



**Mad River Properties, Inc.**  
2660 Clay Road McKinleyville, CA 95519; (707) 496-0054

May 24, 2018

Tricia Shortridge  
County of Humboldt Planning and Building Dept.  
3015 H Street  
Eureka, CA 95501

RE: APN: 108-012-008/APPS #12085

Tricia,

Please find attached, the Less Than 3 Acre Conversion Mitigation Documents, to be added to their perspective files, for the above mentioned APN and Application number.

Would you please provide me with the proper planner's name and information, which this will go to?

Sincerely,

A handwritten signature in black ink, appearing to read "Stephen Hohman", written over a horizontal line.

Stephen Hohman RPF#2652  
Mad River Properties, Inc.



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Canigou INC.  
Tristan Strauss  
P.O. Box 38  
Samoa CA, 95564

Grindstone Openings L.P.  
Timothy and Marie Cochrane  
12035 Wilder Ridge Rd.  
Garberville, CA 95542

## **Grindstone Canigou Less Than Three Acre Conversion Mitigation Plan**

This document has been prepared pursuant to Section 55.4.10(j) of the Humboldt County Commercial Medical Marijuana Land Use Ordinance, applications for Commercial Cannabis Activity occupying sites created through prior unauthorized conversion of timberland. The document evaluates site conditions and conversion history for the parcel and contains a Registered Professional Foresters (RPF's) recommendation as to remedial actions necessary to bring the conversion area into compliance with provisions of the Forest Practice Act.

### 1. Contact Information

#### a. Timberland/Timber Owner of Record:

Grindstone Openings LP  
12035 Wilder Ridge Rd.  
Garberville, CA 95542

#### b. Registered Professional Forester Preparing Report:

Stephen Hohman RPF #2652  
PO Box 733  
Hydesville CA. 95547  
(707) 768-3743

### 2. Location of Project

a. Site Address: 12035 Wilder Ridge Rd, Honeydew CA, 95545

b. Community Area: Honeydew

c. Assessor's Parcel No(s): 108-012-008

d. Parcel Size(s): 86 Ac.

### 3. Project Description

a. Timber stand characteristics including species composition and age class.

The Grindstone Canigou property is within a Douglas fir/tanoak forest. The surrounding forest composition consists primarily of even-age second growth Douglas-fir, tanoak, and pacific madrone with a minor amount of other hardwood species. All species combined (conifer & hardwood) basal areas is approximately 260 square feet (sq. ft.) per acre with closed canopy. The property is zoned Agriculture Exclusive (AE) and Timber Production (TPZ).

b. Watercourse and Lake Protection Zones (WLPZ) which exist within the boundaries of the parcel or immediate vicinity of the project (Section 916.4)

The property does contain a class I and several class II and class III watercourses that require WLPZ or ELZ protection (riparian buffer). As per the Forest Practice Rules, the riparian buffer requirements are listed as follows:

*Class I standard watercourse 14CCR 916.9(f): (within the Coastal Anadromy Zone)*

**ZONE WIDTHS:**

*Channel Zone = channel between the WTL.*

*30' Core Zone and 70' Inner Zone (100' Riparian Buffer)*

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*<30% = 15' Core Zone and 50' Inner Zone*

*30%-50% = 15' Core Zone and 75' Inner Zone*

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*Class III watercourse 14CCR 916.9(h): (within the Coastal Anadromy Zone)*

**ELZ WIDTHS (Riparian Buffer):**

*30 ft. for side slopes <30%.*

*50 ft. for side slopes >30%.*

c. Describe the timber harvest history, including timber operations within the parcel prior to the unauthorized conversion.

The area has had at least two previous entrees. The past harvesting incorporated the removal of large diameter old growth trees by tractor skidding.

d. Identify and describe any portions of the parcel that are part of the unauthorized conversion of timberland. Calculate the total acreage of all areas converted. Differentiate between discrete (non-contiguous) areas of conversion and provide relevant sub-totals of these acreages.

Property boundary note; Hohman and Associates/Mad River Properties Inc. did not conduct an investigation on a legal survey of the property. The property boundary on the ground does not



match Humboldt County's Parcel Map. Two property corner markers for this and the adjacent property have been located in the field and 'way-pointed'. Also, the boundary has been surveyed by Kolstad Land Surveyors and their boundary makers in the field match the boundaries on maps included in this document.

There is one site, totaling 4.83 acres of converted land on the property.

#### 4. Analysis of Consistency between Unauthorized Conversion and Applicable Forest Practice Rules.

History: This site was partially harvested under NTMP 1-02-085-HUM. The structure on the south side and the neighboring house were built by 2009. More trees were harvested by 2012. By 2014 the west side of the harvested area had been converted to cultivate cannabis with a grading and garden beds. In 2017 two groups of trees near the structure were cleared for cannabis cultivation and a metal shop was built on the north side. The site is currently occupied by multiple temporary greenhouses, two permanent structures, water tanks, and a generator. There is a residential house adjacent to the conversion. The conversion area is not within any riparian buffers. No rare, threatened or endangered animals and plants present within 1000' as per 2017 CNDDB search. No permit was obtained from CALFIRE to clear the area for such activities. Ownership at the time of the initial illegal conversion and expansion was Grindstone Openings LP..

Numbers of acres converted without 14CCR1104.1: **4.83**

**Mitigations for Project:** Road Points (RP) are specific locations that are currently in conflict with the Forest Practice Rules or have potential to cause environmental damage. Road Points have been identified from where the access road enters the property to and around the conversion sites.

RP#1: Jeep trail with approximately 28% grade. Install water-bars every 100'. 14CCR 923.5

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#### 6. Photos, Figures, and Maps



Figure 1) Southwest edge looking north



Figure 2) Northwest position looking southeast, RP#1



Figure 3) North edge (RP#2) looking west



Figure 4) West position looking southeast



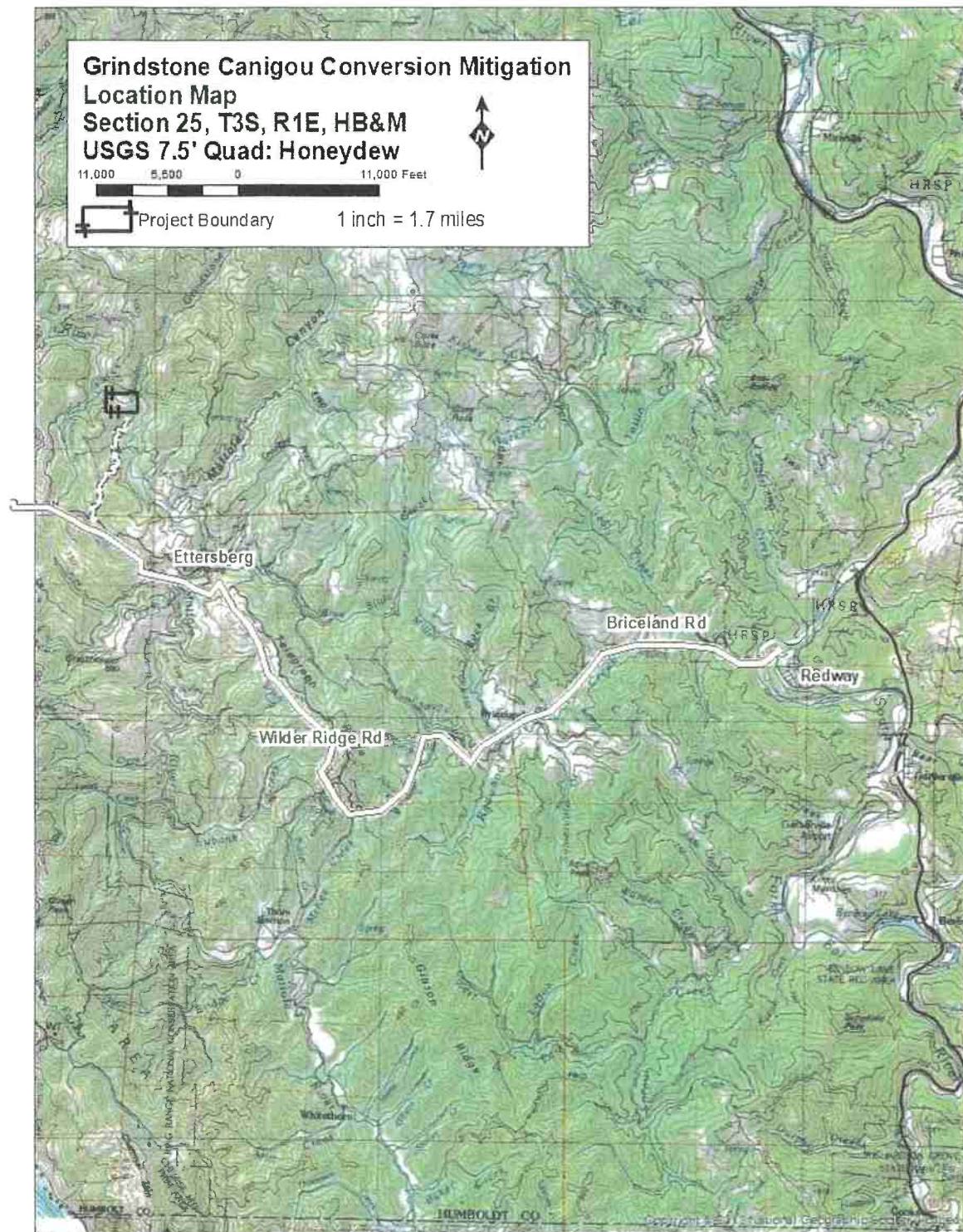


Figure 5) Location Map

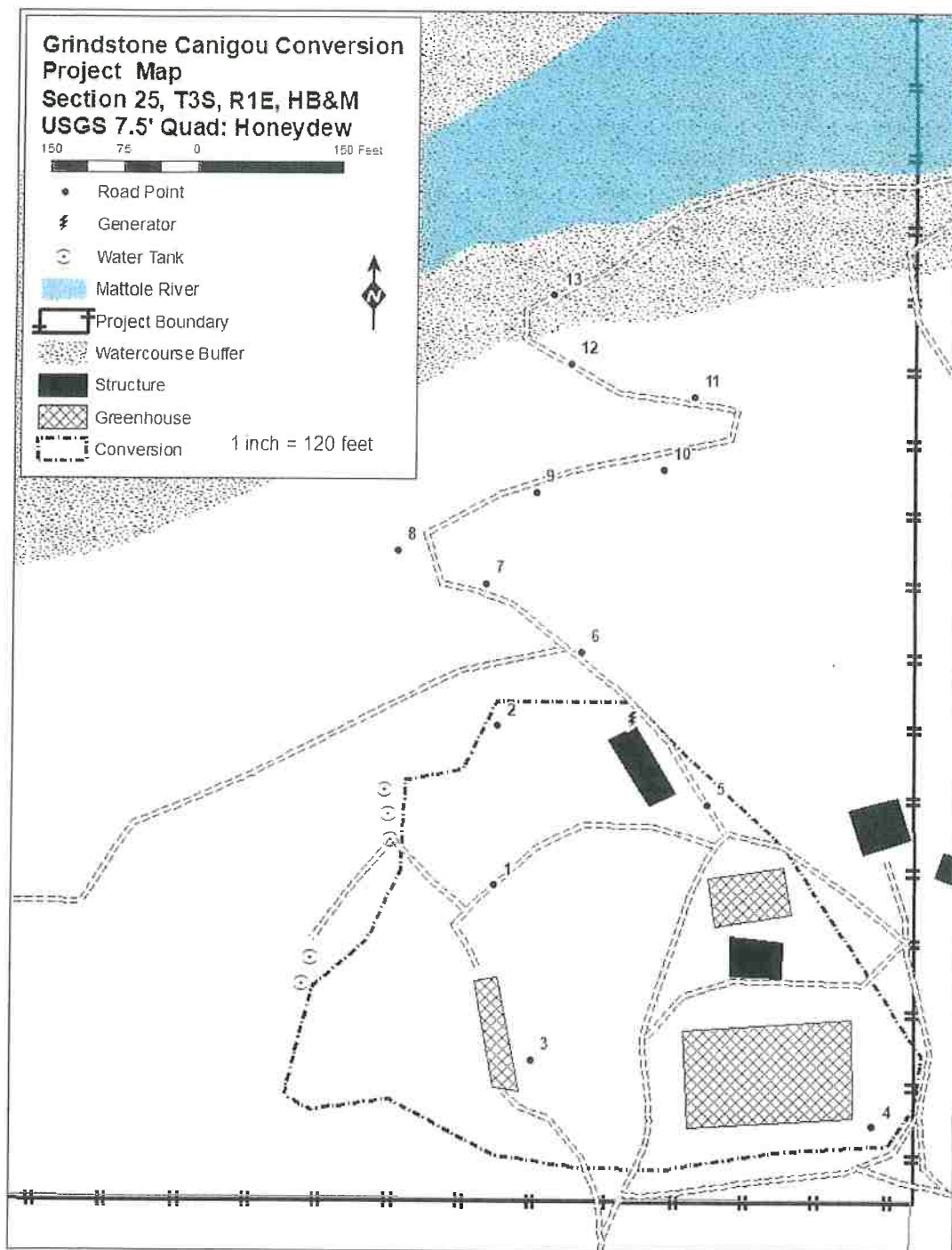


Figure 6) Project Map



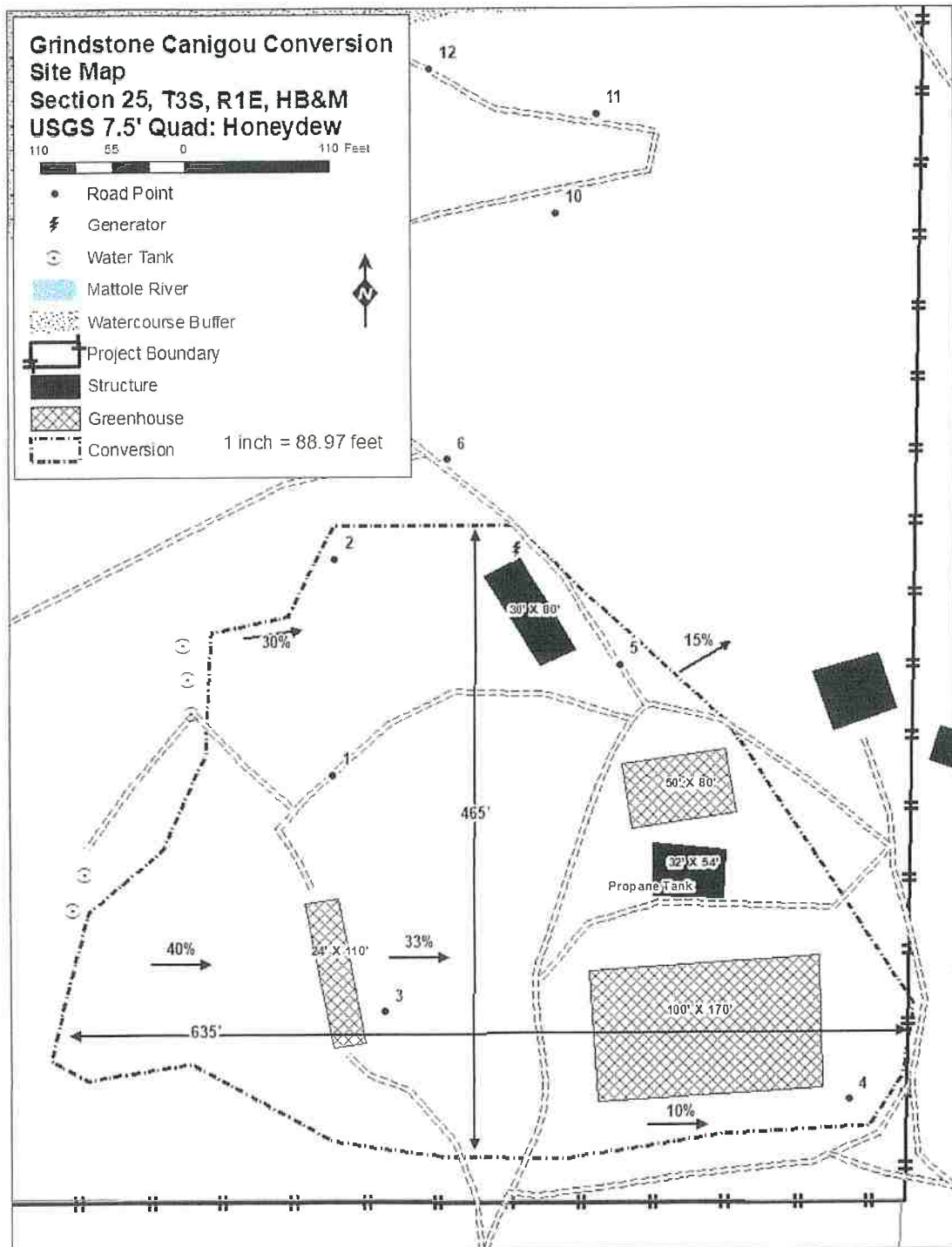


Figure 7) Site map

## Grindstone Canigou Conversion Mitigation

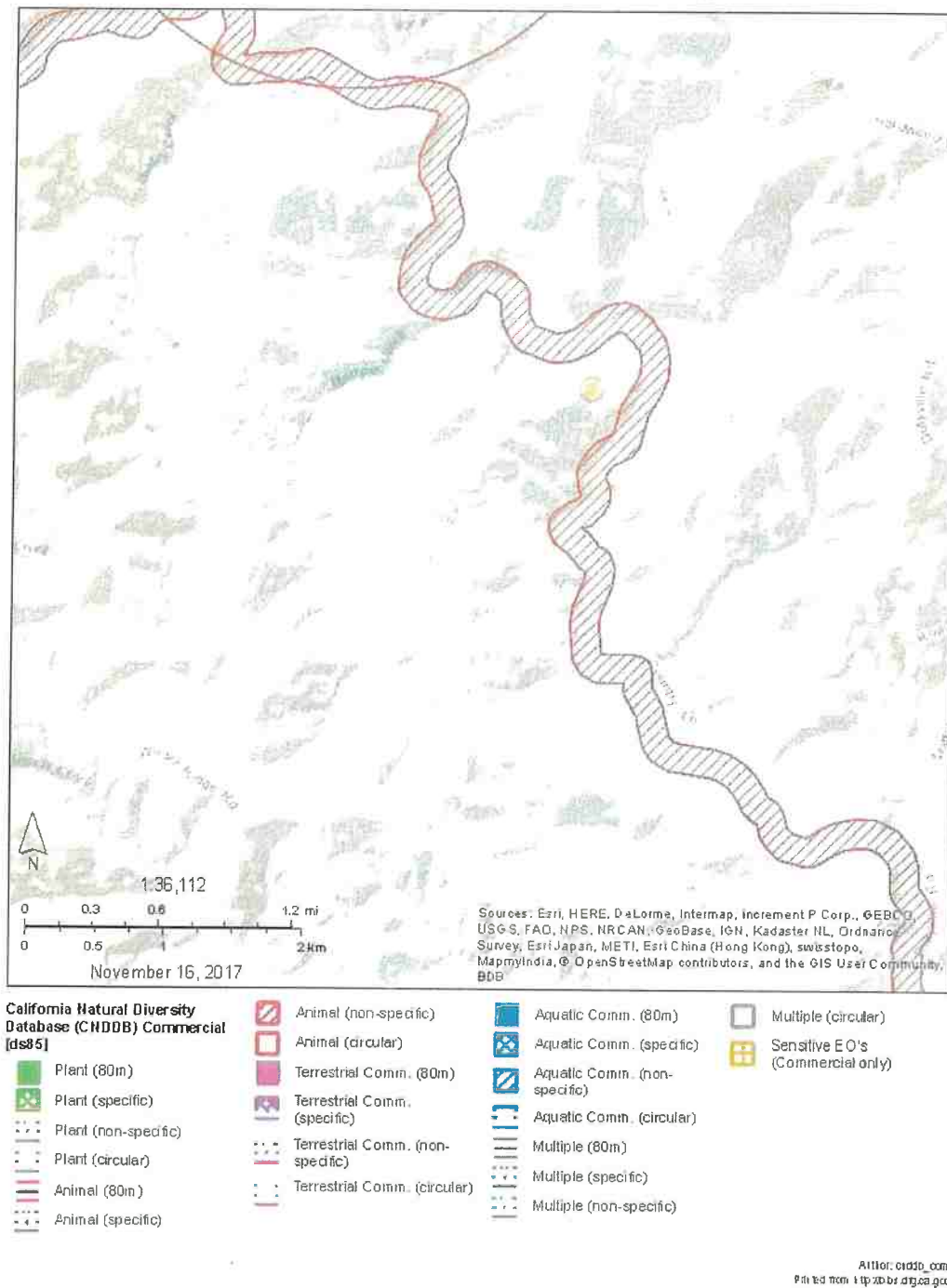


Figure 8) California Natural Diversity Database

**Kolstad  
Land  
Surveyors**  
PO Box 594  
Bayside, CA. 95524

October 21, 2017

The following letter is intended to serve as an explanation of our field survey on Sept. 22 of this year. My 2-person survey crew conducted the field survey at my direction. The field survey consisted entirely of retracing boundaries surveyed by Don Bushnell, LS 2786, for Lee French, filed in Book 27 of Surveys, Page 118, Humboldt County Records.

My field crew met with you on the morning of the 22nd as we had arranged, and you guided them to the apparent corner marker common to assessor's parcels 108-012-011, 108-012-012 (your parcels), 108-012-009 (Doricko), and 108-012-008 (Grindstone Openings LP) - this is shown as corner "8" on the Bushnell survey.

The corner marker was found to be a 3/4" iron pipe, bent, and showed signs of being disturbed, possibly by CAT activity related to a logging operation. Of the two bearing trees described by Bushnell as references to this corner, one appeared to be gone, the other questionable as to character (a rotted stump, not matching reported location). My field crew measured to this corner, and also located recently cut trees in the area, and a 22'x32' building which appeared to straddle the property line, and set temporary/approximate stakes along the property line. These stakes were wood lath, were not marked, intentionally set at places of convenience and not necessarily in-line; they are set in this manner with the expectation of correcting them upon completing the field survey, when the exact direction of the property line is known.

My crew then surveyed along an offset / off-line traverse towards the next corner to the north, common to APN 108-012-011, 108-012-008, and 108-012-006 (Stansberry), shown as corner "7" on the Bushnell survey. Bushnell's corner "7" was found to be a 3/4" iron pipe, with plastic plug, and both bearing trees described by Bushnell's survey were found in good condition. My crew accepted this monument as being properly set as Bushnell left it. Comparing the measured distance between the two found survey monuments to that reported by the Bushnell survey yields a distance within reason (a couple feet), but given the lack of certainty in the position of Corner "8", they elected to perform more measuring.

My field crew returned to their control in the vicinity of corner "8", and surveyed an offset / off-line traverse to the next corner to the south, common to APN 108-012-012, 108-012-009, and

Kolstad Land Surveyors  
PO Box 594  
Bayside, CA. 95524

Phone: (707) 822-2718  
Facsimile: (707) 822-5636  
Email: dylan.kolstad@gmail.com

Figure 9) Boundary Survey Report, page 1 of 3



108-012-010 (De Cordova), shown as Corner "9" on the Bushnell survey. A 3/4" iron pipe, with plastic plug, stamped "LS 2786" was found at this location, along with one of the bearing trees noted by the Bushnell survey. The pipe was found to be leaning hard in a northerly direction, but the base of the pipe matched the direction and distance called from Bushnell's map from the found bearing tree. The overall distance between corner "7" and corner "9" matches map distance within 1.5 feet, reasonable given the terrain and age of the survey.

Upon completion of the measurement to the south, the day was done, and no time remained to adjust & correct the previously set temporary property line stakes set along the line between APN 108-012-008 & 108-012-011, and as far as I know, they remain in place, uncorrected. When hired to mark property line, we generally start at one good corner and measure to a second, and will set stakes along the way to save time. Typically once the measurement to the second good corner is done, the error in the stakes is small enough to allow us to correct them perpendicularly to the true property line with a tape-measure rather than having to set up our total station again at each point. Accepting the monuments found at Corner "7" and Corner "9" and calculating the proper position for the moved Corner "8" in-between puts the boundary line almost directly through the middle of the 22'x32' building, and I calculate the proper position of that Corner "8" to be 4.5 feet in a northwesterly direction from the found pipe.

I have waited for your direction on the next step in this process. A proper conclusion to this survey would result in replacing the moved Corner "8" and correcting the line stakes to their proper position. As well, my crew noted that there were more cut trees closer to the river which we did not have time to locate, and if we return it would be wise to take a closer look at any other encroachments or intrusions onto the property, now that the property line is known with reasonable certainty.

Please let me know if I can be of further assistance.

Sincerely,



Dylan Kolstad, PLS 8152



Attachments: Book 27 of Surveys, Page 118

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Bayside, CA. 95524

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Figure 10) Boundary Survey, page 2 of 3

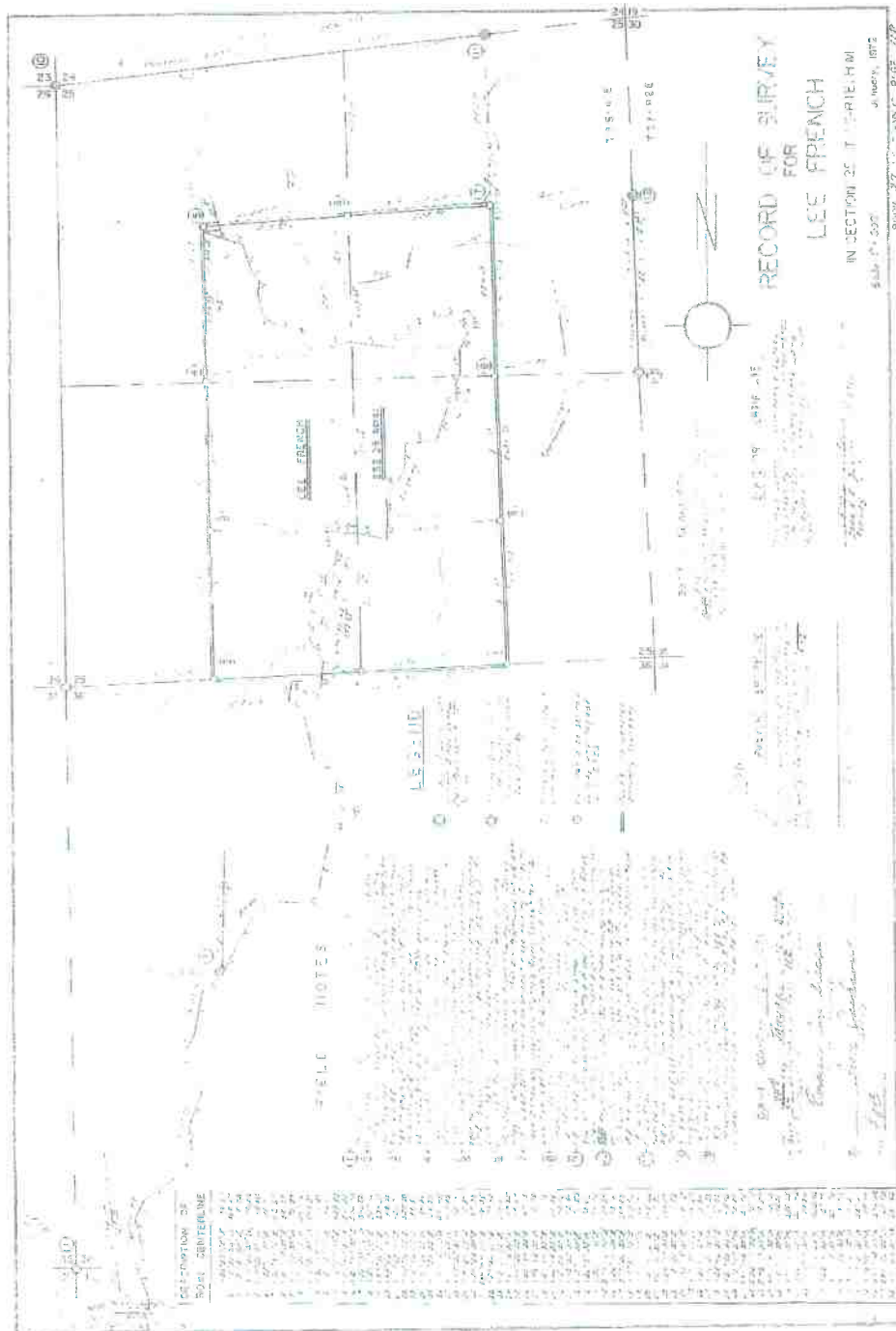


Figure 11) Boundary Survey, page 3 of 3

2013-013486-2  
Recorded - Official Records  
Humboldt County, California  
Carolyn Crnich, Recorder  
Recorded by: FRENCH  
Rec Fee: \$16.00  
Survey Mon Fee: \$10.00

RECORDING REQUESTED BY:  
Grindstone Openings LP

AND WHEN RECORDED MAIL TO:

Grindstone Openings LP  
PO Box 71  
Whitethorn, CA 9558 9

Doc Trf Tax: \$572.00  
Clerk: LH Total: \$598.00  
Jun 11, 2013 at 10:56:54

SPACE ABOVE THIS LINE FOR RECORDER'S USE

### GRANT DEED

THE UNDERSIGNED GRANTORS DECLARE  
Unincorporated Area  
Parcel No. 108-012-008

Documentary Transfer Tax is \$572.00  
computed on full value of property conveyed

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,

**RICHARD L. FRENCH and SALLY J. FRENCH, husband and wife, as community property with the right of survivorship**

hereby GRANT to

**GRINDSTONE OPENINGS LP, a Nevada limited partnership**

the real property in the unincorporated area of the County of Humboldt, State of California whose physical address is 12035 Wilder Ridge Road, Garberville, CA 95542, Parcel No. 108-012-008, described as follows:

The Southeast Quarter of the Northwest Quarter and the Southwest Quarter of the Northeast Quarter of Section 25, Township 3 South, Range 1 East, Humboldt Meridian, according to the Official United States Government Survey.

Dated: 5-22-13

Richard L. French

Richard L. French

Sally J. French

Sally J. French

1 of 2

Figure 12) Grindstone Openings deed, page 1 of 2

STATE OF CALIFORNIA.

COUNTY OF HUMBOLDT

JSS.

On May 22, 2013, before me, Jessica L. Etter, NOTARY  
personally appeared  
Richard L. French and Sally J. French

Proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s) or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature



My commission expires: 12-25-2014

(This area for official notarial seal)



OR #2013-013486-2 2 of 2

Figure 13) Grindstone Openings L.P. deed, page 2 of 2

## 7. References

California Forest Practice rules, 2017; Title 14, California Code of Regulations, Chapters 4, 4.5, and 10

California Natural Diversity Database, September 20, 2017, <http://bios.dfg.ca.gov>

Parcel Quest Data – County Assessor information; <http://pqweb.parcelquest.com>

Humboldt County Web GIS, November 2017, <http://webgis.co.humboldt.ca.us/HCEGIS2.0/>

### STATEMENT OF CONTINGENT AND LIMITING CONDITIONS CONCERNING THE PREPARATION AND USE OF THE LESS THAN 3 AC CONVERSION MITIGATION PLAN

Prepared by Hohman & Associates/Mad River Properties Inc.

1. This information has been prepared for the sole use of the **Landowner of Record**, for the express purpose of submitting the document to CAL Fire and the local county planning department.
2. Hohman and Associates/Mad River Properties Inc. does not assume any liability for use of this information by any party other than the owner or their agent.
3. The assessment presented in this report should be viewed and considered in light of the time spent observing the property and the methodologies used. The assessment may differ from those made by others or from the results of interpretation and assessment protocols.
4. Hohman and Associates/Mad River Properties Inc. did not conduct an investigation on a legal survey of the property.
5. The information is based upon conditions apparent to Hohman and Associates/Mad River Properties Inc. at the time the work was done. This report is time sensitive and provides current conditions as per the date of this document. No further clearing of trees, grading or construction of structures shall occur on site until the approval of this document by CAL Fire and/or the local county planning department.
6. All future work on site shall be through **approved permits** with local state or county agencies.
7. Hohman and Associates/Mad River Properties Inc. shall not be responsible for the supervision of mitigation operations following approval of the conversion plan.

