NOTICE OF TIMBER OPERATIONS - NTMP

FOR ADMIN. USE ONLY

NTMP-NTO #:_____.

FILING DATE

Date Mailed:_____.

Delivery date to CDF:

STATE OF CALIFORNIA
DEPARTMENT OF FORESTRY AND FIRE PROTECTION
NOTICE OF TIMBER OPERATIONS FOR A
NONINDUSTRIAL TIMBER MANAGEMENT PLAN
RM – 68A (Rev. 01/00)

This Notice of Timber Operations (NTO), for the specified approved Nonindustrial Timber Management Plan (NTMP), is submitted to the California Department of Forestry and Fire Protection (CDF) and timber operations are hereby noticed to commence, as per CCR 1090.7 and PRC 4594. This Notice of Timber Operations is effective for a maximum of one year from the Date of Filing. Timber operations may commence immediately unless the Notice has been filed by mailing, in which case operations may commence 3 days after the Notice has been mailed.

SUMMARY OF INFORMATION

A. NTMP #: 1-01NTMP-018 SCR (Valencia Creek NTMP – Unit 1)

B. Applicable Personnel :

1. Timberland Owner
   Name: Cal Poly Corporation
   Address: Building 15, 1 Grand Avenue, San Luis Obispo, CA 93407
   Phone #: (805) 756-1131

2. Timber Owner
   Name: Cal Poly Corporation
   Address: Building 15, 1 Grand Avenue, San Luis Obispo, CA 93407
   Phone #: (805) 756-1131

3. Registered Professional Forester (RPF)
   Name: Nadia Hamey
   Address: 3564 Highway 1, Davenport, CA 95017
   Phone #: (831) 457-6383 or (831) 431-0288
   License #: 2788

4. Licensed Timber Operators (LTO)

   Name: Santa Cruz Timber Company
   Address: 4150 Empire Grade Road, Santa Cruz, CA 95060
   Phone #: (831) 334-8554
   License #: A 9495

5. Field Operations Supervisor
   Name: Nadia Hamey
   Address: 3564 Highway 1 Davenport, CA 95017
   Phone #: (831) 457-6383 or (831) 431-0288
   &
   Name: Steve Auten
   Address: 125 Swanton Road, Davenport, CA 95017
   Phone #: (831) 458-5413 or (831) 247-6697

C. Commencement/Completion Dates

1. Expected commencement date of timber operations: March 28, 2013

2. Expected completion date of timber operations: March 28, 2014

D. Legal description of the portion(s) of the NTMP area on which timber operations will be conducted:

Sections 27, 28 & 34, T10S, R1E, MDB&M, Loma Prieta USGS 7.5' Quadrangle

E. Silvicultural prescription(s) to be applied: Single tree selection per 14 CCR 913.8(a)

F. Heavy equipment to be used for yarding: Tractor and skidder

G. ___YES** _X_ NO Archeological sites have been discovered in the harvest area since the approval of the NTMP.

H. ___YES** _X_NO Threatened or endangered species have been discovered in the harvest area since the approval of the NTMP.

I. ___YES** _X_NO Have there been any physical environmental changes in the cumulative impacts assessment area that are so significant as to require any amendment of the NTMP?

A minor amendment updating the sustainability analysis was filed on January 31, 2013. An amendment updating the botanical survey results, minor infrastructure adjustments, hours of operation, and SOD regulations was filed on March 13, 2013. Per NTMP Item 38 (page 24), I have notified the California Geological Survey and the Santa Cruz County Department of Public Works. The letter sent to the Santa Cruz County Department of Public Works is attached. Public Works shall be re-notified around April 22 and invited to participate in videotaping Rider Road.
Dave Longstreth from CGS made a site visit on March 22, 2013 to assess the slope stability conditions. Several minor adjustments to operations and close-out procedures were discussed. These adjustments include outsloping the skid trail at mitigation point M4, minimizing perched fill and slash-packing the trail at close out. At landing L26/crossing R17, the landing will be expanded approximately 20 feet into the cutbank with balanced cut and fill. Upon closeout, the landing shall be outsloped away from the Class III watercourse in an attempt to hydrologically disconnect the road from the watercourse, the landing shall be tractor packed with slash or straw mulched and seeded and the approaches to the Class III watercourse shall be re-rocked. The letter to the file from CGS shall be amended to NTMP once it is received. No equipment operations at these sites shall take place until the NTMP is amended.
The raptor surveys were completed on March 10, 2013. No impacts to special status or non-special status species are anticipated. Survey findings are attached.

**Note: If G., H., or I. is answered YES, an Amendment to the NTMP is required. See 14 CCR 1090.24 regarding Amendments.

J. Special Provisions, if any, which are necessary to protect any unique area within the area of timber operations (use attachments if necessary) : See NTMP

K. Attach on a separate sheet(s) all instructions to the LTO regarding the following: felling, yarding, road construction or reconstruction, hauling, erosion control work, site preparation, erosion control maintenance, winter operations, watercourse protection measures and slash treatment.
See NTMP

L. RPF Certification:

1. I certify that the Notice of Timber Operations ~~as submitted~~ conforms to the provisions of the approved NTMP and will carry out ~~the~~ Best Management Practices for the protection of the beneficial

uses of water, soil stability, forest productivity and wildlife as required by the current rules of the Board of Forestry.

OR (**choose one, cross out the other**)

2. I certify that the Notice of Timber Operations as submitted conforms to the provisions of the approved NTMP, is consistent with the NTMP, and will not result in significant degradation of the beneficial uses of water, soil stability, forest productivity, or wildlife, or be in violation of applicable legal requirements.

RPF Signature: _____ Date: 3/25/2013

M. LTO Verification: I have been briefed by the RPF on the content of the notice and intend to implement and comply with the management plan.

LTO Signature: _____ Date: 3-27-2013

N. On a USGS quadrangle or equivalent map of a scale not less than 2" to the mile, the following information pertinent to the Notice of Operations shall be clearly provided. Additional maps may be required to show specific details, and may be planimetric. Color coding shall not be used. A legend shall be included indicating the meaning of the symbols used. See the district rules for the appropriate minimum mapping acreages.
    1. Boundaries of area to be harvested (quadrangle map or its equivalent).
    2. Boundaries of areas for specified regeneration methods, intermediate treatments, special harvesting methods, and alternative prescriptions that are to be applied.
    3. Boundaries of areas for specified yarding (logging) systems, if more than one system is to be used.
    4. Location of public roads within the Notice area, and private roads appurtenant to the timber operations where such roads are under the ownership or control of the timberland owner, and are contiguous with the Notice area, and classification all proposed and existing logging roads as permanent, seasonal, or temporary roads.
    5. Location of proposed and existing landings in the watercourse and lake protection zone, and landings outside the zone that are greater than ¼ acre in size or whose construction involves substantial excavation.
    6. Road failures on existing roads to be reconstructed.
    7. Location of all existing and proposed watercourse crossings on logging and tractor roads; if a permanent culvert is involved, its minimum diameter and length shall be provided. See NTMP
    8. Designate areas of high or extreme erosion hazard rating, if more than one.
    9. Location of watercourse with Class I, II, III or IV waters.
    10. Location of known unstable areas or slides.
    11. Location of unique areas.

