that RPFs must follow for the cumulative impacts assessment. First, the THP must "establish and briefly describe the assessment area within or surrounding the Plan for each resource subject [to be assessed] and shall briefly explain the rationale for establishing the resource area." (14 CCR §§ 898, 932.9, Add. 2) The resource subjects to be evaluated range from Watershed to Biological to Greenhouse Gases to Wildfire Risk and Hazard. (14 CCR § 932.9(c).) The planning watershed maps distributed by CAL FIRE must be used to evaluate impacts absent explicit approval by the Director. The THP must identify and briefly describe "past, present, and Reasonably Foreseeable Probable Future Projects," and describe "any continuing significant adverse impacts from past

land use activities within the assessment area(s) that may add to the impacts of the proposed project.” (14 CCR § 932.9.) Finally, the Appendix to TRA 2 provides extensive guidelines for the RPF’s evaluation of whether the THP will “cause or add to significant adverse Cumulative Impacts.”

FOREST PRACTICE TERMS

ASP	Anadromous Salmonid Protection	FPR	California Forest Practice Rule
BMP	Best Management Practice	LTO	Licensed Timber Operator
BOF	California Board of Forestry and Fire Protection		
CAL FIRE	Calif. Dept. of Forestry & Fire Protection	NCRWQCB	North Coast Water Quality Control Board
CCR	California Code of Regulations	NSO	Northern Spotted Owl
CCSTA	Coastal Commission Special Treatment Area	OR	Official Response
CDFW	California Department of Fish and Wildlife	PC	Public Comment
CEG	Certified Engineering Geologist	PHI	Pre-Harvest Inspection
CEQA	California Environmental Quality Act	PRC	Public Resources Code
CESA	California Endangered Species Act	NCRWB/RWB	Regional Water Quality Control Board
CIA	Cumulative Impacts Assessment	RPF	Registered Professional Forester
CGS	California Geological Survey	STA	Special Treatment Area
CSDS	Controllable Sediment Discharge Sources	THP	Timber Harvesting Plan
DBH/dbh	Diameter Breast Height	TPZ	Timber Production Zone
DDD	Director’s Determination Date	USFWS	U.S. Fish and Wildlife Service
DPR	Department of Parks and Recreation	WAA	Watershed Assessment Area
ECA	Equivalent Clearcut Area	WDR	Waste Discharge Requirements
ECP	Erosion Control Plan	WLPZ	Watercourse and Lake Protection Zone

[sic] Word used verbatim as originally printed in another document. May indicate a misspelling or incorrect word usage

BACKGROUND

Timber Harvesting Plan (THP) # 1-23-00099-SON proposes to harvest timber on 736 acres of Gualala Redwood Timber LLC timberland using the single tree selection, Special Treatment Area Prescription, Variable Retention and no harvest silvicultural methods. The THP was originally received by CAL FIRE on July 21, 2023 and accepted for filing on December 18, 2023. The review team, comprised of members representing CAL FIRE, CDFW, CGS, and the NCRWQCB, conducted a desk review referred to as first review prior to filing. During first review, each agency drafted questions addressing environmental concerns relative to the agency's expertise for the RPF to address. A PHI was scheduled for December 15, 2023 and the RPF responded to the first review questions prior to the PHI on December 7, 2023. The PHI was conducted over the course of two days beginning on December 15, 2023 and attended by representatives of CAL FIRE, CDFW, CGS and the NCRWQB. The Final Interagency Review (aka Second Review) occurred on February 15, 2024. The RPF responses to First Review and the PHI were addressed and clarified at the Final Interagency Review. The Second Review Chair requested fourteen revisions to the THP during the meeting. The RPF completed the response to all Second Review recommendations on February 29, 2024. The Second Review Chair accepted the RPF responses to Second Review on February 29, 2024. The public comment period then ended on March 11, 2024. This Official Response to address public concerns was drafted on- April 10, 2024.

PUBLIC COMMENT SUMMARY

During the public comment period for this THP as described above, there were seven public comment letters received at the CAL FIRE Region Headquarters in Santa Rosa. These public comments brought up concerns that are addressed in this Official Response (OR). General concerns are grouped by subject matter and followed by the Department's response. Original text taken directly from the public comments, rules, reports, or the THP are presented as italicized text. A copy of the original letters sent to the Department are viewable through the Department's online Forest Practice Database CalTREES.