Landowner of Record: Grindstone Openings LP

Signature: [Signature] Date: 12/12/2017  
General Partner

Landowner of Record: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Registered Professional Forester: Stephen Hohman RPF #2652

Signature: [Signature] Date: 12-19-2017

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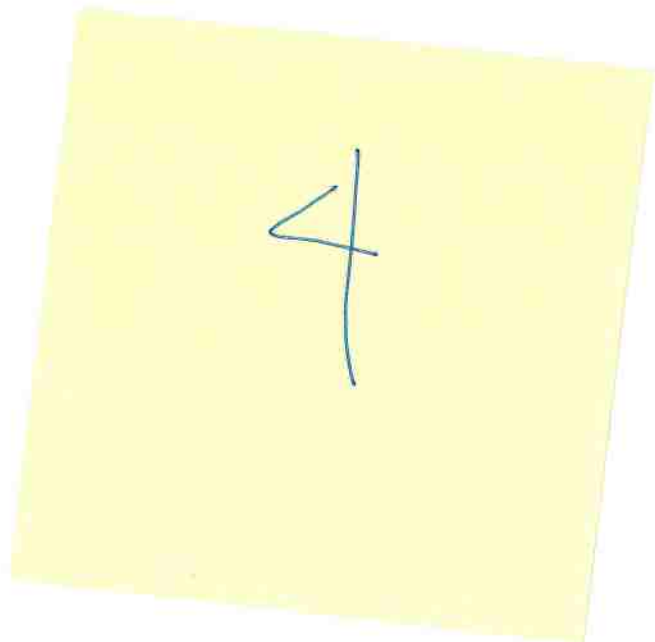
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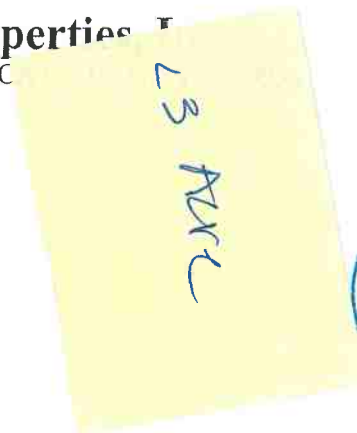


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#### 6. Photos, Figures, and Maps



Figure 1) Southwest edge looking north



Figure 2) Northwest position looking southeast, RP#1







Figure 3) North edge (RP#2) looking west

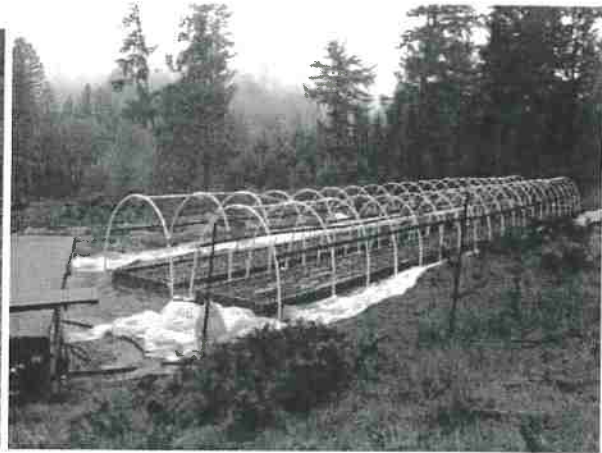


Figure 4) West position looking southeast



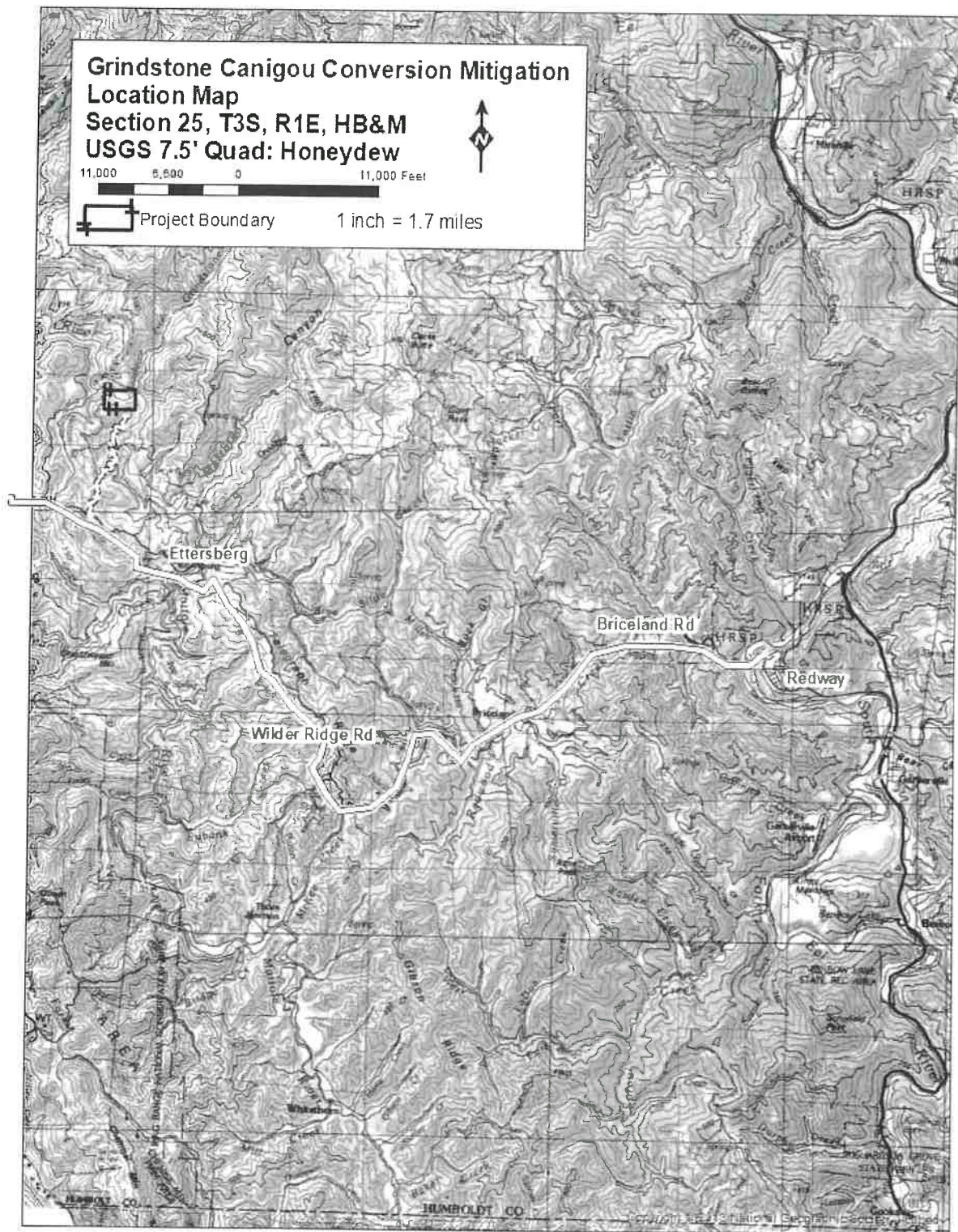


Figure 5) Location Map



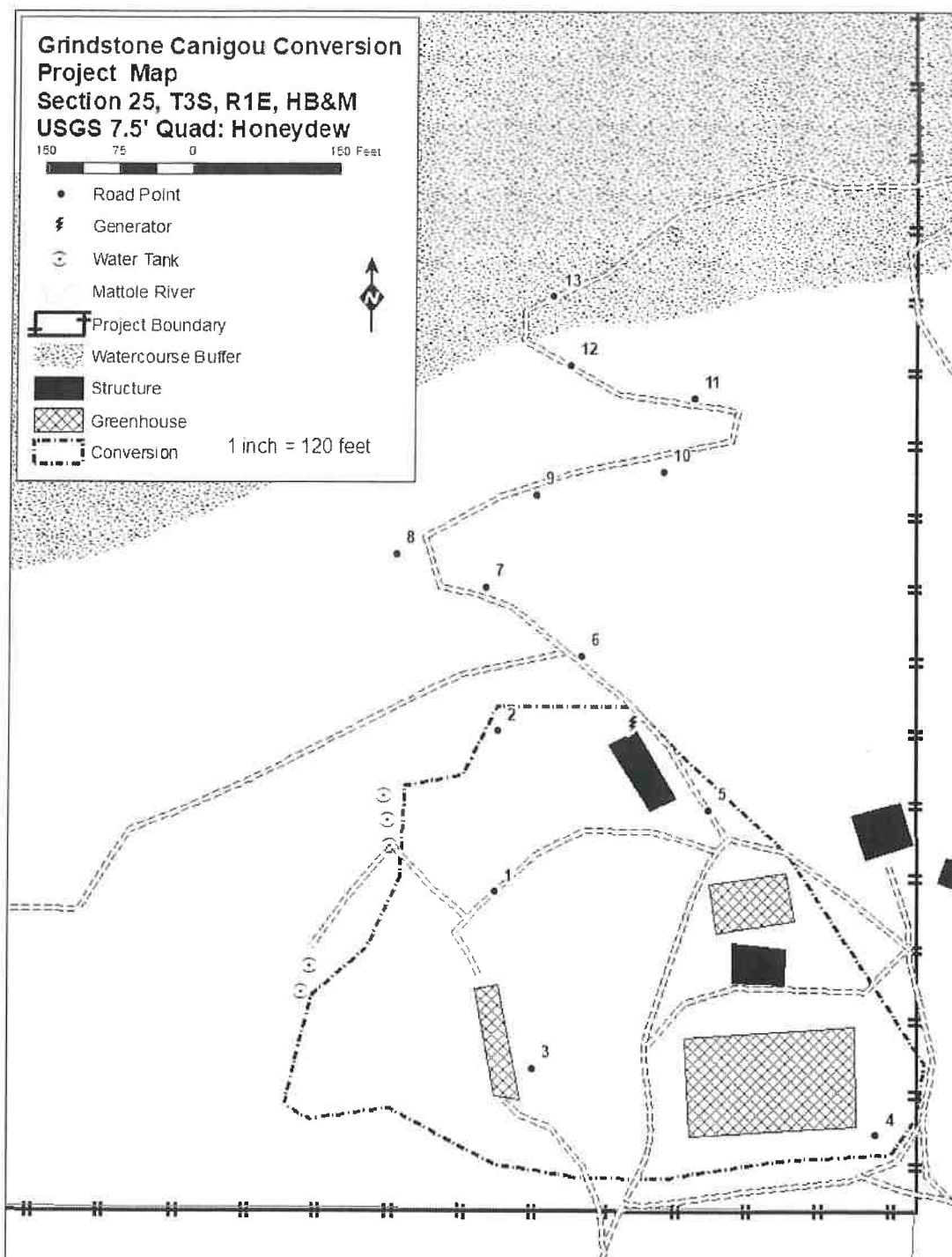


Figure 6) Project Map





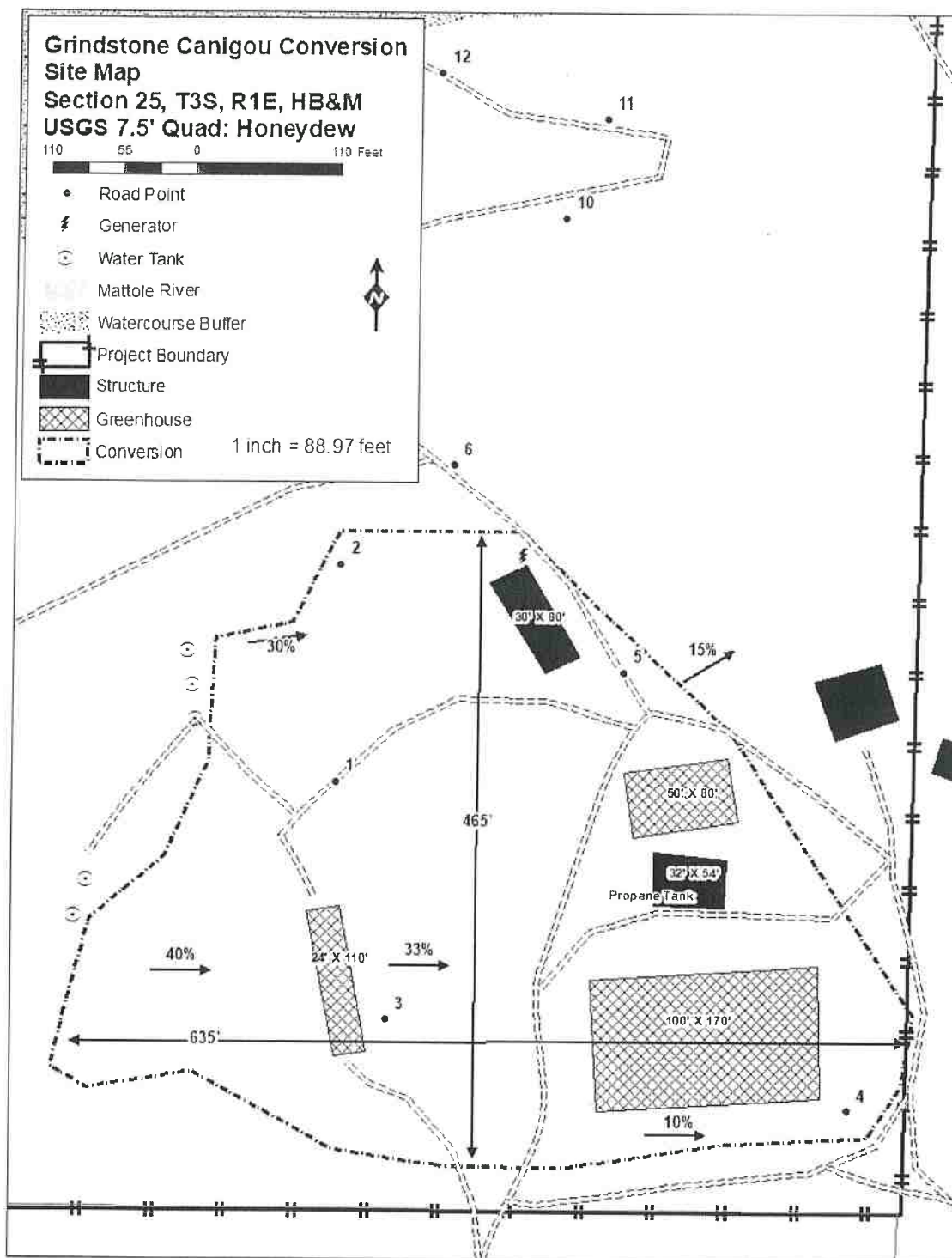
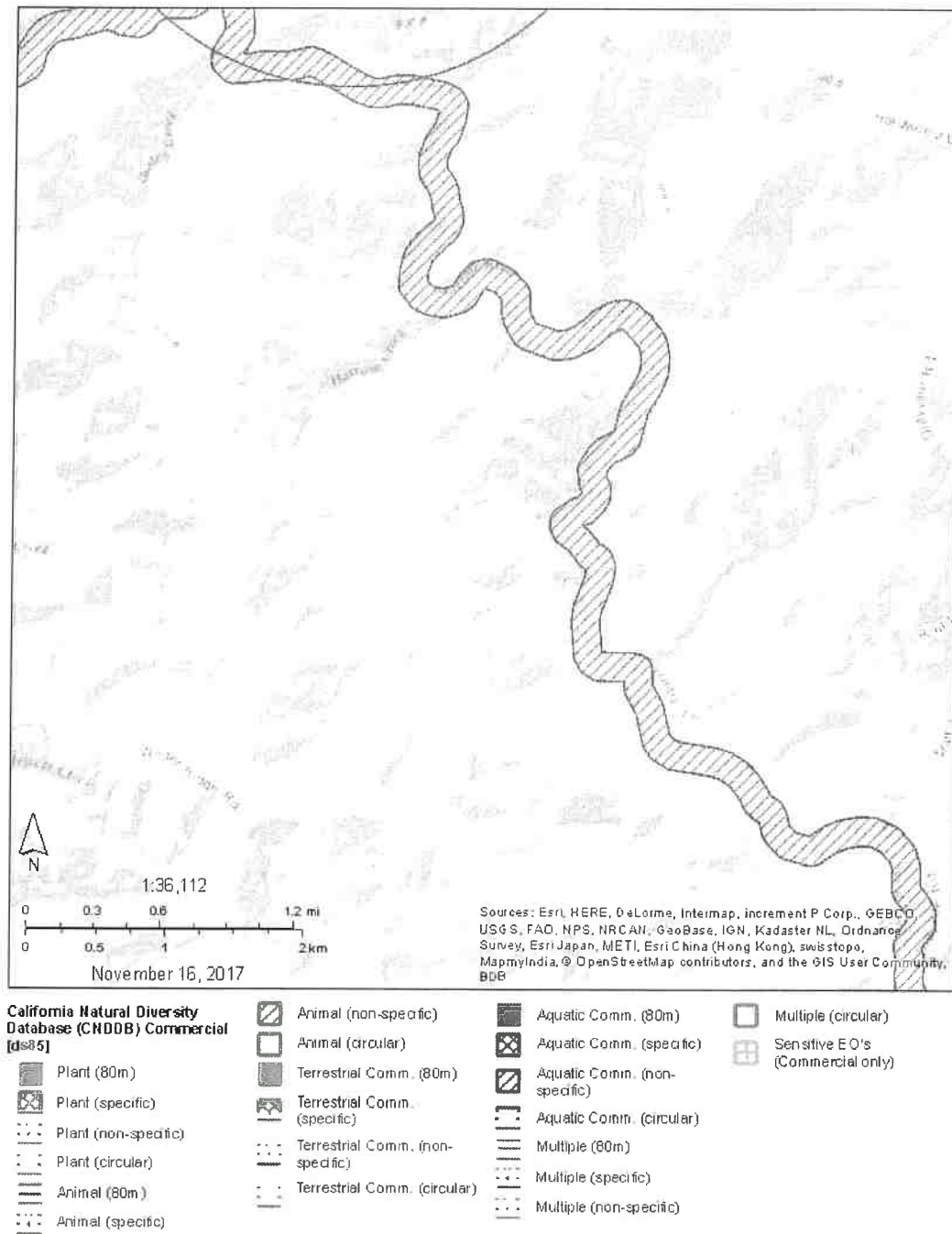


Figure 7) Site map





## Grindstone Canigou Conversion Mitigation



Attorney: caddb.com  
Printed from: <http://bbs.dtyca.gov>

Figure 8) California Natural Diversity Database



**Kolstad  
Land  
Surveyors**  
PO Box 594  
Bayside, CA. 95524

October 21, 2017

The following letter is intended to serve as an explanation of our field survey on Sept. 22 of this year. My 2-person survey crew conducted the field survey at my direction. The field survey consisted entirely of retracing boundaries surveyed by Don Bushnell, LS 2786, for Lee French, filed in Book 27 of Surveys, Page 118, Humboldt County Records.

My field crew met with you on the morning of the 22nd as we had arranged, and you guided them to the apparent corner marker common to assessor's parcels 108-012-011, 108-012-012 (your parcels), 108-012-009 (Doricko), and 108-012-008 (Grindstone Openings LP) - this is shown as corner "8" on the Bushnell survey.

The corner marker was found to be a 3/4" iron pipe, bent, and showed signs of being disturbed, possibly by CAT activity related to a logging operation. Of the two bearing trees described by Bushnell as references to this corner, one appeared to be gone, the other questionable as to character (a rotted stump, not matching reported location). My field crew measured to this corner, and also located recently cut trees in the area, and a 22'x32' building which appeared to straddle the property line, and set temporary/approximate stakes along the property line. These stakes were wood lath, were not marked, intentionally set at places of convenience and not necessarily in-line; they are set in this manner with the expectation of correcting them upon completing the field survey, when the exact direction of the property line is known.

My crew then surveyed along an offset / off-line traverse towards the next corner to the north, common to APN 108-012-011, 108-012-008, and 108-012-006 (Stansberry), shown as corner "7" on the Bushnell survey. Bushnell's corner "7" was found to be a 3/4" iron pipe, with plastic plug, and both bearing trees described by Bushnell's survey were found in good condition. My crew accepted this monument as being properly set as Bushnell left it. Comparing the measured distance between the two found survey monuments to that reported by the Bushnell survey yields a distance within reason (a couple feet), but given the lack of certainty in the position of Corner "8", they elected to perform more measuring.

My field crew returned to their control in the vicinity of corner "8", and surveyed an offset / off-line traverse to the next corner to the south, common to APN 108-012-012, 108-012-009, and

*Kolstad Land Surveyors  
PO Box 594  
Bayside, CA. 95524*

*Phone: (707) 822-2718  
Facsimile: (707) 822-5636  
Email: dylan.kolstad@gmail.com*

Figure 9) Boundary Survey Report, page 1 of 3



108-012-010 (De Cordova), shown as Corner "9" on the Bushnell survey. A 3/4" iron pipe, with plastic plug, stamped "LS 2786" was found at this location, along with one of the bearing trees noted by the Bushnell survey. The pipe was found to be leaning hard in a northerly direction, but the base of the pipe matched the direction and distance called from Bushnell's map from the found bearing tree. The overall distance between corner "7" and corner "9" matches map distance within 1.5 feet, reasonable given the terrain and age of the survey.

Upon completion of the measurement to the south, the day was done, and no time remained to adjust & correct the previously set temporary property line stakes set along the line between APN 108-012-008 & 108-012-011, and as far as I know, they remain in place, uncorrected. When hired to mark property line, we generally start at one good corner and measure to a second, and will set stakes along the way to save time. Typically once the measurement to the second good corner is done, the error in the stakes is small enough to allow us to correct them perpendicularly to the true property line with a tape-measure rather than having to set up our total station again at each point. Accepting the monuments found at Corner "7" and Corner "9" and calculating the proper position for the moved Corner "8" in-between puts the boundary line almost directly through the middle of the 22'x32' building, and I calculate the proper position of that Corner "8" to be 4.5 feet in a northwesterly direction from the found pipe.

I have waited for your direction on the next step in this process. A proper conclusion to this survey would result in replacing the moved Corner "8" and correcting the line stakes to their proper position. As well, my crew noted that there were more cut trees closer to the river which we did not have time to locate, and if we return it would be wise to take a closer look at any other encroachments or intrusions onto the property, now that the property line is known with reasonable certainty.

Please let me know if I can be of further assistance.

Sincerely,



Dylan Kolstad, PLS 8152



Attachments: Book 27 of Surveys, Page 118

Kolstad Land Surveyors  
PO Box 594  
Buyside, CA. 95524

Phone: (707) 822-2718  
Facsimile: (707) 822-5636  
Email: dylan.kolstad@gmail.com



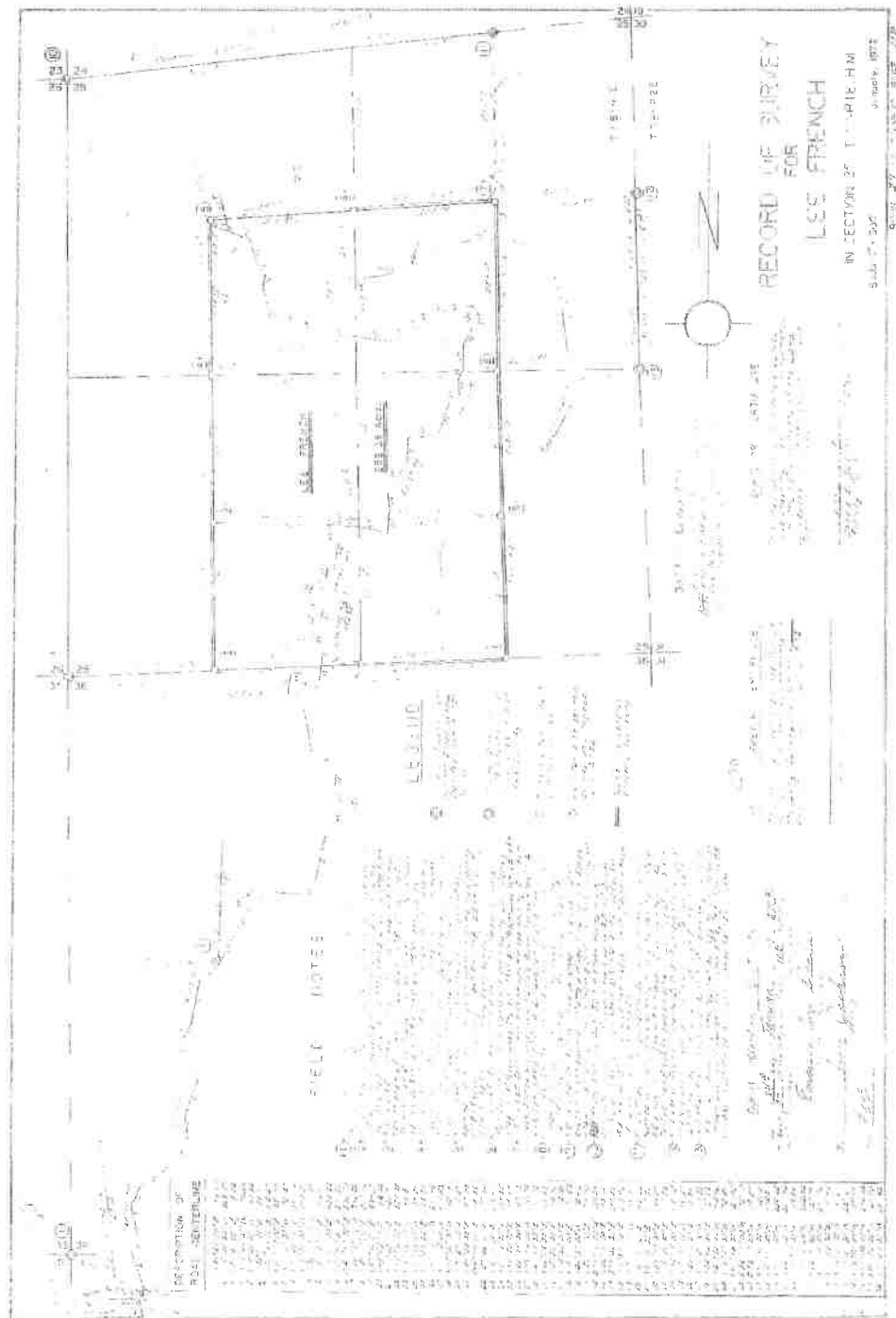


Figure 11) Boundary Survey, page 3 of 3





2013-013486-2  
Recorded - Official Records  
Humboldt County, California  
Carolyn Crnich, Recorder  
Recorded by: FRENCH  
Rec Fee: \$16.00  
Survey Mon Fee: \$10.00

RECORDING REQUESTED BY:  
Grindstone Openings LP

AND WHEN RECORDED MAIL TO:

Grindstone Openings LP  
PO Box 71  
Whitethorn, CA 9558 9

IDoc Trf Tax: \$572.00  
Clerk: LH Total: \$598.00  
Jun 11, 2013 at 10:56:54

SPACE ABOVE THIS LINE FOR RECORDER'S USE

### GRANT DEED

THE UNDERSIGNED GRANTORS DECLARE  
Unincorporated Area  
Parcel No. **108-012-008**

Documentary Transfer Tax is \$572.00  
computed on full value of property conveyed

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,

**RICHARD L. FRENCH and SALLY J. FRENCH, husband and wife, as community property with the right of survivorship**

hereby GRANT to

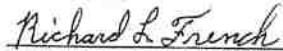
**GRINDSTONE OPENINGS LP, a Nevada limited partnership**

the real property in the unincorporated area of the County of Humboldt, State of California whose physical address is 12035 Wilder Ridge Road, Garberville, CA 95542, Parcel No. 108-012-008, described as follows:

The Southeast Quarter of the Northwest Quarter and the Southwest Quarter of the Northeast Quarter of Section 25, Township 3 South, Range 1 East, Humboldt Meridian, according to the Official United States Government Survey.

Dated: 5-22-13

Richard L. French



Sally J. French



1 of 2

Figure 12) Grindstone Openings deed, page 1 of 2



STATE OF CALIFORNIA.

COUNTY OF HUMBOLDT

JSS.

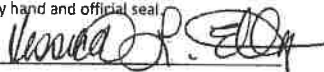
On May 22, 2013, before me, Jessica L. Etter, NOTARY  
personally appeared  
Richard L. French and Sally J. French

Proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) ~~is~~/are subscribed to the within instrument and acknowledged to me that ~~he~~/she/they executed the same in ~~his~~/her/their authorized capacity(ies), and that by ~~his~~/her/their signature(s) on the instrument the person(s) or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature



My commission expires: 12-25-2014

(This area for official notarial seal)



OR #2013-013486-2 2 of 2

Figure 13) Grindstone Openings L.P. deed, page 2 of 2



## 7. References

California Forest Practice rules, 2017; Title 14, California Code of Regulations, Chapters 4, 4.5, and 10

California Natural Diversity Database, September 20, 2017, <http://bios.dfg.ca.gov>

Parcel Quest Data – County Assessor information; <http://pqweb.parcelquest.com>

Humboldt County Web GIS, November 2017, <http://webgis.co.humboldt.ca.us/HCEGIS2.0/>

### STATEMENT OF CONTINGENT AND LIMITING CONDITIONS CONCERNING THE PREPARATION AND USE OF THE LESS THAN 3 AC CONVERSION MITIGATION PLAN


Prepared by Hohman & Associates/Mad River Properties Inc.

1. This information has been prepared for the sole use of the **Landowner of Record**, for the express purpose of submitting the document to CAL Fire and the local county planning department.
2. Hohman and Associates/Mad River Properties Inc. does not assume any liability for use of this information by any party other than the owner or their agent.
3. The assessment presented in this report should be viewed and considered in light of the time spent observing the property and the methodologies used. The assessment may differ from those made by others or from the results of interpretation and assessment protocols.
4. Hohman and Associates/Mad River Properties Inc. did not conduct an investigation on a legal survey of the property.
5. The information is based upon conditions apparent to Hohman and Associates/Mad River Properties Inc. at the time the work was done. This report is time sensitive and provides current conditions as per the date of this document. No further clearing of trees, grading or construction of structures shall occur on site until the approval of this document by CAL Fire and/or the local county planning department.
6. All future work on site shall be through **approved permits** with local state or county agencies.
7. Hohman and Associates/Mad River Properties Inc. shall not be responsible for the supervision of mitigation operations following approval of the conversion plan.





Landowner of Record: Grindstone Openings LP

Signature:  Date: 12/12/2017  
General Partner

Landowner of Record: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Registered Professional Forester: Stephen Hohman RPF #2652

Signature:  Date: 12-19-2017



FOR ADMIN. USE ONLY  
Amendments-date & S or M

**TIMBER HARVESTING PLAN**  
STATE OF CALIFORNIA  
DEPARTMENT OF FORESTRY  
AND FIRE PROTECTION  
RM-63 (01-00)

FOR ADMIN. USE ONLY

THP No. 1-02-085 HUM

Dates Rec'd APR 09 2002

1. \_\_\_\_\_ 7. \_\_\_\_\_  
2. \_\_\_\_\_ 8. \_\_\_\_\_  
3. \_\_\_\_\_ 9. \_\_\_\_\_  
4. \_\_\_\_\_ 10. \_\_\_\_\_  
5. \_\_\_\_\_ 11. \_\_\_\_\_  
6. \_\_\_\_\_ 12. \_\_\_\_\_

THP Name: French - Grindstone

(In the CDF FPS, this is "THP Description")

If this is a Modified THP, check box: ☐ ☐

Date Filed APR 19 2002

Date Approved JUNE 25, 2002

Date Expires JUNE 24, 2005

Extensions 1) ☐ 2) ☐

This Timber Harvesting Plan (THP) form, when properly completed, is designed to comply with the Forest Practice Act (FPA) and Board of Forestry and Fire Protection rules. See separate instructions for information on completing this form. NOTE: The form must be printed legibly in ink or typewritten. The THP is divided into six sections. If more space is necessary to answer a question, continue the answer at the end of the appropriate section of your THP. If writing an electronic version, insert additional space for your answer. Please distinguish answers from questions by *font change* bold or underline.

SECTION I - GENERAL INFORMATION

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

1. TIMBER OWNER(S) OF RECORD: Name Richard and Sally French

Address 12051 Wilder Ridge Road

City Garberville

State CA

Zip 95542

Phone 707-986-7552

Signature x Richard L. French Sally J. French Date x 3-21-02

NOTE: The timber owner is responsible for payment of a yield tax. Timber Yield Tax information may be obtained at the Timber Tax Section, MIC: 60, State Board of Equalization, P.O. Box 942879, Sacramento, California 94279-0060; phone 1-800-400-7115; BOE Web Page at <http://www.boe.ca.gov>.

2. TIMBERLAND OWNER(S) OF RECORD: Name Richard and Sally French

Address 12051 Wilder Ridge Road

City Garberville

State CA

Zip 95542

Phone 707-986-7552

Signature x Richard L. French Sally J. French Date x 3-21-02

3. LICENSED TIMBER OPERATOR(S): Name Richard L. French

(If unknown, so state. You must notify CDF of LTO prior to start of operations)

Lic. No. C-2707

per RPF  
letter 4/24/02

Address 12051 Wilder Ridge Road

City Garberville

State CA

Zip 95542

Phone 707-986-7552

Signature x Richard L. French Date x 3-21-02

RECEIVED

APR 09 2002

COAST AREA OFFICE  
RESOURCE MANAGEMENT

4. PLAN SUBMITTER(S): Name Richard French  
Address 12051 Wilder Ridge Road  
City Garberville State CA Zip 95542 Phone 707-986-7552  
(Submitter must be from 1, 2, or 3 above. He/she must sign below. Ref. Title 14 CCR 1032.7 (a))  
Signature x Richard L. French Date x 3-21-02

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

Name Richard French

Address 12051 Wilder Ridge Road

City Garberville State CA Zip 95542 Phone 707-986-7552

b. ☒ Yes ☐ No Will the timber operator be employed for the construction and maintenance of roads and landings during conduct of timber operations? If no, who is responsible?

Maintenance only. No new roads are proposed. No new culverts, or watercourse crossings are proposed.

c. Who is responsible for erosion control maintenance after timber operations have ceased and until certification of the Work Completion Report? If not the LTO, then a written agreement must be provided per 14 CCR 1050 (c).

LTO, Richard French NOTE: Erosion control maintenance period is three (3) years.

6. a. Expected date of commencement of timber operations:

☒ date of THP conformance, or ☐ \_\_\_\_\_ (date)

b. Expected date of completion of timber operations:

☒ 3 years from date of THP conformance, or ☐ \_\_\_\_\_ (date)

7. The timber operation will occur within the:

☒ COAST FOREST DISTRICT

☐ Southern Subdistrict of the Coast F. D.

☐ The Tahoe Regional Planning Authority Jurisdiction

☐ A County with Special Regulations, identify: \_\_\_\_\_

☐ SOUTHERN FOREST DISTRICT

☐ High use subdistrict of the Southern F. D.

☐ Coastal Zone, no Special Treatment Area

☐ Special Treatment Area(s), type and identify: \_\_\_\_\_

☐ NORTHERN FOREST DISTRICT

☐ Other \_\_\_\_\_

8. Location of the timber operation by legal description:

Base and Meridian: ☐ Mount Diablo

☒ Humboldt

☐ San Bernardino

Section Township Range Acreage County Assessor's Parcel Number (Optional)

25

T3S

R1E

22

Humboldt

TOTAL ACREAGE 22 (Logging Area Only) Note: Base map is portions of USGS 7.5 min Quads. Honeydew (1970), Briceland (1969), Shelter Cove (1997), and Ettersburg (1969)

Planning Watershed: CALWATER Version 2.2, Identification Number, and Name: 1112.300303 (11,339 ac) Sholes Cr.  
1112.300301 (10,505 ac) Mattole Cyn.

9. ☐ Yes ☒ No Has a Timberland Conversion been submitted? If yes, list expected approval date or permit number and expiration date if already approved.

10. ☐ Yes ☒ No Is there an approved Sustained Yield Plan for this property? Number \_\_\_\_\_ Date app. \_\_\_\_\_  
☐ Yes ☒ No Has a Sustained Yield Plan been submitted but not approved? Number \_\_\_\_\_ Date sub. \_\_\_\_\_

11. ☐ Yes ☒ No Is there a THP or NTMP on file with CDF for any portion of the plan area for which a Report of Satisfactory Stocking has not been issued by CDF?  
If yes, identify the THP or NTMP number(s): \_\_\_\_\_  
☐ Yes ☒ No Is there a contiguous even aged unit with regeneration less than five years old or less than five feet tall? If yes, explain. Ref. Title 14 CCR 913.1 (933.1, 953.1) (a)(4).

12. ☒ Yes ☐ No Is a Notice of Intent necessary for this THP?  
☒ Yes ☐ No If yes, was the Notice of Intent posted as required by 14 CCR 1032.7 (g)?

13. RPF preparing the THP: Name Stephen M. Launi RPF Number 2020

Address 3542 18<sup>th</sup> Street

City Eureka State CA Zip 95501 Phone 707-442-1262

- a. ☒ Yes ☐ No I have notified the plan submitter(s), in writing, of their responsibilities pursuant to 14 CCR 1035 of the Forest Practice Rules.  
☒ Yes ☐ No I have notified the timber owner and the timberland owner of their responsibilities for compliance with the Forest Practice Act and rules, specifically the stocking requirements of the rules and the maintenance of erosion control structures of the rules.
- b. ☒ Yes ☐ No I will provide the timber operator with a copy of the portions of the approved THP as listed in 14 CCR 1035 (e). If "no", who will provide the LTO a copy of the approved THP?

I or my supervised designee will meet with the LTO prior to commencement of operations to advise of sensitive conditions and provisions of the plan pursuant to 14 CCR 1035.2.

c. I have the following authority and responsibilities for preparation and administration of the THP and timber operation. (Include both work completed and work remaining to be done):

Preparation of this THP. Flagging and marking of site features appurtenant to the THP. I will make myself available for consultation and advice, to the owners and LTO as deemed appropriate and necessary by them, and/or required by rules during operations. Preparation of any necessary amendments, and agreement to designation of a RPF successor in interest, should any of these duties be terminated by the owner, submitter, or RPF of record.

d. Additional required work requiring an RPF, which I do not have the authority or responsibility to perform:

I am not responsible for location of property lines, or designation of cutting boundaries in proximity to property lines. I am not responsible for conduct of operations, but will make myself available for consultation and advice during the effective period of the THP.

e. After considering the rules of the Board of Forestry and Fire Protection and the mitigation measures incorporated in this THP, I have determined that the timber operation:

☐ will have a significant adverse impact on the environment. (Statement of reasons for overriding considerations contained in Section III).

☒ will not have a significant adverse impact on the environment.

Registered Professional Forester: I certify that I, or my supervised designee, personally inspected the THP area, and this plan complies with the Forest Practice Act, the Forest Practice Rules and the Professional Foresters Law. If this is a Modified THP, I also, certify that: 1) the conditions or facts stated in 14 CCR 1051 (a) (1) - (16) exist on the THP area at the time of submission, preparation, mitigation, and analysis of the THP and no identified potential significant effects remain undisclosed; and 2) I, or my supervised designee, will meet with the LTO at the THP site, before timber operations commence, to review and discuss the contents and implementation of the Modified THP.

Signature

*Stephen M. Lamm*

Date

*3/12/02*



**REGISTERED PROFESSIONAL FORESTER (RPF) RESPONSIBILITY****ACKNOWLEDGEMENT**

(As per Section 1035.1 Title 14, CCR)

RPF Certified to Provide Professional Advice:

Name: Stephen M. LauniStreet Address/PO Box: 3542 18<sup>th</sup> Street City: Eureka Zip Code: 95501Telephone Number: (707) 442-1262 RPF Number: # 2020

As of January 1, 2001, I have read and understand my responsibility as RPF, as described under 14 CCR 1035.1(a-g). I agree to fulfill my responsibilities as an RPF as they pertain to this plan.

☒ Yes ☐ No I have been retained as the RPF, available to provide professional advice to the licensed timber operator and timberland owner upon request throughout the active timber operations regarding: (1) the plan, (2) the forest practice rules, (3) and other associated regulations pertaining to timber operations.

RPF Signature: Stephen M. Launi**PLAN SUBMITTER RESPONSIBILITY ACKNOWLEDGEMENT**

(As per Section 1035 Title 14, CCR)

Plan Submitter

Name: Richard FrenchStreet Address/PO Box: 12051 Wilder Ridge Rd. City: Garberville Zip Code: 95542Telephone Number: (707) 986-7552

As of January 1, 2001, I have read and understand my responsibilities as Plan Submitter as described under 14 CCR 1035. I certify that I have fulfilled my legal obligation as stated in the forest practice rules, and agree to fulfill my responsibility as the plan submitter as it pertains to this plan.

☒ Yes ☐ No I have retained the services of an RPF to provide professional advice to the LTO and timberland owner upon request throughout active timber operations regarding: (1) the plan, (2) the forest practice rules, (3) and other associated regulations pertaining to timber operations.

☐ Yes ☒ No I have authorized the timberland owner, \_\_\_\_\_ to perform the services of a professional forester, understanding that the services will be provided personally on lands owned by the timberland owner.