O. Other information as required by Board of Forestry and Fire Protection via regulation to meet its rules and the standards of this chapter (use attachments if necessary) :

Per NTMP Section II, Item #15, the NTMP (including amendments) shall function as the compliance agreement to allow for the removal of hardwood for commercialization from the project area. Since the information and mitigations required for compliance with the current California Oak Mortality Task Force protocols have been included in a recent amendment, the collection of NTMP documents shall function as the compliance agreement for operations under this NTO.

Contact the nearest CDF office listed below for questions regarding the use of this notice.

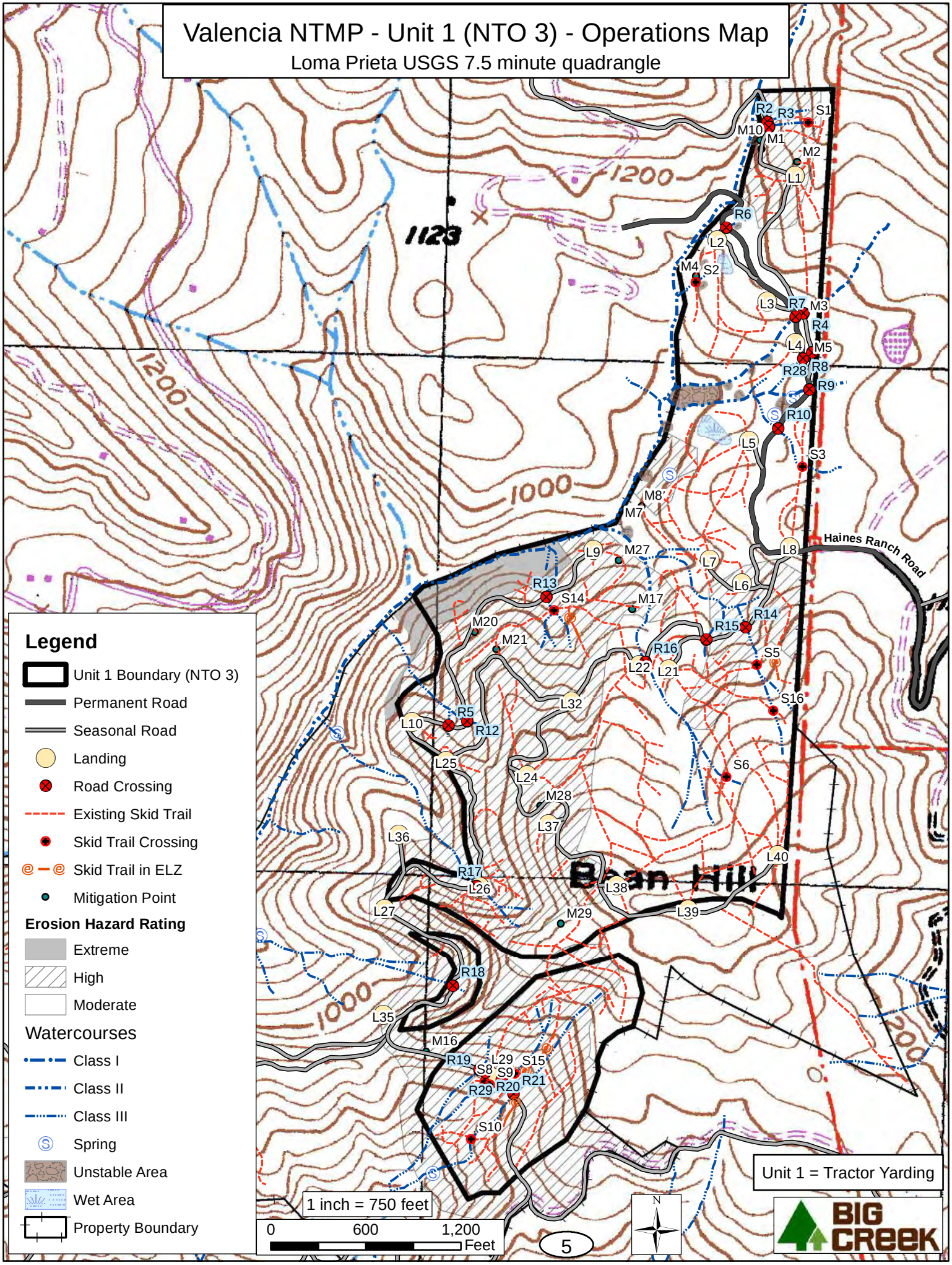
FILE THIS NOTICE WITH THE NEAREST CDF OFFICE BELOW FOR THE COUNTY IN WHICH THE OPERATION WILL OCCUR:

Humboldt, Del Norte, Mendocino, Sonoma, Marin, Lake, Napa, Colusa, Solano, Alameda, San Francisco, San Mateo, Santa Cruz, Santa Clara, Contra Costa, and western Trinity Counties.

CDF
Forest Practice Program
135 Ridgway Avenue
Santa Rosa, CA 95401
(707) 576 - 2959

Valencia NTMP - Unit 1 (NTO 3) - Operations Map

Loma Prieta USGS 7.5 minute quadrangle



Legend

- Unit 1 Boundary (NTO 3)
- Permanent Road
- Seasonal Road
- Landing
- Road Crossing
- Existing Skid Trail
- Skid Trail Crossing
- Skid Trail in ELZ
- Mitigation Point

Erosion Hazard Rating

- Extreme
- High
- Moderate

Watercourses

- Class I
- Class II
- Class III
- Spring
- Unstable Area
- Wet Area
- Property Boundary

BIG CREEK
"Growing Redwoods for the Future"

March 1, 2013

County of Santa Cruz
Attn: Jennifer Michelsen
701 Ocean Street Rm. 312
Santa Cruz, CA 95060
Env052@co.santa-cruz.ca.us

RE: Valencia NTMP, #1-01NTMP-018 SCR, Road Consultation

Dear County Representative,

I am in the process of preparing a Notice of Timber Operations for the Valencia NTMP (#1-01NTMP-018 SCR) for the second harvest in Unit 1 since NTMP approval. This property is sustainably managed by Big Creek Lumber Co for Cal Poly, San Luis Obispo. I would like to invite you to review the condition of Rider Road prior to log hauling. If deemed necessary, we are prepared to post a road bond in the amount of $10,000 to repair appurtenant road structures in the unlikely instance of willful or negligent damage by the LTO's log hauling operations. The following verbiage is from the approved NTMP.