CalTREES instructions: navigate to <https://caltreesplans.resources.ca.gov/caltrees/caltrees.aspx> Click the search icon at the top of the page, then type the Plan # in the Record Number box (county identifier not needed). Under the Document Number column, select the Plan Number for the "Timber Harvest Plan" Type. Below the "Record Details" should be a list of attachments for the Plan. (Note: if there are a substantial number attachments, or attachments with large file sizes, it may take some time to load) The Public Comments are labeled under "Record Type" and are in pdf format, usually with a "PC" label.

SUMMARY OF SIGNIFICANT ENVIRONMENTAL GENERAL CONCERNS WITH RESPONSES

1. **General Concern:** Timber Operations in the Vicinity of Residential Areas.
PC-1, PC-2, PC-3, PC-4, PC-5

CAL FIRE received four public comments indicating general concerns related to the conduct of Timber Operations within the vicinity of residential structures and areas. Nothing within the Forest Practice Act, Rules, or any other mechanism of law, provides for or allows timber operations to damage or harm such structures and areas. Any such damage or harm would be subject to existing civil or criminal law, as applicable, and is outside the jurisdiction of the Forest Practice Act and Rules. For concerns regarding slope stability, soil stabilization, wildfire risk and hazard, and watershed protection, please see responses to those General Concerns below.

2. **General Concern:** Watershed/Watercourse Protection.
PC-2, PC-4, PC-5, PC-6, PC-7,

CAL FIRE received five public comments indicating general concerns related to water quality, watershed protection, and watercourse protection.

Proposed operations related to and surrounding watercourses are described within the THP in Section II, Item 14: silviculture, specifically single-tree selection in special treatment areas and within watercourse and lake protection zones (pages 11 through 17), Items 18 through 21: soil stabilization and ground-based equipment, in which the proposed THP imposes prescriptive requirements to operations adjacent to watercourses (pages 22 through 30), Item 23: winter operations, in which the plan imposes prescriptive conditions for conducting operations from October 15 through May 1 to address climatic effects during that period (pages 31 through 36), Item 24: road work, in which the proposed THP provides a tabular description of existing and potential significant erosion sites and the proposed treatment associated with those sites (pages 41 to 51), and Items 26 and 27: watercourses and WLPZ in-lieu or alternative practices, in which the proposed THP provides specific conditions for operation within and surrounding watercourses and watercourses, watercourse and lake protection zones, and equipment limitation zones (pages 54 through 79).

The potential for cumulative significant impacts to watershed resources were analyzed across three planning watersheds, Black Point, Big Pepperwood Creek, and Mouth of the Gualala (as identified through CALWATER version 2.2), consistent with the regulatory guidance within 14 CCR § 912.9. Pages 164 through 218 of the THP assess and analyze the potential for the actions contained within the proposed THP, in conjunction with past projects (including those which have impaired watercourses as described within section 303 of the Federal Clean Water Act), reasonably foreseeable probable future projects, and continuing significant adverse impacts from past land use activities, to result in significant cumulative impacts. The analysis within the THP indicates that no reasonably potential significant adverse impacts to the watershed, including water quality (sedimentation) and individual watercourses, can be expected to occur as a result of THP. Activities associated with project design, such as the maintenance of canopy cover from retained trees and vegetation, upgrading and improvement of road and crossing conditions, elimination of operations

on unstable features, and soil-stabilization actions, serve to prevent both current and future sources of sediment via the prevention of transportable sediment from entering stream channels, and by ensuring that existing in-stream potential sediment sources remain in place.

CAL FIRE has determined that the analysis is reasonable based on the characteristics of the assessment area and the proposed operations. In light of the available information contained within the record, CAL FIRE concurs with the RPF's conclusion that the plan will not have a significant adverse effect on watershed resources.