Plan Submitter Signature: x Richard L. French**TIMBERLAND OWNER RESPONSIBILITY ACKNOWLEDGEMENT**

(As per Section 1035(d)(2)(B) Title 14, CCR)

Timberland Owner

Name: Richard and Sally FrenchStreet Address/PO Box: 12051 Wilder Ridge Road City: Garberville Zip Code: 95542Telephone Number: (707) 986-7552

~~As of January 1, 2001, I have read and understand my responsibilities as timberland owner as described under 14 CCR 1035(d)(2)(A-C). I certify that I have fulfilled my legal obligation as stated in the forest practice rules, and agree to fulfill my responsibilities as the timberland owner as it pertains to this plan.~~

~~I understand that I have been authorized by the plan submitter to perform the services of a professional forester pursuant to the Landowner exception in Public Resources Code Section 757, and such services will be personally performed only on those lands that I own.~~

~~Timberland Owner's Signature: \_\_\_\_\_~~

## LICENSED TIMBER OPERATOR RESPONSIBILITY ACKNOWLEDGEMENT

(As per Section 1035.3 Title 14, CCR)

Harvesting Plan Number: \_\_\_\_\_

### Licensed Timber Operator Information

Name: Richard L. French

Street Address/PO Box: 12051 Wilder Ridge Road City: Garberville Zip Code: 95542

Telephone Number: (707) 986-7552 LTO Number: A-2707

As the LTO listed above I acknowledge responsibility for the following:

- 1) Inform the responsible RPF or plan submitter orally or in writing of any site conditions which in The LTO's opinion prevent implementation of the approved plan and amendments.
- 2) Be responsible for the work of his or her employees and familiarize all employees with the intent and details of the operational and protection measures of the plan and amendments that apply to their work.
- 3) Keep a copy of the applicable approved plan and amendments available for reference at the site of active timber operations.
- 4) Comply with all provisions of the Act, Board rules and regulations and the applicable approved plan, and amendments.
- 5) Attend an on-site meeting or discuss archaeological site protection with the RPF or supervised designee familiar with on-site conditions.
- 6) To inquire of the plan submitter, timberland owner or their authorized agent, RPF who wrote the plan, or the supervised designee, if any mitigation measures or specific operating instructions are contained in the Confidential Archaeological Addendum or any other confidential addendum to the plan.
- 7) Provide the RPF responsible for professional advice throughout the timber operations, the name, address and phone number of an on-site contact employee authorized by the LTO to receive RPF advice.
- 8) Keep the RPF responsible for professional advice throughout the timber operations advised of the status of timber operation activity.
- 9) Within 5 days before, and not later than the startup of timber operations, notify the RPF of the start of timber operations.
- 10) Within 5 days before, and not later than the shutdown of a timber operation, the LTO shall notify the RPF of the shutdown of timber operations.
- 11) Cease operations, except for emergencies and operations needed to protect water quality, upon receipt of written notice of an RPF's withdrawal of professional services from the plan. The LTO shall not resume operations until written notice is received from the plan submitter that another RPF has visited the site and accepts responsibility for providing advice regarding the plan as the RPF of record.

In addition to the above, I have specific responsibilities for the following: \_\_\_\_\_

I have read and understand my responsibilities as the Licensed Timber Operator summarized above and specifically described in 14 CCR 1035.3. I will fulfill my legal obligation as stated in the forest practice rules, and agree to fulfill my responsibilities as described above.

LTO Signature: X Richard L. French Title: X L.T.O.

### Responsible On-Site Contact (if different)

Name: Richard French

Printed Name: Richard French

Date: X 3/21/02

Street Address/PO Box #: 12051 Wilder Ridge Road City: Garberville Zip: 95542

Telephone Number: (707) 986-7552

## SECTION II - PLAN OF TIMBER OPERATIONS

**NOTE:** If a provision of this THP is proposed that is different than the standard rule, the explanation and justification should normally be included in Section III unless it is clearer and better understood as part of Section II.

14. a. Check the Silvicultural methods or treatments allowed by the rules that are to be applied under this THP. Specify the option chosen to demonstrate Maximum Sustained Production (MSP) according to 14 CCR 913 (933, 953) .11. If more than one method or treatment will be used show boundaries on map and list approximate acreage for each.

☐ Clearcutting \_\_\_\_ ac.    ☐ Shelterwood Prep. Step \_\_\_\_ ac.    ☒ Seed Tree Seed Step 14 ac.  
☐ Shelterwood Seed Step \_\_\_\_ ac.    ☒ Seed Tree Removal Step 4 ac.    ☐ Shelterwood Removal Step \_\_\_\_ ac.  
☐ Selection \_\_\_\_ ac.    ☐ Group Selection \_\_\_\_ ac.    ☐ Transition \_\_\_\_ ac.  
☐ Commercial Thinning \_\_\_\_ ac.    ☐ Road Right of Way \_\_\_\_ ac.    ☐ Sanitation Salvage \_\_\_\_ ac.  
☐ Special Treatment Area \_\_\_\_ ac.    ☒ Rehab. of 4 ac. Understocked Area    ☐ Fuelbreak \_\_\_\_ ac.  
☐ Alternative \_\_\_\_ ac.    ☐ Conversion \_\_\_\_ ac.    ☐ Non-Timberland Area \_\_\_\_ ac.

Total acreage 22 ac.: Explain if total is different from that in 8.    MSP option chosen: (a) ☐ (b) ☐ (c) ☒

- b. If Selection, Group Selection, Commercial Thinning, Sanitation Salvage or Alternative methods are selected the post harvest stocking levels (differentiated by site if applicable) must be stated. Note mapping requirements of 1034 (x) (12).

See Addendum, Item #14, Section III. (All Site III) Within the Seed Tree, Seed Step areas, at least 8 conifer trees per acre which are at least 18 inches DBH or greater shall be retained. Each retained conifer over 24 inches DBH shall count as 2 trees for this purpose.

- c. ☐ Yes    ☒ No    Will evenage regeneration step units be larger than those specified in the rules (20 acres tractor, 30 acres cable)? If yes, provide substantial evidence that the THP contains measures to accomplish any of subsections (A) - (E) of 14 CCR 913 (933, 953) .1 (a) (2) in Section III of the THP. List below any instructions to the LTO necessary to meet (A) - (E) not found elsewhere in the THP. These units must be designated on map and listed by size.

See Addendum, Item #14, Section III The property exhibits a variable timber stand in terms of tree species mix, age class distribution, and stocking levels. The mix of pre-harvest and post harvest advance conifer regeneration, and the younger age timber stand currently occupying the site, largely preclude this concern. Post harvest, the area will not have the appearance of, or resources effects of a clear-cut type harvest. The area will be well vegetated. The advanced age of the established young growth timber, associated hardwood component, brush and small trees, will combine to make the post-operations site appear as a more or less selective type partial removal harvest area.

- d. Trees to be harvested or retained must be marked by or marked under the supervision of the RPF. Specify how the trees will be marked and whether harvested or retained.

Trees to be removed in areas subject to harvest will be marked on the bole and root collar on two sides of the tree, by or under the supervision of the RPF preparing the THP. Blue paint will be used for marking. At least 20% of the area to be harvested will be marked for the edification of the LTO and for evaluation during the PHI.



[ ] Yes [X] No

Is a waiver of marking by the RPF requirement requested? If yes, how will LTO determine which trees will be harvested or retained? If yes and more than one silvicultural method, or Group Selection is to be used, how will LTO determine boundaries of different methods or groups?

All trees to be harvested, will be marked with blue paint. In addition, silvicultural method boundaries will be flagged with boundary flagging pink THP flags, and/or green silviculture boundary flags.

e. Forest products to be harvested: Saw logs, pulp logs, biomass fuel, veneer logs, split products, burls, firewood.

f. [ ] Yes [X] No Are group B species proposed for management?

[ ] Yes [X] No Are group B or non-indigenous A species to be used to meet stocking standards?

[X] Yes [ ] No Will group B species need to be reduced to maintain relative site occupancy of A species?

If any answer is yes, list the species, describe treatment, and provide the LTO with necessary felling and slash treatment guidance. Explain who is responsible and what additional follow-up measures of manual treatment or herbicide treatment are to be expected to maintain relative site occupancy of A species. Explain when a licensed Pest Control Advisor shall be involved in this process.

Hardwood species consist of tanoak, true oak, Pacific madrone, laurel and a small amount of big leaf maple.

Hardwoods (broadleaf species) shall be reduced to an approximate 40% canopy coverage, in the rehabilitation of understocked area, where operations occur, and may be harvested along with conifers in other areas, as part of operations. Hardwoods shall not be used to meet future stocking standards, and will not be managed in the future stand for commercial value or in the attainment of MSP.

Within the area designated as rehabilitation of understocked area, the stocking standard in all areas operated shall be 300 point count per acre, or 10 trees planted for each tree harvested, group A conifers. This shall be accomplished by a combination of planting Douglas-fir seedlings, natural seeding from the surrounding residual conifer stand, and retention of viable seedlings, saplings and pole sized Douglas-fir trees. Planted bare root conifer seedlings, and residual natural conifer regeneration will compete successfully with hardwoods in the future stand, given pre existing and projected establishment of post harvest viable stocking levels of Douglas-fir. No follow-up plantation treatments should be necessary.

g. Other instructions to LTO concerning felling operations. Snags shall be retained as much as possible, unless they constitute a fire or safety hazard. Hardwood overstory canopy, in those small sub-areas where it exists, may be further reduced by felling or mechanical removal incidentally during operations.

h. [X] Yes [ ] No Will artificial regeneration be required to meet stocking standards?

i. [X] Yes [ ] No Will site preparation be used to meet stocking standards? If yes, provide the information required for a site preparation addendum, as per 14 CCR 915.4 (935.4, 955.4).

Artificial regeneration will be required for the rehabilitation unit to meet stocking standards. In all the silvicultural areas, sufficient area(s) of bare mineral soil will result from harvest operations, so that conifer seedlings shall be encouraged and allowed to germinate and become established, in addition to those existing.

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At the owner's discretion, site preparation may be undertaken to promote favorable seedbed and reduce fuel loading and alleviate hazard of wildfires.

- j. If the rehabilitation method is chosen provide a regeneration plan as required by 14 CCR 913 (933, 953) .4 (b).

**Regeneration Plan (Rehabilitation of Understocked Area):**

Areas of the rehabilitation of understocked silvicultural treatment area, and possibly some small isolated areas of the seed tree, seed step areas, are characterized as primarily hardwood overstory forest vegetation matrix. Collectively, these areas comprise approximately 4 acres, or approximately 1/5<sup>th</sup> (20%) of the THP area. These sites are capable of, and suitable for, growing successive crops of commercially valuable conifer timber. However, they currently exhibit less than 50 square feet of conifer basal area per acre, and less than 100 point count, comprised of group A tree species. Although some light and scattered distribution of conifers exist in certain locations, they typically exhibit hardwood basal areas from 60 to 120 square feet per acre. Hardwood crown canopy closure ranges from 60% to 100%.

Therefore, in areas such as these, where overstory vegetation is removed or disturbed, artificial reforestation (tree planting) shall occur. Douglas-fir seedlings shall be planted. Seedlings suitable to and compatible with the seed zone and elevation will be obtained, handled and planted carefully. Planting will occur the first winter season following operations. Planting shall be to attain the standard of 300 point count per acre on average, or ten (10) seedlings planted for each tree harvested. The stocking and regeneration standards of 14 CCR 912.7 (b) (1) and/or 913.4 (b) shall apply. Naturally occurring conifer seedlings, saplings, and pole size trees currently existing on site, shall be protected as much as possible during operations. These shall be counted for purposes of meeting stocking requirements, so long as they exhibit live healthy characteristics. However it is understood that the primarily hardwood areas are not generally adequately stocked at this time.

Sufficient areas of bare mineral soil seed bed for planting, or natural seeding in of conifers, is anticipated as a result of harvest operations. This shall consist of skid trail surfaces and associated areas of disturbed surface soil and organic litter horizons. Additional mechanical site preparation shall generally not be required. The skidding or long lining of hardwood trees, as well as yarding of tops, is anticipated to create sufficient areas of disturbed and exposed surface mineral soil. It is anticipated that necessity for further site preparation will be limited by this condition. Sufficient hardwood canopy shall be removed during operations, such that growing space for Douglas-fir regeneration, meeting the above detailed standard, is secured.

If desired by the timberland owners, supplemental mechanical site preparation shall be conducted. A crawler tractor (D-7 size or smaller) may be used for piling or wind rowing of organic debris. Such operations shall not occur on slopes in excess of 40%, shall not occur during the winter period, nor other times of year when soils are saturated. Mechanical site preparation shall not occur within ELZs, or EEZs, nor where surface runoff may transport sediment directly to class I, II, or III watercourses.

Site preparation burning, and pile or windrow burning, on a limited basis such that areas less than one acre in extent are treated, may be undertaken by the owners. Such burning shall be done when fuel moisture and weather conditions combine to allow fire to consume fuels of piece size up to six inches in diameter, but not the larger cull logs, rooted stumps and snags on-site. Site preparation burning shall not be caused to ignite within WLPZs, EEZs, or ELZs, nor in areas of active slope instabilities. Site preparation burning shall consider air quality effects, and shall be conducted on permissive burn days, under permit from the California Department of Forestry and Fire Protection.

**Site Preparation Addendum:**

Site preparation may be implemented on portions of this THP area, subject to the discretion of the owners and THP submitter, to assist in accomplishing the goal of successful reforestation, by increasing the areas of exposed bare mineral soil seedbed.

Site preparation may consist of mechanical removal of slash and woody debris. Site preparation may also consist of



burning of piles or windrows, and small area limited broadcast burning for fire hazard reduction.

Mechanical site preparation may occur within the seed tree, seed step and rehabilitation silvicultural areas. No site preparation shall occur within EEZs associated with watercourses or wet areas, nor shall any heavy equipment operate in areas of unstable slopes, steep slopes, or landslide areas. Fire will not be ignited within these areas.

Site preparation shall occur as soon as possible after harvest operations.

Mechanical site preparation shall only occur during the non-winter period and when soils are substantially dry. "Dry" is defined as that condition where puddling of the soil, excessive compaction of the soil, or significant degradation of the soil physical structure does not occur. Mechanical site preparation shall occur on slopes not greater than 40%. Crawler tractors shall be used for this purpose.

Burning shall occur during the spring, fall, or winter period, and at such times that fuel moisture, weather and temperature conditions combine to allow for a "cool" burn, such that the largest piece size woody debris and rooted stumps are not consumed. Burning shall consider air quality effects, and shall be conducted only after obtaining a valid burning permit from CDF&FP as required. Retained live conifer trees and advanced regeneration shall be protected from burning by mineral soil fire trails, or physical removal of contiguous fuel concentrations, and natural fire breaks such as areas of higher fuel moisture and micro-site humidity.

Surface runoff from areas of site preparation shall be dispersed to vegetated areas, and/or areas that do not drain surface waters directly to a watercourse.

Reduction in heavy fuel build-up will reduce the intensity of future catastrophic wildfire.  
Site preparation shall conform to all provisions of 14 CCR 914.2, 915.1, and 915.2 of the Coast District forest practice regulations.

The LTO shall be responsible for site preparation burning. He is:

Richard L. French	Lic. #: A-2707
12051 Wilder Ridge Road	
Garberville, CA 95542	Phone: (707) 986-7552

The LTO shall be responsible for mechanical site preparation. He is:

Richard L. French	Lic. #: A-2707
12051 Wilder Ridge Road	
Garberville, CA 95542	Phone: (707) 986-7552

## PESTS

15. a. ☐ Yes ☒ No Is this THP within an area that the Board of Forestry and Fire Protection has declared a Zone of Infestation or Infection, pursuant to PRC 4712 - 4718? If yes, identify feasible measures being taken to mitigate adverse infestation or infection impacts from the timber operation. See 14 CCR 917 (937, 957) .9 (a).
- b. ☒ Yes ☐ No If outside a declared zone, are there any insect, disease or pest problems of significance in the THP area? If yes, describe the proposed measures to improve the health, vigor, and productivity of the stand(s).

A number of conifer trees are in a decadent condition, and/or exhibit fruiting bodies of Fomes pini. This condition is not epidemic however, and other than occasional removal of an infected tree, no special management is deemed necessary.



## HARVESTING PRACTICES

16. Indicate type of yarding system and equipment to be used:

- | GROUND BASED*   | CABLE  | SPECIAL                                 |
|---|--|---|
| a. <input checked="" type="checkbox"/> Tractor, including end/long lining | d. <input type="checkbox"/> Cable, ground lead | g. <input type="checkbox"/> Animal      |
| b. <input checked="" type="checkbox"/> Rubber tired skidder, Forwarder    | e. <input type="checkbox"/> Cable, high lead   | h. <input type="checkbox"/> Helicopter  |
| c. <input checked="" type="checkbox"/> Feller buncher                     | f. <input type="checkbox"/> Cable, Skyline     | i. <input type="checkbox"/> Other _____ |

\* All tractor operations restrictions apply to ground based equipment.

17. Erosion Hazard Rating: Indicate Erosion Hazard Ratings present on THP. (Must match EHR worksheets)

- ☐ Low                      ☒ Moderate                      ☐ High                      ☐ Extreme

If more than one rating is checked, areas must be delineated on map down to 20 acres in size (10 acres for high and Extreme EHRs in the Coast District).

18. Soil Stabilization: In addition to the standard waterbreak requirements describe soil stabilization measures or additional erosion control measures to be implemented and the location of their application. See requirements of 14 CCR 916.7 (936.7, 956.7), and 923.2 (943.2, 963.2) (m), and 923.5 (943.5, 963.5) (f).

Within the EEZ of the class III watercourse, any contiguous areas of bare mineral soil greater than 100 square feet, and created by operations, will be mulched with fine logging slash 4" thick & 90% surface coverage, in all disturbed area, and refreshed to 90% surface coverage the first season after operations and initial application. Treatment shall be completed prior to any storm which causes overland flow on such surfaces, and between October 16<sup>th</sup> and April 30<sup>th</sup>, whenever a 30% chance of rain is forecast, or within 10 days of creation. Erosion control and drainage structures shall be in place prior to any storm which causes overland flow in areas where operations have occurred, and as soon as possible after operations are completed, and/or whenever a 30% chance of rain is forecast by the National Weather Service in Eureka, California. Currently, there are no active erosion sites of significance within the area of proposed operations.

19. ☐ Yes                      ☒ No                      Are tractor or skidder constructed layouts to be used? If yes, specify the location and extent of use:

NA

20. ☐ Yes    ☒ No                      Will ground based equipment be used within the area(s) designated for cable yarding? If yes, specify the location and for what purpose the equipment will be used. See 14 CCR 914.3 (934.3, 954.3) (e).

Not applicable. There are no cable logging areas.

**TIMBER HARVESTING PLAN**  
**ADDENDUM**

**THP Item #II-18:**

The following language of the forest practice regulations (Interim Watershed Protection ) shall apply to this operation where applicable:

9/6.9 (m) All tractor roads shall have drainage and/or drainage collection and storage facilities installed as soon as practical following yarding and prior to either (1) the start of any rain which causes overland flow across or along the disturbed surface within a WLPZ or within any ELZ or EEZ designated for watercourse or lake protection, or (2) any day with a National Weather Service forecast of a chance of rain of 30 percent or more, a flash flood warning, or a flash flood watch.

(n) Within the WLPZ, and within any ELZ or EEZ designated for watercourse or lake protection, treatments to stabilize soils, minimize soil erosion, and prevent the discharge of sediment into waters in amounts deleterious to aquatic species or the quality and beneficial uses of water, or that threaten to violate applicable water quality requirements, shall be applied in accordance with the following standards:

(1) The following requirements shall apply to all such treatments.

(A) They shall be described in the plan.

(B) For areas disturbed from May 1 through October 15, treatment shall be completed prior to the start of any rain that causes overland flow across or along the disturbed surface.

(C) For areas disturbed from October 16 through April 30, treatment shall be completed prior to any day for which a chance of rain of 30 percent

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1 or greater is forecast by the National Weather Service or within 10 days,  
2 whichever is earlier.

3 (2) The traveled surface of logging roads shall be treated to prevent  
4 waterborne transport of sediment and concentration of runoff that results  
5 from timber operations.

6 (3) The treatment for other disturbed areas, including: (A) areas  
7 exceeding 100 contiguous square feet where timber operations have exposed  
8 bare soil, (B) approaches to tractor road watercourse crossings between the  
9 drainage facilities closest to the crossing, (C) road cut banks and fills,  
10 and (D) any other area of disturbed soil that threatens to discharge sediment  
11 into waters in amounts deleterious to the quality and beneficial uses of  
12 water, may include, but need not be limited to, mulching, rip-rapping, grass  
13 seeding, or chemical soil stabilizers. Where straw, mulch, or slash is used,  
14 the minimum coverage shall be 90%, and any treated area that has been subject  
15 to reuse or has less than 90% surface cover shall be treated again prior to  
16 the end of timber operations. The RPF may propose alternative treatments  
17 that will achieve the same level of erosion control and sediment discharge  
18 prevention.

19 (4) Where the undisturbed natural ground cover cannot effectively  
20 protect beneficial uses of water from timber operations, the ground shall be  
21 treated by measures including, but not limited to, seeding, mulching, or  
22 replanting, in order to retain and improve its natural ability to filter  
23 sediment, minimize soil erosion, and stabilize banks of watercourses and  
24 lakes.

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21. Within the THP area will ground based equipment be used on:

- a. ☐ Yes ☒ No Unstable soils or slide areas? Only allowed if unavoidable.  
b. ☐ Yes ☒ No Slopes over 65%?  
c. ☐ Yes ☒ No Slopes over 50% with high or extreme EHR?  
d. ☐ Yes ☒ No Slopes between 50% and 65% with moderate EHR where heavy equipment use will not be restricted to the limits described in 14 CCR 914 (934, 954) .2 (f) (2) (i) or (ii)?  
e. ☐ Yes ☒ No Slopes over 50% which lead without flattening to sufficiently dissipate water flow and trap sediment before it reaches a watercourse or lake?

If a. is yes, provide site specific measures to minimize effect of operations on slope stability below. Provide explanation and justification in section III as required per 14 CCR 914 (934, 954) .2 (d). CDF requests the RPF consider flagging tractor road locations if "a." is yes. If b., c., d. or e. is yes:

- 1) the location of tractor roads must be flagged on the ground prior to the PHI or start of operations if a PHI is not required, and
- 2) you must clearly explain the proposed exception and justify why the standard rule is not feasible or would not comply with 14 CCR 914 (934, 954).

The location of heavy equipment operation on unstable areas, or any use beyond the limitations of the standard rules, must be shown on the map. List specific instructions to the LTO below.

Tractors and ground skidding heavy equipment, shall not operate in close proximity (150 feet) to Mattole River,

Except to traverse the existing seasonal road and summer crossing, nor in any areas shown on maps as unstable,

nor the inner gorge of the drainage headwalls and watercourse channels near the THP area. The down-slope

limit of tractor operations along these margins is flagged with THP boundary flagging.

22. ☐ Yes ☒ No Are any alternative practices to the standard harvesting or erosion control rules proposed for this plan? If yes, provide all the information as required by 14 CCR 914 (934, 954) .9 in Section III. List specific instructions to the LTO below.

NA

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#### WINTER OPERATIONS

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23. a. ☒ Yes ☐ No Will timber operations occur during the winter period? If yes, complete "b, c, or d." State in space provided if exempt because yarding method will be cable, helicopter, or balloon.  
b. ☐ Yes ☒ No Will mechanical site preparation be conducted during the winter period? If yes, complete "d".  
c. ☐ I choose the in-lieu option as allowed in 14 CCR 914 (934, 954) .7 (c). Specify below the procedures listed in subsections (1) and (2), and list the site specific measures for operations in the WLPZ and unstable areas as required by subsection (3), if there will be no winter operations in these areas, so state.  
d. ☒ I choose to prepare a winter operating plan per 14 CCR 914 (934, 954) .7 (b).

Timber operations during the winter period (as defined in 14 CCR 895.1) shall be limited to timber falling only, and shall not involve the use of heavy equipment or trucks. Access vehicles shall use the seasonal road only during extended periods of dry ground conditions. Ground based skidding operations, loading and hauling shall not occur during the winter period, defined as November 15<sup>th</sup> to April 1<sup>st</sup>.

"Saturated soils" shall be defined as soil conditions under which any of the following may occur: puddling of the soil, increased compaction of the soil, significant measurable loss of physical structure, and increased turbidity in class I, II or IV waters, loss of normal traction by heavy equipment, and whenever soil conditions exist that precipitate

excessive rutting, of skid trails, landings, and road surfaces. See also, definition of saturated soils on page 13.

Seasonal roads shall not be used for hauling or heavy equipment operations under saturated soil conditions during any time of the year. Seasonal roads shall be upgraded to permanent (rocked) road if year round operations are desired, and implemented by amendment.

**THP Item #II-23 (continued)**

In addition to any other definition of saturated soils, effecting plan provisions contained in text of this plan, the following definition (14 CCR 895.1) shall apply:

**Saturated Soil Conditions** means :

- 1) the wetness of the soil within a yarding area such that soil strength is exceeded and displacement from timber operations will occur. It is evidenced by soil moisture conditions that result in:
  - a) reduced traction by equipment as indicated by spinning or churning of wheels or tracks in excess of normal performance, or
  - b) inadequate traction without blading wet soil or, c) soil displacement in amounts that cause visible increase in turbidity of the downstream waters in a receiving Class I or II watercourse or lake. Soils frozen to a depth sufficient to support equipment weight are excluded.
- 2) soil moisture conditions on soil-surfaced seasonal roads and landings, in excess of that which occurs from normal road watering or light rainfall that will result in the significant loss of surface material from the road and landings in amounts that cause visible increase in turbidity of the downstream waters in a receiving Class I or II watercourse or lake.

## WINTER OPERATIONS

Item 23. (continued)

1. The EHRs for this area remain as moderate where winter operations may occur.
2. Mechanical site preparation is not proposed during the winter period.
3. The yarding system is tractor, and ground based.
4. The winter operating period may include any dates between November 15<sup>th</sup> and April 1<sup>st</sup>, except for purpose of installing erosion control structures, in which case the period shall be October 15<sup>th</sup> to May 1<sup>st</sup>, and subject to the above noted limitations during the life of the plan, including consideration of saturated soil conditions.
5. Between October 15<sup>th</sup> to November 15<sup>th</sup> and April 1<sup>st</sup> to May 1<sup>st</sup> waterbars shall be installed on seasonal roads and all skid trails whenever there is a thirty (30) % chance of measurable precipitation is forecasted by the U.S. Weather Service in Eureka, California. These waterbars shall be in place within twenty-four (24) hours of forecast; or at the end of the workday prior to weekends or other shut down periods greater than one (1) day.
6. Measurable precipitation is considered to include rain or snow.
7. Frozen ground is not considered in assessment of wet soil conditions.
8. Vegetation is estimated to cover 60% of the ground surface after logging is complete.
9. 10. 11. Winter equipment operations, including trucking, during the winter period are not proposed. Such operations at other times of year shall only occur during periods of low antecedent soil moisture.

Note all water breaks and rolling dips must be installed by October 15<sup>th</sup> or as prescribed above. For purposes of installing drainage facilities and structures, water breaks, and rolling dips, the winter period shall be from October 15<sup>th</sup> to May 1<sup>st</sup>.

NOTE: "Winter period" means the period between November 15 and April 1, except as noted under special County Rules at Title 14 CCR 925.1, 926.18, 927.1, and 965.5... (a) except as otherwise provided in the rules: (1) All waterbreaks shall be installed no later than the beginning of the winter period of the current year of timber operations. (2) Installation of drainage facilities and structures is required from October 15 to November 15 and April 1 to May 1 on all constructed skid trails and tractor roads prior to sunset if the National Weather Service forecast is a "chance" (30% or more) of rain within the next 24 hours.

## THP SECTION II – Item #24

### ROADS AND LANDINGS

#### GEOLOGIST'S Recommendations:

##### CGS Recommendation #1:

If active operations include use of this segment of road (CGS 1), a water bar, or rolling dip, and discharge area energy dissipater shall be installed at the conclusion of operations, or prior to the winter period.

*See THP page 25.1.*

##### CGS Recommendation #2:

At the conclusion of operations, or prior to the winter period after operations, waterbars shall be installed, such that road drainage onto the old sidecast at this location (CGS 2) does not occur. This area of old sidecast resulted from excavation of the old flat area up-slope from the existing road at this location.

*See THP page 25.1.*

##### CGS Recommendation #3:

At the conclusion of operations, or prior to the winter period after operations, the berm shall be retained (at CGS 3), and built up higher if breached during hauling, or other operations. The road segment surface may also be insloped to carry runoff inboard to a more suitable cross-drain location. Road surface drainage shall be substantially prevented from reaching any point where the old down-slope head scarp is within 30 feet of the road.

*See THP page 25.1.*

##### CGS Recommendation #4:

1. The road shown off-site and immediately south the subject property and THP area (CGS 4) shall not be used for operations. 2. At the conclusion of operations, or prior to the winter period after operations, the culvert on the lower existing access road shall be fitted with a slotted drop inlet. 3. The culvert shall be inspected during the winter, as soon as possible after high flows, to insure it's continued drainage function. 4. Any additional sediment deposition on the lower road surface shall not be sidecast at this location, but shall be deposited at a stable location. 5. The road surface at the culvert crossing along the lower road shall be seeded and mulched prior to the first winter following operations.

*See THP page 25.1.*

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## ROADS AND LANDINGS

24. Will any roads be constructed? ☐ Yes ☒ No, or reconstructed? ☐ Yes ☒ No. If yes, check items "a." through "g."  
Will any landings be constructed? ☐ Yes ☒ No, or reconstructed? ☐ Yes ☒ No. If yes, check items "h." through "k."
- a. ☐ Yes ☒ No Will new or reconstructed roads be wider than single lane with turnouts?  
b. ☐ Yes ☒ No Are logging roads proposed in areas of unstable soils or known slide-prone areas?  
c. ☐ Yes ☒ No Will new roads exceed a grade of 15% or have pitches of up to 20% for distances greater than 500 feet? Map must identify any new or reconstructed road segments that exceed an average 15% grade for over 200 feet.  
d. ☐ Yes ☒ No Are roads to be constructed or reconstructed, other than crossings, within the WLPZ of a watercourse? If yes, completion of THP Item 27 a. will satisfy required documentation.  
e. ☐ Yes ☒ No Will roads be located across more than 100 feet of lineal distance on slopes over 65%, or on slopes over 50% which are within 100 feet of the boundary of a WLPZ?  
f. ☐ Yes ☒ No Will any roads or watercourse crossings be abandoned?  
g. ☐ Yes ☒ No Are exceptions proposed for flagging or otherwise identifying the location of roads to be constructed?  
h. ☐ Yes ☒ No Will any landings exceed one half acre in size? If any landing exceeds one quarter acre in size or requires substantial excavation the location must be shown on the map.  
i. ☐ Yes ☒ No Are any landings proposed in areas of unstable soils or known slide prone areas?  
j. ☐ Yes ☒ No Will any landings be located on slopes over 65% or on slopes over 50% which are within 100 feet of the boundary of a WLPZ?  
k. ☐ Yes ☒ No Will any landings be abandoned?
25. If any section in "item 24" above is answered yes, specify site-specific measures to reduce adverse impacts and list any additional or special information needed by the LTO concerning the construction, maintenance, and/or abandonment of roads or landings, as required by 14 CCR Article 12. Include required explanation and justification in THP Section III.

New roads are not proposed at this time. New roads may be proposed by amendment. The summer crossing and

And seasonal truck road shall not be widened by cutting into the river bank at the approaches to the streambed.

## WATERCOURSE AND LAKE PROTECTION ZONE (WLPZ) AND DOMESTIC WATER SUPPLY PROTECTION MEASURES

26. a. ☒ Yes ☐ No Are there any watercourse or lakes which contain Class I through IV waters on or adjacent to the plan area? If yes, list the class, WLPZ or ELZ width, and protective measures determined from Table I and/or 14 CCR 916 (936, 956) .4 (c) of the WLPZ rules for each watercourse. Specify if Class III or IV watercourses have WLPZ, ELZ or both.  
b. ☒ Yes ☐ No Are there any watercourse crossings that require mapping per 14 CCR 1034 (x) (7)?  
c. ☐ Yes ☒ No Will tractor road watercourse crossings involve the use of a culvert? If yes state minimum diameter and length for each culvert (may be shown on map).  
d. ☐ Yes ☒ No Is this THP Review Process to be used to meet Department of Fish and Game CEQA review requirements? If yes, attach the 1603 Addendum below or at the end of this Section II; provide the background information and analysis in Section III; list instructions for LTO below for the installation, protection measures, and mitigation measures; as per THP Form Instructions or CDF Mass Mailing, 07/02/1999, "Fish and Game Code 1603 Agreements and THP Documentation".

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The summer crossing on the river is pre-approved in association with other non-appurtenant work. Temporary crossings shall be abandoned by removal of culvert or drain, removal of fill material, sloping back of disturbed area of banks to less than natural side-slope gradient, seeding and mulching of disturbed mineral soil area (40 lbs. Per acre grass seed and 4

inch thick native organic duff mulch for 90% surface coverage which may settle to 90 % after the winter period following abandonment.) DF&G shall be consulted regarding 1603 requirements, prior to any use of the existing class I watercourse crossing. Salvage logging, as well as logging of hardwoods, shall not occur within the WLPZs of any class I watercourses, except in emergency situations to maintain proper erosion control and maintain drainage structures.

WATERCOURSE PROTECTION (See THP Map A for location and designation of watercourses.)

Class III Watercourses and seasonal wet areas: Class III (seasonal intermittent surface flow); A minimum 25 foot EEZ is established and flagged on site where sideslopes do not exceed 30%, and a 50 foot EEZ where sideslopes exceed 30%. Within this zone heavy equipment shall not operate. At least 50% surface area understory vegetation coverage shall be maintained after operations are complete. Mid-canopy or larger trees, both conifer and hardwood, may also be retained within EEZs consistent with the silvicultural treatment prescribed. Any mineral debris accidentally deposited in channels will be removed concurrently with operations. Any vegetative debris so deposited shall be similarly removed or stabilized as part of operations. The drainage ditch, located inboard of the landing at Point 'A' on THP Map A, shall be maintained.

Class I Watercourses : Mattole River and channel zone, and Grindstone Creek (Habitat for fish), and any other stream reaches with domestic water intakes located within <sup>1000</sup>~~400~~ feet downstream in channel (None currently known). per RPF 6/25/02

No harvest operations are proposed. However, the following provisions are included for consistency with FPRs: A 150 foot width WLPZ is established on-site, consistent with 14 CCR 916.5 (See attached chart). Within this zone, heavy equipment shall not operate. Where it currently exists, at least 85% overstory vegetation cover, well distributed within 75 feet of the stream transition line, shall be retained. And at least 65% overstory canopy, well distributed within the remainder of the zone, shall be retained. At least 25% of the overstory comprised of conifers shall be designated for retention. At least 50% understory vegetation, consisting of brush and shrubs, tree seedlings, saplings and pole size trees, both conifer and hardwood, well distributed within the zone, shall be retained. Areas of bare mineral soil greater than 100 square feet in area, accidentally created by operations, shall be seeded 40 lbs. per acre native grass/legume mix, and mulched with hay 4 inches thick for 90% surface coverage, refreshed to 90% the season after application. Any in-stream mineral or vegetation debris accidentally created by operations, shall be removed concurrently with operations. In this specific case, no operations are proposed in the WLPZ of any class I watercourse. No operations are proposed in any special operating zone of a class I watercourse.

NOTE: At some locations, the WLPZ and EEZ widths are wider than the minimums specified. Included within these wider zone areas are any springs, seeps, inner gorge potential instabilities and overly steepened banks of respective watercourses.

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27. Are site specific practices proposed in-lieu of the following standard WLPZ practices?
- a. ☐ Yes ☒ No Prohibition of the construction or reconstruction of roads, construction or use of tractor roads or landings in Class I, II, III, or IV watercourses, WLPZs, marshes, wet meadows, and other wet areas except as follows:
- (1) At prepared tractor road crossings.
  - (2) Crossings of Class III watercourses which are dry at time of timber operations.
  - (3) At existing road crossings.
  - (4) At new tractor and road crossings approved by Department of Fish and Game.
- b. ☐ Yes ☒ No Retention of non-commercial vegetation bordering and covering meadows and wet areas?
- c. ☐ Yes ☒ No Directional felling of trees within the WLPZ away from the watercourse or lake?
- d. ☐ Yes ☒ No Decrease of width(s) of the WLPZ(s)?
- e. ☐ Yes ☒ No Protection of watercourses which conduct class IV waters?
- f. ☐ Yes ☒ No Exclusion of heavy equipment from the WLPZ except as follows:
- (1) At prepared tractor road crossings.
  - (2) Crossings of Class III watercourses which are dry at time of timber operations.
  - (3) At existing road crossings.
  - (4) At new tractor and road crossings approved by Department of Fish and Game.
- g. ☐ Yes ☒ No Establishment of ELZ for Class III watercourses unless sideslopes are <30% and EHR is low?
- h. ☐ Yes ☒ No Retention of at least 75% of the overstory canopy in the WLPZ?
- i. ☐ Yes ☒ No Retention of at least 50% of the understory in the WLPZ?
- j. ☐ Yes ☒ No Are any additional in-lieu or any alternative practices proposed for watercourse or lake protection?