Performance Bonding on Rider Road
The plan submitter shall post adequate financial security to restore the paved portion of county maintained Rider Road and appurtenant structures which are willfully or negligently damaged by the LTO's log hauling operations. This damage shall include cracked inside edges to the paved surface at sharp turns caused when Log truck drivers obviously deviate from the paved surface. The plan submitter shall post a certificate of deposit, certificate of insurance or performance bond, or other financial security in favor of the Department in an amount of $10,000. Such cash deposit or other acceptable financial security shall cover a period not to exceed the effective period of each harvest entry. Logging trucks shall not use the roads until the required security is posted with the Department. The Director shall release the bond or equivalent to the principal of the security upon completion of log hauling operations and compliance with the requirements of this section. If and when repairs are necessary, as determined by CDF, the Director shall request the operator to provide for making the repairs. If the repairs are not made, the Department may take corrective action and may order the bond, or equivalent, forfeited in an amount not to exceed actual damage. When a bond or equivalent has been posted, the Department shall provide the county with a copy of the Work Completion Report. The county shall advise the Department in writing within 30 days of its receipt of notification of completion of hauling operations or the Work Completion Report if damage has occurred, repairs need to be made. If the county fails to notify the Director within 30 days, the bond or surety shall be released.

Notice of Hauling to County: The plan submitter shall notice the County Public Works department one month prior to log hauling for each entry to give Public Works time to assess the condition of Rider Road prior to log hauling. This assessment may include videotaping of the road.

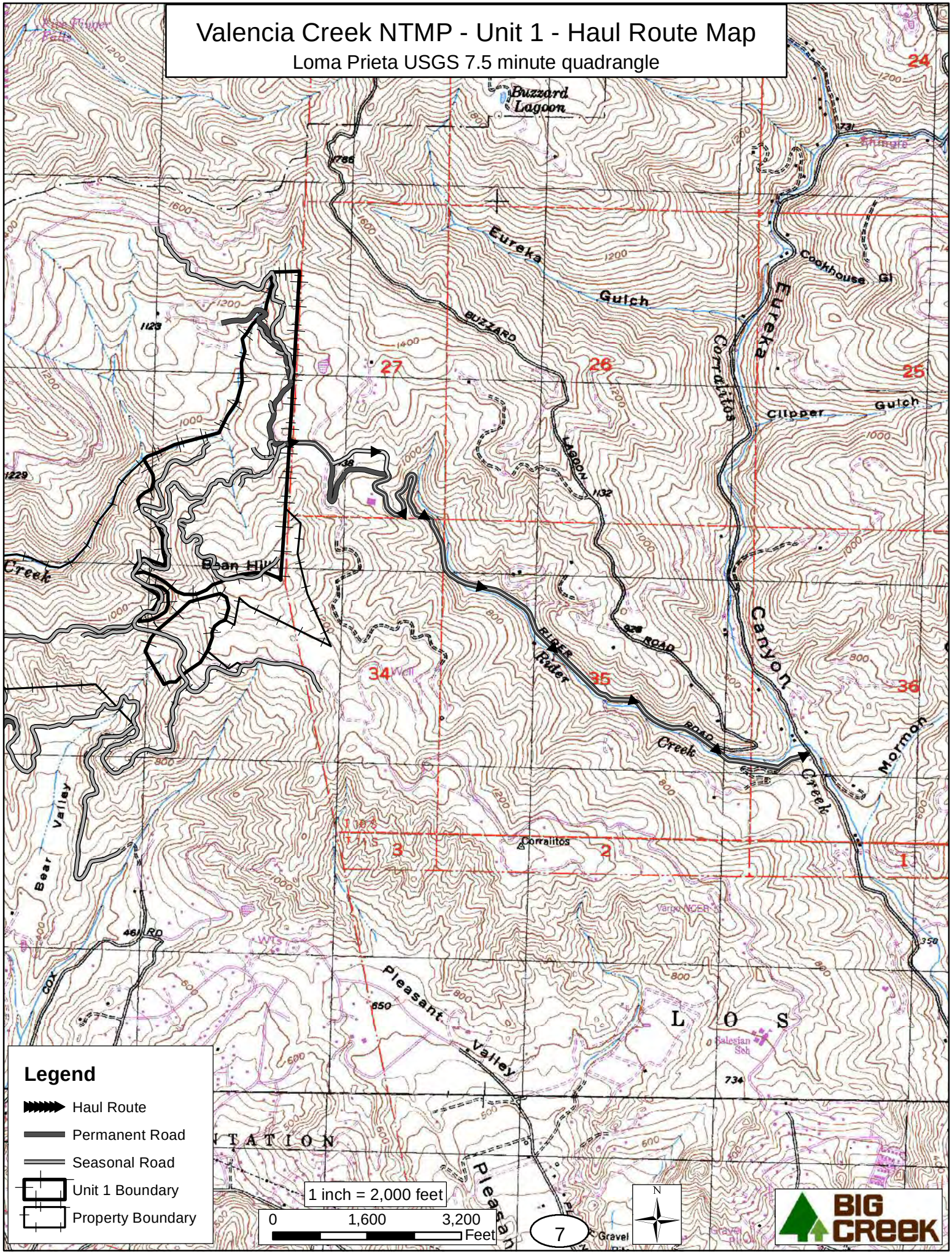
A map of the haul route from the private road, down Rider Road to Eureka Canyon Road is attached. Please don't hesitate to contact me if you have any questions or comments at (831) 457-6383 or nadiah@big-creek.com.

Sincerely,

Nadia Hamey
RPF #2788

Valencia Creek NTMP - Unit 1 - Haul Route Map

Loma Prieta USGS 7.5 minute quadrangle



David L. Suddjian
Biological Consulting Services
801 Monterey Avenue, Capitola, CA 95010
Telephone 831· 479· 9603, email dsuddjian@gmail.com

March 14, 2013

Big Creek Lumber Company
Attn: Nadia Hamey
3564 Highway 1
Davenport, CA 95017

RE: Findings of 2013 Raptor Survey for the Valencia Creek NTMP, Santa Cruz County, CA

INTRODUCTION

This letter presents the findings of a raptor survey conducted during March 2013 at Unit 1 of the Valencia Creek NTMP, Santa Cruz County, California. The survey focused on determining the presence of selected raptor species in and near the area to be harvested in 2013.

STUDY AREA AND METHODS

Study Area and Habitat Conditions

The survey area included the 213-acre harvest area delineated on the operations map, and adjacent areas of Valencia Creek NTMP and neighboring properties out to 300 feet from the harvest area where reasonable access permitted. The survey area includes the slopes of the eastern portion of the headwaters of Valencia Creek, and parts of Bean Hill. Elevations range from 800' to 1,440' above sea level. The survey area is dominated by previously logged coast redwood forest, with small areas of scrub habitat. Coast redwood is dominant over the forested parts of the survey area, where tanoak and forest live-oak (Shreve oak) are also common. Douglas-fir is generally thinly distributed, but is more frequent in local sites where redwoods are lacking, and some large Douglas-firs occur along lower slopes near Valencia Creek. Other trees include madrone and big leaf maple. The forest understory has abundant tanoak and redwood saplings, and French broom. The forest ground layer supports blackberry, poison oak, hazelnut, toyon, various ferns, forbes

and grasses. Scrub habitats have mostly closed shrub canopies, except where traversed by roads. Common shrubs are chamise, coyote bush, yerba santa, and ceanothus.