3. **General Concern: Fire Hazard/Hazard Reduction.**

PC-2, PC-3, PC-4

As an agency, CAL FIRE fulfills many roles to protect both the public and natural resources of our state. When it comes to operations that can impact both the natural environment and the public, CAL FIRE must review these proposals with an eye toward these two responsibilities. When it decides whether to approve a plan, CAL FIRE must exercise professional discretion:

14 CCR § 897 Implementation of Act Intent

(d) Due to the variety of individual circumstances of timber harvesting in California and the subsequent inability to adopt site-specific standards and regulations, these Rules use judgmental terms in describing the standards that will apply in certain situations. By necessity, the RPF shall exercise professional judgment in applying these judgmental terms and in determining which of a range of feasible (see definition 14 CCR 895.1) silvicultural systems, operating methods, and procedures contained in the Rules shall be proposed in the plan to substantially lessen significant adverse impacts in the environment from timber harvesting. The Director also shall exercise professional judgment in applying these judgmental terms in determining whether a particular plan complies with the Rules adopted by the Board and, accordingly, whether he or she should approve or disapprove a plan. The Director shall use these Rules to identify the nature of and the limits to the professional judgment to be exercised by him or her in administering these Rules.

Requirements of Evaluation Included in the Rules

The Forest Practice Rules recognize that Timber Operations have the potential to cause and contribute to the severity of fires. The need to protect property and natural resources from fire goes back to the founding of the original Board of Forestry in 1885. Fire prevention laws were the first regulations governing forestry in our state.

Current Forest Practice Laws contain significant details on how operations are to be conducted to reduce or eliminate the chance that logging will cause a fire. Article 7 of the Rules covers the various methods of reducing fire risk and hazard, collectively called "Hazard Reduction":

- 917, 937, 957 Hazard Reduction
 - 917.2, 937.2, 957.2 Treatment of [Logging] Slash to Reduce Fire Hazard
 - 917.3 Prescribed Broadcast Burning of Slash [Coast]
 - 937.3 Prescribed Broadcast Burning of Slash [Northern]
 - 957.3 Prescribed Broadcast Burning of Slash [Southern]
 - 917.4 Treatment of Logging Slash in the Southern Subdistrict
 - 957.4 Treatment of Logging Slash in the High-Use Subdistrict
 - 917.5, 937.5, 957.5 Burning of Piles and Concentrations of Slash

- 917.6, 937.6, 957.6 Notification of Burning
- 917.7, 937.7, 957.7 Protection of Residual Trees
- 917.9, 937.9, 957.9 Prevention Practices

A primary concern addressed in the Hazard Reduction Rules deals with logging debris left over after trees are harvested. Branches, leaves, and other materials not taken to a sawmill (called “slash”) must be treated in such a way that an increase in fire hazard does not occur, and to prevent the spread of forest-based insects and diseases. For example, the following standard practices shall be followed within the THP area to treat slash:

917.2, 937.2, 957.2 Treatment of Slash to Reduce Fire Hazard [All Districts]

Except in the [High-Use Subdistrict of the Southern Forest District,] Southern Subdistrict of the Coast Forest District, and Coastal Commission Special Treatment Areas of the Coast Forest District, 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. Lopping for fire hazard reduction is defined in 14 CCR 895.1.

- a. Slash to be treated by piling and burning shall be treated as follows:
 - 1. 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.
 - 2. 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.
- b. Within 100 feet of the edge of the traveled surface of public roads, ... and seasonal] private roads open for public use where permission to pass is not required, Slash created and trees knocked down by road construction or Timber Operations shall be treated by lopping for fire hazard reduction, piling and burning, chipping, burying or removal from the zone.
- c. All woody debris created by Timber Operations greater than one inch but less than eight inches in diameter within 100 feet of permanently located structures maintained for human habitation shall be removed or piled and burned; all Slash created between 100-200 feet of permanently located structures maintained for human habitation shall be lopped for fire hazard reduction, removed, chipped or piled and burned

No matter where Timber Operations are located, every Licensed Timber Operator is required to submit to CAL FIRE a Fire Suppression Resource Inventory that contains emergency contact information for each Licensed Timber Operator along with the number of personnel and types of equipment that can be used to suppress any fire. These operators can be called upon to assist CAL FIRE with emergency fire suppression in the area where they are operating, further adding to the resources that can be used during a fire.

In addition to the hazard reduction rules, operations proposed in this plan have additional benefits expected to reduce fire danger.