**NOTE: A yes answer to any of items "a." through "j." constitutes an in-lieu practice. If any item is answered yes, refer to 14 CCR 916 (936, 956).1 and address the following for each item checked yes:**

1. The RPF shall state the standard rule;
2. Explain and describe each proposed practice;
3. Explain how the proposed practice differs from the standard practice;
4. The specific location where it shall be applied, see map requirements of 14 CCR 1034 (x) (15) and (16);
5. Provide in THP Section III an explanation and justification as to how the protection provided is equal to the standard rule and provides for the protection of the beneficial uses of water, as per 14 CCR 916 (936, 956) .1 (a). Reference the in-lieu and location to the specific watercourse to which it will be applied.

**Any trees felled from within any EEZ shall be felled directionally away from the drainage channel. Such material shall be removed by long line, and heavy equipment shall not encroach into EEZs.**

**No salvage logging shall occur in the WLPZ of class I watercourses, except that in emergency situations, to prevent or alleviate mass wasting of stream banks, blockage of culverts or drains, blockage of or diversion from other drainage structures, and/or blockage of or damage to seasonal and permanent roads, down trees or logs may be removed or stabilized. The access road shall not be graded or drained directly toward surface waters.**

28. a. ☒ Yes ☐ No Are there any landowners within 1000 feet downstream of the THP boundary whose ownership adjoins or includes a class I, II, or IV watercourse(s) which receives surface drainage from the proposed timber operations? If yes, the requirements of 14 CCR 1032.10 apply. Proof of notice by letter and newspaper should be included in THP Section V. If No, "28 b." need not be answered.
- b. ☐ Yes ☒ No Is an exemption requested of the notification requirements of 14 CCR 1032.10? If yes, an explanation and justification for the exemption must appear in THP Section III. Specify if requesting an exemption from the letter, the newspaper notice or both.
- c. ☐ Yes ☒ No Was any information received on domestic water supplies that required additional mitigation beyond that required by standard Watercourse and Lake Protection rules? If yes, list site specific measures to be implemented by the LTO.

**There are no domestic water intakes downslope within 1,000 feet of the boundary of this THP.**

**Direct observation during reconnaissance visits, and contact with adjacent and nearby landowners**

**indicated no domestic water intakes downstream or down-slope within 1/2 mile of the THP area.**

29. [ ] Yes [X] No

Is any part of the THP area within a Sensitive Watershed as designated by the Board of Forestry and Fire Protection? If yes, identify the watershed and list any special rules, operating procedures or mitigation that will be used to protect the resources identified at risk?

NA

Mattole River and Grindstone Creek Fish Habitat Description: (Near the THP area and adjacent reaches)

In Mattole River, riffles and deeper runs appear to occur in approximately a 50/50 mix. In Grindstone Creek, shallow pools and riffles appear to occur in approximately a 50/50 mix within the class I stream reaches. Pools are shallow but persistent, and contain much structural diversity, comprised of large rock and cobbles, gravel, coarse and fine sand, as well as large and moderate sized organic debris. Pools are characterized in profile as having relatively deeper head and "plunge pool" area, moderately deep middle reach, and progressively shallower tail out area, where more transitory small size aggregate gravel and sand deposits tend to exist. Maximum depth range is from four feet to six inches, during moderate flows. Outlets may be deep and narrow, or shallow and fan shaped, depending more on location and juxtaposition of large rock, or persistent keyed in woody debris. Flat water is generally in evidence in the creeks, due to the overall moderate stream channel gradient. Overall, the gradient is less than 10%. Jump pools are generally not of sufficient depth, and size, to allow fish escapement in an upstream direction over the many short falls. These streams do not lie within the THP area.

b. Large woody material appears overly abundant in most stream reaches. A high percentage of this structure is comprised of conifer species, which are more persistent and less prone to rapid decay, than hardwood species. However, these species are also in evidence to a significant degree. Large and moderately large decadent trees have been retained throughout the assessment area near watercourses for future recruitment of woody debris. Generally, geologic conditions dictate that large rock will also be recruited from upstream and up-slope in stream substrates and banks. This will generally compliment the structural diversity provided by large in-stream wood alone.

c. Near water vegetation is abundant, lush, and diverse along most reaches of streams within the assessment area, and the class III watercourse in the THP area. Along Grindstone Creek, except where recent bank cutting and where inner gorge slides have occurred, generally canopy coverage is estimated to be 90% made up of dense and vigorous mid-level and understory vegetation, as well as overstory trees. The drainage slope and watercourse channels within the THP area trend toward a southwest and northwest slope aspect, are rather deeply incised, and it is rare for direct solar radiation to have a significant warming effect on these typically small intermittent and perennial stream channels.

These watercourses, there respective WLPZs, as well as any special management zones, are located outside the area of THP operations.

## CALIFORNIA FOREST PRACTICE RULES

916.5, 936.5, 956.5 Procedures for Determining Watercourse and Lake Protection Zone Widths and Protective Measures [All Districts]

TABLE I

Procedure for Determining Watercourse and Lake Protection Zone Widths and Protective Measures <sup>1</sup>								
Water Class characteristics or Key Indicator Beneficial Uses	1) Domestic supplies. Including springs, on site and/or within 100 feet downstream of the operations area and/or		1) Fish always or seasonally present offsite within 1000 feet downstream and/or		No aquatic life present, watercourse showing evidence or being capable of sediment transport to Class I and II waters under normal high water flow conditions after completion of timber operations.		Man-made watercourses, usually downstream, established domestic, agricultural, hydroelectric supply or other beneficial use.	
	2) Fish always or seasonally present onsite, includes habitat to sustain fish migration and spawning.		2) Aquatic habitat for nonfish aquatic species,					
			3) Includes Class III waters that are tributary to Class I waters.					
Water Class	Class I		Class II		Class III		Class IV	
Slope Class (%)	Width Feet	Protection Measure	Width Feet	Protection Measure	Width Feet	Protection Measure	Width Feet	Protection Measure
					[see 916.4(c)] [see 936.4(c)] [see 956.4(c)]		[see 916.4(c)] [see 936.4(c)] [see 956.4(c)]	
<30	75	BDG	50	BEI	See CFH		See CFI	
30 - 50	100	BDG	75	BEI	See CFH		See CFI	
>50	150 <sup>2</sup>	ADG	100 <sup>3</sup>	BEI	See CFH		See CFI	
1 - See Section 916.5(e) for letter designations application to this table. 2- Subtract 50 feet width for cable yarding operations. 3- Subtract 25 feet width for cable yarding operations.								



"A" WLPZ shall be clearly identified on the ground by the RPF who prepared the plan, or his supervised designee, with paint, flagging, or other suitable means prior to the preharvest inspection.

"B" WLPZ shall be clearly identified on the ground by an RPF, or his supervised designee, with paint, flagging, or other suitable means, prior to the start of timber operations. In planning watersheds determined to contain coho salmon, chinook salmon, or steelhead, on the ground identification of the WLPZ must be completed prior to the preharvest inspection.

"C" In site-specific cases, the RPF may provide in the plan, or the director may require, that the WLPZ be clearly identified on the ground with flagging or by other suitable means prior to the start of timber operations.

"D" To ensure retention of shade canopy filter strip properties of the WLPZ and the maintenance of a multi-storied stand for protection of values described in 14 CCR 916.4(b) [936.4(b), 956.4(b)], a base mark below the cut line of residual or harvest trees within the zone shall be done in advance of the preharvest inspection by the RPF, or supervised designee. Except in planning watersheds determined to contain coho salmon, chinook salmon, or steelhead, sample marking is satisfactory in those cases where the Director determines it is adequate for the plan evaluation. When sample marking has been used, all marking shall be done in advance of felling operations within the WLPZ.

"E" To ensure retention of shade canopy filter strip properties and the maintenance of wildlife values described in 14 CCR 916.4(b) [936.4(b), 956.4 (b)], a base mark shall be placed below the cut line of the residual or harvest trees within the zone and shall be done in advance of timber falling operations by an RPF, or supervised designee. In planning watersheds determined to contain coho salmon, chinook salmon, or steelhead, tree marking must be completed prior to the preharvest inspection. Sample marking is satisfactory in those cases where the director determines it is adequate for the plan evaluation. When sample marking has been used, all marking shall be done in advance of falling operations.

"F" Residual or harvest tree marking within the WLPZ may be stipulated in the THP by the RPF or required by the Director in site-specific cases to ensure retention of filter strip properties or to maintain soil stability of the zone. The RPF shall state in the THP if marking was used in these zones.

"G" To protect water temperature, filter strip properties, upslope stability, and fish and wildlife values, at least 50% of the overstory and 50% of the understory canopy covering the ground and adjacent waters shall be left in a well distributed multi-storied stand composed of a diversity of species similar to that found before the start of operations. The residual overstory canopy shall be composed of at least 25% of the existing overstory conifers. Species composition may be adjusted consistent with the above standard to meet on-site conditions when agreed to in the THP by the RPF and the Director.

"H" At least 50% of the understory vegetation present before timber operations shall be left living and well distributed within the WLPZ to maintain soil stability. This percentage may be adjusted to meet on-site conditions when agreed to in the THP by the RPF and the Director. Unless required by the Director, this shall not be construed to prohibit broadcast burning with a project type burning permit for site preparation.

"I" To protect water temperature, filter strip properties, upslope stability, and fish and wildlife values, at least 50% of the total canopy covering the ground shall be left in a well distributed multi-storied stand configuration composed of a diversity of species similar to that found before the start of operations. The residual overstory canopy shall be composed of at least 25% of the existing overstory conifers. Due to variability in Class II watercourses these percentages and species composition may be adjusted to meet on-site conditions when agreed to by the RPF and the Director in the THP.

## HAZARD REDUCTION

30. a. ☒ Yes ☐ No Are there roads or improvements which require slash treatment adjacent to them? If yes, specify the type of improvement, treatment distance, and treatment method.  
b. ☐ Yes ☒ No Are any alternatives to the rules for slash treatment along roads and within 200 feet of structures requested? If yes, RPF must explain and justify how alternative provides equal fire protection. Include a description of the alternative and where it will be utilized below.

Within 50 feet of the seasonal road bisecting the property, slash, bark, and woody debris created as a result of operations shall be removed and disposed of by logging or chipping and scattering, or piling and burning, or total removal, prior to completion of operations. These are within the subject property bordered by THP areas.

31. ☒ Yes ☐ No Will piling and burning be used for hazard reduction? See 14 CCR 917.1-.11, 937.1-.10, or 957.1-.10, for specific requirements. Note: LTO is responsible for slash disposal. This responsibility cannot be transferred.

## BIOLOGICAL AND CULTURAL RESOURCES

32. a. ☒ Yes ☐ No Are any plant or animal species, including their habitat, which are listed as rare, threatened or endangered under federal or state law, or a sensitive species by the Board, associated with the THP area? If yes, identify the species and the provisions to be taken for the protection of the species.  
b. ☐ Yes ☒ No Are there any non-listed species which will be significantly impacted by the operation? If yes, identify the species and the provisions to be taken for the protection of the species.

NOTE: See THP Form Instructions or the CDF Mass Mailing, 07/02/1999, section on "CDF Guidelines for Species Surveys and Mitigations" to complete these questions.

Northern spotted owl information decision checklist, and all it's provisions, shall be attached and made part of the THP. The LTO shall cease operations and notify CDF and DF&G if any rare, threatened, or endangered species, or sensitive species as designated by the Board of Forestry, raptor nests or fur bearer den sites are discovered or observed in the THP area during operations. For northern spotted owl, surveys shall be USF&WS protocol.

33. ☒ Yes ☐ No Are there any snags which must be felled for fire protection or safety reasons? If yes, describe which snags are going to be felled and why.

Conifer snags which pose a safety or fire hazard will be felled concurrently with operations. Other snags will be retained.

34. ☐ Yes ☒ No Are any Late Succession Forest Stands proposed for harvest? If yes, describe the measures to be implemented by the LTO that avoid long-term significant adverse effects on fish, wildlife and listed species known to be primarily associated with late succession forests.

The nearest old growth, or late successional forest timber stand(s) is located approximately 2 miles northwest, and outside the watershed and biological assessment areas.

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35. ☒ Yes ☐ No Are any other provisions for wildlife protection required by the rules? If yes, describe.

See THP (end of Section II and Sensitive Species Addendum Section V) for additional potentially occurring possibly sensitive animals, or fish species, and mitigation information. The person who submitted the THP, or their successor in interest, shall be responsible for submission of any and all subsequent NSO consultation information or documentation to CDF as enforceable amendments, should change in NSO status within 500, or within 1,000 feet of the THP boundary occur. Operations shall cease if status change occurs, and not resume until information, documentation and mitigation is amended into the THP.

36. a. ☒ Yes ☐ No Has an archaeological survey been made of the THP area?

By the RPF preparing the THP.

- b. ☒ Yes ☐ No Has a current archaeological records check been conducted for the THP area?

- c. ☒ Yes ☐ No Are there any archaeological or historical sites located in the THP area? Specific site locations and protection measures are contained in the Confidential Archaeological Addendum in Section VI of the THP, which is not available for general public review.

37. ☐ Yes ☒ No Has any inventory or growth and yield information designated "trade secret" been submitted in a separate confidential envelope in Section VI of this THP?

38. Describe any special instructions or constraints that are not listed elsewhere in Section II.

Additional listed and/or potentially sensitive species, which may inhabit this site, are shown on page 28 for reference. Provisions to avoid take, as listed in the spotted owl "no-take" certification, shall be made part of the THP. Log trucks, service and crew vehicles shall observe a safe rate of speed on Wilder Ridge Road. Operations, other than use of the existing road, shall not occur in the meadow areas and margins of the river. The LTO shall observe and adhere to all applicable provisions of the existing 1600 Agreement R1 #00-0011 (99-0237), which is applicable to the summer crossing on Mattole River shown on the THP maps. The trees designated for removal in the western edge of the archeological site, shall be felled directionally west, And yarded or grappled whole-tree by equipment which shall not encroach beyond the existing road edge located west and northwest of the defined archeological site, such that surface disturbance. No disturbance to delineated features within the arch. Site shall occur, as a result of these operations.

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DIRECTOR OF FORESTRY AND FIRE PROTECTION

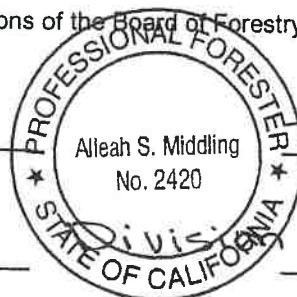
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This Timber Harvesting Plan conforms to the rules and regulations of the Board of Forestry and Fire Protection and the Forest Practice Act:

By:

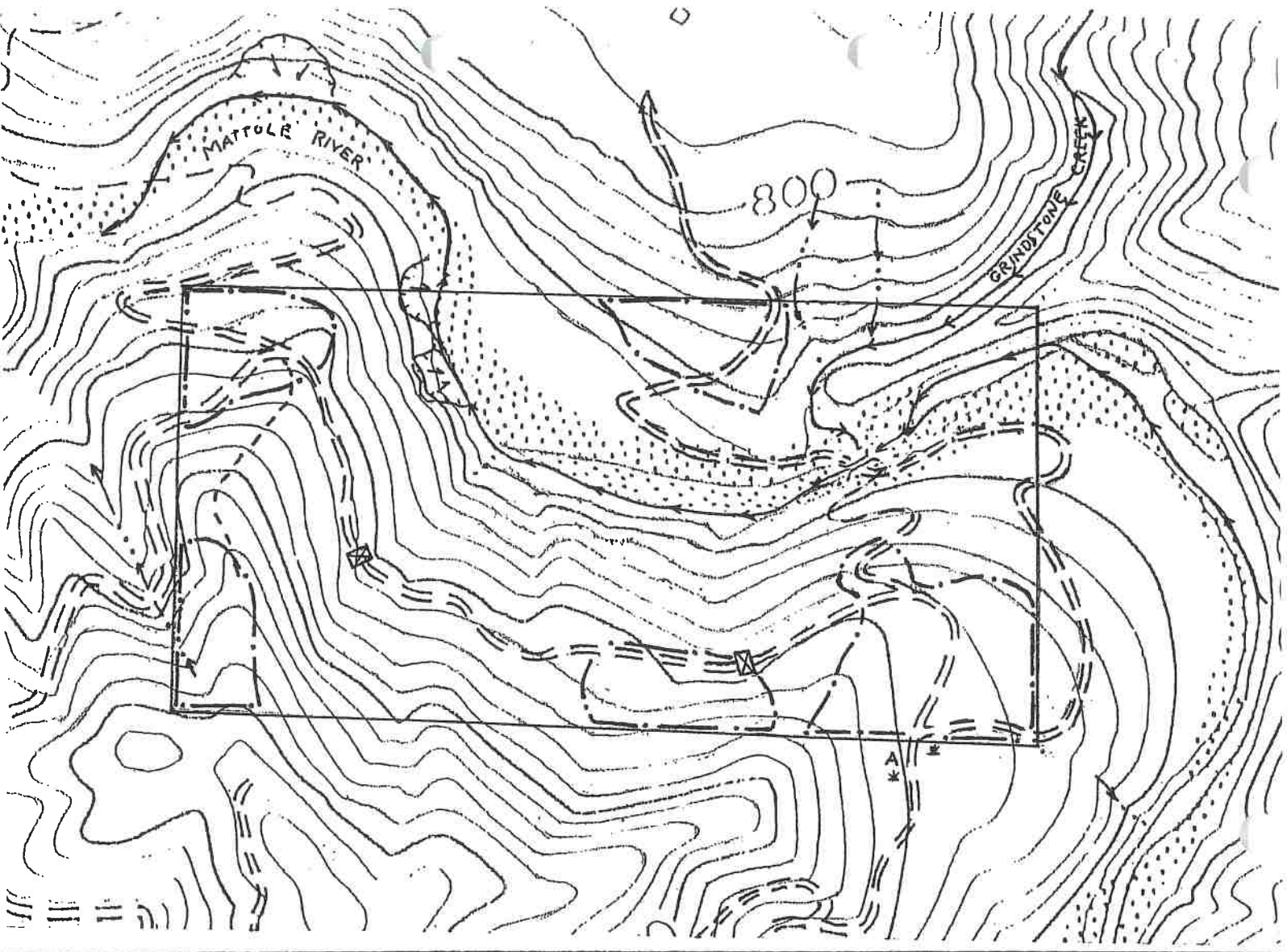
(Signature)

(Printed Name)



(Date)

(Title)



TIMBER HARVESTING PLAN  
THP MAP A  
Richard and Sally French – Mattole River



**LEGEND**

- |               |                                    |           |                         |
|---------------|------------------------------------|-----------|-------------------------|
| — · — · — · — | Harvest Area Boundary              | ← — — — — | Watercourse (Class I)   |
| —————         | Property Boundary                  | ← · · · — | Watercourse (Class II)  |
| =====         | Private Seasonal Road (Existing)   | ← · · · — | Watercourse (Class III) |
| - - - - -     | Skid Trail (Existing)              | * *       | Wet Area (Class III)    |
| ☒             | Rolling Dip Cross Drain (Proposed) | ·····     | Channel Zone            |
| ⌋             | Low Water Crossing (Temporary)     | ⌋         | Slope Instabilities     |

*Portion of Honeydew 7.5 Min. USGS Quad. (1970) Sect. 25 T3S, R1E, HBM*

Scale: 1 Inch = 500 Feet

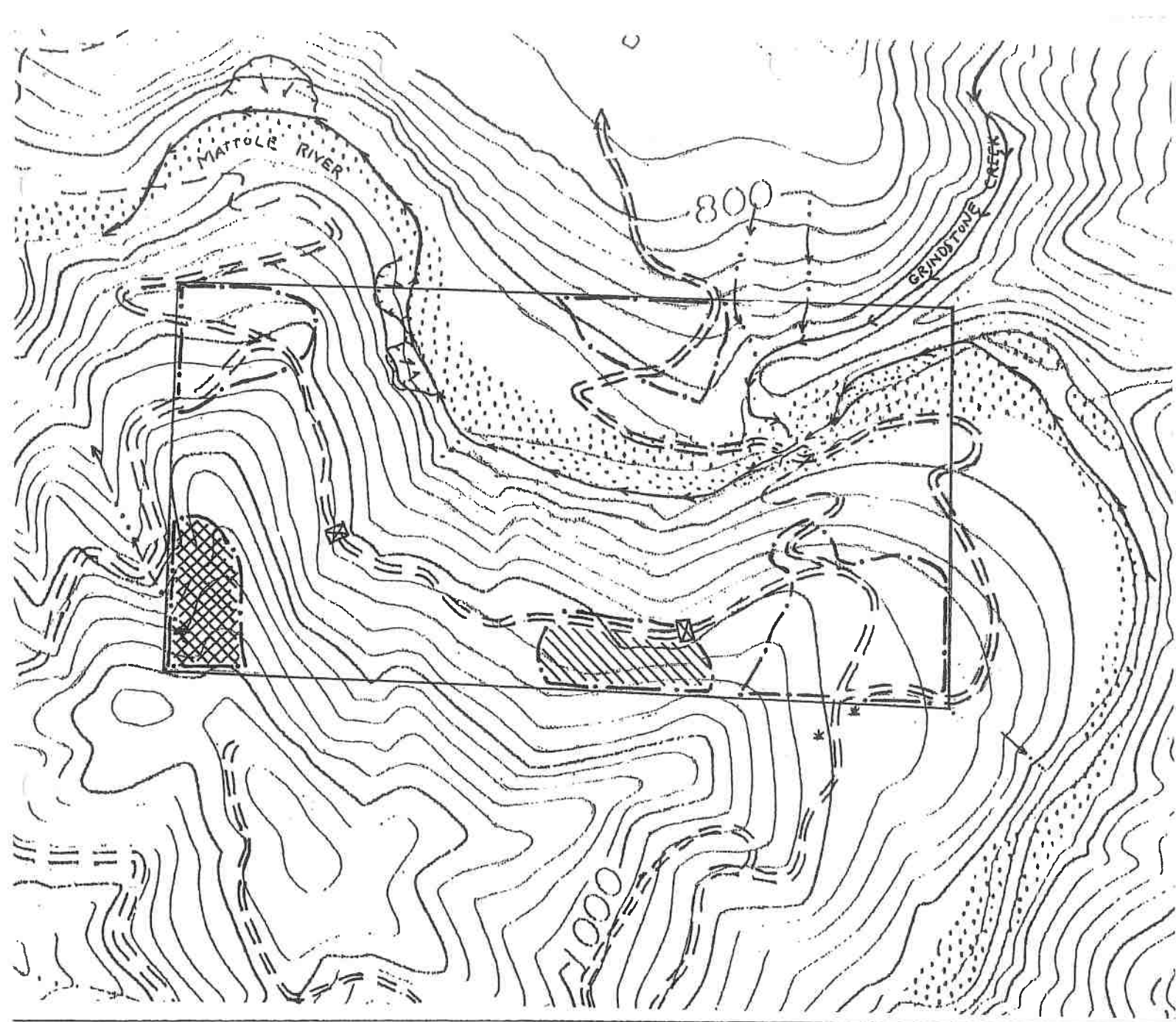
Date: January 25, 2002

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TIMBER HARVESTING PLAN  
THP MAP B - SILVICULTURE  
Richard and Sally French - Mattole River

**LEGEND**



— · — · — Harvest Area Boundary

———— Property Boundary

==== Private Seasonal Road (Existing)

← — — — — Watercourse (Class I)

← · · · · · Watercourse (Class II)

← · · · · · Watercourse (Class III)

(All site III)

□ Seed Tree, Seed Step

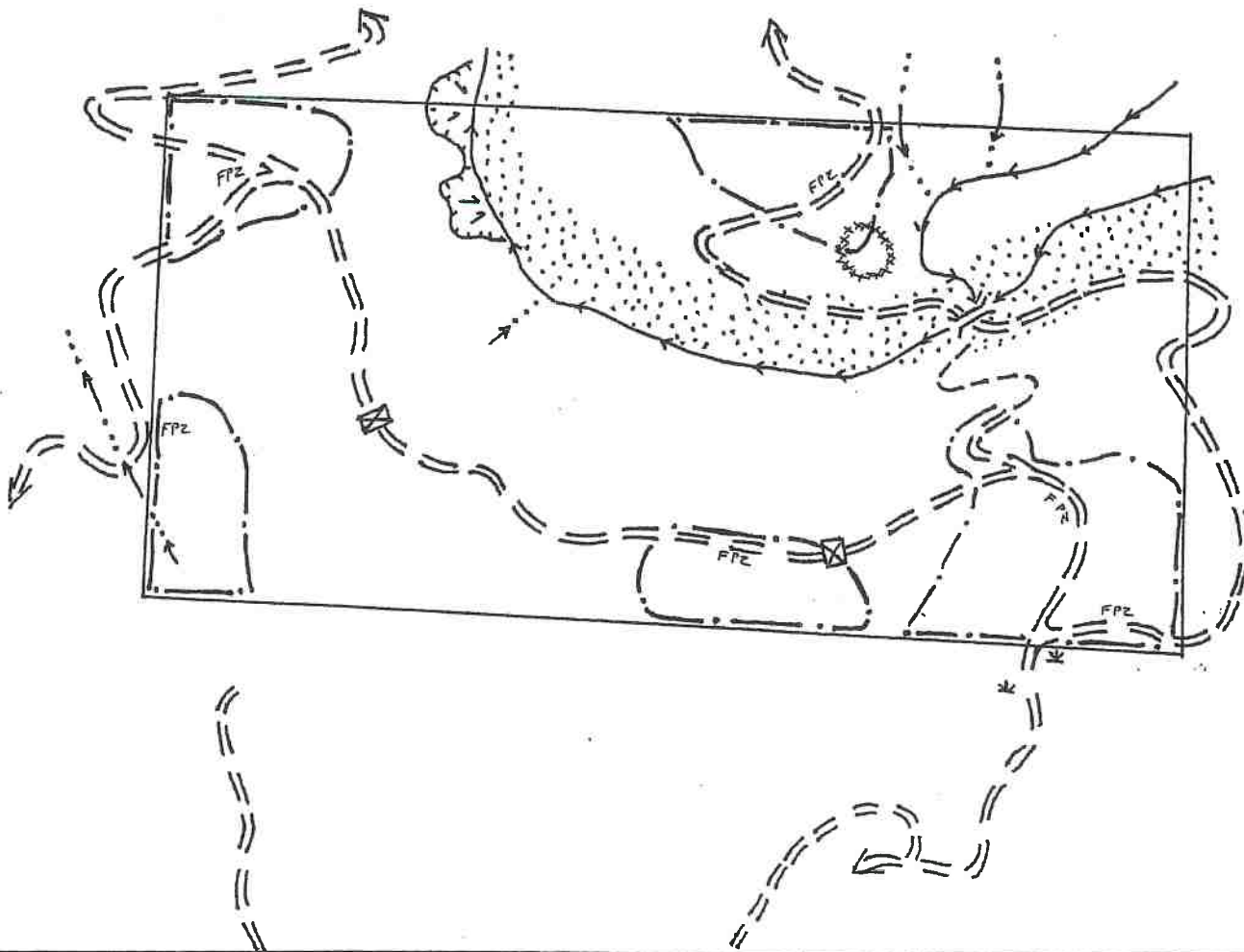
▣ Rehabilitation of Understocked Area

▤ Seed Tree, Removal Step

Portion of Honeydew 7.5 Min. USGS Quad. (1970) Sect. 25 T3S, R1E, HBM

Scale: 1 Inch = 500 Feet

Date: January 25, 2002



TIMBER HARVESTING PLAN  
THP MAP C - PLANIMETRIC  
Richard and Sally French - Mattole River



FPZ	50' Fire Protection Zone	<b>LEGEND</b>	xxxxxx xxxxxx	Zone of No Heavy Equipment Operations
— · — · —	Harvest Area Boundary		← — — — ←	Watercourse (Class I)
—————	Property Boundary		← · · · ←	Watercourse (Class II)
=====	Private Seasonal Road (Existing)		← · · · ←	Watercourse (Class III)
- - - - -	Jeep Trail (Existing)		* *	Wet Area (Class III)
⊠	Rolling Dip Cross Drain (Proposed)		· · · · ·	Channel Zone
	Low Water Crossing (Temporary)		~	Slope Instabilities

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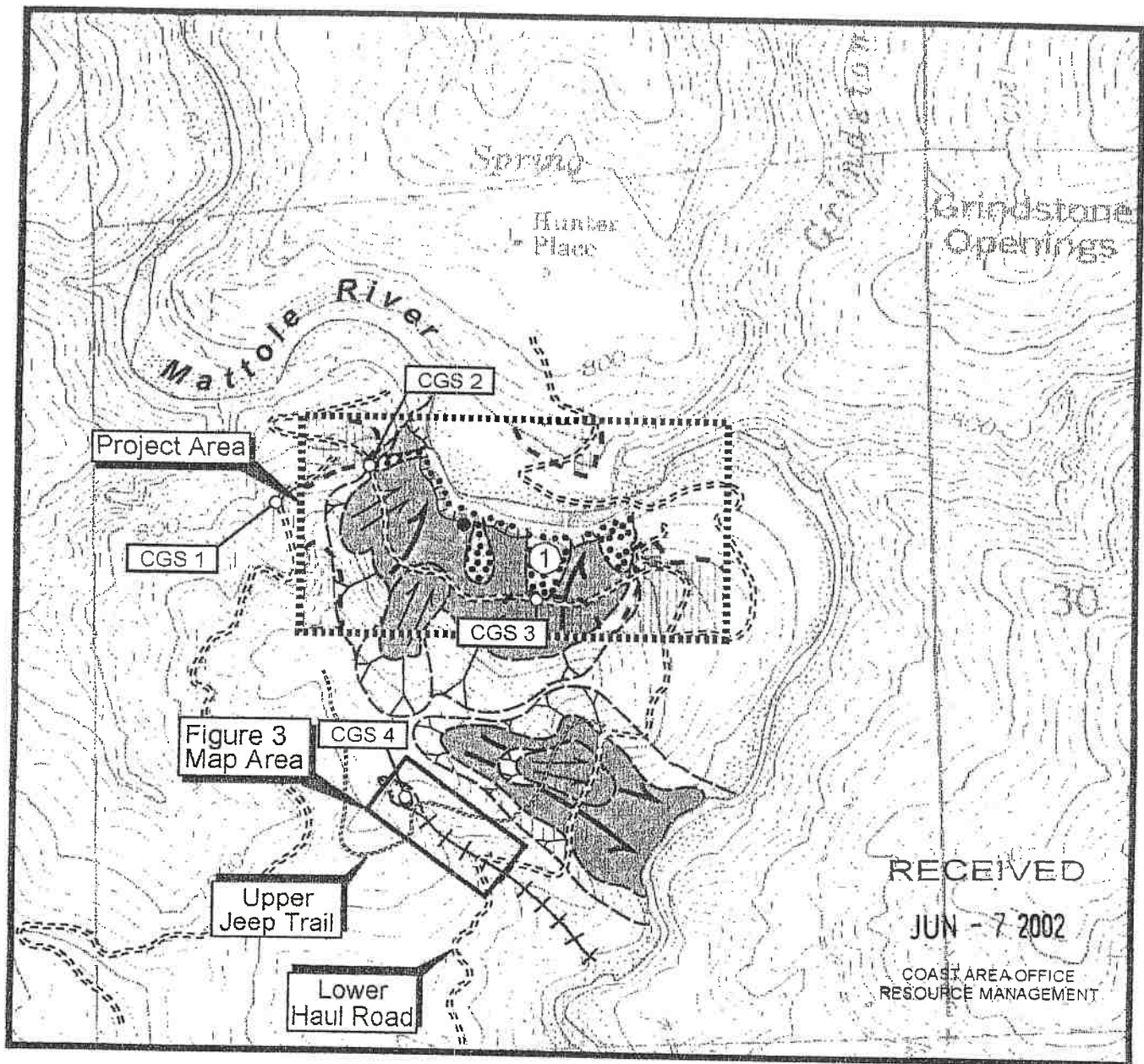
Portion of Honeydew 7.5 Min. USGS Quad. (1970) Sect. 25 T3S, R1E, HBM

Scale: 1 Inch = 500 Feet

Date: January 25, 2002

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See Figure 1 for explanation of map symbols

① Active debris slide  
of 1965

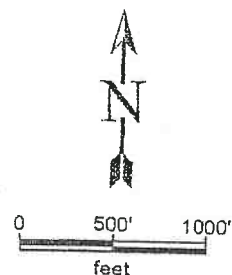


Proposed timber harvest unit

CGS 4

Specific site keyed to text

Note: Geology and geomorphic features related to landsliding  
mapped from 1954 and 1963 aerial photographs.



Date: 5-14-02

Scale: 1"= 1,000'

Approved By:

CGS

Site Map

To Accompany

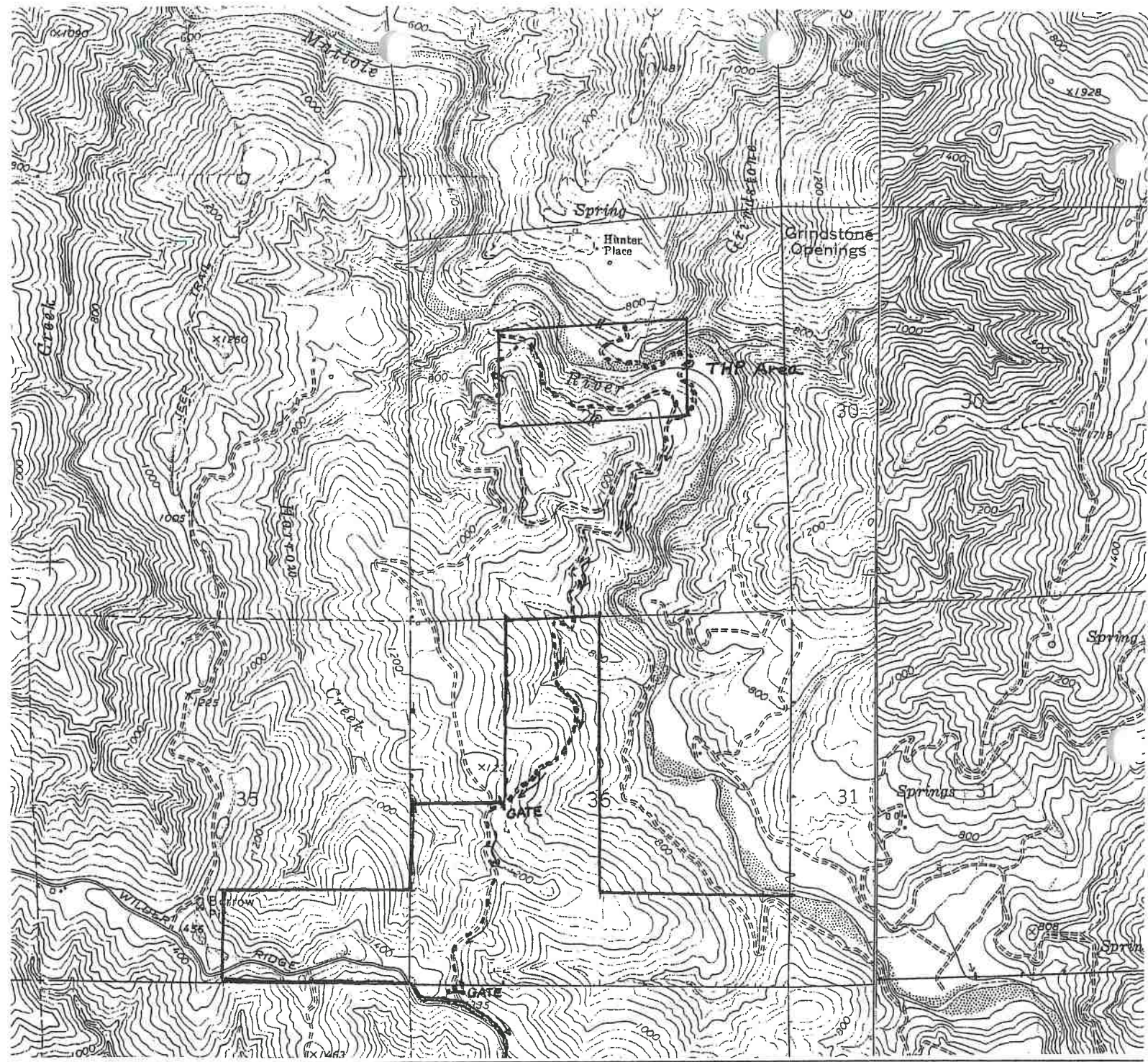
Engineering Geologic Review of

THP 1-04-085 HUM (French-Grindstone)

Figure:

2





**TIMBER HARVESTING PLAN**  
**APPURTENANT ROAD / HAUL ROUTE MAP**  
 Richard and Sally French – Mattole River

**LEGEND**

- |       |                           |       |                          |
|-------|---------------------------|-------|--------------------------|
| —#—   | Property Boundary         | ===== | Seasonal Road (Existing) |
| ===== | Permanent Road (Existing) | ←     | Haul Route               |
| ===== | Appurtenant Road          |       |                          |



*Portion of Honeydew and Shelter Cove USGS Quads. T3&4S, R1E HBM*

*Scale: 1 Inch = 2,000 Feet*

*Date: January 25, 2002*



**TIMBER HARVESTING PLAN ADDENDUM'S**  
**SECTION II**

**ITEM #32:**

The table below represents the "Rare, Endangered or Threatened" species, Board of Forestry "Sensitive Species" and Department of Fish and Game "Species of Special Concern" whose range may be encompassed, and that can be expected to be found in the forest region associated with the project and assessment area. This table is intended to provide a quick reference of the status of these species within the THP and Biological Assessment Area (BAA). A species is considered present if it was ever observed within the THP or BAA, or if it showed up in the appropriate area on the California Natural Diversity Database. For the purpose of this evaluation the term "habitat" was defined as a site that has all the necessary components to fulfill the natural history requirements of that species. Similarly, the term "Possible" (POSS) means that although this species was not found in the appropriate area, it is possible that existing habitat could sustain the species. Notwithstanding this consideration, the reason for lack of documented presence of any species is entirely unknown, but may include site specific features or factors which are likewise unknown at this time, and or based on current research. For an evaluation of those species deemed potentially present and potentially sensitive in this specific case, based upon field reconnaissance, please refer to Sensitive Species Information in Section III of this addendum.