Study Approach and Species Considered

The survey focused on determining the presence and location of territorial pairs and active nests of six special status species: Osprey (*Pandion haliaetus*), Sharp-shinned Hawk (*Accipiter striatus*), Cooper's Hawk (*A. cooperi*), Golden Eagle (*Aquila chrysaetos*), Peregrine Falcon (*Falco peregrinus*), and Long-eared Owl (*Asio otus*). The occurrence of several other more common species was assessed generally during surveys.

Field Methods

The presence of the Osprey, Golden Eagle, and Peregrine Falcon was determined by searching for individuals and potential nest sites. Suitable nest sites for these three species would be obvious, and the presence of individuals of these species easily determined. The field effort to determine presence of Long-eared Owl was limited to a search for possible nest sites, and to listening for the species during two night-time visits to the survey area.

Field survey emphasis was placed on determining the presence of the two *Accipiter* species. The surveys for these hawks focused on listening for unsolicited territorial calls ("stop and listen" survey), broadcasting recorded territorial calls to elicit responses from territorial hawks ("broadcast vocalization" survey), watching for perched or flying raptors, scanning tree crowns for nests, and searching for other raptor sign (e.g., prey remains, feathers, "white-wash"). Together, these methods provided a high likelihood of detecting the presence of nesting *Accipiters* in the survey area. I combined the "stop and listen" and "broadcast vocalization" methods, staying for periods of 15-45 minutes at a series of locations that permitted sampling of the entire survey area. I also traversed throughout the site to search for nest structures and other signs of raptor presence. Each portion of the harvest area was visited on two different dates.

I performed all the surveys. Early morning visits were made for surveys on March 1, 4, 9 and 10, 2013. Each morning survey visit began 45 minutes before sunrise and concluded three or four hours after sunrise. I was present in the survey area at night on March 3, 4, and 10. Weather conditions were favorable for surveys on all visits.

Prior Experience With Detection of Nesting Raptors

I have conducted focused surveys for nesting raptors in the Santa Cruz Mountains region and elsewhere annually since 1987. These have included surveys for timber harvest plans, inventories for parks and other public lands, surveys for breeding bird atlases, and for long term monitoring programs. I have extensive local experience with the vocalizations and habitat requirements of all the focal species, including observation and documentation of nesting evidence for the two *Accipiter* hawks on over 140 occasions in the Santa Cruz Mountains.

RESULTS

Thirty-nine species of birds were found during the surveys (Table 1).

Special Status Raptors. None of the raptor species of special interest were found, or any potential nests or sign of those species. There is no suitable nesting habitat for Osprey, Golden Eagle or Peregrine Falcon in or immediately adjacent to the harvest area. The harvest area and immediate surrounding area are unlikely to support Long-eared Owl due to the lack of suitable foraging habitat. The harvest area and surrounding lands do provide suitable nesting habitat for Sharp-shinned and Cooper's hawks (and nesting has been confirmed in the surrounding region), but neither species was detected during the surveys, and no suspected active nest structures were found.

Other Raptor Species. Five non-special status raptors were detected during the surveys: Red-shouldered Hawk (*Buteo lineatus*), Barn Owl (*Tyto alba*), Western Screech-Owl (*Megascops kennicottii*), Great Horned Owl (*Bubo virginianus*), and Northern Saw-whet Owl (*Aegolius acadicus*). It is likely that Red-tailed Hawk (*Buteo jamaicensis*) and Northern Pygmy-Owl (*Glaucidium gnoma*) also occur in harvest area at times. Of the five species that were detected on the surveys, the Barn Owl and Great Horned Owl were only noted outside the harvest area when detected, but it is likely that both occur there at times. Additional details for all these species are provided here.

One adult Red-shouldered Hawk was detected on two dates calling from a perched position in the general area of Landing 7, and another was calling over the harvest area and adjacent HD Ranch and La Frentz property to the west. The same or other calling Red-shoulddereds were heard in the distance to the south of the harvest area. This species is widespread and fairly common over much of Santa Cruz County. It is likely that a pair of this species nests in the general vicinity of the harvest area, but no evidence of an active nest was noted within the harvest area. The adjacent HD Ranch and La Frentz property, with its open areas, provides excellent nesting and foraging habitat for this species.

Red-tailed Hawk was not detected on these surveys, but it occurs widely in the greater surrounding area and has been detected before at the HD Ranch and La Frentz property (pers. obs., 2010). No likely nest structures were observed in the harvest area on the surveys.

Barn Owl was heard east of the harvest area in the Rider Road area, and likely occurs in other areas adjacent to the harvest area where there are open areas. There is no suitable nesting habitat in the harvest area, and foraging habitat is marginal there.

Western Screech-Owl is a common resident throughout the forested region of the Santa Cruz Mountains, and several pairs occur in the harvest area and presumably nest there. It was beyond the scope of this survey to resolve possible cavity nesting sites for this non-special status species.

Northern Pygmy-Owl occurs widely in the forested regions of the Santa Cruz Mountains, and has been detected previously in the surrounding area (pers. obs). None were noted on the surveys. If a pair was currently resident in or very near the harvest area, it is very likely they would have been detected on the early morning surveys, as specific attempts were made to elicit responses from this species, and it is quite vocal in early March.

Great Horned Owl was heard calling in the distance on the HD Ranch and La Frentz property to the west of the harvest area, to the east in the Rider Road area, and to the south toward Cox Road. None were heard within the harvest area, but individuals likely visit the area at times and may roost there sometimes. No likely nest structures (e.g., large raptor nests) were observed in the harvest area and the species is apparently not nesting there presently.

Northern Saw-whet Owl is a common resident throughout the forested region of the Santa Cruz Mountains, and at least a few pairs occur in the harvest area and presumably nest there. It was beyond the scope of this survey to resolve possible cavity nesting sites for this non-special status species.

CONCLUSION AND RECOMMENDATIONS

Since no territorial individuals of special status raptors, or their nests, were found in or adjacent to the harvest area, no impacts to these species are expected to occur. The timing of the surveys is fairly early relative to the local breeding phenology of Sharp-shinned and Cooper's hawks. Territorial birds would likely be detected, if present, but they would not be expected to have nests with eggs in March. If tree falling is delayed beyond April 10, then additional field effort by a biologist to assess the nesting status of these species would be warranted.

If a raptor nest is discovered during the harvest operations, it should be inspected by a biologist to determine the species and nest status. Appropriate measures to avoid impacts would then be employed, as per the stipulations of the NTMP and in consultation with the California Dept of Fish and Game, as needed.

The timber harvest is not expected to result in significant impacts to non-special status raptors.

* * *

Sincerely,

David Suddjian
Wildlife Biologist

Table 1. Bird species detected within or adjacent to the survey area.

* Denotes species only detected adjacent to the harvest area (not within it) during the surveys.