- Road brushing and maintenance: As part of the Timber Operations, existing roads will receive maintenance to allow for access to logging equipment. These operations ensure that

roads used for operations are free of obstruction and can be used during the operations and in the future in the event they are required for fire suppression:

*923.1, 943.1, 963.1 Planning for Logging Roads and Landings. [All Districts]
Logging Roads and Landings shall be planned and located within the context of a systematic layout pattern that considers 14 CCR § 923(b), uses existing Logging Roads and Landings where feasible and appropriate, and provides access for fire and resource protection activities.*

Additionally, any time that burning permits are required (e.g. during the declared fire season), all roads and landings within the harvest plan area must be passable for use during an emergency:

923.6, 943.6, 963.6 (d) When burning permits are required pursuant to PRC § 4423, Logging Roads and Landings that are in use shall be kept in passable condition for fire trucks.

Maintaining access within the harvest plan area is consistent with the Sonoma-Lake-Napa Unit Strategic Fire Plan to allow for rapid extinguishment of fires within CAL FIRE responsibility areas.

When it comes to evaluating the potential for the proposed plan to negatively impact wildfire risk and hazard, the Rules contain the following guidelines:

Excerpt from Technical Rule Addendum #2:

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.*
- 2. Existing and probable future fuel conditions including vertical and horizontal continuity of live and dead fuels.*
- 3. Location of known existing public and private Fuelbreaks and fuel hazard reduction activities.*
- 4. Road access for fire suppression resources.*

The Rules specify that an RPF must evaluate potential impacts that could be caused by the project. Timber harvesting is not required to lower wildfire risk and hazard, although this is common from properly designed and implemented operations.

The complete assessment is located on pages 167-169 and correctly discloses that the area is designated as being within a High Fire Hazard Severity Zone. This designation was made by CAL FIRE as part of a statewide assessment. Additional details and information can be found on the CAL FIRE website.⁷

The Fire Hazard Severity Zone maps are developed using a science-based and field-tested model that assigns a hazard score based on the factors that influence fire likelihood and fire behavior. Many factors are considered such as fire history, existing and potential fuel (natural vegetation), predicted flame length, blowing embers, terrain, and typical fire weather for the area. There are three levels of hazard in the State Responsibility Areas: moderate, high and very high. Urban and wildland areas are treated differently in the model, but the model does recognize the influence of

burning embers traveling into urban areas, which is a major cause of fire spread.

CAL FIRE has determined that the assessment of potential hazards is reasonable based on the characteristics of the assessment area and the proposed operations. In light of the available information contained within the record, CAL FIRE concurs with the RPF's conclusion that the plan will not have a significant adverse effect on Wildfire Risk and Hazard.

Rules for fire hazard mitigation have been addressed above in Fire Hazard Risk and Assessment under General Discussion and Background. Plan-specific measures are displayed below.

- Item 18a page-22: Slash is used as a soil stabilization protection measure in the form of slash mulch. Scattered at a depth of 4 inches and packed at a depth of 2-4 inches with both at 90% coverage. Below are Specific Slash Pack guidelines for the LTO include:
 - a) *The slash should be small enough in diameter so that it can be crushed and embedded into the soil by track walking over it with a cat; generally 2 to 3 inch diameter and smaller.*
 - b) *Place slash on the bare soil surface, by hand or with equipment, so that at least 90% of the ground surface is covered with slash.*
 - c) *The slash should be placed no more than 1 foot thick, so that it can be effectively crushed and embedded in the soil by the cat*

- Item 18i. page-26: Erosion control/soil stabilization measures for logging roads/landings happening within ASP watershed.
 - Description of Treatments*
 - Within the WLPZ, and within any ELZ or EEZ designated for watercourse or lake protection, treatments to stabilize soils, minimize soil erosion, and prevent significant sediment discharge shall be described in the plan as follows.*
 - (1) Soil stabilization is required for the following areas*
 - (A) Areas exceeding 100 contiguous square feet where timber operations have exposed bare soil.*
 - (B) Approaches to tractor road watercourse crossings between the drainage facilities closest to the crossing.*
 - (C) Any other area of disturbed soil that threatens to discharge sediment into waters in amounts that would result in a significant sediment discharge.*
 - (2) Soil stabilization treatment measures may include, but need not be limited to, removal, armoring with rip-rap, replanting, mulching, installing commercial erosion control devices to manufacturer's specifications, or chemical soil stabilizers.*
 - (3) Where straw or slash mulch is used, the minimum straw coverage shall be 90 percent, and any treated area that has been reused or has less than 90 percent surface cover shall be treated again by the end of timber operations.*
 - (4) Where slash mulch is packed into the ground surface through the use of a tractor or equivalent piece of heavy equipment the minimum slash coverage shall be 75 percent.*
 - (5) For areas disturbed from May 1 to October 15, treatment shall be completed prior to the start of any rain that causes overland flow across or along the disturbed surface that could deliver sediment into a watercourse or lake in quantities deleterious to the beneficial uses of water.*
 - (6) For areas disturbed from October 15 to May 1, treatment shall be completed prior to any day for which a chance of rain of 30 percent or greater is forecast by the National Weather Service or within 10 days, whichever is earlier.*