Additionally, "Listed" species whose range may encompass the THP and BAA, are also included in lists under Sensitive Species Information in Section V and Section II Addendum's of this THP. These species are considered unlikely to exist within either the THP or BAA, and/or unlikely to be effected due to their specific habitat requirements, and/or the limited scope and area effected by this THP. For this reason a full biological review was not done on these species and they were not necessarily included in the table below.



**TIMBER HARVESTING PLAN ADDENDUM'S**  
**SECTION II**

**SPECIES STATUS TABLE**

<b>In BAA Species</b>	<b>Habitat Present in THP</b>	<b>Species Observed in THP</b>	<b>Habitat Present in BAA</b>	<b>Species Observed in BAA</b>
<u><b>Mammals</b></u>				
Red tree vole	YES	NO	YES	NO
Pacific fisher	YES	NO	YES	NO
Humboldt marten	POSS	NO	POSS	NO
<u><b>Amphibians</b></u>				
Foothill yellow-legged frog	NO	NO	YES	YES
Northern red-legged frog	POSS	NO	POSS	NO
Southern torrent salamander	NO	NO	YES	NO
Tailed frog	NO	NO	YES	NO
Del Norte salamander	POSS	NO	POSS	NO
<u><b>Reptiles</b></u>				
Western pond turtle	NO	NO	YES	NO
<u><b>Fish</b></u>				
Steelhead	NO	NO	YES	YES
Coho salmon	NO	NO	YES	YES
Coastal cutthroat trout	NO	NO	NO	NO
Chinook salmon	NO	NO	YES	YES
<u><b>Birds</b></u>				
Bald eagle	NO	NO	YES	YES
Peregrine falcon	YES	NO	YES	NO
Marbled murrelet	NO	NO	NO	NO
Northern spotted owl	YES	NO	YES	YES
Golden eagle	NO	NO	YES	NO
Great blue heron	NO	NO	YES	YES
Great egret	NO	NO	YES	NO
Northern goshawk	NO	NO	YES	NO
Osprey	NO	NO	YES	NO
Ruffed grouse	NO	NO	NO	NO
Purple martin	NO	NO	NO	NO
Yellow warbler	NO	NO	POSS	NO
Yellow breasted chat	NO	NO	POSS	NO
Cooper's hawk	NO	NO	YES	NO
Sharp-shinned hawk	YES	NO	YES	YES
Black-capped Chickadee	YES	NO	YES	NO
Vaux's swift	NO	NO	POSS	NO
<u><b>Plants</b></u>				
Humboldt milk vetch	YES	NO	YES	NO
Bensoniella	NO	NO	YES	NO
Leafy reed grass	POSS	NO	POSS	NO



United States Department of the Interior

FISH AND WILDLIFE SERVICE  
ARCATA FISH AND WILDLIFE OFFICE  
1655 HEINDON ROAD  
ARCATA, CA 95521  
(707) 822-7201  
FAX (707) 822-8411

Unit, FG, WQ  
6-20-02 R

June 11, 2002

**In Reply Refer To:**  
1-14-2002-TA-1294

Mr. Bill Snyder  
Deputy Chief, Forest Practice  
Dept. of Forestry and Fire Protection  
135 Ridgeway Avenue  
Santa Rosa, CA 95402

**Subject:** Response to Request for Technical Assistance Regarding Timber Harvest Plan 1-02-085 HUM

Dear Mr. Snyder:

This responds to a request for U.S. Fish and Wildlife Service (Service) technical assistance, received in our office on June 3, 2002, on the above timber harvest plan (THP). At issue in the request is the potential for incidental take of the Federally listed northern spotted owl as a result of operations conducted on the above THP. After review of the information pertaining to this request the Service provides the following technical assistance.

This is a 22 acre (seed tree seed step 14/seed tree removal 4/rehabilitation 4) THP located in Section 25, Township 3 South, Range 1 East, M.D.B. & M. in Mendocino County. There are no known northern spotted owl activity centers located within 1,000 feet of the THP (see attached map). The Service has determined that operations as proposed on the above THP would not be likely to incidentally take northern spotted owls, provided operations are complete prior to February 1, 2003.

All maps and data used to provide this technical assistance are on file at this office. If you have questions regarding this response, please contact Mr. Ken Hoffman at the Arcata Fish and Wildlife Office at (707) 822-7201.

Sincerely,

*[Handwritten signature of Bruce Halstead]*

*Acting*  
Bruce Halstead  
Project Leader

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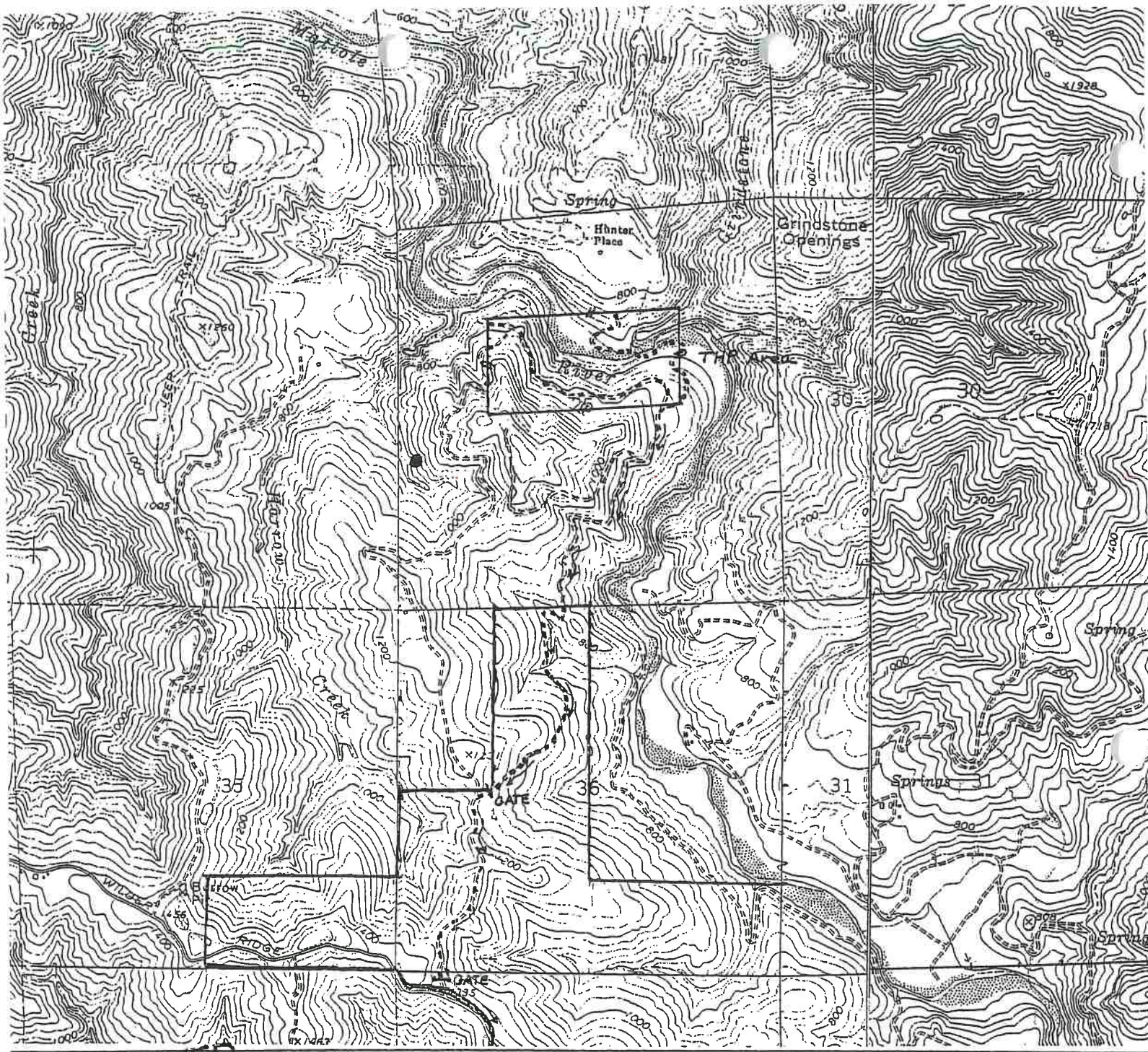
JUN 17 2002

cc:

RPF: S. Launi, 3542 18<sup>th</sup> Street, Eureka, CA 95501

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1-14-2002-TA-1294

TIMBER HARVESTING PLAN  
APPURTENANT ROAD / HAUL ROUTE MAP  
Richard and Sally French - Mattole River  
1-02-085 Hum

PART OF PLAN

HU 345

LEGEND

- Property Boundary
- ===== Seasonal Road (Existing)
- ===== Permanent Road (Existing)
- ===== Appurtenant Road
- ← Haul Route

N

Portion of Honeydew and Shelter Cove USGS Quads. T3&4S, R1E HBM

Scale: 1 Inch = 2,000 Feet

28.2  
26.

Date: January 25, 2002

12/23



**TIMBER HARVESTING PLAN ADDENDUM'S**  
**SECTION II**

**ITEM #32:**

While a letter of technical assistance is pending, provisions to avoid take of northern spotted owl (NSO) shall include the following:

1. No operations shall occur until a valid letter of technical assistance is obtained from the USF&WS. All provisions of this letter shall be amended into the plan and become enforceable provisions of the THP.
2. Surveys for northern spotted owl shall be conducted in conformance with USF&WS approved protocols.
3. The location of known historic NSO activity centers within 1.3 miles of the proposed THP area is indicated on the attached map. (Otherwise, there are no known NSO activity centers located within 1.3 miles.)
4. The following standard protection measures shall apply to NSO activity centers:
  - a. The buffer zone for NSO activity centers shall consist of the area within 1,000 feet of the tree or trees containing a nest or supporting an activity center.
  - b. No significant modification of habitat structure shall occur within a 500 foot radius of a NSO activity center. A minimum of 60% canopy of trees 11 inches DBH and greater shall be maintained within the area from 500 feet to 1,000 feet from a NSO activity center.
  - c. During the period February 1<sup>st</sup> until August 31, no timber harvest operations shall occur within the buffer zone.
  - d. Helicopter yarding within .5 miles of an activity center is prohibited between February 1<sup>st</sup> till August 31<sup>st</sup>.
  - e. Operations shall not result in a reduction below 500 acres of suitable functional NSO habitat within .7 miles of an activity center. Less than 50% of the retained area shall be operated in any one year.
  - f. Operations shall not result in a reduction below 1336 acres of suitable functional NSO habitat within 1.3 miles of an activity center.

The plan submitter, or his successor in interest will submit subsequent consultations or letters of technical assistance to the Department as enforceable amendments to the plan prior to operations being conducted pursuant to that consultation or letter of technical assistance.



# United States Department of the Interior

FISH AND WILDLIFE SERVICE  
ARCATA FISH AND WILDLIFE OFFICE  
1655 HEINDON ROAD  
ARCATA, CA 95521  
(707) 822-7201  
FAX (707) 822-8411

January 10, 2001

In Reply Refer To:  
1-14-2001-TA-20

Mr. Dean Lucke  
Assistant Deputy Director, Forest Practice  
Dept. of Forestry and Fire Protection  
135 Ridgeway Avenue  
Santa Rosa, CA 95402

Subject: Response to Request for Technical Assistance Regarding Northern Spotted Owl Guidelines

Dear Mr. Lucke:

This responds to your request for U.S. Fish and Wildlife Service (Service) technical assistance on the use of the Northern Spotted Owl Guidelines (Guidelines) submitted to our office on October 26, 2000. Your request describes initiating a process by which, through the use of the Guidelines, timber harvest plan (THP) proponents may have their THPs approved in compliance with the Forest Practice Rules and the California Environmental Quality Act. At issue in the request is the potential for incidental take of the Federally listed northern spotted owl (*Strix occidentalis caurina*).

In response to your request, the Service has determined that, provided no timber operations will occur until valid northern spotted owl technical assistance has been obtained from the Service, implementation of the process described in the Guidelines would not be likely to incidentally take northern spotted owls. Parties submitting information to the Service for technical assistance should be aware that other information may be required in addition to that specified in your Guidelines.

If you have questions regarding this response, please contact Mr. Ken Hoffman at the Arcata Fish and Wildlife Office at (707) 822-7201.

Sincerely,

Phil Detrich  
HCP Team Project Leader

cc:

CDF: J. Harris, 118 Fortuna Blvd., Fortuna, CA 95540  
CDF: J. Marshal, 118 Fortuna Blvd., Fortuna, CA 95540  
CDF: R. Thompson, 135 Ridgeway Avenue, Santa Rosa, CA 95402  
CDF: B. Snyder, 135 Ridgeway Avenue, Santa Rosa, CA 95402  
CDF: D. Shintaku, 6105 Airport Road, Redding, CA 96001

#20

STATE OF CALIFORNIA-THE RESOURCES AGENCY

RECEIVED

Gray Davis, Governor

DEPARTMENT OF FORESTRY AND FIRE PROTECTION

COAST-CASCADE REGION

35 RIDGWAY AVENUE

P.O. BOX 870

SANTA ROSA, CA 95402-0870

(707) 576-2959

OCT 26 2000

U.S. Fish & Wildlife Service  
Arcata, CA



October 20, 2000

Mr. Kenneth Hoffman  
U.S. Fish & Wildlife Service  
Arcata Fish & Wildlife Office  
1655 Heindon Road  
Arcata, CA 95521

Subject: Request for Technical Assistance on CDF Northern Spotted Owl Guidelines

Dear Mr. Hoffman:

The California Department of Forestry & Fire Protection (CDF) would like to seek technical assistance (TA) from the U.S. Fish & Wildlife Service (Service) on the attached Northern Spotted Owl Guidelines. The purpose of the guidelines is to assure that timber harvest plans submitted within the range of the northern spotted owl will not likely result in take of this federally threatened species. The guidelines address information needs, standard protection measures, and the need to amend subsequent letters of TA into the THP. It is the intent of the CDF that upon receiving technical assistance from the Service to make these guidelines available to individuals preparing timber harvest plans and the public. The CDF is therefore requesting TA on the process and not on an individual action.

If you have any questions regarding the information in this document please feel to contact either Jay Harris (707/726-4256) or Bill Snyder (707/576-2938) of my staff for assistance.

Sincerely,

A handwritten signature in cursive script that reads 'Dean Lucke'.

Dean Lucke  
Assistant Deputy Director for  
Forest Practice

cc: Rodger Thompson (CDF - Santa Rosa)  
Duane Shintaku (CDF - Redding)  
Bill Snyder (CDF - Santa Rosa)  
John Marshall (CDF - Fortuna)  
Jay Harris (CDF - Fortuna)  
Mark Stopher (DFG - Redding)  
Steve Rae (DFG - Yountville)  
Ken Moore (DFG - Eureka)



## **TIMBER HARVESTING PLAN ADDENDUM'S**

### **SECTION III**

#### **THP Item #II-14: General Discussion of Timber Stand Conditions**

The property where the THP is located consists of approximately 80 acres. It is located approximately 2.5 miles north of Ettersburg, along the Mattole River in southern Humboldt County. The average elevation is 700 feet. The property is bisected by the Mattole River and Grindstone Creek. These are fish bearing streams, known to support salmonid species. The THP area does not encroach on these main watercourses. Harvest boundaries are configured so as to avoid their zones of influence.

The five small harvest units, totaling approximately 22 acres of timber stands proposed for management, consist of two more or less distinct age classes within a single forested vegetation matrix. The timber stand is dominated by Douglas-fir, but also contains Pacific madrone, tanoak, live oak, true oak, and other hardwoods. Understory species include blue and red huckleberry, poison oak, hazelnut, various ferns and common coastal transition and coast range forest herbaceous plants.

The timber exhibits an overstory general age class of approximately 80 years, with a consistently evenaged component of this age concentrated in the western and eastern portions of the parcel. The south central portion of the parcel and THP area is two aged. The young growth stand component is approximately 25 years old, and regenerated after the partial cutting which appears to have occurred in the 1970s. This young growth conifer component is generally well developed in most areas. In addition, there are a few widely scattered older Douglas-fir "seed trees" evident on the property. The entire timbered area is classified as site III.

Slopes in the area range from nearly flat, to over 70% in some parts of the property. The entire property is a northwest and southwest aspect. Soils are deep moist and well drained, clay loams of the Hugo series. There are also some rocky areas and hard rock at one location. There are no active landslides in the THP area. The south central area of the property is an apparent debris slide amphitheater. The feature is largely dormant. Recently active slope instabilities identified on the property are characterized as small localized inner gorge slides.

All roads and main skid trails are pre-existing as a result of previous timber harvest and ranching operations. No major excavation or reconstruction effort is necessary for their re-use in the proposed operation. The area is accessed via

## TIMBER HARVESTING PLAN ADDENDUM'S SECTION III

### Pre and Post Harvest Timber Stand Description

Wilder Ridge Road (County), and a private gated seasonal road system that is shared by several property owners. The road is well maintained, and suitable for hauling and heavy equipment use.

**Objectives:** Throughout the property, the older age class conifers are identified as having surpassed the growth stage of culmination of mean annual increment. Therefore the silvicultural systems prescribed allow primarily for harvest of the majority of these trees. Most of the area exhibits a well advanced young growth conifer timber stand component. The area is generally well stocked, and of advanced young growth age (in the seed tree silvicultural areas). Therefore, the area will remain well vegetated after operations. Hardwoods may also be commercially and incidentally removed in order to improve the conditions for conifer regeneration where it is not now established.

Within the area of operations, the harvest will not have the appearance, or potential resource effects of a clearcut harvest as a result of operations. A well stocked stand of 25 to 40 year old timber will be retained. In addition, some scattered older age class Douglas-fir, mixed hardwoods, and younger age class conifer seedlings, saplings, and poles will also be retained. Actual retention of trees and other vegetation will be higher than those minimum standards stated below. Within the EEZ associated with the class III watercourse, and considering the separation between, and juxtaposition of, harvest areas; a relatively greater number of trees shall be retained. Most of the parcel shall have no actual operations occur. A significant component of natural advanced conifer regeneration is already present in most areas. Finally, a component of overstory, understory, and mid-level hardwood species will be retained in various areas where they currently occur. There is no accessible point where the public may readily view these operations areas.

Trees to be harvested shall be marked by the RPF, or under the supervision of the RPF prior to felling. A sample area shall be marked for evaluation, prior to the pre-harvest inspection. Satisfactory stocking will be retained post harvest within the Seed Tree, seed step and removal step, and will be quickly re-established in all harvested areas. Tree planting will be required in the rehabilitation area, and may be implemented in the seed tree, seed step area to help insure prompt reforestation.

**TIMBER HARVESTING PLAN ADDENDUM'S**  
**SECTION III**

**Pre- and Post Harvest Timber Stand Conditions:**

**Seed Tree, Seed Step Area**

At least 8 group A conifer trees per acre that are at least 18 inches DBH (or 4 in excess of 24 inches DBH) on average shall be retained as seed trees, in the **Seed Tree, Seed Step** areas. These trees shall consist of Douglas fir. Seed trees shall be viable, full crowned, and capable of good seed production, and representative of desirable phenotypes. Seed trees shall be at least 18 inches DBH. Seed trees greater than 24 inches DBH are common, and will count as 2 trees for purposes of meeting the silviculture retention standard. No point within the logged area shall be more than 150 feet from a retained seed tree.

The area will not have the appearance, or potential resource effects of a clearcut harvest as a result of operations. Actual retention of trees and other vegetation may be higher than those minimum standards stated above. A relatively greater number of trees, including sapling and pole size young growth, may be retained, due to a varying and generally sparse component of natural advanced conifer regeneration already present within portions of the area designated for seed tree seed step harvest method.

Trees to be removed shall be marked in a sample area, with blue paint by the RPF prior to the PHI. All timber shall be marked prior to felling operations.

Satisfactory stocking will be retained in the form of seed trees, and will be quickly re-established in all harvested areas, in accordance with the requirements of 14 CCR 912.7 (b) (1), 913.1 (c) (1); and 14 CCR 913.11 (c) (1).

**Seed Tree, Seed Step Area**

	<b>Pre-Harvest:</b>	<b>Post-Harvest:</b>
<b>Stand Basal Area Avg.:</b>	210 sq.ft./ac.	25 - 50 sq.ft./ac.
<b>Stand Volume per Acre:</b>	35 MBF/ac.	2.5 MBF/ac.
<b>Stocking Standard:</b>		300 Point Count/Ac.
		Within 2 years
<b>Estimated Stand Growth:</b>	300 BF/ac./yr.	800 BF/ac./yr.*

Some small areas of the seed tree, seed step area currently have some established advance natural Douglas-fir regeneration. This shall be protected and retained as much as possible, during operations.

\* Predicted for similar stands regional, averaged over rotation age 60.



## **TIMBER HARVESTING PLAN ADDENDUM'S** **SECTION III**

### **Seed Tree, Removal Step Area**

The seed tree removal step area shown on THP Map B exhibits overstory conifers identified as having surpassed the growth stage of culmination of mean annual increment and will be harvested under the **Seed Tree, Removal Step** silviculture method. No more than 50 square feet of basal area per acre shall be harvested. Not more than 15 predominant trees per acre shall be removed. Overstory canopy closure, consisting of conifers, ranges from 10% to 20%, with additional full canopy closure made up of advanced Douglas-fir young growth, tanoak, and other hardwoods. The overstory stand is greater than 60 years old. Advanced conifer regeneration is established in most of the area. In localized situations, conifer regeneration has not become established, and the site is vegetated with hardwoods and brush species. Such areas are to be disturbed as a result of operations, and they will be planted with Douglas-fir seedlings. Some overstory conifers may be retained for structural diversity in the future stand, and to promote additional natural conifer regeneration in the future stand. This stand cannot be managed for attainment of MSP in its current condition. This unit comprises 4 acres. The trees will be designated for harvest by marking with blue paint and flagging the boundary of the unit.

The area will not have the appearance, or potential resource effects of a clearcut harvest as a result of operations. Actual retention of trees and other vegetation may be higher than those minimum standards stated above. A relatively greater number of overstory conifer and hardwood trees, and including sapling and pole size young growth, may be retained.

Satisfactory stocking will be retained in the form of established young growth trees, and may be supplemented by planting seedlings, in accordance with the requirements of 14 CCR 912.7 (b) (1)

### **Pre and Post Harvest Timber Stand Conditions:** **Seed Tree, Removal Step Method**

	<b>Pre-Harvest:</b>	<b>Post-Harvest:</b>
<b>Stand Basal Area Avg.:</b>	50 sq.ft./ac.	< 25 sq.ft./ac. (Overstory Conifer)
<b>Stand Volume per Acre:</b>	5 MBF/ac.	< 3 MBF/ac.
<b>Stocking Standard:</b>		> 300 Point Count/Ac.
<b>Estimated Stand Growth:</b>	100 BF/ac./yr.	500 BF/ac./yr.*
<b>Stand Basal Area Avg.:</b>	60 sq. ft./ac.	<30 sq. ft./ac. (Hardwood)

- Based upon observed growth rates averaged for the rotation age, for similar regional timber stands.
- Volumes expressed are for trees greater than 12 inches DBH.

**TIMBER HARVESTING PLAN ADDENDUM'S**  
**SECTION III**

**Rehabilitation of Understocked Area**

In the southwestern portion of the property, an area exists, where conifer stocking is largely lacking. The primary cover of vegetation is comprised of overstory tanoak and madrone. Conifers occur as single widely scattered trees, or are largely completely absent from the current stand. Crown closure varies, but averages 70%, and conifers cannot regenerate and grow beneath this canopy. Hardwood canopy will be reduced to approximately 40% as a result of operations, and Douglas-fir seedlings will be established where operations have occurred.

**Pre and Post Harvest Timber Stand Conditions:**

(Group A Conifers)

	<b>Pre-Harvest:</b>	<b>Post-Harvest:</b>
<b>Stand Basal Area Avg.:</b>	<50 sq.ft./ac. *	<50 sq.ft./ac.*
<b>Stand Point Count:</b>	<30 / ac.**	300 / ac.**
<b>Stand Volume per Acre:</b>	2 MBF/ac.*	0 MBF/ac.*
<b>Stocking Standard:</b>		300 Point Count/Ac. Within 5 years
<b>Estimated Stand Growth:</b>	<100 BF/ac./yr.	700 BF/ac./yr.***

(Hardwood of various ages)

	<b>Pre-Harvest:</b>	<b>Post-Harvest:</b>
<b>Stand Basal Area Average:</b>	90 - 150 sq. ft./ ac.	60 sq.ft./ ac.
<b>Stand Point Count Per Acre:</b>	200 / acre	<100 / acre
<b>Stand Volume Per Acre:</b>	5 MBF / acre	2 MBF / acre
<b>Estimated Stand Growth:</b>	not applicable	not applicable

Satisfactory stocking shall be met by point count method. At least 300 point count per acre, or ten seedlings established for each tree harvested, shall be achieved by a combination of planted Douglas-fir seedlings, residual viable and countable seedlings, saplings, and poles, as well as certain retained mature commercial conifers. As detailed above, conifer stocking levels shall additionally be supplemented by planting seedlings to meet or exceed the standard of 14CCR912.7 (b) as deemed desirable. Replanting shall be accomplished as soon as feasible, during the first winter(s) after operations.

\* Mature conifers.

\*\* Conifers of various ages.

\*\*\* Average for 60 year projected rotation age.

**TIMBER HARVESTING PLAN ADDENDUM'S**  
**SECTION III**

**Rehabilitation of Understocked Area**

Hardwood (broad leaf species) shall be removed in sufficient quantity relative to conifer removal, such that increased growing space for established conifers, and natural as well as artificial conifer regeneration, is created as a result of operations. Countable trees for meeting stocking standards shall consist of healthy, viable native Group A conifers, as well as planted seedlings two growing seasons in the ground. Trees to be removed shall be marked by, or under the supervision of the RPF preparing the THP. Trees shall be marked on two sides and at the base with blue paint prior to felling. The site preparation, and regeneration plan provided, shall apply to this silvicultural area.

All harvest units are identified by perimeter flagging with pink boundary ribbons, and red property boundary ribbons. Trees to be harvested are to be marked with blue paint for identification, prior to operations. No WLPZs, or special management zones associated with perennial watercourses are located within, or immediately adjacent to harvest units.



## **TIMBER HARVESTING PLAN ADDENDUM'S**

### **SECTION III**

#### **ANALYSIS OF ALTERNATIVES**

The owners and forester considered potential feasible alternatives when assessing the area for harvest. It was the owners decision to harvest timber commercially, for profit, and to achieve MSP while insuring that environmental effects are substantially mitigated prior to the submittal of the project proposal.

This plan was selected for harvest because the stand age, species composition, and timber quality are appropriate for commercial harvest and use for the production of high quality forest products, as has historically been practiced on this property, and the surrounding area. It is an advisable and normally accepted use of such lands and resources.

As per Title 14, CCR Sec. 15126 (d), the following alternatives to this proposed project were considered to compare the relative merits of the alternatives and insure that the preferred alternative achieved the objectives of the proposed project while avoiding or substantially lessening any potential significant effects.

1) No Project: The owners business goal is to produce and maintain a flow of high quality timber products from their timberlands under a system of management which will contribute to a sustainable resource for the economy while providing sound, long term protection to all natural resource values. A "no project" alternative is contradictory to the owner's business plans, and was rejected as an acceptable alternative.

2) Alternative Land Uses: This property is and has been specifically managed for timber growing and harvesting timber. The land is zoned Timber Production Zone (TPZ) - meaning that its primary use and zoned intent is for the long term growth and yield of timber products. The overwhelming primary use for this property is the growing and harvesting of trees on a sustained yield basis. Because this proposed plan does not result in any overriding concern or environmental consequence that would cause the landowner to consider an alternative, the "Alternative Land Use" option was rejected as an acceptable alternative.

3) Timing of the Project: There are numerous factors that are taken into consideration when determining the appropriate timing of a particular project. Some main issues include market plans, harvest adjacency and stocking constraints, winter operating (access) constraints in specific ownership tracts and geologic types, stand age, road constraints (access), and availability of necessary harvesting equipment. When taking into account the factors described above and considering that the proposed plan is determined not to cause a significant cumulative effect with other projects, timing of this particular project is judged appropriate and an alternative time of harvest is unwarranted.

**TIMBER HARVESTING PLAN ADDENDUM'S**  
**SECTION III**

**ANALYSIS OF ALTERNATIVES**

4) Alternative Site: The consideration of an alternative site to harvest requires the examination of many of the same factors that are identified above in "Timing of the Project". Critical factors such as species composition, market, log grades, seasonal access constraints, and harvest adjacency constraints are key components in determining where a project could and should be planned. This is a small forested ownership, and there is a spatial limitation on other site(s) available for harvest. Considering that the proposed project was determined to not cause a significant adverse effect, the "alternative site" option was rejected as an unacceptable and unnecessary alternative

5) Public Acquisition: No viable offer of public acquisition has been advanced. The proposed project demonstrates no overriding concerns or environmental consequences that would cause the landowner to consider the "Public Acquisition" option as an acceptable alternative in this case.

6) Conservation Easement: The owners wish to retain full rights to utilization and enjoyment of the natural resources currently existing on the property and those that may accrue over time, such as timber growth. It should also be noted that the property is currently zoned , compatible with timber production, in recognition of it's intended long term use. Conservation easements, and government's acquisition of productive private properties, typically deprive local governments of much needed revenue and place undue liabilities and expectations on adjacent properties. Lost revenue to rural communities universally translates into degradation of local infrastructure and public services. The adverse resource impacts of deminished public road maintenance, degradation of local schools, less open space allocation (local parks and green belts), deminished law enforcement capability, inadequate fire protection services, outdated water treatment and transport facilities, etc., are literally incalculable. In light of these factors, a conservation easement is inappropriate in this instance.

Finding: The proposed project as submitted is therefore considered the preferred alternative since it best represents and achieves the landowners objectives while insuring that no significant negative effects to the environment will occur as a result of implementing the project.

**TIMBER HARVESTING PLAN ADDENDUM'S**  
**SECTION IV**  
**CUMULATIVE IMPACTS ASSESSMENT**

**STATE OF CALIFORNIA**  
**BOARD OF FORESTRY**  
**CUMULATIVE IMPACTS ASSESSMENT**

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

☒ Yes     ☐ No

If the answer is yes, identify the project(s) and affected resource subject(s). (See past and future activities below)

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

☒ Yes     ☐ No (Mattole River is listed by EPA as a 303d impaired watershed.)

If the answer is yes, identify the activities and affected resource subject(s).

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

	<u>Yes after mitigation</u>	<u>No after mitigation</u>	<u>No reasonably potential significant effects</u>
	<u>A</u>	<u>B</u>	<u>C</u>
1. Watershed		X	
2. Soil Productivity			X
3. Biological			X
4. Recreational			X
5. Visual			X
6. Traffic			X
7. Other			X

(4) If column (A) is checked in (3) above describe why the expected impacts cannot be feasibly mitigated or avoided and what mitigation measures or alternatives were considered to reach this determination of impacts. If column (B) is checked in (3) above describe what mitigation measures have been selected which will substantially reduce or avoid reasonably potential significant cumulative impacts except for those mitigation measures or alternatives mandated by application of the rules of the Board of Forestry. (See cumulative impacts assessment background information below)



**TIMBER HARVESTING PLAN ADDENDUM'S**  
**SECTION IV**  
**CUMULATIVE IMPACTS ASSESSMENT**

Strict compliance with the Forest Practice Rules should mitigate the impacts of these harvesting operations so that they do not combine with other activities to cause significant adverse cumulative environmental effects. The operations proposed under this THP do not have a reasonable potential to join with the impacts of any other project to cause significant cumulative impacts if operations comply with the Forest Practice Rules and with mitigation measures mandated by application of the rules of the Board of Forestry.

**(5) Provide a brief description of the assessment area used for each resource subject. (See identification of resource areas below)**

**(6) List and briefly describe the individuals, organizations, and records consulted in the assessment of cumulative impacts for each resource subject. Records of the information used in the assessment shall be provided to the Director upon request. (See identification of information sources below)**

**Past and Future Activities**

All known past, present, and reasonably foreseeable future projects, as well as known naturally occurring events were considered in this evaluation. Personal observation, by the RPF during plan preparation, of the harvesting area and roads in the area were also utilized. Historically, the private ownership's in the assessment area were harvested originally in the 1920's through 90's and many were subsequently harvested periodically one or more times since. Many of the ownership's in the watershed have since been subdivided into smaller parcels with dwellings established on them over time. There are no old growth timber stands on or adjacent to the site. Fish bearing stream reaches flow downstream, or downslope from the project area(s), but none are located within or immediately adjacent. Intermittent, and perennial watercourses flow through the area. Mattole River and Grindstone Creek are class I watercourses supporting resident and anadromous salmonids.

Evidence of past disturbance such as old roads, skid trails, stumps and various aged natural conifer and hardwood regeneration, are visible throughout the area. Existing roads are generally stable and their surfaces are vegetated, with the exception of those in regular current use. These have been kept clear and maintained to varying degrees.

Past and current projects within the watershed assessment area include logging operations as detailed above, road building, farming, gravel extraction and grazing of sheep, goats, donkeys, horses and cattle. Less than 25% of the assessment area watershed has had some degree of harvest activity during the 10 year analysis period. Most of the various resource values of the area appear to have stabilized and are recovering from past disturbances, as is typical for the region. Significant long-term adverse cumulative effects due to timber harvesting are not in evidence.

Future activities may include minor subdivisions for low density rural residential development.



**TIMBER HARVESTING PLAN ADDENDUM'S**  
**SECTION IV**  
**CUMULATIVE IMPACTS ASSESSMENT**

To my knowledge, the following listing of THP's represent those projects that have been submitted and approved within, or partially within the Cumulative Impact Assessment Area over the past 10 years:

THP#	Acres	Status	Stocking	Silviculture	Yarding Methods	AA
1-88-796H	211	C	YES	CC, SH/REM	TR	WAA
1-91-294H	147	C	YES	SH/REM,CC, ST/REM,CT	TR	WAA
1-91-347H	65	C	YES	ALT,SH/REM	TR	WAA
1-95-498H	33	WITHDRAWN				
1-95-499H	45	WITHDRAWN				
1-96-401H	32	C	YES	ST/SS,ST/REM	TR	WAA
1-96-536H	122	CANCELLED				
1-98-159H	49	WITHDRAWN				
1-98-301H	55	A	PS	SEL,SH/REM	TR	WAA

**Abbreviations Used in Past Projects Descriptions:**

**Status:** A - Active, I - Inactive, C - Complete, E - Expired. Fully Stocked  
 PEND - Pending approval, F - Final S=yes, N=no, PS=partial

**Silviculture Methods:** CC - Clearcut, SH/PR - Shelterwood/Prep, SH/SS - Shelterwood/Seed,  
 SH/REM - Shelterwood Removal, ST/SS - Seed Tree/Seed, ST/REM - Seed Tree/Removal,  
 SEL -Selection, TRANS -Transition, SAN/SAL - Sanitation/Salvage, REH - Rehab, CT - Commercial  
 Thinning, ALT - Alternative Prescription, ROW - Right-of-Way.

**Yarding Method:** TR - Tractor, HELI - Helicopter, C/S - Cable Yarding ,GB - Ground Based  
 SK - Skidder, FO - Forwarder

The harvest plans discussed above are in the CDF plan files and available for review regarding specific plan location and history. Several of these plans are located only partially within the CIAA.

**Assessment Areas:** AA, WAA - Watershed Assessment area, BAA "B" - Biological Assessment Area

**TIMBER HARVESTING PLAN ADDENDUM'S**  
**SECTION IV**  
**CUMULATIVE IMPACTS ASSESSMENT**

To my knowledge, there are no known, continuing significant environmental problems that have been caused by any of these past and present projects.