California Quail

Red-shouldered Hawk

Band-tailed Pigeon

Mourning Dove

* Barn Owl

Western Screech-Owl

* Great Horned Owl

Northern Saw-whet Owl

Anna's Hummingbird

Allen's Hummingbird

Acorn Woodpecker

Hairy Woodpecker

Northern Flicker

Pileated Woodpecker

Hutton's Vireo

Steller's Jay

Common Raven

Chestnut-backed Chickadee

Bushtit

Red-breasted Nuthatch

Pygmy Nuthatch

Brown Creeper

Pacific Wren

Bewick's Wren

Golden-crowned Kinglet

Ruby-crowned Kinglet

Wrentit

Hermit Thrush

American Robin

Varied Thrush

* California Thrasher

Orange-crowned Warbler

Townsend's Warbler

Spotted Towhee

Fox Sparrow

Dark-eyed Junco

Purple Finch

Red Crossbill

Pine Siskin

VALENCIA NTMP – UNIT 1 - NTO 3, 2013

INSTRUCTIONS TO THE LTO ARE OUTLINED BELOW:

Specific Mitigation Points

No skidding on H & D Road.

Site M3: This site is an existing through-cut from initial road construction. Prior to NTO 1 (2001), severe rilling and gullying had occurred on the road surface (for a distance of approximately 150'). The soil texture of the road surface is extremely fine ("blue goo"). An inside ditch was previously constructed within the through-cut, and the road surface was sloped to this inside ditch. The inside ditch was lined with 5" x 10" rock to function as an energy dissipater and rolling dips were constructed above and below the through-cut in 2001. The inside ditch and rolling dips shall be re-shaped following operations in 2013. This entire portion of road was rocked with ¾" drain rock after operations in 2001, and shall be re-rocked following operations in 2013.

Tractors on Unstable Slopes

Site M4: Approximately 180' of existing trail is on or adjacent to unstable areas in this location. Tipped trees were observed and significant cracks in the earth were noted. Previously, a waterbar was placed before the slide through a berm toward Valencia Creek to prevent flow from occurring over the unstable area. This waterbar unfortunately caused incision and gully erosion toward Valencia Creek. Skidding equipment shall use the trail with "blade up" and vegetation and soil along the trail shall not be re-graded. Prior to the winter period the trail shall be outsloped, minimizing perched fill and slash-packed to dissipate flow, in-keeping with on-site discussions with CGS. 75% canopy will be retained above M4 skid trail. No equipment operations at this site shall take place until the CGS letter is amended to the NTMP.

Tractors on Slopes Greater Than 50% with High Erosion Hazard Rating

Site M7: This site is an existing skid trail on slopes greater than 50% (below trail). The adjacent ground appears to be unstable. During operations, a berm log shall be placed on the outside edge of the trail to prevent material from being sidecast over the edge of the trail. The RPF shall flag the location of waterbars to prevent the concentration of water from flowing across unstable soil. After operations, the trail surface shall be tractor-packed with slash and waterbarred at an extreme EHR spacing.

Tractors on Slopes Greater Than 65%

Site M27: This site is a 100 foot section of existing skid trail on 70% slopes is proposed for possible re-use. The skid trail climbs the slope at a 55% grade before flattening at a break in slope. If this trail is used, prior to skidding logs a tree length brow log shall be placed along the outside edge of the trail along the steep section. Another brow log shall be placed on the outside edge of the curve at the break in slope. Prior to the winter period following operations, waterbars shall be installed for extreme erosion hazard rating, and the trail shall be packed with slash.

Site M8: This site is an existing trail on slopes greater than 50%. After operations, the trail shall be tractor-packed with slash and waterbarred at an extreme EHR spacing. Waterbars shall be directed to carry flow away from the unstable area near the bottom of the trail.

Site M17: This site is an existing skid trail located on slopes greater than 50% for a distance of approximately 100'. After operations, the trail shall be tractor-packed with slash and waterbarred at an extreme EHR spacing.

Site M20: This site is approximately 130' of existing skid trail on slopes greater than 50% (below trail). After operations, the trail shall be tractor-packed with slash and waterbarred at an extreme EHR spacing.

Site M21: This site is approximately 30' of existing skid trail located on slopes greater than 50%. After operations, the trail shall be tractor-packed with slash and waterbarred at an extreme EHR spacing.

Site M25: This site is approximately 150' of existing skid trail located on slopes greater than 50%. After operations, the trail shall be tractor-packed with slash and waterbarred at an extreme EHR spacing.

Specific Road Mitigation Points

Site M1: This site is an existing cut-bank failure and debris flow below the road. After the 2001 operation, the LTO arched the road prism over the unstable area. The roadway was outsloped adjacent to the landslide so as to prevent discharge of concentrated surface runoff into the unstable area and all bare areas were seeded and straw-mulched. In 2013, no additional treatment is necessary.

Site M16: On the section of road from the junction past L35 to R19 a gully had formed in the road surface prior to the 2001 harvest. As close-out for that harvest the road was outsloped with rolling dips installed at proper spacing. Subsequently there were several slip-outs on the outboard road edge. As close-out for NTO 3 additional waterbars shall be installed at extreme EHR spacing to further reduce concentrated flow.

Site M28: This road, built in 2001, crosses a 65% sideslope for approximately 75 feet. The road was full-bench construction. No additional mitigation is necessary.

Landings

Existing landings shall be used whenever possible. For NTO 3, no new landings construction is proposed. Unless otherwise stated, landing surfaces shall be seeded with annual rye grass or other suitable grass prior to November 15 following operations. The following landings require further mitigation or explanation for the LTO prior to construction or use:

Operations on landings L4, L10, L22, L24, L26, and L29 shall take place between April 15 and October 15 only.

Specific Landing Mitigation Points

Landing L4: This is an existing landing located at the edge of the WLPZ of a Class II tributary of Valencia Creek. Operations shall avoid the WLPZ. After operations, the landing shall be straw mulched and seeded or tractor-packed with slash. If the landing surface is straw mulched and seeded, cull logs shall be placed at the front end of the landing to restrict illegal access from the adjacent road.

Landing L5: Equipment in this area shall operate on designated skid trails only due to the nearby wet area. For NTO 3, there is a pull-over tree in the vicinity.

Landing 22: This existing landing is located near a class III watercourse. During close-out of the 2001 harvest, the class III was re-aligned to the east of the small redwood tree and the EEZ was planted with redwood trees and straw mulched. For NTO 3, a fifteen foot EEZ shall be established between the landing edge and the class III channel. The landing edge shall be defined through the use of a brow log. Following the harvest, the landing surface shall be tractor packed with slash or straw mulched and seeded.

Landing 24: During the 2001 harvest, the size of the existing landing was increased by removing a portion of a redwood clump on the edge of the landing. No additional work is necessary for NTO 3.

Landing 26: This existing landing is located in a broad swale of a Class III watercourse. During close-out of the 2001 harvest, the class III was re-aligned as described in crossing R17. For subsequent entries, landing activities shall be confined to the north side of the re-channeled class III and a 10 foot EEZ shall be established between the landing edge and the class III channel. The landing edge shall be defined through the use of a brow logs, straw bales, or other suitable fencing material. For NTO 3, in order to have enough useable space at this landing for loading, the landing will be expanded approximately 20 feet into the cutbank with balanced cut and fill. Upon closeout, the landing shall be outsloped away from the Class III watercourse in an attempt to hydrologically disconnect the road from the watercourse. The landing surface shall be tractor packed with slash or straw mulched and seeded and the approaches to the Class III watercourse shall be re-rocked.