(7) Where the natural ability of ground cover is inadequate to protect beneficial uses of water by minimizing soil erosion or by filtering sediment, the plan shall specify protection measures to retain and improve the natural ability of the ground cover to filter sediment and minimize soil erosion.

See also (d) above.

- Item 30g. page-84: Treatment of logging slash will comply with 14 CCR 917 .2 and 917.4 and be completed prior to April 1st of the year following its creation.

- Item 30d. page-83: Slash found within 100 feet of permanently located structures maintained for human habitation within the project area will be removed. Additionally, slash found between 100-200 feet will be lopped. To reduce fire hazard.

d) After the slash is placed, the cat should walk over the slash until most of the pieces of slash are touching the ground, and most of the length of any individual piece of slash is in contact with the ground.

Additionally, slash use for pile burning is explained in Section IV as seen below.

Page-189:

Pile Burning and Equipment Maintenance (14 CCR 916): Potential sources of chemical contamination includes the accidental release of equipment fuels and oils and introduction of excess nutrients released during the burning of slash piles. Maintenance and fueling of equipment shall be done in locations away from watercourses. Slash piles will be created at landing sites. These will be located along roads. The distance of slash piles from watercourses and the establishment of WLPZ filter strips will significantly minimize the movement of excess nutrients into watercourses. Slash piles created as a result of this THP will follow the requirements of the FPRs including the placement of piles away from watercourses. Furthermore, equipment shall be re-fueled and worked on away from any watercourse and outside WLPZ buffers.

4. General Concern: Slope Stability.

PC-1, PC-2, PC-4,

CAL FIRE received three public comments which indicated concerns related to the potential for unstable areas within the plan area to be activated or made worse from the proposed Timber Operations including both the harvesting of trees and proposed road construction. The presence of homes downslope of the proposed plan area raised concerns over public safety from potential unstable areas.

The potential for Timber Operations to trigger unstable areas or make existing areas worse is a key concern for CAL FIRE. This risk is further enhanced when there are potential impacts to homes, roads or other infrastructure. The Rules specify that activities which could cause slope instability threatening public safety are a reason for plan denial:

14 CCR § 898.2 Special Conditions Requiring Disapproval of Plans

(i) Implementation of the plan as proposed would result in significant adverse slope stability impacts that could affect public safety. The Director's determination of this special condition shall be supported by a review from the California Geological Survey.

Involvement in the plan review process by the California Geological Survey (CGS) is an important

component in evaluating potential impacts from Timber Operations to slope stability and public safety and the agency conducted a thorough analysis during the PHI which is reflected in their report.

The RPF has indicated that No Harvest or equipment operations will occur on all unstable areas. Section II Item 19g. Page-29

All unstable areas within the THP are No-Harvest areas located within and included in the WLPZ and are therefore Equipment Exclusion Zones. Trees within unstable areas included within the WLPZ flagging are not marked for harvest.

CAL FIRE has determined that the plan adequately discloses the presence of unstable areas and other areas of potential instability and the measures prescribed in the plan are sufficient to avoid a significant adverse effect on the environment.

5. **General Concern: Soil Stabilization.**

PC-2, PC-3, PC-4, PC-5

For potential soil erosion and sediment impacts, the THP contains a detailed plan containing myriad restrictions and limitations to timber operations that are specifically intended to avoid sedimentation from the proposed operations. These details are included in Section II (Operations) portion of the THP and are summarized below:

- Item #14i on pages 15-17 describe the proposed measures to be taken during site preparation activities. The Rules describe Site Preparation as:

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.

These measures describe the types of equipment that may be used for this activity, whether or not burning of vegetation may occur, how trees that are not proposed for harvest are to be protected and the measures to ensure that watercourses and other sensitive areas are not impacted by operations.