Ownerships in the assessment area consist of industrial and non-industrial commercial timberland and ranchland with maturing second growth timber, and Bureau of Land Management lands. As such, owners can be expected to make other entries into this assessment area, for timber harvest, as adjacency constraints free up and regeneration becomes established. Exactly when or even if this will take place will depend on a variety of factors which includes: The individual goals and needs of the various owners, management of biological resources, future timber and log supply, government rules and regulations, mill requirements, and a host of economic factors associated with wood product markets.

In addition to timber and ranch land activity, regular and emergency maintenance of Wilder Ridge Road, is performed by the County of Humboldt. At present this includes bridge repair and resurfacing of the road at several locations. Overhead electrical transmission lines run roughly parallel to the County Road. These are routinely maintained by Pacific Gas And Electric Company. Maintenance includes clearing of brush, trees, and other vegetation along the power line right-of-way.

**Site and Area Description**

The site of this proposed THP is in southern Humboldt County approximately 2.5 air miles northwest of Etnersburg. The region can be characterized as a mix of forested and prairie ranchland areas. The 22 acres planned for harvest are in a single, but highly variable and discontinuous wooded area, bisected by the Mattole River. Together with interspersed areas of prairie type vegetation matrix, it constitutes five small and separate blocks within the 80 acres of the ownership. The harvest units lie on the northwest and southwest aspects of hillsides that are not immediately adjacent to the Mattole River. The units were designed with this in mind. The adjacent and nearby properties are small private semi-wooded parcels with timber management, farm and ranch activity taking place. No city, state or federal lands are adjacent to this site. As mentioned, there are class I fish bearing stream reaches flowing through the property. There are no in-stream domestic water intakes on and adjacent to the property. These stream reaches are typical of other higher order watercourses in the Watershed and Biological Assessment Areas (CIAA).

Elevations on-site range from 600 to 1,200 feet and slopes are generally gentle to moderate in areas proposed for operations. Heavy equipment will not traverse any (greater than 50%) steep areas, except on pre-existing skid trails, or existing roads which are adjacent to the steep portion of the slope. Tractor long lining will be required on the isolated small areas exhibiting steep slopes, as well as within the watercourse equipment exclusion zone. Elevations within the CIAA range from less than 600 feet to over 3,000 feet. Within the CIAA, steep slopes are generally located adjacent to defined watercourses. This is observed to be a function of the area geomorphology.

Soils are generally deep, and well-drained clay-loams, sandy loams and rocky loams. The primary soil series on-site where operations are proposed is Hugo. Parent material consists of coarse to fine-grained sandstone and soft shale. There are minor intrusions of igneous and relatively hard metamorphic and sedimentary rock. Ancient earth flow terrain is evident throughout the general area of the Mattole River. Debris slide slopes are also evident in the terrain nearby. The only true

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slide amphitheater encompassing a portion of the areas of proposed operations is in association with bank cutting and down cutting action of the higher order watercourses. It is otherwise largely dormant. However, the gentle gradient side slopes in the immediate area seem to generally preclude other significant surface geologic movement. Existing seasonal roads, and old skid trails are apparent on site, and throughout the CIAA. The proposed road system in this operation utilizes such generally stable, and pre-existing grades.

Timber species in the CIAA consist mainly of Douglas-fir, tanoak, and madrone. Some pepperwood, maple and alder also are found on site and in the watershed.

**Project Description**

Planned operations consist of timber harvesting and promoting of natural and artificial reforestation, as well as road maintenance and up-grades, and installation of two new rocked rolling dips to mitigate minor diversion of surface flows laterally along the existing road surfaces.

**Identification of Resource Areas**

The geographic assessment area prescribed for the watershed resources include a representative sub-area of the drainage of the Mattole River, and all of Grindstone Creek and Harrow Creek. The assessment area delineated by the Registered Professional Forester area lies within the Mattole Canyon, and Sholes Creek Cal planning watersheds, and includes the drainage area of various other small tributaries to the Mattole River, plus a somewhat atypical four mile reach of the channel of the river itself. The areas within these drainages, together with the biological assessment area are referred to as the Cumulative Impact Assessment Area (CIAA) throughout this plan (See attached CIAA Map in Section IV of the addendum). No other watersheds are potentially effected by this proposed operation. This CIAA includes a watershed assessment area of approximately 6,000 acres, and is also in consideration relative to biological resources. A variety of ownership types are included. They include truck farms and orchards, commercial timber, ranches, rural residential and recreation properties and other agricultural land use patterns. This assessment area provides a moderate sized topographic unit to analyze, and within which potential effects may be identified with a more or less specific location and cause. The larger drainages of Mattole River were more generally evaluated, and several specific sites were visited during various seasons of the year. It was judged that the CIAA was generally representative of the larger watershed, for purposes of this evaluation, and the conclusions in this addendum would be essentially the same, or more liberal, for other additionally evaluated areas of similar characteristics and attributes. The remainder of the rationale for choosing this assessment area is contained in Technical Rule Addendum No. 2, Cumulative Impacts Assessment (14 CCR 912.9).

The geographic assessment area for soil productivity is the area inside of the project area boundaries. This is the only area where equipment will be operated that could create a potential for impacts to soil productivity. The rationale for choosing this assessment area is contained in Technical Rule Addendum No. 2, Cumulative Impacts Assessment (14 CCR 912.9).

The geographic assessment area for biological resources is the same as the watershed resource assessment area discussed above and especially an overlapping area within approximately 1 mile of the plan boundary. The RPF and wildlife biologists have provided information that identifies specific range, habitat requirements and sensitivity to timber harvest for all listed species and unlisted species that may potentially be significantly impacted. This information, as well as other sources listed in the



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THP and field review, is used to identify specific species upon which the plan may likely have an effect. If any particular species is identified, a suitable assessment area boundary was chosen to analyze the potential effect on that species. It is felt that the combination of the watershed assessment area and the area within 1 mile of the plan allows for an adequate assessment of aquatic, terrestrial and avian biological resources. The remainder of the rationale for choosing this assessment area is contained in Technical Rule Addendum No. 2, Cumulative Impacts Assessment (14 CCR 912.9).

The geographic assessment area for recreational resources assessment was the area that includes the logging area and property encompassing it, plus 300 feet, and to some extent, the larger surrounding river corridor. The rationale for choosing the size of the recreational assessment area is found in the Board of Forestry Technical Rule Addendum No. 2, Cumulative Impacts Assessment (14 CCR 912.9).

The geographic assessment area for visual resources is considered to be the project area, residential adjacent properties, or any portion of the project area that might be readily visible to significant numbers of people who will be no further than three miles from this project. Essentially, this includes only a short segment of the Mattole River, which may be used by recreational people trespassing from time to time. The rationale for choosing the size of the visual assessment area is found in the Board of Forestry Technical Rule Addendum No. 2, Cumulative Impacts Assessment (14 CCR 912.9).

The geographic assessment area for traffic is the County road (Wilder Ridge Road) running through various landowners in near proximity to the proposed operation. (See Haul Route Map, THP page 22.) This assessment area was chosen because it is the intended haul route. The Board of Forestry Technical Addendum No. 2, Cumulative Impacts Assessment (14 CCR 912.9) was referred to in selecting the traffic assessment area. Traffic on Briceland Road (west of the area) and Highway 101, and traffic moving at a significant distance from the operations area was not considered because the small increase in traffic attributed to this plan would be inconsequential to the normal traffic flow on those transportation arteries. This assessment area was selected since it will be the potentially significantly affected portion of the haul route. The rationale for choosing this assessment area was the recommendations contained in Technical Rule Addendum No. 2, Cumulative Impacts Assessment (14 CCR 912.9).



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**Identification of Information Sources**

Landowner(s)	Richard and Sally French 12051 Wilder Ridge Road Garberville, CA 95542
Adjacent Owners	Robert Stansberry P.O. Box 56 Honeydew, CA 95545-0056  Larry Goff 15715 Briceland Thorn Road Whitethorn, CA 95589
USGS 7.5 Min. Quad Maps -	Honeydew, Briceland, Shelter Cove, Ettersburg
WAC Air Photos (2000 Flight) -	WAC Corporation 520 Conger Street Eugene, Oregon 97402-2795
Calif. Dept. of Forestry - & Fire Protection	118 Fortuna Blvd. Fortuna, Calif. 95540
Calif. Dept. of Fish & Game - Resource Management	619 Second Street Eureka, Calif. 95501
Humboldt County Assessor's Office -	825 Fifth Street Eureka, Calif. 95501
Humboldt County Planning Dept. -	3015 H Street Eureka, Calif. 95501
Fisheries Workshop for Resource - Professionals	Calif. Licensed Foresters Association (Proceedings) March, 1991
Road Location and Design -	Calif. Licensed Foresters Association (Proceedings) June, 1995
Anadromous Fisheries Workshop for - Resource Professionals	Calif. Licensed Foresters Association (Proceedings) March, 1995
Field Guide to Freshwater Fishes -	A. J. McClane Holt, Rinehart & Winston; 1974
DMG Note 50; Factors Affecting - Landslides in Forested Terrain	Calif. Division of Mines & Geology Web Site ( <a href="http://www.consrv.ca.gov/dmg/shezp/">http://www.consrv.ca.gov/dmg/shezp/</a> ).

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Also, see the biological sources listed under "Bibliography" in Section VI of the addendum's.

## **1. Watershed Resources**

### **303d Impaired Watershed Listing:**

The Mattole River drainage is listed by the U.S. Environmental Protection Agency, as an "impaired watershed", with regard to fisheries resources. This status is in light of previous one-time findings to the effect that excessive temperature of watercourses tributary to the River itself, and high levels of sedimentation, have caused damage to, or decline in, anadromous fisheries habitat. Causes, which may have contributed to this condition, may include land management practices in and around the watershed, but also marine conditions and flow rates in the River itself.

Nearly all major northcoast watersheds are similarly listed as 303d status, virtually regardless of ownership patterns or land management history. Information and data used to justify said listings was presumably reviewed one time, and may, or may not, have represented verifiable, peer reviewed, scientific studies, nor conclusive experimental methodology.

In the case of the Mattole River, it appears from direct observation, that salmonid spawning and rearing is ubiquitous throughout the main stem and lower reaches of main tributaries. Furthermore, regional declines in viability of fisheries, and fish populations may be somewhat cyclical in nature, based to a degree upon long and short term dynamics of climate, ocean conditions, predator/prey population dynamics, over fishing, routine de-watering of tributary streams, and other external cause and effect relationships, not considered or quantified in the listing process.

Within the sub-watersheds of the Mattole, and to a certain degree the main river, it is observable that small perennial streams are routinely de-watered, or run naturally sub-surface in association with rural residential domestic water systems, illicit land use activities, and artificial diversions. This is decidedly not the case on the subject property. A lack of maintenance and continuing use of poorly engineered roads and access systems in proximity to watercourses, up-stream agricultural runoff, and other causes not associated with timber management may also be contributing factors. This also is decidedly not the case on the subject property. Lack of maintenance of riverside development facilities is also playing a part in fisheries dynamics.

The marine estuary of the Mattole River is noted as poorly suited to anadromous fish escapement. Parasitic and predatory species dynamics are poorly documented. Apparently, significantly elevated numbers of marine mammals are observable in association with this fisheries system. Predation and competition from other fish is likely a significant factor in the river's habitat assessment.

Notwithstanding these observations, operations under this proposed THP will likely have no negative effect on water quality downstream from the THP area. Slight positive effects, in terms of short-term water yield increases during low flow periods, may occur. Surface waters currently exit the project site(s) clear and cold, at the times when surface water is present. Turbidity and increased sediment transport are negligible, even during periodic high flow storm runoff events. These condition and attributes will continue after timber operations are complete. Observations of water quality may be

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readily made at the confluence of Grindstone Creek and the river, and again immediately downstream along the river from the areas of operations.

#### **1. Watershed Resources**

##### **General Analysis:**

Sediment - Increase in suspended sediment is not expected to be significant considering the management practices described above. Watercourse setbacks, equipment exclusion zones, culvert fill repair, stabilization, and armoring along the haul route, and soil stabilization measures incorporated into this THP and THP's throughout the CIAA will provide sediment traps and filter strips to prevent significant amounts of sediment from reaching the streams within the assessment area. Current fine sediment generation may actually be reduced. Operation of the plan combined with other projects and naturally occurring events should result in no significant adverse cumulative effects relating to sediment.

Water temperature - Operations on this plan should not have a significant impact on water temperature within the assessment area considering the management practices described above and the watercourse protection prescribed under item 26 of this plan. Water temperatures should not be significantly or adversely affected by this THP, or when this THP is considered in conjunction with other projects in the area. Water temperatures are significantly below lethal levels for aquatic dependent species, and salmonids, including coho salmon and steelhead, during the times of year when surface water is present within the THP area. This is essentially a northwest aspect heavily shaded site. Channels are generally deeply incised. During the season of the year when surface water temperatures would be elevated, the class III watercourse flowing through the THP area exhibits a dry channel, and therefore is not contributing to any unrelated downstream water temperature increases.

Organic debris effects - Operations on this plan will not introduce significant amounts of organic debris into the watercourses. The protection provided to the watercourse under item 26 and in the FPR's should ensure that significant quantities of organic debris are not introduced into assessment area streams from this operation. Only a very short segment of class III watercourse channel could possibly be so affected by operations as designed. If any debris is accidentally deposited in the class III watercourse during timber operations, it will be removed by hand prior to completion, or yarded away by long lining while logging, or stabilized.

Chemical contamination effects - Operations on this plan should not have a significant impact on chemical contamination within assessment area watercourses. Large area broadcast burning is not proposed. Use of herbicides is not proposed. Petroleum products may not be stored on site long term, and shall not be disposed of on site. Necessity for these activities is not anticipated. Pile burning only, will be utilized if it is necessary to reduce hazard of wildfire, and/or improve aesthetics. The timing of prescribed burns is dependent upon the existence of atmospheric and fuel moisture conditions that will result in low intensity burns, thus minimizing the potential for nutrient release. Watercourse protection measures incorporated into this THP aid in minimizing the risk that nutrient release from controlled burning of excess organic material could impact these streams.



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**Watershed Resources (continued)**

**General Analysis:**

Peak flow effects - Summer peak flows may increase slightly due to removal of trees and associated loss of evapo-transpirational effects as part of this timber harvesting operation. Winter peak flows should be unaffected by timber harvest. Much of the harvest area will remain heavily vegetated. Any peak flow effects will decrease as the site becomes increasingly re-vegetated. Re-vegetation of this site will occur rapidly. A nearly complete vegetative ground cover of conifers, natural shrubs and ferns, natural annual and perennial grasses, and other herbaceous plants will become established in less than two years. No significant adverse cumulative effects relating to peak flows are anticipated.

Primary roads are generally located on broad ridge tops, and gently sloping terrain. Road and skid trail surfaces will be outsloped and cross drained for erosion control. Therefore, concentration of accumulated surface runoff is of less concern for this proposed operation.

Watercourse Condition - The watercourses within the proposed THP area are low order intermittent stream which drain indirectly to the river. Mattole River and Grindstone Creek is a class I fish-bearing drainage system, and provides habitat for native salmonids. The riverbed, is a wide sand, gravel and cobble substrate, low gradient channel.

Mass wasting in and near watercourse banks may be observed in the watershed assessment area. Significant down-cutting and scouring does not appear to be occurring generally within the watershed assessment area, nor the proposed THP area. Bank cutting along the watercourse margins is evident, and even dramatic, at some locations. The tributary streams are located primarily in deep "v" shaped channels of fairly steep gradient, with rock or large cobble often apparent in the substrate mix. In small low gradient channels, this material is fairly immobile. In larger streams, sediment contribution from natural disturbance, such as bank cutting and minor down-cutting is apparent. For this reason, general stream morphology is somewhat dynamic over time.

Large organic debris, in the form of old logs, root masses, and associated debris, is evident in all streams in the area. This is due to old debris being naturally deposited from the generally moderately steep inner gorges. Douglas-fir, the primary timber tree species, is somewhat persistent and tends to resist rotting. Old fires, and land use practices which occurred prior to institution of the forest practice regulations may have also played a role in deposition of significant quantities of woody material.

Streamside vegetation is generally dense, layered and diverse, comprised of conifer and hardwood trees, as well as brush and shrubs, ferns and grasses. Lush vegetation is characteristic of the area and region, and will be maintained due to buffer and exclusion zones established along all watercourses where operations are proposed.



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**Watershed Resources (continued)**

**General Analysis:**

Flood flow events, which occurred regionally during the winters of 1996 and 1997, triggered a regional increase in landslide activity, and indeed throughout California. It is documented that individual rainfall events constituted storm episodes exceeding the predicted "50 year" flood flow. In spite of such occurrence, most areas remained stable in the assessment area. Geomorphology in the watershed assessment area includes inner gorge features, earth-flow terrain, and in some cases, debris slide slopes; which are common in similar terrain regionally. These are normal and easily recognizable features, which have probably always affected slope stability and watercourse conditions in the drainage to some degree. However, this is not ordinarily judged as a negative impact. Rather, these geologic conditions contribute to normal stream dynamics over time.

**2. Soil productivity**

Generally, the soil types within the watershed, and other assessment areas, are forest and range soils. These soils are judged as fertile and suitable and capable of growing forest type vegetation communities in perpetuity, if properly managed for that purpose. One of the goals of this THP is to accomplish that objective.

The soil series found within the area of proposed operations are primarily Hugo and possibly a small area of unconsolidated colluvium. These are clay loams and sandy or gravelly loams, characterized as "site III" in fertility class. In most areas, the mantle of soil is 30 to 60 inches deep. The parent material consists of coarse to fine-grained sandstone primarily. Geologically, the region is characterized as part of the Franciscan Complex. It is subject to activity along two more or less parallel geologic shear zones off-site to the north and south. They are the Mattole and Honeydew shear zones. Erosion hazard potential is generally calculated as moderate, but may be considered high in those limited locations where existing access roads cross steep side slopes.

Organic Matter Loss - Organic matter loss can cause a decrease in site productivity due to loss of support for critical soil microbial activity and diminished capability of the soil to store moisture in a form readily available to both plants and soil microorganisms. Organic matter displacement can cause localized or micro-site impacts on soil productivity within a THP area, but this impact is effectively mitigated by limits placed on the use of ground skidding equipment by the Forest Practice Rules, as well as provisions of this THP. Organic matter loss is primarily from erosion and volatilization. Losses from erosion are discussed below. The potential loss from fire is associated with wildfire and not controlled burns, which are of much lower intensity. Timing of the ignition of a prescribed burns, or pile burning if undertaken, will be based upon the existence of temperature, wind, humidity, and fuel moisture conditions that will result in a low intensity burn. Such conditions allow retention of large woody debris and the finer organic matter concentrated at the soil/litter interface. These burns may result in nutrient release that is beneficial to prompt re-vegetation of the site, but should not result in a net loss of soil productivity due to organic matter loss.

The risk of wildfire is reduced by the CDF&FP's prompt and effective response to wildfire reports. This property will exhibit favorable and improved accessibility as a result of operations proposed. Operations entail improvement of existing roads, as well as reduction of excess natural fuel loading, and fire fighting equipment that is required to be on site during timber operations.

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**Soil Productivity (continued)**

Surface soil loss - Loss of topsoil can significantly reduce soil productivity because the highest nutrient content is contained in this top layer of the soil. Displacement of topsoil is unavoidable in tractor skid roads and truck roads. However to a great extent, this proposed plan intends to utilize roads and skid trails currently existing in the plan area. The minimal loss of topsoil can be prevented by proper installation and maintenance of erosion control structures within the yarding area. Re-vegetation of the site is also a key factor in longer term potential for surface soil loss due to erosion. As discussed under "peak flow effects" above, vegetation will reclaim these logging areas swiftly through both natural means and the efforts for artificial regeneration. This will significantly reduce the potential for long term erosion processes to occur from raindrop impacts or sheet erosion. Surface soil loss is not expected to be significant.

Soil compaction - Soil compaction can affect site productivity through loss of the ability of the soil to transmit air and water and by restricting root penetration. Significant compaction usually occurs when soil moisture conditions are high enough to facilitate soil plasticity. The restrictions on operations during the winter period as specified in the addendum under Item # 23 will prohibit tractor and heavy equipment operations on these soils during periods of high soil moisture conditions. Soil compaction will be at a level where the impacts to the site are minimized and overall effects are insignificant. Natural soil processes such as frost action, shrink-swell and the activity of soil biota are also expected to add new micro-pores to the soil and reduce the effects of compaction that may occur. Observations of past projects in the vicinity of this THP on similar soil types indicate that significant soil compaction has not occurred. Young conifers appear to regenerate and grow well on these forest soils after harvesting operations, especially in the existing skid trails and areas previously used by heavy equipment, or abandoned haul roads.

Growing space loss - Essentially no growing space loss will occur as a result of the proposed operation. Other than the primary access system, skid trails, margins of roads and landings will either remain vegetated during operations, or quickly re-vegetate after operations are complete. Upon completion of harvesting activities, logged areas are naturally and artificially reforested to assure prompt and adequate revegetation.

Road mileage, length and number of skid trails, size of landings, and surfacing of roads has been minimized in engineering of the proposed operations. This factor alone will contribute to establishment of forest type vegetation communities throughout the logged areas, to the maximum extent feasible, after operations are complete.



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**3. Biological Resources**

**A. Rare Threatened and Endangered Species:**

During the information gathering phases of preparation of this timber harvesting plan, the potential for presence, or use of the project area and surroundings by rare, threatened or endangered species was considered. Virtually all visits to the site and surroundings by the RPF and biologists include general observation for a wide variety of listed species and potentially sensitive species.

On site the RPF, as well as field biologists conducted reconnaissance and random traverses on multiple occasions. Structural elements of terrestrial habitat, such as snags and decadent trees, large woody debris, talus and rock outcrops, and any potentially unique, or out of the ordinary habitat elements were carefully examined when discovered. Aquatic systems were examined on-site and watercourse and wet area classification, protection, and mitigation was based primarily upon biological habitat potential, and observed presence (or absence) of aquatic dependent species. State databases, including the CDF NSO database, DF&G Natural Diversity Database, and WHR system were accessed. If any specific listed species potential was noted, or species observed, special emphasis in field reconnaissance was implemented. Listed species identified as potentially utilizing the various habitats, or habitat elements in the THP area, and mitigation for each, are discussed in THP Items #32 and 35, and the THP Section V addendum. No outstanding unmitigated listed species concerns will occur as a result of the operations proposed. Ample replacement habitat for these species exists regionally, and is being recruited over time through forest growth within, and surrounding the assessment area. The THP area is being retained in forest growing use, as evidenced by the continuity of silvicultural systems on the property overall.

**B. Significant Wildlife, Vegetation, or Fisheries Resource Concerns:**

Allegations and concerns expressed by various persons and entities, in regards to forestry activities and how they may relate to wildlife, fisheries, and vegetation resources in general, are discussed and addressed throughout this THP. Significant unmitigated concerns within the proposed THP area, and assessment area have not been noted. Periodic observational studies, related to populations of anadromous salmonid fish species, and northern spotted owls, are continuing regionally and within the assessment area, and THP area, concurrent with operations.

The above concerns are addressed in the THP, in the form of wildlife and sensitive species surveys, tractor and heavy equipment operations restrictions and seasonal limitations, stream protection measures, and timing and extent of disturbance considerations. Road maintenance and erosion control improvements that are part of this plan should facilitate continued recovery over time, of fisheries and aquatic habitat values in the assessment area.

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**3. Biological Resources (continued)**

**C. Aquatic and Near Water Habitat Condition:**

- a. Within the assessment areas, and excepting the Mattole River itself, pools and riffles appear to occur in approximately a 50/50 mix within the class I and II stream reaches. Pools are persistent and contain much structural diversity, comprised of large rock and cobbles, gravel, coarse and fine sand, as well as large and moderate sized organic debris. Pools are characterized in profile as having relatively deeper head and "plunge pool" area, moderately deep middle reach, and progressively shallower tail out area, where more transitory small size aggregate gravel and sand deposits tend to exist. Outlets may be deep and narrow, or shallow and fan shaped, depending more on location and juxtaposition of large rock, or persistent keyed in woody debris.

These reaches of the river are characterized by shallow to moderately deep runs, interspersed by riffle areas. Only small pools are evidenced, and are usually the result of eddying of water against rocky banks, or occasionally occurring large rock in mid-channel.

- b. Large woody material appears overly abundant in most stream reaches. A high percentage of this structure is comprised of conifer species, which are more persistent and less prone to rapid decay, than hardwood species. However, these species are also in evidence to a significant degree. Large and moderately large decadent trees have been retained throughout the assessment area near watercourses for future recruitment of woody debris. Generally, geologic conditions dictate that large rock will also be recruited from upstream and up-slope in stream substrates and banks. This will generally compliment the structural diversity provided by large in-stream wood alone.

- c. Near water vegetation is abundant, lush, and diverse along most reaches of streams within the assessment area, and the THP area. Except along the banks of the summer channel of the large low gradient streams, generally canopy coverage is estimated to be 90% made up of dense and vigorous mid-level and understory vegetation, as well as overstory trees. The drainage slope and watercourse channels within the THP area trend toward a southwest slope aspect, are rather deeply incised, and it is rare for direct solar radiation to have a significant warming effect on these typically small intermittent and perennial stream channels.

**D. Biological Habitat Condition:**

Snags/Den/Nest Trees occur with relative abundance throughout the Biological Assessment Area, and to some extent, within the THP area, where a number will be designated for retention status when timber is being marked. Snags are recruited naturally, to varying degrees, throughout the life of a developing forested vegetation matrix. Generally, currently existing snags, and decadent live trees, are being retained within the assessment areas and within this specific ownership. The only exception to this policy occurs when snags pose a safety or fire hazard, and for these reasons, they may be felled if accessible, concurrent with other operations being conducted.

Exact numbers and size characteristics of snags have not been directly quantified. A statistically valid, feasible and effective sampling technique has not been devised. Many such snags are less than the height of the surrounding forest canopy, and therefore are only visible from very near proximity. However, generally within this assessment area, large snags are roughly estimated to occur at a frequency of 1 to 3 per acre. Within the THP area, snags tend to be grouped at specific



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locations, such as isolated excessively steep slopes, and other areas, which are currently designated as excluding heavy equipment, as well as inherently limiting general operations. Therefore, nearly all pre-existing snags are being retained. Snag and decadent tree structural elements are commonly recruited throughout the life and successional stages of development of the forest vegetation matrix. There is no reason to doubt that the trend will evidence itself in this instance.

Downed large, woody debris – Large down woody debris, old stumps, and piles and minor artificial concentrations of such material left over from old operations exists throughout the THP and nearby areas. Though sampling procedures for similar occurrence of woody debris within the assessment area has not been implemented, general limited observations indicate that conditions are the same as the THP area.

Upon completion of harvesting operations there will likely be a temporary increase in the amount of large and small woody debris on the project area. Very limited prescribed burning, if required for hazard reduction, will be designed to create a low intensity burn that will not totally consume the residual large woody material.

Multistory canopy – It is expected that a multistory canopy will be present in the area of this plan within approximately 10 to 15 years. This is due to the existence of advanced regeneration of various young age conifers and conifer stands currently, the forest openings being created as a result of proposed operations, and the current age and successional development stage of the timber stand being managed. Within the assessment area, general forest characteristics are similar to the area of proposed operations. Therefore, future development and recruitment of timber stands with multi-storied canopy is reasonably anticipated.

Road density - The roads associated with this project will not be open to the public and will not have the pressure of public travel or recreation. Logging and residential roads within the CIAA are primarily paved, graveled or otherwise surfaced for limited all weather use. All these transportation systems have been in existence for many years.

Hardwood Cover - Hardwoods are common throughout the assessment area especially along the watercourses and wet areas, as well as the relatively higher and drier, or rockier micro-sites. These species will be perpetuated in this ownership by the retention of hardwoods in watercourse zones, and by natural regeneration of alder, maple, tanoak, and madrone throughout the assessment area.

Late seral forest characteristics - This project area and surroundings does not conform to characteristics usually attributed to "Late Seral". It is a mid-successional stage second and third growth forest.

Special habitat elements - Harvesting this plan will have a mixed effect on individuals of species that inhabit the project site. Individuals that can disperse and are negatively affected by this project will likely move while others that are positively affected may migrate into the project area. Riparian zones are considered to be a significant habitat type for many species of wildlife. The riparian corridors along class I and II watercourse reaches, as well as near springs, bogs, ponds, and wet areas, will be maintained in the plan and likely within the assessment area generally to provide riparian habitat and travel corridors. Although this project may adversely impact some individuals of certain species, it should not significantly impact any species as a whole.

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As noted above, this site and surrounding assessment area are characterized as a forest and range vegetation community at a mid-successional stage of development. As such, micro-habitats and localized environments are recognized to be in a long term gradual and naturally dynamic state. Therefore, in general, strict preservation of static ecosystems is simply not an option.

**E. Recreation**

This proposed plan lies entirely within private ownership and is not open for public recreation. Road access will be controlled by gates, or the roads will be blocked, and no developed recreation sites occur within the project area. Therefore, this project will not significantly affect any recreational opportunities. Adjacent and nearby properties are in similar land use categories. Recreational activities such as hunting and firewood cutting will actually be enhanced by the operations proposed.

**F. Visual Resources**

Visual effects will be minor. Effects are buffered by distance, slope and configuration of intervening terrain and by residual seed trees, young growth conifers, and hardwoods that will not be harvested. They will act as a partial vegetation canopy in the operating areas immediately after harvest. This is particularly true of areas that afford a long distance or oblique view.

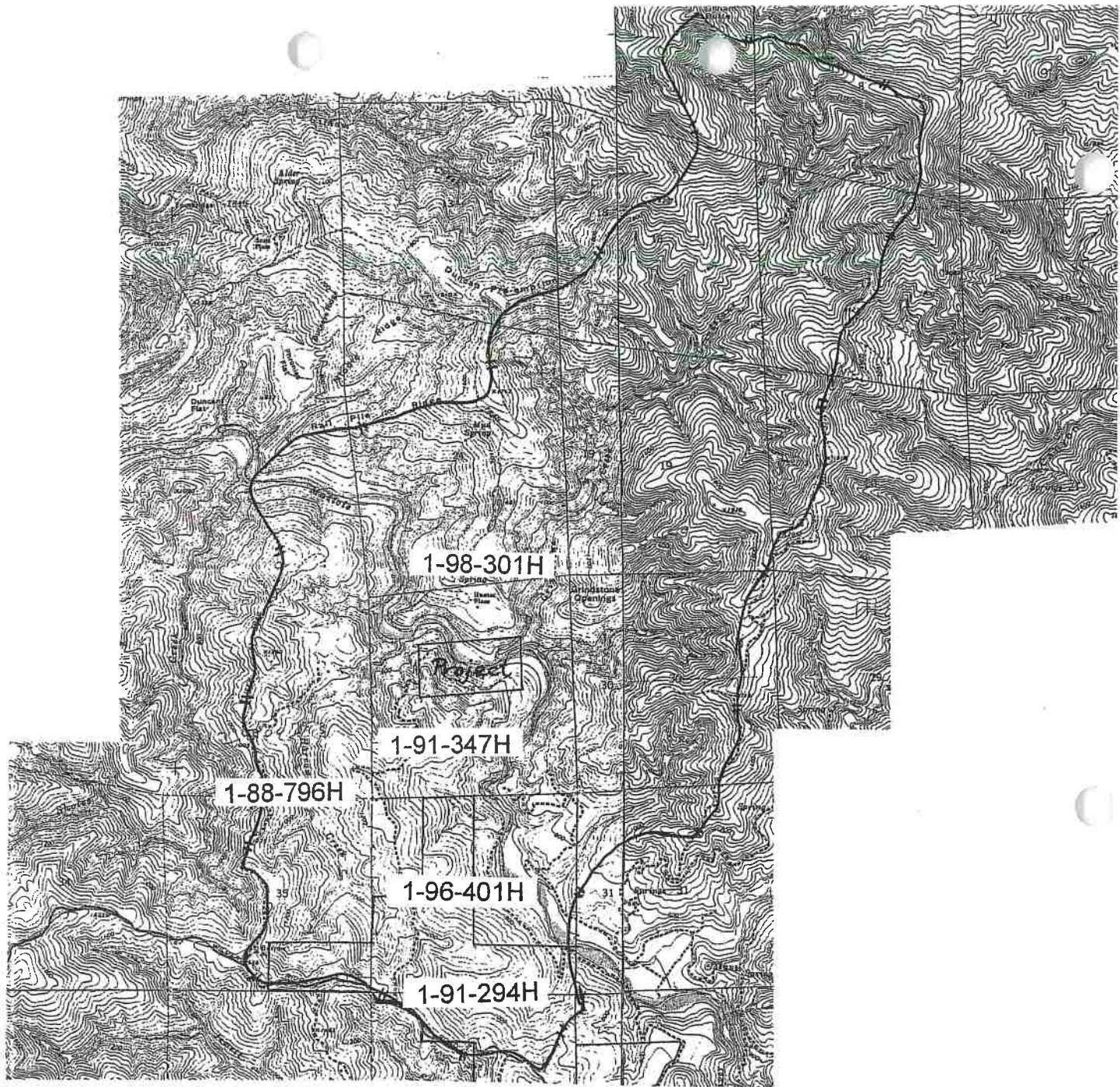
The site of proposed operations is visible, to a brief and limited extent, from the Mattole River. This effect is buffered by the immediately adjacent sideslope, and the intervening vegetation, for the most part. The vegetation will likely grow and fill in over time, thus obscuring the remaining view to passing recreational users of the river.

**G. Traffic**

Most of the haul route was not considered because the small increase in traffic attributed by this plan would be inconsequential to the normal traffic flow on the main highways. The condition of the haul route is regularly inspected and maintained by the County public works department, and State Department of Transportation. The haul route through the THP area to the nearest public road will traverse a private road controlled partially by the subject non-industrial private land and timber owners.

Conclusion: - This operation should not combine with any other factors to cause any significant long term adverse resource effects. The relatively small size of the operations area, limited amount of roads and landings and location in the watershed; all combine to effectively mitigate potential for adverse impacts. Compliance with the state forest practice regulations further insures this goal.

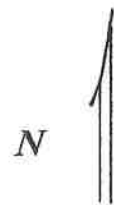




TIMBER HARVESTING PLAN  
CUMULATIVE EFFECTS ASSESSMENT MAP  
French – Mattole/Grindstone

**LEGEND**

- Property Boundary
- #—— Watershed and Biological Assessment Area(s) Boundary
- ===== Permanent Road (Existing)
- ===== Seasonal Road (Existing)



*Portion of Honeydew, Briceland, Shelter Cove & Ettersburg USGS  
Quads. T3&4S, R1&2E HBM*

*Scale: 1 Inch = 4,000 Feet*

*Date: March 6, 2002*



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**Item #35:**

This property was assessed for wildlife, fisheries values and sensitive plants by the RPF, during plan preparation, investigation, and reconnaissance. Reconnaissance consisted of many field site visits. The specific site investigations completed thus far occurred during the spring, summer, and fall/winter of 2001/02. Previous investigations by various foresters and biologists were conducted in association with preparation and monitoring, planning and operations on other timber harvests in the watershed and vicinity. These were completed, or are continuing in the area. The northern spotted owl investigations have been taking place seasonally since the early 1990s, virtually throughout the watershed and nearby the area of the proposed THP.

The RPF's on-site investigations and reconnaissance of these sites occurred during and fall and winter of 2001 and 2002, for purposes of habitat assessment work. Functional habitat elements and features such as snags, large decadent trees, tiered and layered canopy, ground burrows, common visible nest structures, rock outcrops, talus areas and the watercourses, riparian and wet areas, if present were carefully investigated.

Literature and publications reviewed for information regarding listed and common wildlife and other species, and their habitat needs include:

Special Animals (July, 2001)

State and Federally Listed Endangered and Threatened Animals of California (October, 2001)

State and Federally Listed Endangered, Threatened and Rare Plants of California (January, 2002)

NDDB (Honeydew, Briceland, Shelter Cove, Ettersburg Quads. 1/09/02, )

WHR (Type 5M and 4D (Douglas-fir), 9-30-93) (generally applicable)

Special Vascular Plants, Bryophytes and Lichens List (January 2002)

Plants of the Pacific Northwest Coast Pojar and Mackinnon(1994)

The Jepson Manual (Hickman, 1993)

In addition, I referred to Audubon field for descriptions and habitat needs of various species, as well as illustrations used for species verification. The databases and models of the Natural Diversity Database (NDDB) and Wildlife Habitat Relationships (WHR) were reviewed for the area and general vegetation cover types evident in the assessment areas. I have consulted with qualified wildlife biologists if any evidence of listed or sensitive species was noted. In this



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particular case, no overriding or unmitigated sensitive species concerns were noted during site visits, or investigations to date. See information included for specific species, background information, habitat requirements, and general mitigation incorporated as part of operations.