Landing 29: The landing is located on the western edge of a Class III. The landing edge shall be defined through the use of brow logs, straw bales, or other suitable fencing placed at least ten feet west of the class III channel. Prior to the winter period following operations the landing surface shall be tractor packed with slash or straw mulched and seeded.

Road Watercourse Crossings

Crossing R2: This is an existing crossing of a minor Class III watercourse and another substantial Class III watercourse. During close-out of the 2001 harvest, the LTO constructed a shallow inside ditch to carry flow from the minor Class III to where the major Class III meets the road. At this point, a crossing was dipped out after operations. The dipped crossing was lined with 5-10" gabion rock. Following operations for NTO 3, this crossing shall be cleaned out and the approaches to the crossing and WLPZ roads shall be rocked.

Crossing R3: This is an existing crossing of two minor Class III watercourses. During close-out of the 2001 harvest, the crossing was dipped out, lined with 5-10 inch gabion rock, and any bare areas were seeded and straw-mulched for 25' on either side of the crossing. Following operations for NTO 3, this crossing shall be cleaned out and the approaches to the crossing and WLPZ roads shall be rocked.

Crossing R4: This is an existing crossing of a Class II watercourse, which was upgraded to a rocked ford during close-out of the 2001 harvest. The entire length of road within the WLPZ was rocked using ¾" drain rock to a minimum depth of 2". If this crossing is flowing at the time of operations, the flow shall be conveyed across the road in an adequately sized flexible pipe armored with small logs and capped with soil and drain rock. Following operations for NTO 3, the crossing shall be cleaned out, gabion rock shall be added to the top and drain rock shall be spread on the approaches.

Crossing R5: This is an existing crossing of a Class III watercourse. Following operations, the crossing shall be dipped out and the approaches shall be seeded and straw-mulched for 25' in either direction.

Crossing R6: This is an existing crossing of a Class III watercourse which will not be used for NTMP operations. During close-out of the 2001 harvest, a 10" concrete pipe and an 18" aluminum pipe were removed and replaced with a 24 inch culvert and flexible culvert extension directed onto concrete energy dissipaters. No additional work is required for NTO 3.

Crossing R7: This is an existing crossing of a Class II tributary to Valencia Creek. During close-out of the 2001 harvest, the debris that was in place for energy dissipation was removed and large woody debris was installed for energy dissipation. The iron flap at the culvert inlet was cut off to allow free passage through the culvert and a critical dip was installed by building up the road downhill from the culvert. Following operations for NTO 3, the critical dip shall be rebuilt.

Crossing R8: This is an existing crossing of an inside ditch (not a Class III watercourse, only flow from road surface). During close-out of the 2001 harvest, a 12" cement pipe was removed and replaced with a 24" diameter culvert. Following operations for NTO 3, the inlet and outlet shall be cleaned, including the inside ditch to the secondary pipe up above the crossing.

Crossing R9: This is an existing crossing of a Class II watercourse and spring seep from above the road. During close-out of the 2001 harvest, a 10' downspout extension was connected to the 18" CPP that directs flow under the road and 1' x 1' rock was used as an energy dissipater placed at the base of the downspout. A t-post trash rack was installed above the culvert inlet and the outside road edge berm was removed. In addition, the road surface was rocked with ¾ inch drain rock to a two inch depth for the first 100 feet south of the crossing. Following operations for NTO 3, material behind the trash rack shall be removed to achieve original grade and this section of road shall be re-rocked.

Crossing R10: This is an existing crossing of a Class III watercourse. During close-out of the 2001 harvest, a 12" CMP was removed, and a 24" CPP was installed. A t-post trash rack was also installed at the inlet of the culvert. No additional work is required for NTO 3.

Crossing R12: This is an existing crossing of a Class III watercourse. Following operations for NTO 3, the crossing shall be dipped out and the approaches seeded and straw-mulched for 25' in either direction.

Crossing R13: This is an existing crossing of a Class III watercourse. During close-out of the 2001 harvest, the crossing was dipped out and a crib log was keyed into the outside edge of the road bed just above the existing crib log to function as a nick point to prevent downcutting to the outside edge of the road. An energy dissipater of rock and large woody debris was installed below the crib log. Following operations for NTO 3, the approaches to the crossings shall be seeded and straw-mulched for 25' in either direction.

Crossing R14: This is an existing rocked ford crossing, armored with gabion rock, with chunks of wood or other debris placed in the outlet as energy dissipaters. The crossing shall be used as is for NTO 3 and following operations, the ford shall be cleaned out.

Crossing R15: This is an existing rocked ford crossing through an old landing, armored with gabion rock, with 5-10 inch gabion sized rock or large woody debris armoring the outlet.

Crossing R16: This is an existing Class III road crossing that was upgraded to a 32" culvert during the 2001 harvest. Following operations for NTO 3, the rocked critical dip on the north side of the crossing shall be cleaned out.

Crossing R17: This is an existing road crossing of a class III watercourse through an old landing. During close-out of the 2001 harvest, the class III channel was re-established through the landing area and lined with 5-10 inch gabion rock. During operations for NTO 3, a 10 foot ELZ for the Class III channel shall be established with brow logs and following operations, the approaches to the Class III watercourse shall be re-rocked.

Crossing R18: This is an existing haul road crossing of a minor class III watercourse. Following operations for NTO 3, the class III shall be dipped to provide proper road drainage.

Crossing R19: This is an existing road crossing of a class III watercourse. During close-out of the 2001 harvest, the channel across the road was re-established and lined with 5-10 inch gabion rock. Following operations for NTO 3, the rocked crossing shall be cleaned out.

Crossing R20: This is an existing road crossing of a class III watercourse. During close-out of the 2001 harvest, the channel across the road was lined with 5-10 inch gabion rock. Following operations for NTO 3, the rocked crossing shall be cleaned out.

Crossing R21: This is an existing road crossing of a class III watercourse. During close-out of the 2001 harvest, the channel across the road was lined with 5-10 inch gabion rock. Following operations for NTO 3, the rocked crossing shall be cleaned out.

Crossing R28: This is an existing inside ditch to a rocked ford crossing lined with 5-10 inch rock. Following operations for NTO 3, the rocked crossing shall be cleaned out and a Rolling dip shall be re-established in the road between the crossing and Rider Road.

Crossing R29: This is an existing road crossing of a class III watercourse. During close-out of the 2001 harvest, the channel across the road was lined with 5-10 inch gabion rock. Following operations for NTO 3, the rocked crossing shall be cleaned out.

Skid Trail Watercourse Crossings

All Class III channels above and below crossings shall be cleared of large debris prior to the winter period to prevent flow from diverting down the skid trail.

Crossing S1: This is an existing skid trail crossing of a swale/minor Class III watercourse. The crossing shall be used as is and following operations for NTO 3, the crossing shall be dipped out and tractor-packed with slash.