- Item #17 on page-21 discloses the Erosion Hazard Rating for the plan area.

Erosion Hazard Rating calculations found on pages 314-317 are a site-specific evaluation of potential erodibility based upon the soils present, the slopes involved in operations and the physical conditions that will exist after proposed operations are conducted. Not only are these calculations made by the Registered Professional Forester who wrote the plan, they are also independently verified by the CAL FIRE inspector (on page 6 of their report) and the interagency review team during the PHI. These calculations directly impact and inform the development of measures designed to reduce sediment transport out of the logging area. The Erosion Hazard Rating influences many aspects of timber harvesting including:

- The distance between waterbreaks to be installed on roads and skid trails prior to the Winter Operating Period each year and prior to the conclusion of operations when the plan is completed. (See 14 CCR 914.6, 934.6, 954.6(c).
- Limitations on the size of even-age harvesting units such as clearcuts or similar (see 14 CCR 913.1, 933.1, 953.1(a)(2))
- The operations that are permissible or require consideration adjacent to watercourses (see 14 CCR 916.4, 936.4, 956.4(c)(1), 14 CCR 916.9, 936.9, 956.9(f)(2)(D)(2), 916.9, 936.9, 956.9(f)(4)(D)(2))

- Restrictions on proposals for tractor operations on unstable areas, on slopes over 65%, and on areas where slopes average over 50% and the EHR is high or extreme. (see 14 CCR 1034(z))
 - Restrictions on the use of heavy equipment on slopes steeper than 50% where the Erosion Hazard Rating is high or extreme. (see 14 CCR 914.2, 934.2, 954.2(f)(1)(B))
 - Restrictions on the use of heavy equipment on slopes between fifty (50) percent and sixty-five (65) percent where the Erosion Hazard Rating is moderate. (see 14 CCR 14 CCR 914.2, 934.2, 954.2(f)(3))
- Item #18 on pages 22-27 describes the specific soil stabilization measures designed to prevent soil from moving out of the logging area in general and away from streams specifically including:
 - Any treatments that are necessary to prevent significant sediment discharge to watercourses or lakes.
 - Any treatments necessary for sidecast or road fill materials (including areas of bare soil exceeding 100 square feet) that have the potential to enter a watercourse or lake.
 - Any treatments necessary to stabilize soils within a Watercourse and Lake Protection Zone where the land is not capable of filtering sediment.
 - Any treatments necessary to stabilize or reduce sedimentation potential at existing or new watercourse crossings.
 - Any treatments necessary for features that cannot be hydrologically disconnected from a watercourse.
 - Items #19-21 on pages 28-30 specify limitations on the use of tractor operations on steep slopes and unstable areas and any additional erosion control measures necessary to keep sediment onsite and out of watercourses and lakes.
 - Item #23 on pages 31-36 specify limitations on operations and special erosion control measures to be implemented during the Winter Period (November 15 to April 1) and the Extended Wet Weather Period (October 15 to May 1).
 - Items #24-25 on pages 37-53 specify whether or not roads and landings within the plan area will be constructed, reconstructed or abandoned along with the site-specific measures necessary to avoid impacts such as sediment leaving the construction sites in a way that would be detrimental to the beneficial uses of water. Additionally, any sites that are considered Significant Existing or Potential Erosion Sites must be disclosed and mitigation measures discussed:

Significant Existing or Potential Erosion Sites means a location where soil erosion is currently, or there are visible physical conditions to indicate soil erosion may be in the future, discharged to Watercourses or lakes in quantities that violate Water Quality Requirements or result in significant individual or cumulative adverse Impacts to the beneficial uses of water.

- Item #26 on pages 54-74 describe the specific measures that are taken to protect watercourses and lakes from negative impacts to the beneficial uses of water. 14 CCR 916, 936, 956 of the Rules describes the specific intent behind the creation of these regulations:

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 to clarify and assign responsibility for recognition of potential and existing Impacts of Timber Operations on Watercourses and lakes, native aquatic and Riparian-associated species, and the beneficial functions of Riparian zones and to ensure all plans, exemptions and emergency notices employ feasible measures to effectively achieve compliance with this article. 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. "Evaluations made" pertain to the assessment of the conditions of the physical form, water quality, and biological characteristics of Watercourses and lakes, including cumulative Impacts affecting the beneficial uses of water on both the area of planned logging operations and in the Watershed Assessment Area (WAA). "Measures taken" pertain to the procedures used or prescribed for the restoration, enhancement, and maintenance of the beneficial uses of water.