Various watercourses and springs were noted and investigated on or near this site. There are no old growth timber stands adjacent to, or near the THP area.

Northern spotted owls have been noted in the CDF Data base to have been detected and monitored to determine breeding status within 1.3 miles of the THP area. The nearest activity center documented is one mile away. Significant parts of the area surrounding the proposed logging units lacks habitat connectivity. It is characterized as interspersed oak woodland and open prairie.

Spotted owls are Federally listed as "threatened". Northern spotted owls are notably common regionally, much more so than first supposed when the species was accepted for listing. Functional habitat is proven to be much less limiting than that described in government sponsored literature. Suitable replacement habitat for the owl exists locally and regionally in abundance. In addition, some of the THP areas which are currently judged as functional foraging habitat, will be partially maintained in functional owl habitat after operations are complete.

According to NDDDB data, red tree voles are known to occur in the general region, but not in or near the THP area. This species is not listed under the State or Federal endangered species acts. The THP includes provisions for marking of trees to be removed, by the forester, or under the supervision of the forester. As part of this process, trees are visually examined. If any other nest structures and/or roosting opportunity are observed as being utilized by listed or sensitive species, or any raptors, the tree will be retained, and other appropriate mitigation and protective measures will be implemented during operations.

The general area of this THP consists of a mix of young second growth conifer and hardwood forest cover types. Other vegetation cover types include open prairie and chaparral. These are accessed by private ranch roads, seasonal, and permanent logging roads, and county maintained permanent vehicular travel routes. The area generally conforms to WHR types 5M and 4D Douglas-fir. Surface water is present near the THP area in the form of class III watercourses. These are mapped in the plan and protected by flagged and designated EEZs. Fish bearing streams, or class II watercourses are not features of the proposed logging areas. The entire area within the harvest units is in forest cover types. The property is currently planned to remain in that use designation. Understory vegetation, and low undergrowth is abundant, such that areas of contiguous open understory are dispersed and scattered on the subject property and surroundings. The site will remain in forest growing use post operations, and small openings will be created as a result of operations. Therefore, conditions should remain favorable for most forest habitat dependant species, should they occur.

A number of rare, threatened and endangered species were considered during reconnaissance and evaluations for THP preparation. Sensitive species considered in the evaluation of this THP area and surroundings include: Bald eagle, Golden eagle, Northern goshawk, Osprey, Northern spotted owl, Great blue Heron, Great egret; as well as other species including Pacific fisher, Red tree vole, southern torrent salamander, Del Norte salamander, northern red-legged frog and tailed frog. No evidence of habitat use by these species, and no sightings have been made in the THP area. No

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sensitive furbearers were noted during site investigations, however, raccoons and river otters probably occur nearby. Racoon tracks were observed along the river margins during reconnaissance. No listed or sensitive plants were noted during on-site investigations to date. No fish species utilize the watercourses within, or immediately adjacent to, the plan areas.

Southern torrent salamander, Olympic salamander, Del Norte salamander, tailed frog, yellow legged frog and red legged frog (or sub-species) were searched for in suitable habitat micro-sites evaluated during general THP reconnaissance and area transects and site visits. Aquatic dependent species habitat is protected by spatial buffers from the THP areas, for all seasonally and permanently wet areas and watercourses. Suitable foraging habitat for eagles and ospreys may exist nearby to the THP area, and suitable similar habitat exist extensively within the biological assessment area. As part of THP area investigations, any large platform type nest structure was observed for signs of current activity or occupancy. None of the above noted types of nest structures were detected.

Additional raptor species that were evaluated for, but not observed, are Coopers hawk, and sharp shinned hawk. Habitat for these species may exist in the THP area and in surrounding areas locally and regionally. However these species were not observed during investigations of this site. The site of the THP will generally remain functional habitat for these species after operations are complete.

Deer browsing and other animal related damage to conifer seedlings or other timber resources was noted on and near this project site. Accordingly, any conifer seedlings will be planted such that their locations are away from migration corridors and trails; and hidden by obstacles such as light slash and leftover organic debris.

One of the mammals, which were evaluated for, with no indication of presence, was Pacific fisher. Pacific fisher essential habitat elements are believed to include snags and large downed woody debris. Both elements occur, to a degree, in the THP areas and surrounding areas. However, the proximity to extensive young growth forest, prairie and open areas, as well as livestock grazing and associated human activity likely preclude presence of fishers. Retention standards are detailed in the Plan, and no significant removal of such habitat elements is proposed. Therefore no long term adverse impacts to fisher habitat will occur.

Coho salmon (*Onchorychus kisutch*) may occur seasonally in the Mattole River and many of it's main tributaries such as Grindstone Creek. Coho salmon are Federally listed as threatened. Mattole River is noted as a more or less low gradient, aggraded, and braided channel, exhibiting elevated water temperatures during the low flow summer season. Fine sediment accumulation in low gradient reaches of the river, and coarse sediment deposits at the mouths of tributary streams may be observed in the watershed. Grindstone Creek is judged as limited spawning and rearing habitat, or "restorable" habitat, with abundant food supply and moderately deep cold water during the winter and spring months. River waters are believed to be prohibitively warm and minimally flowing during summer.

Recreational fishing occurs in the Mattole River, but not in watercourses in or near this THP area or in Grindstone Creek near the site(s) of proposed operations. Predator species, including ospreys and bald eagles, which are themselves listed species, have been observed preying on fish and fish carcass material in the Mattole River System and it's main tributaries. Coastal cutthroat trout, a voracious pest relative to coho spawning, may inhabit the river, or some of it's tributaries.



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Other salmonid species inhabiting the Mattole River and its tributaries include; steelhead trout, Chinook salmon, and as mentioned, coastal cutthroat trout. Summer is the in-stream rearing season for coho salmon fingerlings and smolts.

Predation and competition from other fish is likely a significant factor in coho habitat assessment in this localized situation. In other coastal streams, the species are known to co-exist. In any case, since habitat requirements for several species are similar, the THP does not address mitigation for competition.

Operations under this THP are mitigated in terms of watercourse protection and erosion control, by specific provisions, and the State forest practice regulations. Surface flowing water temperatures within the watershed downstream and down-slope are well within the needs of native salmonid species during the winter and spring months. Watercourses in proximity to the THP area(s) are surface dry, during the summer and fall, when surface water temperatures are normally elevated, and almost all winter as well. Therefore, elevated water temperatures should not result from operations as proposed. Increased turbidity is not likely to occur, as a result of operations. Most of the harvest area is heavily wooded, and will remain vegetated, especially in proximity to watercourses. General erosion control provisions are being implemented as part of this plan. In-stream woody debris is judged as ample for downstream fishery needs, and is not being removed. Surface waters delivered from the proposed THP area, to higher order watercourses may be expected to deliver only nominal amounts of woody debris downstream during periodic flood events. Therefore, no adverse effects on downstream salmonid species habitat should result from operations as proposed.

**Listed Plant Species**

The area and surroundings of this proposed THP are essentially a transitional and mid-successional forest vegetation community. As documented elsewhere in the plan, the relatively young growth conifer and hardwood overstory, and associated understory plant species are resultant from earlier logging or agricultural activities. Such activities will likely continue to occur locally and regionally. Per sections 657 – 660 of the California Civil Code, plants are the real property of the landowner. The area will remain in, or eventually succeed to the currently existing forest vegetation types in the future. Therefore, it can be reasonably assumed that those species utilizing habitats and general conditions occurring at various forest successional stages from plantation to maturity, will be in evidence during those stages and relative time periods. A report of a qualified botanist, together with a list of plant species encountered on site, may be developed as a result of his/her survey. This report can then be attached to the approved THP as necessary, prior to operations.

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Listed plant species which could possibly be found at or near this site may include the following:

Endangered (Ca. Fed.)	McDonald's rock-cress	<i>Arabis mcdonaldiana</i>
Rare (Ca.)	Bensoniella	<i>Bensoniella oregona</i>
Rare (Ca.)	leafy reed grass	<i>Calamagrostia foliosa</i>
Endangered (Ca.)	Humboldt milk vetch	<i>Astragalus agnicidus</i>

None are known to occur, and none were noted in the plan area or immediate surroundings during our investigations of the site. The area of the THP is currently entirely wooded. The site can be characterized as an early to mid-successional vegetation community, as is common locally and regionally. The provisions of Section 1913 of the Fish and Game Code (Native Plant Protection) shall apply to this THP.

EEZs, steep slopes, and other operational limitation and exclusion areas will provide some residual habitat retention in addition to the partial cutting silvicultural methods prescribed by the THP. The majority of the harvest area will retain those attributes of a forest rendering the site suitable for recovery of any forest dependent species and re-occupation of the site by those species.

If any nest, den, observed occurrence, or activity center of a listed or sensitive species is discovered in the area of proposed operations before, or subsequent to initiation of harvest activity, operations will cease in the immediate area, and CDF, and/or CDF&G will be notified. Operations will not resume until appropriate mitigation and/or protection measures are implemented. The LTO will observe all provisions of 14 CCR 919 of the Coast District Forest Practice Rules, in the conduct of this operation. NSO Consultation #2318 decision checklist shall be attached and made part of the THP prior to operations. All operational provisions of that consultation shall be incorporated into THP Section II, prior to operations under the THP. Operations as proposed, should have no significant adverse effects on populations of forest dependent species.

The following is a brief discussion of the habitat requirements and attributes of some of the various species that might possibly occur under conditions similar to those occurring in the area of proposed operations.

**BALD EAGLE** (*Haliaeetus leucocephalus*) (Breeding and Wintering) - Johnsgard (1990) listed the essential components of bald eagle breeding habitat as an adequate supply of moderate-sized to large fish, nearby nesting sites, and reasonable freedom from disturbance during the nesting period. In California, the birds breed in mountainous habitats near reservoirs, lakes, and rivers (CDFG 1990). Winter habitats of bald eagles are less closely associated with water than summer habitats (Evans 1982). Wintering bald eagle require suitable food supplies and roosting sites (Johnsgard 1990). The eagles generally prefer to roost in trees that are taller (Stalmaster and Newman 1979, Keister and Anthony 1983) or that are more open in structure (Keister and Anthony 1983) than trees in the surrounding stand. They also appear to prefer small groups of trees over trees in large stands (Stalmaster and Newman 1979). Specific characteristics of forest stands and roost trees vary considerably among regions. In California, bald eagles winter at lakes, reservoirs, river systems, range and open prairie lands, and coastal wetlands (CDFG 1990). In the Klamath Basin, Douglas-fir was preferred as a roost tree species (Keister and Anthony 1983).



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Since Douglas-fir trees and open prairies are attributes of the area, bald eagles were searched for visually as part of each site visit. None are known to inhabit the areas within a mile of the THP area. Therefore no impacts to this species are anticipated.

GOLDEN EAGLE (*Aquila chrysaetos*) (Breeding and Wintering) - Johnsgard (1990) listed essential components of golden eagle habitat as a favorable nest site (large tree or cliff), a dependable food supply (medium to large mammals and birds), and broad expanses of open country for foraging.

In California, the birds are found in rolling country with lightly wooded areas, savannahs, grasslands, desert edges, farms, or ranches (Small 1974). Johnsgard (1990) noted that western wintering habitat had available perches plus native shrub-steppe vegetation with good populations of jackrabbits. This raptor has a large range, and in Humboldt and Del Norte counties often occurs in association with ridge-top prairies.

Ridgetops and prairies are attributes of the area. Therefore, golden eagles were searched for visually as part of each site visit. None were observed and none are known to inhabit the areas within a mile of the THP area. Therefore, no impacts to this species are anticipated.

GREAT BLUE HERON (*Ardea herodias*) - Great blue herons inhabit a variety of freshwater habitats including streams, rivers, lakes, ponds and swamps; but seem equally tolerant to salt water (Soothill and Soothill 1982). They may breed in bushes, and on rocks, ledges, or the ground (Soothill and Soothill 1982), but prefer to nest in secluded groves of tall trees near shallow water feeding areas (Zeiner et al. 1990b). Throughout its range the species is found at altitudes up to 4900 feet (Soothill and Soothill 1982).

In California, the herons are found in coastal bays, lagoons, inter-tidal areas, mud flats, and rocks along inland rivers, creeks, ponds, and lakes (Yocum and Harris 1975) and also in croplands, pastures, and mountains above foothills (Zeiner et al. 1990b).

Although herons generally require trees adjacent to water for nesting, these birds are generally not affected by forest management unless it is near a breeding area. No known rookeries or nesting habitat are located in the THP area. This species is not been noted to occur in the THP area. Harvest areas are removed from the river margins. Therefore, no impacts to this species are anticipated.

GREAT EGRET (*Casmerodius albus*) - Great egrets are found in open but shallow freshwater ponds, lake margins, rivers, and brackish swamps, and tidal estuaries and nest in platforms in trees or reed beds (Soothill and Soothill 1982). Groves of trees suitable for nesting and roosting are relatively isolated from human activities and are near aquatic foraging areas (Zeiner et al. 1990b). In California, great egrets inhabit coastal bays and lowlands, pastures, mouths of rivers, freshwater lagoons and rarely among rivers inland (Yocum and Harris 1975). Great egrets have successfully bred in a cypress grove on Indian Island in Humboldt Bay. In this area the egrets also feed in highway medians and drainage ditches (Schlorff 1978).

Although great egrets require trees adjacent to water nesting, these birds are generally not affected by forest management unless it is near a breeding area. No known breeding areas or habitats are

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near this THP area. So extensive specific surveys for nesting egrets were not conducted. Harvesting operations on this plan should not have a negative impact on this species. Considering the protection provided to watercourses within this THP by the FPR and those described in this THP, operations on this plan should not have a significant effect on this species.

No known rookeries or nesting habitat are located in the THP area. None are known within the biological assessment area. This species has not been noted to occur in the area. Therefore no impacts to this species are anticipated.

NORTHERN GOSHAWK (*Accipiter gentilis*) - Kenward (1982) found high goshawk densities in an area of only 12% woodland in Europe. In North America, goshawk nest sites are in large forest stands and are characterized by a sparse understory for foraging, greater than 50% canopy cover for nest protection (Johnsgard 1990), and areas with gentle or moderate slope (Hall 1984). In northwestern California and throughout the range of goshawks, nests are more frequently found in conifer stands (Hall 1984, Johnsgard 1990) of mature uncut or second growth forests (Bloom et al. 1985), but nest stands among regions may vary according to structure, physiognomy, and vegetation (Hall 1984). Because of this variation, Hall (1984) concluded that goshawks tolerate flexible nesting conditions. Nest sites in northwestern California were found to differ from those in other regions by having steeper slopes and a relatively intermediate canopy closure. Nest stands in this area were characterized as dense single stage stands of young Douglas-fir with scattered hardwood components and having large, mature trees with a park-like understory. Brushy areas and open hardwood and conifer stands were identified as potential foraging areas (Hall 1982).

Bloom et al. (1985) found most goshawk territories studied in California to contain some openings, meadows, or clearings of sagebrush. During winter months, Goshawks exhibit less habitat specificity and will range into relatively open habitats (Johnsgard 1990).

Goshawks have been found to frequent regions that support good populations of their primary prey species - diurnal squirrels and forest grouse. Both groups of prey are known to occur in the area of the proposed THP. Therefore, northern goshawks were searched for visually as part of each site visit. None were observed and none are known to inhabit the areas within a mile of the THP area. None were observed or detected during spotted owl surveys or habitat investigations to date. Goshawks often react dramatically to incursions on their territories by other raptors. Therefore, no impacts to this species are anticipated.

AMERICAN PEREGRINE FALCON (*Falco peregrinus anatum*) - Peregrine falcons are associated with tall cliffs that serve as nesting and perching sites and provide unobstructed views of the surroundings. Nest sites require areas that provide protection from mammalian predators and weather and are often close to water and adequate prey populations. Peregrines breed in a wide variety of habitats ranging from temperate conifers to cities, where they nest on man-made structures such as building ledges (Johnsgard 1990). Wintering habitat requirements are less specific (Evans 1982), requiring perching sites and an adequate prey base (Johnsgard 1990). In California, peregrine falcons nest on cliff faces, city buildings, and bridges. Nesting and wintering habitats include wetlands, woodlands, cities, agricultural areas and coastal habitats (CDFG 1990).

Nesting type habitat was not noted during site investigations, but extensive foraging areas exist in the area. Therefore, falcons were searched for visually as part of each site visit. None were observed



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and none are known to inhabit the areas within a mile of the THP area. None were observed or detected during spotted owl surveys or habitat investigations thus far. Peregrine falcons often react dramatically to incursions on their territories by other raptors and disturbing influences, and are therefore usually detected. Therefore, no impacts to this species are anticipated.

OSPREY (*Pandion haliaetus*) (Breeding) - Basic habitat needs of ospreys include an adequate source of fish that can be captured near the surface of water clear enough for them to be seen, and an elevated nest site within a few kilometers of the food source (Johnsgard 1990).

Ospreys in California are associated with large fish-bearing waters, primarily in ponderosa pine through mixed conifer habitats (CDFG 1990). In northern California, ospreys were found to nest on both natural (mostly redwood snags) (French 1972) and artificial (Levensen 1976) structures. Many nests were found adjacent to roads or highways and one site was characterized as a second to third growth redwood stand with an understory of evergreen huckleberry, salal, sword fern, rhododendron, and red alder (French 1972). Merlo (1975) described typical nest sites in the California redwood region as located near a bay or tidewater area in a protected exposure and in a relatively tall tree or snag. Suitable habitat does exist some distance away from, but not near the THP site. No ospreys were observed during site investigations, and no impacts to this species are anticipated as a result of operations.

COOPER'S HAWK (*Accipiter cooperii*) - Cooper's hawks nest in patchily distributed open stands of deciduous or mixed forests rather than in the interior of contiguous stands (Johnsgard 1990). In Oregon, the birds nested mostly in dense, 30-70 year-old conifer stands (Reynolds et al. 1982) from sea level to timberline (Reynolds 1983). Cooper's hawks have often been observed nesting near man-made clearings (Johnsgard 1990) and water (Reynolds et al. 1982). Winter habitat is similar to nesting habitat (Johnsgard 1990). In California, Cooper's hawks most frequently use dense stands of live oak (Asay 1987), riparian deciduous, or other forest habitats near water (Zeiner et al. 1990b). Asay (1987) studied Cooper's hawk nesting habitat near Sacramento and in southern California and found the structure of nest stands to be one or more trees forming a single, continuous canopy. Stand understories were comprised of tree trunks and large branches with few small branches and leaves. Most nests were in bottomlands. Asay concluded that although Cooper's hawks may nest in many different tree species and habitats in California, the primary nesting habitat in the state is live oak woodlands.

Accipiters were searched for visually as part of each site visit. None were observed and none are known to inhabit the areas within a mile of the THP area. None were observed or detected during spotted owl surveys or habitat investigations. Therefore no impacts to this species are anticipated.

SHARP-SHINNED HAWK (*Accipiter striatus*) - Sharp-shinned hawks occupy generalized breeding and wintering habitat characterized by woodlands of young or open forests with a variety of plant life forms (Johnsgard 1990). Breeding habitats vary according to region ranging from coniferous (Evans 1982) to mixed deciduous forests (Johnsgard 1990). In Oregon, sharp-shinned hawks were found to nest in dense, 25-50 year old even age (single canopy layer) conifer stands (Reynolds et al. 1982) from sea level to timberline (Reynolds 1983). In western states, these hawks often migrate down slope after the breeding season to winter in oak woodlands (Johnsgard 1990). In California, the birds winter in all types of habitat except deserts, grasslands, and aquatic or marshy areas (Small 1974).

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Wintering populations in northwestern California are found in wooded to open country (Yocum and Harris 1975), except in areas with deep snow (Zeiner et al. 1990b). These raptors inhabit open woodlands, forest edges and riparian corridors.

Accipiters were searched for visually as part of each site visit. None were observed and none are known to inhabit the areas within a mile of the THP area. None were observed or detected during spotted owl surveys or habitat investigations. Therefore no impacts to this species are anticipated.

RUFFED GROUSE (*Bonasa umbellus*) - Ruffed grouse require a variety of habitats. Males need areas with little ground cover with thick shrubs above and an elevated platform such as a log or rock on which to drum (Johnsgard 1989). Vertical cover at ground, understory, and overstory levels are used for concealment and nesting and open grasslands provide insects for young grouse (Brenner 1989). Most ruffed grouse habitat requirements are met by a mosaic of habitat including grasslands, dense shrubby and brushy areas (Brenner 1989), and mixed age woodlands (Barber et al. 1989). Ideally these habitat components are found within the smallest area possible (Gullion 1989).

Aspen trees, a preferred food item, are regarded as the most important component of ruffed grouse habitat range-wide covering 92% of the bird's native range and supporting probably more than 95% of the ruffed grouse population (Gullion 1989). The importance of conifer cover to wintering grouse is debated. Dense conifer groves may be important for providing cover in areas with little snowfall (Barber et al. 1989), but such cover may constitute better protection for ruffed grouse predators than for the grouse themselves (Gullion 1989). The birds can survive reasonably well without dense conifer stands if hardwood trees, especially aspen, are well distributed throughout young conifer stands (Gullion 1989).

In the west, ruffed grouse prefer deciduous stands, with Douglas-fir and grand fir utilized by the species in Idaho. The birds are found up to 8,000 feet in elevation in early successional conditions rather than in mature forests (Barber et al. 1989).

Little information exists about habitat of ruffed grouse in California (Zeiner et al. 1990b). In northern California, ruffed grouse are found in riparian lowlands and headwaters of streams to elevations of 4000 ft (Yocum and Harris 1975). Northern California is at the southern limit of their range and it is apparent that the habitat is marginal, at best, in this area. Timber harvest generally creates the structural habitat that should favor ruffed grouse, but apparently some other key element of their life history requirements is lacking in this area because populations remain low. Because of this, surveys for ruffed grouse were not conducted and this proposed operation should have no negative impact to this species.

Ruffed grouse were searched for visually as part of each site visit. None were observed, drumming behavior off-site was found to be blue grouse, and no ruffed grouse are known to inhabit the areas within a mile of the THP area. This would be the very southern limit of the species' range. None were observed or detected during spotted owl surveys or habitat investigations. Therefore no impacts to this species are anticipated.



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**PURPLE MARTIN (*Progne subis*)** - Purple martins nest in abandoned woodpecker cavities (Allen and Nice 1952) of isolated tall trees or snags (Zeiner et al. 1990b), on cliffs (Bent 1942), or in man-made structures such as martin houses which are commonly used in the east (Allen and Nice 1952). In

California, purple martins inhabit a variety of open-wooded, low elevation habitats including valley foothill and mountain hardwood and hardwood-conifer areas, riparian habitats, and coniferous forests comprised of Douglas-fir, redwoods, ponderosa pine, or Monterey pine (Zeiner et al. 1990b). In California (Small 1974) and throughout the west (Allen and Nice 1952), martins do not frequently inhabit martin houses.

Because mitigation included in this plan to retain snags and wildlife trees, this plan will provide current and future nesting habitat for this species. Purple martins were not observed during general site transects and investigations. No specific surveys for purple martins were conducted because this plan should have no negative impact on this species.

**YELLOW WARBLER (*Dendroica petechia*)** - This species is considered a riparian bird and if present within the assessment area would most likely be located along the larger areas of riparian habitat. General surveys have not been conducted and this species have not been detected incidentally during transects along the river margins. Considering the protection provided to watercourses within and near this THP by the FPRs and those described in this THP, operations on this plan should not have a significant effect on this species.

**YELLOW-BREASTED CHAT (*Icteria virens*)** - Yellow-breasted chats breed and winter in dense second growth and scrub habitats. They are typically associated with early successional stages of forest regeneration such as those found in abandoned agricultural lands, fields, and stream valleys (Thompson and Nolan 1973). In California, yellow-breasted chats are found in dense thickets of willow or other brushy tangles (Zeiner et al. 1990b) of riparian woodlands (Small 1974). Gaines (1974) characterized the bird in the Sacramento Valley as an edge-nester, nesting between the forest-field and gravel-bar interface.

This species is considered an early seral stage and riparian bird. If present within the assessment area, it would most likely be located along the larger areas of riparian habitat. General surveys have not been conducted and this species have not been detected incidentally. Considering the protection provided to watercourses within and near this THP by the FPR and those described in this THP, operations on this plan should not have a significant effect on this species.

**BLACK-CAPPED CHICKADEE (*Parus atricapillus*)** - Black-capped chickadees range in North America from tree line south to central United States (Brent 1946). In California, they are residents in the northwest corner of the state (Broen et al. 1986) in Del Norte, Humboldt, and Siskiyou counties (Small 1974). The species breeds regularly near Requa and are found wintering in Crescent City, Arcata, Blue Lake, Eureka, and the mouth of the Mad River (Yocum and Harris 1975).

In California, black-capped chickadees are found in riparian areas (Small 1974, Yocum and Harris 1975) associated with deciduous trees (Brown et al. 1986) such as willows (Small 1974), alder, or birch (Zeiner et al. 1990b). This species occasionally is found in conifer stands near riparian areas (Zeiner et al. 1990b).

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General surveys have not been conducted and this species has not been detected incidentally in the biological assessment area. Considering the protection provided to watercourses within this THP by the FPR and those described in this THP, operations on this plan should not have a significant effect on this species.

VAUX'S SWIFT (*Chaetura vauxi*) - Vaux's swift roosts and nest in redwood, Douglas-fir, and other coniferous forests. Their nests are typically built on the vertical inner walls of large hollow trees or snags, especially tall redwood stubs charred by fire. They also occasionally nest in chimneys and buildings (Zeiner et al. 1990).

General surveys have not been conducted, and this species has not been detected incidentally. Considering that large hollow snags and other nesting habitat elements are absent within this THP, and snag retention provisions described in this THP, operations on this plan should not have a significant effect on this species.

BANK SWALLOW (*Riparia riparia*) The bank swallow is a California threatened species. The bank swallow is usually a colonial nester, digging nest holes in sandy banks or cliffs. The nesting areas are generally near rivers, streams, ponds, lakes, or the ocean. The breeding season is from early May through July. Clutches average 4-5, and two broods in one season have been reported (Zeiner et al. 1990b.)

On the north coast they are considered a rare migrant and locally rare breeder (Harris 1996). No nesting colonies are known on or near the THP area. No nesting habitat is known in or near the THP area. This project will not cause adverse impacts to this species

WILLOW FLYCATCHER

No individuals of this species were observed or detected vocally during general reconnaissance or site transects. No individuals of the genus *Empidonax* were detected or observed. Specific habitats, with the exception of river margins removed from operating areas, (willow and alder thickets) are lacking in the THP and surrounding area(s). Due to the establishment of buffer zones, exclusions, and protection measures in regards to watercourses, wet areas and riparian areas, no significant impacts to this species are anticipated.

TAILED FROG (*Ascaphus truei*) - Tailed frog habitat has been characterized as perennial mountain streams or steep-walled valleys with dense vegetation (Bury 1968). Bury (1968) suggested that the most important factor limiting the distribution of tailed frogs was their requirement for perennial, swift streams of low temperature, for which they are highly specialized (Nussbaum et al. 1983). The frogs may inhabit spray drenched cliff walls near waterfalls (Zeiner et al. 1990a), but avoid marshes, lakes, and slow sandy streams (Daugherty and Sheldon 1982).

To support larval tailed frogs, streams must have suitable stones for attachment sites (Noble and Putnam 1931) and diatoms for food (Bury and Corn 1988a). Streams supporting tailed frogs have been found primarily in mature (Bury and Corn 1988a, Welsh 1990) and old growth (Bury 1983, Welsh 1990) coniferous forests.



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The frogs seem to be absent from clearcut areas (Bury and Corn 1988a) or managed young forests (Welsh 1990), although they have been observed in young, naturally regenerated forests suggesting that structure rather than age per se of old growth is important to the animals (Welsh 1990).

In California, tailed frogs have been found in Sitka Spruce, redwood, Douglas-fir and ponderosa pine forests. Bury (1968) described one tailed frog site as shaded by a dense canopy of second growth redwoods. However, Bury (1983) found tailed frogs in old growth plots but not in 6-14 year old clearcut plots near Redwood National Park.

This species was not detected during extensive watercourse investigations and site transects. Considering the protection provided to watercourses within this THP by the FPRs and those described in this THP, operations on this plan should not have a significant effect on this species.

RED-LEGGED FROG (*Rana aurora aurora*) - Red-legged frogs are found in moist forests and riparian habitats (Nussbaum et al. 1983) where they occupy slow moving creeks and ponds (Bury and Corn 1988b). Key habitat components are dense vegetation close to water level (Hayes and Jennings 1988) that provide surfaces for egg attachment (Nussbaum et al. 1983) and shading of the water (Hayes and Jennings 1988). Little or no water flow is required for reproduction (Nussbaum et al. 1983). Strong evidence suggests that in some areas, red-legged frogs are found in intermittent streams as the result of habitat restriction by aquatic predators such as introduced bullfrogs (Hayes and Jennings 1988).

In California, red-legged frogs live near quiet, permanent pools of streams, marshes, and ponds (Zeiner et al. 1990a). Schlorff (1978) found the frogs to be one of the main amphibians occupying drainage ditches in coastal lowlands near Humboldt Bay.

This species was not detected during extensive watercourse investigations and site transects. The site of operations is probably too dry during summer, and too far inland to support this species. Considering the protection provided to watercourses within this THP by the FPRs and those described in this THP, operations on this plan should not have a significant effect on this species.

DEL NORTE SALAMANDER (*Plethodon elongatus*) - Herrington (1988) considered Del Norte salamanders to be restricted to forest talus habitats, but the salamanders have also been found on the forest floor under litter and in rotten logs (Nussbaum et al. 1983). They are not commonly observed in seepages or very moist areas (Brodie and Storm 1971). The species is thought to be closely associated with mature (Bury and Corn 1988a, Raphael 1988) and old growth (Bury and Corn 1988a, Raphael 1988, Welsh 1990) habitats, although some have been found on harvested sites. The latter were early successional stages of Douglas-fir in eastern Humboldt and western Trinity counties in California and were mostly north facing slopes adjacent to older forests (Welsh 1990). The association of Del Norte salamanders and old growth is probably due more to structure providing suitable temperature and moisture regimes than to age per se (Welsh 1990).

In California, Del Norte salamanders inhabit open to dense, sapling to mature stages of valley-foothill, riparian, montane hardwood-conifer, Douglas-fir and redwood habitats (Zeiner et al. 1990a). They have also been found along coastal highways in talus habitats created by slumping of roadcut (Stebbins and Reynolds 1947).

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Talus slopes were investigated within and near the THP area, but this species was not found. It may likely be too far south and beyond the native range of this species. Therefore, operations on this plan should not have a significant effect on this species.

**SOUTHERN TORRENT SALAMANDER (*Rhyacotriton variegatus*)** - Southern torrent salamanders occupy humid coastal (Anderson 1968) coniferous forests at elevations up to 3900 feet (Welsh 1990). They are associated with cold, well shaded permanent streams (Anderson 1968), springs, headwater seeps (Welsh 1990), waterfalls (Bury and Corn 1988), and moss covered rock rubble with flowing water (Anderson 1968). The salamanders inhabit the splash zone, and are rarely found more than 1 m from water (Nussbaum and Tait 1977). They have been observed wintering in talus slopes (Herrington 1988).

Bury (1983) did not find southern torrent salamanders in 6-14 year old logged streams and Bury and Corn (1988a) found the salamanders to be more numerous in uncut 60-500 year old stands than in 14-40 year old regenerated stands (Bury and Corn 1988a). In northwestern California, southern torrent salamanders have also been linked to old growth habitats. Near Redwood National Park, Bury (1983) found southern torrent salamanders in old growth stands, but not in logged stands 6-14 years old. In northern California and southern Oregon, Welsh (1990) found significantly more salamanders in mature and old growth than in young stands, but structure rather than age per se was believed to be important. In the northern part of its range, the species may have broader tolerances and thus be found in habitats other than old growth, although not in as great densities (Welsh 1990).

This species was not detected during extensive watercourse investigations and site transects. Considering the protection provided to watercourses within this THP by the FPRs and those described in this THP, operations on this plan should not have a significant effect on this species.

**WESTERN POND TURTLE (*Clemmys marmorata marmorata*)** - Western pond turtles inhabit a wide variety of habitat types with areas of permanent water (Zeiner et al. 1990a) such as ponds, lakes, rivers (Bury 1970), marshes, sloughs (Nussbaum et al. 1983), and drainage ditches (Zeiner et al. 1990a). They require basking sites such as submerged logs, vegetation mats, rocks, and mud banks (Nussbaum et al. 1983). Nests have been found in a variety of soil types from sandy to hard and must be at least four inches deep (Zeiner et al. 1990a).

Bury (1962) observed that western pond turtles inhabiting warmer inland rivers of California congregated in deep or vegetated pools whereas those in the coastal region were associated with ponds, sloughs, and dams.

Considering the protection provided to watercourses within this THP by the FPRs and those described in this THP, operations on this plan should not have a significant effect on this species.

**COHO SALMON (*Oncorhynchus kisutch*)** - Coho salmon spawning sites are located at the heads of riffles or tails of pools where beds of loose, silt free, coarse, medium to small sized gravel are found, with cover for adults nearby. Preferred spawning conditions include a water depth of 10-54 cm and temperatures 6-10° C. Juveniles are found in pools at least 1 m in depth with plenty of shade and overhead cover. Juvenile habitats are also characterized as having high levels of oxygen and food with preferred temperatures 10-15° C. Density of juveniles is often greatest in areas with logs and other debris.



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No fish bearing streams are located within the proposed THP area. Considering the protection provided to watercourses within this THP by the FPRs and those described in this THP, operations on this plan should not have a significant effect on this species.

COASTAL CUTTHROAT TROUT (*Oncorhynchus clarki*) - Habitats for coastal cutthroat trout are small, low gradient, cool ( $<18^{\circ}\text{C}$ ), well shaded coastal streams and estuarine habitats. Streams with small gravel substrates are required for spawning. Fishery biologists have surveyed major watercourses in the Mattole River system, but have not found this species within the assessment area. The species may exist in other watershed stream systems, down-river from the assessment area(s).

No fish bearing streams are located within the proposed THP area. Considering the protection provided to watercourses within this THP by the FPRs and those described in this THP, operations on this plan should not have a significant effect on this species.

SUMMER STEELHEAD TROUT (*Oncorhynchus mykiss gairdneri*) - Summer steelhead adults require temperatures under  $20^{\circ}\text{C}$ , with  $10-15^{\circ}$  preferred and water with at least 80% saturation of dissolved oxygen. For migrating adults, minimum water depth is 18 cm and for holding pools, 3 m. Ideal pools have cover such as bubble curtains (created by water flowing over rocks) or underwater ledges and caverns. Spawning streams should be cool, clear, and well oxygenated with gravel of diameters 0.64-13 cm.

Fishery biologists and foresters have surveyed the major watercourses of the Mattole River watersheds, and steelhead trout are common in these stream systems. They have found this species in the tributary streams of the assessment area(s). However, considering the protection provided to watercourses within and near this THP by the FPRs and those described in this THP, operations on this plan should not have a significant effect on this species.

This species is known to exist within the biological assessment area. No fish bearing streams are located within the proposed THP area. Considering the protection provided to watercourses within this THP by the FPRs and those described in this THP, operations on this plan should not have a significant effect on this species.

CHINOOK SALMON (*Oncorhynchus tshawytscha*) - Chinook salmon require pools 1-3 m deep with bedrock bottoms and cover in the form of underwater rocky ledges or large rocks. The pools usually have bubble curtains and shade provided throughout the day. Temperatures must be below  $27^{\circ}\text{C}$ . Suitable spawning areas are gravel beds with an optimum mixture of gravel and rubble of mean diameter 1-4 cm with less than 25% under 6.4 mm in diameter.

Fishery biologists have surveyed major watercourses in the Mattole River watershed, and have found habitat conditions favorable for this species within the assessment area. The species does likely exist in other watershed stream systems, down-river from the assessment area(s).

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No fish bearing streams are located within the proposed THP area. Considering the protection provided to watercourses within and near this THP by the FPRs and those described in this THP, operations on this plan should not have a significant effect on this species.

**RED TREE VOLE** (*Arborimus longicaudus*) - The ecology of red tree voles is not well described (Carey et al. 1991). Red tree voles nest, feed, breed, and sleep in trees (Carey 1991), although males may be relatively more terrestrial than females (Corn and Bury 1986). Douglas-firs are the predominant tree species used, with grand fir, Sitka spruce (Meiselman 1987), and western hemlock (Williams 1986) also utilized. Carey et al. (1991) noted that the voles seem closely associated with old growth forests. Williams (1986) suggested that they require fairly dense mature stands of conifers with some Douglas-firs or grand firs, and generally prefer large trees. Habitat records of red tree voles reviewed by Maser (1966), however, revealed the animals to use young second growth Douglas-fir trees 7-15" dbh. The voles were also found to use habitats described as broken, isolated, and scattered by clearcuts, open grass, bracken fern and cultivated fields; or 30-50 year old stands with a few interspersed older trees, but little evidence of dense forest (Maser 1966).