Crossing S2: This is an existing skid trail crossing of a Class III watercourse. The area appears to be unstable. The crossing shall be used as is and following operations for NTO 3, the crossing shall be dipped out and the approaches tractor-packed with slash or seeded and straw-mulched for 25' in either direction.

Crossing S3: This is an existing skid trail crossing of a Class III watercourse/swale. The crossing shall be used as is and following operations for NTO 3, the crossing shall be dipped out and the approaches tractor-packed with slash or seeded and straw-mulched for 25' in either direction.

Crossing S4: This is an existing skid trail crossing of a Class III watercourse. The crossing shall be used as is and following operations for NTO 3, the crossing shall be dipped out and the approaches seeded and straw-mulched or slash packed for 25' in either direction.

Crossing S5: This is an existing skid trail crossing of a minor class III watercourse. The crossing shall be used as is and following operations for NTO 3, the crossing shall be dipped out and the approaches seeded and straw-mulched or slash packed for 25' in either direction.

Crossing S6: This is an existing skid trail crossing of a class III watercourse. The crossing shall be used as is and following operations for NTO 3, the crossing shall be dipped out and the approaches seeded and straw-mulched or slash packed for 25 feet to the north and 75 feet to the south.

Crossing S7: This is an existing skid trail crossing of a class III watercourse. The crossing shall be used as is and following operations for NTO 3, the crossing shall be dipped out and the approaches seeded and straw-mulched or slash packed for 75 feet to the west and 25 feet to the east.

Crossing S8: This is an existing skid trail crossing of a class III watercourse. The crossing shall be used as is and following operations for NTO 3, the crossing shall be dipped out and the approaches seeded and straw-mulched or slash packed for 25' in either direction.

Crossing S9: This is an existing skid trail crossing of a class III watercourse. The crossing shall be used as is and following operations for NTO 3, the crossing shall be dipped out and the approaches seeded and straw-mulched or slash packed for 25' in either direction.

Crossing S10: This is an existing skid trail crossing of a class III watercourse. The crossing shall be used as is and following operations for NTO 3, the crossing shall be dipped out and the approaches seeded and straw-mulched or slash packed for 25' in either direction.

Crossing S14: This is an existing skid trail crossing of two minor class III watercourses. The crossings shall be used as they are and following operations for NTO 3, the crossings shall be dipped out and the approaches seeded and straw-mulched or slash packed for 25' in either direction.

Crossing S15: This is an existing skid trail crossing of a class III watercourse. The existing skid trail will travel out of the landing and up a broad swale/minor class III watercourse for about 60 feet before crossing the class III at a skewed angle. The trail shall be located out of the class III to the extent possible by lining brow logs along the inside edge of the trail between the class III and the trail surface. Another brow log shall be placed on the low side of the crossing to prevent skidded logs from sweeping down the watercourse. These logs shall remain in place throughout skidding operations.

Following operations for NTO 3, prior to the winter period, the crossing shall be dipped out and the entire skid trail shall be tractor packed with slash. Slash from the landing should be used first. A berm shall be constructed approximately 50 feet above the crossing to ensure that the class III to the east does not divert down the skid trail.

Crossing S16: This is an existing crossing of a class III watercourse. The crossing shall be used as is and following operations for NTO 3, the crossing shall be dipped out and the approaches seeded and straw-mulched or slash packed for 25' in either direction.

Use of Existent Skid Trail in WLPZ

Site M10: Approximately 300' of existing trail is located in the WLPZ at this location. Trail use shall stop prior to crossing R2. Following operations for NTO 3, the LTO shall rock the trail surface (used as a road by neighbors) with ¾ inch rock to a two inch depth for the full 300 feet of length inside the WLPZ.

Power Line Trees

Trees that have potential to hit power lines when felled have been marked with blue painted vertical lines on 4 sides of the tree through a horizontal line around the tree at DBH.

Bottlebrush Grass Avoidance

Site M29: This is a patch of California Bottlebrush Grass (*Elymus californicus)*. Do not disturb the majority of this population over the course of operations for NTO 3.

Historic Sites

Two historic sites are present in Unit 1, an intact springboard resting in a stump and a pile of split bolts. These sites are flagged with orange and white candy stripe "SPECIAL TREATMENT AREA" flagging. Do not fall trees into or use equipment in within these bounds.

Other Notes

Twelve Subunits have been delineated to keep track of the volume by subunit (T1-T12).

The NTMP is within the zone of infestation for Sudden Oak Death and the guidelines in the 3/13/13 Amendment shall be followed:

- Host species removed from the NTMP area shall be logs stripped of branches, hardwood rounds, or split firewood greater than 4" diameter. No host foliage will be removed from the project area.
- Host material will not be moved outside of the regulated area.

Winter Period

Winter Period operations, other than timber falling, are not planned for NTO 3. All crossings will be removed and/or treated prior to October 15. Tractor operations shall only occur during extended periods with low antecedent soil wetness. Log Loading and hauling shall only occur when landing and road surfaces are not saturated as defined in 14 CCR 895.1. Cross felling of class III watercourses is permitted during the winter period. If a cross felled log segment is blocking the watercourse during the winter period, the timber faller shall buck out the blocking portion by hand. Cross felling of class I and II watercourses shall not occur during the winter period.

Soil Stabilization

1. Unless specifically stated elsewhere in the plan, skid trails will be packed with tractor crushed slash and debris where feasible and waterbarred following completion of use or as specified in the plan for winter operations. In areas where, due to steepness of slope or lack of slash and debris, tractor crushing is not feasible, hand trashing and/or seeding (35 lbs./acre, annual rye or other seed) will be employed.
2. Portions of all skid trails on slopes over 50% with a high or extreme EHR, on mapped unstable areas, or in the WLPZ, ELZ/EEZ shall be packed with tractor crushed slash, or hand trashed with slash (unless otherwise stated in the NTMP). Slash coverage shall exceed 90% of the bared surface. These trail sections shall be water-barred at an extreme EHR spacing.
3. All temporary crossings will be removed and the approaches straw mulched and seeded with annual rye grass or other grass (35 lbs/acre) or hand trashed with slash and debris prior to October 15 following the completion of operations.
4. All bared areas in the WLPZ or ELZ/EEZ 100 sq. feet and greater will be covered with slash or straw mulched and seeded with annual rye grass (35lbs per acre). Slash and/or straw coverage shall exceed 90% of the bared surface.
5. The plan RPF or supervised designee shall flag the location of all rolling dips/waterbars on haul roads.

6. Former truck roads that will be used as skid trails for future timber harvests shall be seeded, rather than slashpacked, to facilitate better ATV access between harvests.

Watercourse and Lake Protection

Per 14 CCR 916(b)(1) & (2), the LTO shall not do either of the following during timber operations:

1. Place, discharge, dispose of, or deposit in such a manner as to permit to pass into the waters of the state, any substances or materials, including, but not limited to, soil, silt, bark, slash, sawdust, or petroleum, in quantities which may cause harm to fish, wildlife, beneficial functions of riparian zones, or the quality and beneficial uses of water.
2. Remove water, trees or large woody debris from a watercourse or lake, the adjacent riparian area, or the adjacent flood plain in quantities which may cause harm to fish, wildlife, beneficial functions of riparian zones, or the quality and beneficial uses of water.