The site-specific measures described within the plan are intended to avoid both significant and potential impacts and cumulative effects while complying with all relevant regulations and laws. This includes compliance with Section 303(d) of the Federal Clean Water Act, which is specific to impaired segments of watercourses and waterbodies. Review of these plans by agencies evaluate for compliance with all relevant laws and regulations that relate to the protection of watercourses.

6. General Concern: Plants and Wildlife.
PC-2, PC-4, PC-5, PC-6,

The THP discloses species that have the potential to be impacted by Timber Operations within Section II, Item 32 pages 86-97. This same item describes protection measures to be followed if these species are discovered before or during operations.

The potential for cumulative significant impacts to biological resources were analyzed throughout a 6,143-acre area, including all land within 0.7 miles of THP boundaries, consistent with the regulatory guidance within 14 CCR § 912.9. Section IV of the plan includes an assessment, from pages 227 through 267, of potential flora and fauna, of both listed and non-listed species, with potential habitat within the biological assessment area, as well as an analysis of the potential for the actions contained within the proposed THP, in conjunction with past projects, reasonably foreseeable probable future projects, and continuing significant adverse impacts from past land use activities, to result in significant cumulative impacts to each individual species. Furthermore, pages 267 through 277 of the proposed THP provides additional analysis of the potential for the actions contained within the proposed THP, in conjunction with past projects, reasonably foreseeable probable future projects, and continuing significant adverse impacts from past land use activities, to result in significant cumulative impacts to landscape-level biological resources, consistent with the regulatory guidance provided within 14 CCR § 912.9. The analysis within the THP indicates that no reasonably potential significant adverse impacts to the watershed, including water quality (sedimentation) and individual watercourses, can be expected to occur as a result of THP.

CAL FIRE has determined that the analysis is reasonable based on the characteristics of the assessment area and the proposed operations. In light of the available information contained within the record, CAL FIRE concurs with the RPF's conclusion that the plan will not have a significant adverse effect on biological resources.

7. General Concern: Herbicide Use.
PC-5, PC-4, PC-7,

The U.S. Environmental Protection Agency regulates pesticide use nationwide and has exclusive authority over pesticide labeling. Use of a pesticide is limited to the applications and restrictions on the label, and the label restrictions are legally enforceable. The California Department of Pesticide Regulation (DPR) regulates pesticides within the State of California and has legal authority to adopt restrictions on pesticide use going beyond the regulations of the U.S. Environmental Protection Agency. 7 U.S.C.A. Sec. 136v. DPR operates with extensive authority in the California Food and Agricultural Code and in the California Code of Regulations.

Prior to commercial application of any herbicides proposed in the plan, the project proponent must comply with California's DPR process that requires additional site-specific analysis. The analysis takes the form of a written recommendation for herbicide use prepared by a licensed Pest Control Advisor (PCA). They must use contractors that are supervised by Licensed Qualified Applicators. All work must be conducted in a professional manner that strictly follows all regulatory and licensing requirements.

The THP-specific analysis of potential impacts from herbicide application is found on pages 188-196. The plan establishes that the future use of herbicides is not a required component of the THP but could be a reasonably foreseeable future activity. CAL FIRE has determined that the herbicide discussion included in the plan is adequate to disclose and evaluate the potential impacts of future actions which are speculative at this time. CAL FIRE has evaluated the potential herbicide use and concluded that adherence to State and Federal laws pertaining to certifications and operations will prevent significant effects.

To reiterate, the application of herbicides is regulated by DPR and is not subject to CAL FIRE approval or oversight. While not part of the THP and CAL FIRE's permitting/regulatory authority, the use of herbicides has been determined to be likely enough that a discussion of potential cumulative impacts is warranted. This discussion and evaluation has been included in the plan and determined to adequately disclose the potential for the plan to combine with other past, present and reasonably foreseeable future projects to impact the environment.

8. General Concern: Pest and Pathogens
PC-2, PC-4, PC-5

CAL FIRE received three public comments expressing concerns related to the potential for spreading of undesirable species (rye grass) and pathogens (Sudden Oak Death and Pitch Canker).

Regarding the spread of rye grass, the plan does not propose seeding as a means of soil stabilization, or the specific application of rye grass at all.

Regarding the potential for the spread of pathogens, the proposed THP discloses that the plan exists within a zone of infestation of both Sudden Oak Death and Pitch Canker, and includes specific measures to address both pathogens to prevent unnecessary spread on pages 18 through 20 of the proposed THP. The proposed measures are consistent with the regulatory guidance provided within the Board of Forestry and Fire Protection Technical Rule Addendum #3 (Appendix, Article 7, Subchapter 4, Chapter 4, Division 1.5, Title 14, California Code of Regulations), and the August 2010 Sudden Oak Death Guidelines for Forestry (14 CCR § 1052.5(c)).

9. General Concern: Noise and Traffic Impacts

PC-2, PC-4, PC-5

CAL FIRE received three public comments expressing concerns related to potential noise and traffic impacts.

The potential for cumulative significant impacts to noise resources were analyzed within 0.5 miles of the project area. Section IV of the plan includes an assessment, from pages 299 through 300, and analysis of the potential for the actions contained within the proposed THP, in conjunction with past projects, reasonably foreseeable probable future projects, and continuing significant adverse impacts from past land use activities, to result in significant cumulative impacts to noise resources. The analysis within the Plan identifies that the topography and forested conditions are likely to reduce noise levels generated from the project area, and the plan proposes reduction in potential noise impacts through restricting the timing of daily operations and reducing the use of noise-generating jake brakes by log trucks.

CAL FIRE has determined that the analysis is reasonable based on the characteristics of the assessment area and the proposed operations. In light of the available information contained within the record, CAL FIRE concurs with the RPF's conclusion that the plan will not have a significant adverse effect on noise resources.

The potential for cumulative significant impacts to traffic resources were analyzed on roads on which logging traffic must travel and roads commonly used by logging traffic, specifically State Route 1, consistent with the regulatory guidance within 14 CCR § 912.9. Section IV of the plan includes an assessment, from pages 282 through 283, and analysis of the potential for the actions contained within the proposed THP, in conjunction with past projects, reasonably foreseeable probable future projects, and continuing significant adverse impacts from past land use activities, to result in significant cumulative impacts to traffic resources. The analysis within the Plan concludes that the proposed THP is consistent with baseline conditions within the assessment area and does not represent a significant deviation in the level of use from baseline conditions.

CAL FIRE has determined that the analysis is reasonable based on the characteristics of the assessment area and the proposed operations. In light of the available information contained within the record, CAL FIRE concurs with the RPF's conclusion that the plan will not have a significant adverse effect on traffic resources.

Public Comments Addressing Specific Environmental Concerns.

1. 23PC-00000026 PC2

The THP disregards longstanding environmental regulations, Coastal Commission, EPA, Sonoma County and State

Response: The comment is not specific regarding elements of the proposed THP which are not in compliance with existing law. CAL FIRE is not aware of any issues or inconsistency or compliance with the proposed plan and any element of existing law, including but not limited to the Z'Berg-Nejedly Forest Practice Act, Timberland Productivity Act, the California Environmental Quality Act, the Porter Cologne Water Quality Act, the Federal Clean Water Act, and both the State and Federal Endangered Species Acts.

The Department has reviewed the concerns brought up through the public comment process and has replied to them by this Official Response. This process has not demonstrated any new significant points that would warrant a recirculation of the Plan pursuant to 14 CCR § 1037.3(e), or a recommendation of nonconformance pursuant to 14 CCR § 1054. The THP states in Section I, under Item 13(b) "After considering the rules of the Board of Forestry and Fire Protection and the mitigation measures incorporated in this THP, I (the RPF) have determined that the timber operation will not have a significant adverse impact on the environment". The Department finds that the RPF has sufficiently documented that there shall be no unmitigated significant impacts to the identified resources under this THP.

It is the Department's determination that this THP, as proposed, is in compliance with the FPRs and has been through a detailed multi-agency review system. The protection measures and mitigation measures included in the THP have been found to be appropriate to address the concerns brought up by the public comment process. The conclusions reached by the Department and the other state resource agencies are based on decades of professional experience associated with the review of similar harvest plans.