WLPZ WIDTHS

The following WLPZ widths and protection measures shall be adhered to throughout operations.

CLASS I WATERCOURSE

<30%	30-50%	>50%
150 Feet	150 Feet	150 Feet

CLASS II WATERCOURSE

<30%	30-50%	>50%	
50 Feet	75 Feet	100* Feet	* Subtract 25 feet width for cable yarding

CLASS III WATERCOURSE

<30%	>30%
25 Foot ELZ	50 Foot ELZ

GENERAL PROTECTION MEASURES

Per 14 CCR 916.9(d)(1), the mitigation measures below shall be implemented to offset potential significant adverse watershed effects from the proposed timber operations. The LTO shall be responsible for the implementation of each measure.

CLASS II WATERCOURSES

Midway up the property Valencia creek becomes a class II watercourse. A 12 foot rock waterfall and several large log jams were used to identify this transition. Several other class II watercourses are present on the property. The following protection measures shall apply to the class II watercourses on the property.

1. The WLPZ has been clearly identified on the ground by the RPF who prepared the plan, or her designee, with blue and white candy stripe "WATERCOURSE AND LAKE PROTECTION ZONE" flagging.
2. No trees are marked for harvest in the WLPZ.
3. To protect water temperature, filter strip properties, up slope stability, and fish and wildlife values, at least 75% of the total canopy covering the ground shall be left in a well distributed, multistoried stand composed of a diversity of species similar to that found prior to the start of

operations. The residual overstory canopy shall be composed of at least 25% of the existing conifers.
4. No equipment will be operated within the WLPZ unless explained and justified in this THP.
5. Haul roads located in a class II WLPZ shall be rocked to a minimum two inch depth with ¾ inch drain rock.

CLASS III WATERCOURSES

Class III watercourses are located throughout the property and shall be protected with the following measures:

1. Harvest trees within 25' of Class III watercourses shall be marked by the RPF or his supervised designee prior to commencement of operations in the harvest area in order to ensure retention of filter strip properties and maintain soil stability in the zone.
2. At least 50% of the understory vegetation present before operations shall be left living and well distributed adjoining Class III watercourses to maintain soil stability.
3. No equipment will operate within Class III watercourses other than at crossings listed on the Operations Map and for the first entry at Landings L22, L26 and L29. Any soil deposited in a Class III watercourse shall be removed and debris removed or stabilized before the conclusion of operations or before October 15th, whichever comes first.
4. A 25' Equipment Limitation Zone (ELZ) shall be observed when operating near Class III watercourses on slopes under 30%. Where slopes adjacent to Class III's exceeds 30%, a 50' ELZ shall be observed. Equipment operations within these ELZ's are allowed at designated crossings, and on flagged and mapped skid trails, truck roads, and landings L22, L26 and L29. It is the LTO's responsibility to familiarize himself and his crew with the location of the Class III's within the THP area to assure compliance with the ELZ requirements.

No water drafting is proposed for NTO 3.

Hazard Reduction

Slash within 50 feet of the private road used to access the homes north of the plan area (H & D Road) shall be lopped to within twelve inches above the ground. Slash treatment work shall occur by April 1 of the year following its creation**.**

Board Listed Bird Species and Breeding Raptor Mitigation Measures

A Raptor Survey of Unit 1 was recently completed in preparation for submittal of this NTO. No impacts to special status or non-special status species are anticipated; however, timber fallers shall make a visual check for nests for each tree to be felled. If a nest is located which has indicators of current nesting activity, the RPF shall be notified immediately and, if timber operations are active, all timber operations within 300 feet of the nest shall cease immediately. The following measures shall then apply:

For Board Listed Species

a. The RPF shall notify CDF and CDF&G and consult with a qualified biologist.
b. Appropriate mitigation measures as specified for identified listed species in the forest practice rules (CCR 919.3), which includes consultation with CDF&G for flagging of a buffer zone, and specified restrictions or prohibitions of activities within the buffer zone until the young are fledged.

For CDF&G Species of Special Concern

a. The RPF shall notify CDF and CDF&G and consult with a qualified biologist.
b. Upon identification of the species of the nest occupant(s), a buffer zone of the appropriate size shall be flagged around the nest.

Hours of Operation

Within 300 feet of any occupied dwelling, the operation of chain saws and other power equipment, except licensed highway vehicles, shall be restricted to the hours between 8:00 a.m. and 6:00 p.m., and shall be prohibited on Saturdays, Sundays and nationally designated legal holidays. More than 300 feet from any occupied legal dwelling, the operation of chain saws and other power-driven equipment shall be restricted to the hours between 7:00 a.m. and 7:00 p.m., and shall be prohibited on Saturdays, Sundays and nationally designated legal holidays. To facilitate the flow of trucks before the road is busy with commute traffic, log loading and hauling may commence at 6:00 a.m. rather than 7:00 a.m., unless complaints are received.

Log Hauling

"Caution Log Truck" signs shall be posted at regular intervals along Rider Road to inform road users of log trucks. Signs shall be posted approximately every ¼ mile.

Performance Bonding on Rider Road

A performance bond in the amount of $10,000 shall be posted with Cal Fire prior to use of Rider Road for log hauling. This bond covers the paved portion of county maintained Rider Road and appurtenant structures for damages willfully or negligently damaged by the LTO's log hauling operations.

Flagging Key

- **Pink Glo "HARVEST BOUNDARY"** - Delineates the bounds of the harvest area - trees are not to be felled outside of these boundaries.

- **Blue and White Candy Stripe "WATERCOURSE AND LAKE PROTECTION ZONE"** - Signifies WLPZ boundary of Class I and II streams.

- **Blue** - Signifies center line of Class III streams.

- **Orange and White Candy Stripe "SPECIAL TREATMENT AREA"** - Delineates the bounds of an Arch Site or other significant area/feature. Do not fall trees into or use equipment in within these bounds.

- **Orange "TRUCK ROAD"** - Signifies road designated for log truck traffic.

- A combination of **orange "TRUCK ROAD" and White** flags together indicate the location of a landing. The white flag will be labeled with the landing number.

- **Yellow "SKID TRAIL"** - Signifies route to be used by skidders and other heavy equipment.

- A combination of **Yellow "SKID TRAIL", White and Blue** flagging together indicate the point at which a skid trail crosses a class III stream. The white flag will be labeled with the crossing number.

- **Two Yellow "SKID TRAIL"** flags next to each other (within a foot or two) indicate the end of a skid trail; equipment should not proceed beyond this point.

- **White** - Used to provide information about landings, stream crossings or other notable features.

Other Flagging - For the most part these are remnants of growth measurement plots and **should be treated as if they were not there.**

For example: A cluster of 4 or 5 pink flags marks the center of a VPS plot.
A cluster of 4 or 5 orange flags surrounded by many trees spray painted with green numbers marks the center of a CFI plot.