In California, red tree voles are associated with open stands of Douglas-fir (Jameson and Peeters 1988), but also are found using grand firs in Mendocino County and along the Eel River and its tributary streams (Maser 1966). Nests have been found in redwood trees (Maser 1966), but the voles do not eat redwood needles and therefore are not found in pure redwood stands (Williams 1986). Meiselman (1987) suggested that the moist, cool habitats in which red tree voles were found in northern California could be attributed to the climatic buffering of a dense, multi-layered canopy provided by older, riparian Douglas-fir forests. However, she noted that red tree vole nests have been found in young, mature, and old growth stands in that area. Red tree vole nests are recognizable by sloughed off nest material often found at the base of nest trees exhibiting nest type structures.

As part of this THP, trees to be harvested are examined and marked by the foresters. Such nests have not been noted in timber marked for removal. Therefore, no significant impacts to this species are anticipated.

**WHITE-FOOTED VOLE** (*Arborimus albipes*) - White-footed voles are terrestrial and are associated with small, clear streams flowing through coniferous forests (Maser 1966). Most records of white-footed voles are from forested areas, but the mammals have been captured in a clearcut less than four years old (Maser 1966). Small clearings made by individual fallen trees and supporting herbaceous growth may be important habitat for the species (Williams 1986). In California, white-footed voles inhabit stream-side thickets in redwood forests (Jameson and Peeters 1988), with all records from lowlands (Williams 1986).

Lowlands are not a feature of this proposed THP area. Therefore no significant impacts to this species are anticipated.

**PACIFIC FISHER** (*Martes pennanti pacifica*) - Most suitable habitat for *Martes pennanti* has been described as dense forested stands comprised primarily of large diameter conifer trees which provide suitable winter cover (Thomasma et al. 1991). Many researchers have associated fishers with mature forests (Mullis 1985), but the fur bearers are often found in second growth forests, and sometimes in forest openings (Williams 1986). Little is known about the biology of fishers in



**TIMBER HARVESTING PLAN ADDENDUM'S**  
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California (Mullis 1985). In Trinity County, Pacific fishers were studied by Buck (1982) and Mullis (1985). They found the subspecies to occur primarily in multiple species stands of mixed conifer/hardwoods (Mullis 1985) or mature, closed conifers (Buck 1982), with Douglas-fir the primary conifer species. Den sites were in un-harvested or selectively cut areas where less than 20% of the overhead canopy was taken (Buck 1982). The animals were not frequently found in relatively early successional conifer/non-commercial timber types (Mullis 1985). The importance of hardwoods to fishers in the area was ambiguous as in one study the animals seemed to avoid pure hardwood stands (Buck 1982), but in the other, no avoidance, or preference towards hardwoods was detected (Mullis 1985). Fishers also inhabit pine and true fir stands, but avoid redwood forests (Jameson and Peeters 1988). Yocum and McCollum (1973) noted only one record of a fisher in the redwood forest type. At elevations to over 11,000 feet, fishers are found in red fir, lodgepole pine, and mixed evergreen/ broadleaf forests (Williams 1986). Riparian areas are regarded as important fisher habitat (Buck 1982), especially for travel and escape (Mullis 1985).

Evidence of Pacific fisher normally consists of tracks left in soft mud or silt along stream bottoms and moist banks, and sometimes in roadside ditches of forest roads. Evidence of such tracks was searched for during general site transects and site investigations, and during watercourse habitat investigations. No evidence of use of the area by fishers was observed or noted.

**HUMBOLDT MARTEN (*Martes americana humboldtensis*)** The Humboldt marten is a California species of special concern. The State of California continues to classify the marten as a furbearer, but has not had an open season since 1952 (Ruggiero et al. 1994). The range of martens (*Martes americana*) in California includes the Sierra Nevada, Cascades, and north coast ranges in red fir, lodgepole and Ponderosa pine, subalpine, and redwood forests (Ingles 1965, Self and Kerns 1992). This includes the Sierra Nevada subspecies *M. a. sierrae*. Little information exists on the status of the subspecies *M. a. humboldtensis*. The subspecies *M. a. humboldtensis* was first described by Grinnell and Dixon (1926). The boundaries of the subspecies range was drawn by Grinnell and Dixon (1926) on the basis of habitat change, and went from Del Norte and eastern Siskiyou County along the eastern border of Humboldt County down into Mendocino and Sonoma Counties. Grinnell and Dixon (1926) described the Humboldt marten as having decidedly darker, of richer golden brown tones than *M. a. sierrae*, with far less orange-yellow color on the throat and chest. There are also differences in the skulls of the subspecies (Grinnell and Dixon 1926). Essential habitat elements of *Martes americana* include trees, rock piles or talus slopes, or snags for resting, foraging and breeding, and the presence of food; including Douglas tree squirrels, flying squirrels, voles, and also various species of berries.

Trapping records from 1919-1924 indicate that martens historically occurred in the region (Zielinski and Golightly 1996). It is possible that first trapping, then timber harvest, and finally the range expansion of the Pacific fisher may have drastically reduced or eliminated the Humboldt marten from its historic range (Zielinski and Golightly 1996). *Martes americana* is a species predicted to occur in late successional habitat by the CWHM model, likely because of their need for large trees or snags with cavities and other structure (Zeiner et al. 1990c). We have not detected any evidence of Humboldt marten within or near the proposed THP area. Humboldt marten have not been detected in the area as a result of any other known surveys. No observations of Humboldt martens have been documented anywhere near this ownership, so they are presumed to be very rare or absent in the plan area. It is unlikely that this proposed project could adversely affect the Humboldt marten.

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**LEAFY REED GRASS** (*Calamagrostis foliosa*) - According to Munz and Keck (1970), leafy reed grass grows on rocky places near the coast, but CDFG (1990) also included riparian areas and steep roadcut slopes as habitat. Heidsiek (1990) studied leafy reed grass in the King Range Conservation Area and found the plant to grow in low nutrient, low moisture substrates that were actively eroding. The species seemed to prefer rugged, non-grazable sites, mostly on rock outcroppings, with new specimens found in stream banks and other areas. Although this plant may grow in other areas this species is usually associated with coastal scrub stands or exposed rocky locations along the coast and has not otherwise been found in the assessment area.

**BENSONIELLA** (*Bensoniella oregona*) - Bensoniella grows in moist, grassy meadows and small openings in evergreen forests. In California this species has been found at elevations of 3300 feet (Hickman, 1993). This species has not been found in the assessment area because the THP area is too low in elevation to expect to find this species. Furthermore, all possible habitat is located within the class I and II watercourses and wet areas. These are located well off-site from operating areas of the plan. Considering the protection provided to watercourses within this THP, this plan should not have a significant effect on this species.

**MCDONALD'S ROCK CREST** (*Arabis mcdonaldiana*) - Grows on reddish soils, steep slopes, dry ridges and serpentine areas at about 3,300 feet, and is found in cultivation (Jepson 1993). This plant was not found within the boundaries of this THP and is not known to be found in the area.

**HUMBOLDT MILK-VETCH** (*Astragalus agnicidus*) - Humboldt milk-vetch grows in disturbed woodlands at about 2500 feet (Munz and Keck 1970). This species was presumed extinct for many years until rediscovered near Miranda in Humboldt County, and noted by a local environmental activist-extremist. It is now known to occur on other similarly disturbed sites, such as old skid trails. This plant has not been found within the assessment area and this species was not observed during the layout process. The operation of this plan should create only minor new ground disturbance, but may therefore benefit this species.

Much general reconnaissance, on-site investigation, mapping and layout, as well as other required fieldwork for this, and nearby THPs is professionally conducted. During these efforts and operations, the forester(s), biologists, and other resource professionals and technicians conduct numerous walking transects and micro-site specific visual, audio and tactile inspections of terrain and vegetation features. Individual harvest tree and surrounding trees inspection, and/or marking, includes visual inspection for evidence of mass or cavity potential nest structure. In the context of this single technical activity, approximately 75% of all the substantial sized trees existing within and immediately adjacent to the THP area, are individually physically evaluated. Exceptionally large decadent trees and snags are generally retained, unless deemed hazardous. Such work effectively continues with each site visit, even after plan approval. Reconnaissance level surveys and monitoring for listed and other faunal and aquatic sensitive species, as well as more commonly occurring species, are incorporated into each site visit.

At advantageous viewing locations, offering oblique views of the terrain and vegetation canopy on and near the site of proposed operations, binocular and/or spotting scope assisted visual observations are made. This work is conducted by foresters and biologists familiar with indigenous birds of prey, and the habitat requirements of potentially occurring species. Raptors and other



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commonly occurring avian species, if noted, are observed visually if possible, specifically for evidence of breeding behavior(s). Observations of conditions on and near this site, NDDDB record(s), WHR type information, and interviews with local residents and landowners, were evaluated in this assessment and reconnaissance process, to determine potential occurrence of, and impacts to non-listed raptor species and other reasonably expected and observable species. It is assumed that suitable foraging habitat for sharp shinned hawks, Cooper's hawks, and owls native to the region occurs within and adjacent to the THP area. As noted, no accipiters were discovered during daylight surveys, including site transects. This would tend to indicate that resident individuals are not likely present. Migratory individuals may utilize the site at some later date, since suitable foraging habitat will remain available post harvest, and territories may be un-occupied. For this reason, general observational transects will continue. See Item II-38 of the THP. Native owls, if present, commonly respond vocally during mandated night time spotted owl protocol surveys. Responses are documented during the survey visits, and records are included in consultation information. If any such species is discovered during these efforts, mitigation and protection measures shall be incorporated into the THP by amendment,

During layout of this THP, the forester and biologist note unfamiliar plants and identify them to ensure that they are not listed, or sensitive non-listed species as identified in the various literature sources. In this case, reconnaissance of the site and surroundings occurred during fall, and winter. Spring and summer are the period of time roughly corresponding to the flowering period of many low growing plants and shrubs. Therefore, subsequent fieldwork and site investigations will continue during spring, summer, and early fall in conjunction with timber marking and other preparation activities. If listed or sensitive plants are found, appropriate mitigation will be implemented to protect them. As a result this plan should not significantly impact listed plants.

It shall also be noted however, that this property is legally zoned for, and devoted primarily to, the growing and harvesting of successive crops of timber, consistent with applicable rules, regulations, and guidelines. Nothing inconsistent with this goal is proposed. Accordingly, nothing in this THP should be construed as relinquishing those rights and goals by default. As stated and evident in provisions of this THP, the area will remain in timber growing use and forest vegetation matrix cover over the long term. Therefore, it is intended that no specific or general habitat be specifically permanently eliminated. Our conclusion is that the population of those species normally expected to occur and utilize habitat elements related to the various successional stages of a diverse, healthy, thrifty, and actively growing forest, will not be significantly effected, and will continue to thrive on these sites.

**Persons Consulted:**

**Galea Wildlife Consulting  
200 Racoon Court  
Crescent City, CA 95531**



Please use this form when requesting no database and/or consultation number.

**\*\*FILL IN FOR BOTH\*\***

Name Stephen M. Launi DATE 1-8-02  
RPF# or PCB# RPF #2020  
Mailing Address 3542 18th Street Phone# 442-1262  
Eureka, CA 95501 FAX# 445-9440

**\*\*FILL IN FOR DATABASE\*\***

County Hum

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Circle the 1.3 mile radius on an USGS quad map or its equivalent and attach to this document.

**\*\*FILL IN FOR BIO. REQUEST\*\***

County \_\_\_\_\_ THP \_\_\_\_\_ Drainage \_\_\_\_\_

Project Location T \_\_\_\_\_ R \_\_\_\_\_ S \_\_\_\_\_ Acreage \_\_\_\_\_

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Option: A \_\_\_\_\_ B \_\_\_\_\_ F \_\_\_\_\_ Other \_\_\_\_\_

Will pre-consultation with DFG be required for any other species?  
If so list NA

Request No: \_\_\_\_\_ (CDF will assign number)

FILL IN DATABASE SECTION AND BIO. REQUEST SECTION WHEN YOU ARE REQUESTING BOTH.





RPP: STEPHEN M. LAUNI  
RQST. NO.: 2318

#: 2020

01/11/2002  
Pg: 1

California Department of Fish and Game  
California Department of Forestry and Fire Protection

NORTHERN SPOTTED OWL DATABASE MANAGEMENT SYSTEM  
Version 2.0

REPORT #1

DATA

## REPORT OF AREAS SEARCHED

COUNTY	TOWNSHIP	RANGE	SECTION	TERRITORY
HU	38	1E	23	** NO OWLS KNOWN **
HU	38	1E	24	HU700
HU	38	1E	25	HU345
HU	38	1E	26	HU345
HU	38	1E	35	HU240
HU	38	1E	36	** NO OWLS KNOWN **
HU	38	2E	19	HU700
HU	38	2E	29	** NO OWLS KNOWN **
HU	38	2E	30	HU345
HU	38	2E	31	** NO OWLS KNOWN **

NOTE: THREE SEPERATE REPORTS ARE GENERATED IF NORTHERN SPOTTED OWL  
RECORDS ARE KNOWN FROM THE REQUESTED AREA. THE SECOND AND THIRD  
REPORTS WILL NOT PRINT IF OBSERVATIONS RECORDS ARE NOT FOUND.

RPF: STEPHEN M. LAUNI  
RQST. NO.: 2318

#: 2020

02/11/2002

Pg: 1

California Department of Fish and Game  
California Department of Forestry and Fire Protection

## NORTHERN SPOTTED OWL DATABASE MANAGEMENT SYSTEM

Version 2.0

December 12, 2001

REPORT #2

DATA

## REPORT OF TERRITORIES FOUND

LOCALE	TWN	RNG	SECT	1/4	1/16	1/64	OWNER TYPE	OWNER VERIFIED	YEAR TERR.	NEST/YNG KNOWN
TERRITORY: HU240 HARROW CR	4S	1E	1	NE	NE		PVT		00 - P	
TERRITORY: HU345 HARROW CREEK	3S	1E	26	SE	SE	NE	BLM	OKI	01 - P	01 - 00
TERRITORY: HU700 GRINDSTONE CR	3S	2E	19	NW	SW	NW	PVT		97 - P	

NOTE: FOR AN EXPLANATION OF THE DATA COLUMNS, USE A "DATABASE REPORT  
EXPLANATION SHEET" DATED AFTER JANUARY 1, 1994.

RPT: STEPHEN M. LAUNI  
RQST. NO.: 2310

#: 2020

01/11/2002  
Pg: 1

California Department of Fish and Game  
California Department of Forestry and Fire Protection

## NORTHERN SPOTTED OWL DATABASE MANAGEMENT SYSTEM

Version 2.0

December 12, 2001

REPORT #3

DATA

## REPORT OF SIGHTINGS REPORTED FOR TERRITORIES FOUND

TWN	RNG	SECT	1/4	1/16	1/64	DATE SEEN	OBSERVER	NO. OF OWLS	AGE- SEX	NO. OF PAIR	YNG.	NEST
TERRITORY: HU240												
3S	1E	27	SE			05/25/1989	VIA PIERCE	2	UUUU		0	
3S	1E	27	SE			06/09/1989	VIA PIERCE	1	UU		0	
3S	1E	35	SE	E		04/03/1991	HINEY	1	UM		0	
3S	1E	35	SW	SE	SE	06/17/1991	HINEY	1	UM		0	
3S	1E	35	SW	NE	W	06/24/1991	HINEY+	1	UM		0	
3S	1E	35	NW	S		07/03/1991	HINEY+	1	UM		0	
4S	1E	1	NE	NE		01/01/2000		2	UMUF	Y	0	
TERRITORY: HU341												
3S	1E	25	NE	SW	NW	04/12/1991	HINEY+	1	UU		0	
3S	1E	25	NE	SW	NW	05/21/1991	HINEY+	1	UU		0	
3S	1E	25	N3	SW	NW	07/09/1991	HINEY+	1	UU		0	
3S	1E	25	NE	SW	NE	05/05/1997	HINEY or HUNT	1	UF		0	
3S	1E	25	SW	NW	SE	07/10/2000	ROSAN	1	UM		1	
3S	1E	26	SE	NE	NE	04/05/2001	ROSAN	2	UMUF	Y	0	Y
TERRITORY: HU700												
3S	2E	19				01/01/1993	BLM ARCATA	2	UMUF	Y	0	
3S	2E	30	NW	NE		04/12/1993	BLM ARCATA	2	UMUF	Y	0	
3S	2E	19	NW	SW	NW	05/05/1997	HINEY or HUNT	1	UM		0	
3S	1E	13	SE	SE	SE	06/11/1998	MILLER	1	UM		0	
3S	1E	24	NE	NE	SW	06/18/1998	MILLER	1	UM		0	

NOTE: FOR AN EXPLANATION OF THE DATA COLUMNS, USE A "DATABASE REPORT EXPLANATION SHEET" DATED AFTER JANUARY 1, 1994.



### **NOTE**

Information concerning archeological sites has been removed from THP **1-02-085 HUM** accordance with the policy of the Office of Historic Preservation as adopted by the State Historical Resources Commission under the authority of Public Resources Code 5020.4.

Copies of the information have been sent to the following locations to facilitate review of the project:

1. CDF field unit - Fortuna
2. Reviewing Archeologist, Santa Rosa (Region Office)

The original copy of this material is maintained in a confidential file at CDF Northern Region Headquarters, 135 Ridgway Avenue, Santa Rosa, CA 95401.

REVISED PAGE 89 RECEIVED 4/29/02

NOTE

Information concerning archaeological sites has been removed from this THP, **1-02-085 HUM**, in accordance with the policy of The Office of Historic Preservation as adopted by the State Historical Resources Commission under the authority of Public Resources Code 5020.4.

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**Pages 83, 85 -87, 89, 89.1 (Received 6-7-02)**

**RECEIVED**  
**JUN - 7 2002**  
COAST AREA OFFICE  
RESOURCE MANAGEMENT

LETTER & SITE RECORD RECEIVED 6/14/02

NOTE

Information concerning archaeological sites has been removed from this THP, **1-02-085 HUM**, in accordance with the policy of The Office of Historic Preservation as adopted by the State Historical Resources Commission under the authority of Public Resources Code 5020.4.

Copies of the information have been sent to the following locations to facilitate review of the project:

1. CDF field unit - Fortuna
2. Reviewing Archaeologist, Santa Rosa (Region Office)

The original copy of this material is maintained in a confidential file at CDF Northern Region Headquarters, 135 Ridgway Avenue, Santa Rosa, CA 95401.



# Stephen M. Launi Forestry Services

Phone (707) 442-1262  
Fax (707) 445-9440

3542 18<sup>th</sup> Street  
Eureka, California 95501

January 28, 2002

Eureka Times Standard  
930 6th Street  
Eureka, Calif. 95502-3580

Attn: Advertising Dept.

Please run the following text in the Public Notices Section of your newspaper, for one day only.

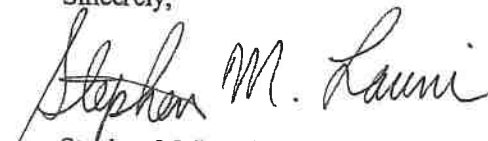
Stephen M. Launi is planning to submit a timber harvesting plan, on behalf of a property owner in the watershed of the Mattole River. The proposed operation is located in portions of Section 25, Township 3 South, Range 1 East. Segments of the Mattole River, and Grindstone Creek flow through and/or adjacent to the property. The Plan will be submitted on or about March 15, 2002.

If you have any knowledge of any domestic water supply whose source is downstream, in the above described watercourse system(s), or that may be effected by the proposed operation, please contact the following person, within (10) ten days of the date of this notice, at the following address:

Stephen M. Launi  
3542 18<sup>th</sup> Street  
Eureka, Calif. 95501

Thank-you for your attention to this matter.

Sincerely,

  
Stephen M. Launi Forestry Services  
Forester

cc: THP Document

PROOF OF PUBLICATION  
(2015.5 C.C.P.)

STATE OF CALIFORNIA

County of Humboldt

I am a citizen of the United States and a resident of the County aforesaid; I am over the age of eighteen years, and not a party to or interested in the above-mentioned matter. I am the principal clerk of the printer of THE TIMES-STANDARD, a newspaper of general circulation, printed and published daily in the City of Eureka, County of Humboldt, and which newspaper has been adjudged a newspaper of general circulation by the Superior Court of the County of Humboldt, State of California, under the date of June 15, 1967 Consolidated Case Number 27009 and 27010; that the notice, of which the annexed is a printed copy (set in type not smaller than nonpareil), has been published in each regular and entire issue of said newspaper and not in any supplement thereof on the following dates, to-wit:

January 31,

All in the year 2002

I certify (or declare) under penalty of perjury that the foregoing is true and correct.

Dated at Eureka, California,  
this 31 day of January 2002

Kristie Ray  
Signature

this space is for the County Clerk's Filing Stamp

Proof of Publication of

PUBLIC NOTICE

PUBLIC NOTICE

Stephen M. Launi is planning to submit a timber harvesting plan, on behalf of a property owner in the watershed of the Mattole River. The proposed operation is located in portions of Section 25, Township 3 South, Range 1 East. Segments of the Mattole River, and Gridstone Creek flow through and/or adjacent to the property. The Plan will be submitted on or about March 15, 2002.

If you have any knowl-

edge of any domestic water supply whose source is downstream in the above described watercourse system(s), or that may be affected by the proposed operation, please contact the following person within (10) days of the date of this notice, at the following address:

Stephen M. Launi  
3542 18th Street  
Eureka, Calif. 96501  
1/31

# Stephen M. Launi Forestry Services

3542 18<sup>th</sup> Street  
Eureka, California 95501

Phone (707) 442-1262  
Fax (707) 445-9440

January 28, 2002

K & L Logging Inc.  
15715 Briceland Thorn Road  
Whitethorn, CA 95589

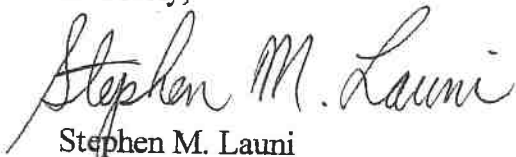
Larry:

We are preparing to submit a Timber Harvesting Plan (THP) in the watershed of the Mattole River, and near Grindstone Creek and Harrow Creek. All or a portion of the proposed THP area is up-stream, up-slope or nearby adjacent to property owned by you. The legal description of the site is: Portion of Section 25, Township 3 South, Range 1 East, HBM. A map is enclosed. The THP will probably be submitted in March of 2002.

If you know of any domestic water system intakes, or domestic water use, in the watercourse(s) in, or downstream within 1,000 feet of, this proposed THP area, please notify us in writing within 10 working days of receipt of this notification. We would like to know the nature, and location of these systems. Such systems are known in the area. The information will be used in review of the THP, and designing and implementing watercourse and wet area protection measures.

Thank-you for your attention to this matter.

Sincerely,



Stephen M. Launi  
Forester (RPF #2020)

Enc: Map

# Stephen M. Launi Forestry Services

3542 18<sup>th</sup> Street  
Eureka, California 95501

Phone (707) 442-1262  
Fax (707) 445-9440

January 28, 2002

Margaret G. Gardner  
100 Moore Creek Road  
Santa Cruz, CA 95060-2320

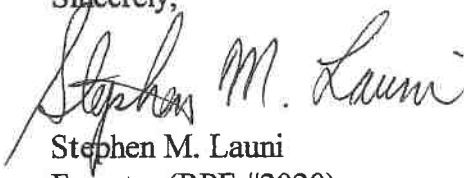
Margaret:

We are preparing to submit a Timber Harvesting Plan (THP) in the watershed of the Mattole River, and near Grindstone Creek and Harrow Creek. All or a portion of the proposed THP area is up-stream, up-slope or nearby adjacent to property owned by you. The legal description of the site is: Portion of Section 25, Township 3 South, Range 1 East, HBM. A map is enclosed. The THP will probably be submitted in March of 2002.

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Thank-you for your attention to this matter.

Sincerely,



Stephen M. Launi  
Forester (RPF #2020)

Enc: Map



# Stephen M. Launi Forestry Services

3542 18<sup>th</sup> Street  
Eureka, California 95501

Phone (707) 442-1262  
Fax (707) 445-9440

January 28, 2002

Robert Stansberry  
P.O. Box 56  
Honeydew, CA 95545-0056

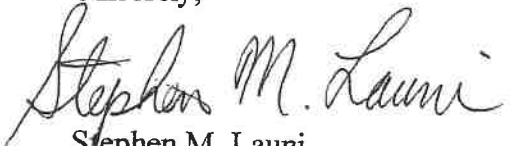
Bob:

We are preparing to submit a Timber Harvesting Plan (THP) in the watershed of the Mattole River, and near Grindstone Creek and Harrow Creek. All or a portion of the proposed THP area is up-stream, up-slope or nearby adjacent to property owned by you. The legal description of the site is: Portion of Section 25, Township 3 South, Range 1 East, HBM. A map is enclosed. The THP will probably be submitted in March of 2002.

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Thank-you for your attention to this matter.

Sincerely,



Stephen M. Launi  
Forester (RPF #2020)

Enc: Map

# Stephen M. Launi Forestry Services

3542 18<sup>th</sup> Street  
Eureka, California 95501

Phone (707) 442-1262  
Fax (707) 445-9440

January 28, 2002

Ethel Carr Trust  
2060 Palomino Lane  
Arcata, CA 95521

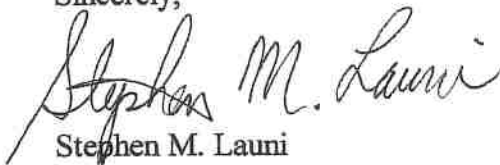
Dear Folks:

We are preparing to submit a Timber Harvesting Plan (THP) in the watershed of the Mattole River, and near Grindstone Creek and Harrow Creek. All or a portion of the proposed THP area is up-stream, up-slope or nearby adjacent to property owned by you. The legal description of the site is: Portion of Section 25, Township 3 South, Range 1 East, HBM. A map is enclosed. The THP will probably be submitted in March of 2002.

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Thank-you for your attention to this matter.

Sincerely,



Stephen M. Launi  
Forester (RPF #2020)

Enc: Map

# Stephen M. Launi Forestry Services

3542 18<sup>th</sup> Street  
Eureka, California 95501

Phone (707) 442-1262  
Fax (707) 445-9440

January 28, 2002

Stephen & Hollie Harrow  
12031 Wilder Ridge Road  
Garberville, CA 95542

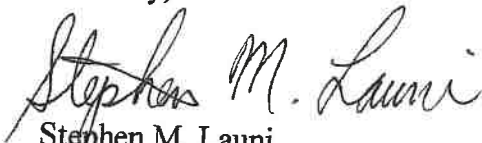
Stephen & Hollie:

We are preparing to submit a Timber Harvesting Plan (THP) in the watershed of the Mattole River, and near Grindstone Creek and Harrow Creek. All or a portion of the proposed THP area is up-stream, up-slope or nearby adjacent to property owned by you. The legal description of the site is: Portion of Section 25, Township 3 South, Range 1 East, HBM. A map is enclosed. The THP will probably be submitted in March of 2002.

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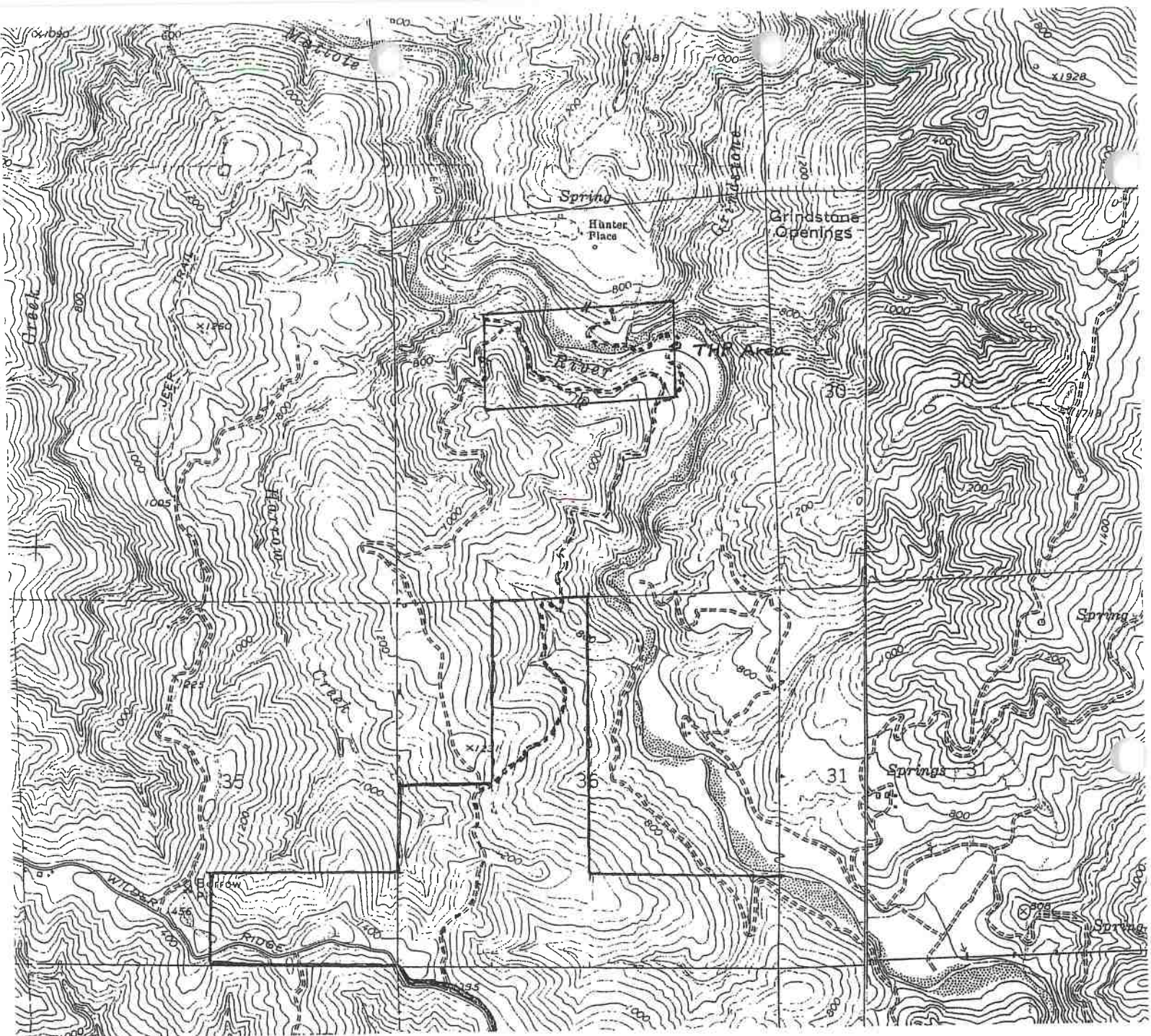
Thank-you for your attention to this matter.

Sincerely,

  
Stephen M. Launi  
Forester (RPF #2020)

Enc: Map









# TIMBER HARVESTING PLAN

Site Location Map  
French – Ettersburg

## LEGEND

-  Harvest Area (Property) Boundary
-  Permanent Road (Existing)
-  Seasonal Appurtenant Road (Existing)
-  Haul Route

Portion of Honeydew USGS  
Quad. (1970) T3S, R1E HBM



Scale: 1 Inch = 2,000 Feet

Date: December 27, 2001



**EROSION HAZARD RATING:**

Estimated Surface Soil Erosion Hazard  
-M-87 (4/84)

State of California  
Board of Forestry

**I. Soil Factors** Factor Rating by Area 'A' = Entire Area

A.	Soil Texture	Fine	Medium	Course	A	B	C
1.	Detachability Rating	Low	Moderate	High			
		1-9	10-18	19-30	14		
2.	Permeability Rating	Slow	Moderate	Rapid			
		4-5	3-2	1	3		

**B. Depth to Restrictive Layer or Bedrock**

	Shallow	Moderate	Deep	
	1"-19"	20"-39"	40"-60"	
Rating	15-9	8-4	3-1	6

**C. Percent surface course fragments greater than 2 mm in size including rocks or stones**

	Low	Moderate	High	
	10-39%	40-70%	71-100%	
Rating	10-6	5-3	2-1	4

**Factor Rating by Area**

A B C

Sub total = 27

**II. Slope Factor**

Slope	5-15%	16-30%	31-40%	41-50%	51-70%	71-80%+	
Rating	1-3	4-6	7-10	11-15	16-25	26-35	8

**III. Protective Vegetative Cover Remaining After Disturbance**

	Low	Moderate	High	
	0-40%	41-80%	81-100%	
Rating	15-8	7-4	3-1	8

**IV. Two-Year, One Hour Rainfall Intensity (Hundredths Inch)**

	Low	Moderate	High	Extreme	
	(-)30-39	40-59	60-69	70-80	
Rating	1-3	4-7	8-11	12-15	11

Total Sum of Factors = 54

**Erosion Hazard Rating**

< 50	50-65	66-75	> 75
Low (L)	Moderate (M)	High (H)	Extreme (E)

The Determination is: M

French - Grindstone THP

Phone (707) 442-1262  
Fax (707) 445-9440

March 12, 2002

Richard French  
12051 Wilder Ridge Road  
Garberville, CA 95542

RE: Timber Harvesting Plan Responsibilities

Mr. French:

As you know, a Timber Harvesting Plan (THP) has been prepared for an operation you will be conducting near the Mattole River off of Wilder Ridge Road Road in Humboldt County. As part of THP preparation, I am required to inform you in writing, of your responsibilities in conduct of operations under the THP provisions, Coast District forest practice rules, and related regulations. The following text is quoted from the forest practice rules:

#### 1035.3 Licensed Timber Operator Responsibilities

Each Licensed Timber Operator shall:

- (a) Inform the responsible RPF or plan submitter, whether in writing or orally, of any site conditions which in the LTO's opinion prevent implementation of the approved plan including amendments.
- (b) Be responsible for the work of his or her employees and familiarize all employees with the intent and details of the operational and protection measures of the plan and amendments that apply to their work.
- (c) Keep a copy of the applicable approved plan and amendments available for reference at the site of active timber operations. The LTO is not required to possess any confidential addenda to the plan such as the Confidential Archaeological Addendum, nor is the LTO required to keep a copy of such confidential plan addenda at the site of active timber operations.
- (d) Comply with all provisions of the Act, Board rules and regulations, the applicable approved plan and any approved amendments to the plan.
- (e) In the event that the LTO executing the plan was not available to attend the on-site meeting to discuss archaeological site protection with the RPF pursuant to Section 929.2 [949.2,969.2] (b), it shall be the responsibility of the LTO executing the plan to inquire with the plan submitter, timberland owner, or their authorized agent, or RPF who wrote the plan, in order to determine if any mitigation measures or specific operating instructions are contained in the Confidential Archaeological Addendum or any other confidential

addendum to the plan.

You share the responsibility for insuring that CDF is informed, by telephone or mail, of start up of operations. It is your responsibility, to insure that appropriate erosion control is accomplished prior to the beginning of each winter period, and at the conclusion of operations. You should also insure that culverts, cross drains, and all erosion control structures are functioning properly. This responsibility should be fulfilled by the licensed timber operator (LTO), and lasts for a minimum period of one year after completion of operations.

As this harvest is a combination of seed tree seed step, and seed tree removal step, every effort should be made to protect the existing component of conifer timber not designated for harvest. This is the future crop of trees.

In the event of discovery during operations of any nest, den, or activity center of any species listed under the state or federal endangered species acts, archeological site(s), or artifacts, operations should cease in the vicinity and CDF and DF&G should be notified. Appropriate protection measures, once determined, should be reported in the form of a THP amendment.

Sincerely,

A handwritten signature in cursive script that reads "Stephen M. Launi". The signature is written in dark ink and is positioned above the printed name.

Stephen M. Launi  
Stephen M. Launi Forestry Services  
RPF# 2020

cc: THP document

Phone (707) 442-1262  
Fax (707) 445-9440

March 12, 2002

Richard and Sally French  
12051 Wilder Ridge Road  
Garberville, CA 95542

RE: Timber Harvesting Plan Responsibilities

Richard and Sally:

As you know as the land and timber owners, a Timber Harvesting Plan (THP) is being submitted on your behalf, for your timber off of Wilder Ridge Road near the Mattole River in Humboldt County, California. As part of THP preparation, I am required to inform you in writing, of your responsibilities in conduct of operations under the THP provisions, Coast District forest practice rules, and related regulations.

Please insure that the CDF is notified by phone or mail, when operations are to commence.

#### 1035 (Forest Practice Rules) Plan Submitter Responsibility

The plan submitter, or successor in interest (Owner), shall:

- (a) Ensure that an RPF conducts any activities which require an RPF.
- (b) Provide the RPF preparing the plan or amendments with complete and correct information regarding pertinent legal rights to, interests in, and responsibilities for land, timber, and access as these affect the planning and conduct of timber operations.
- (c) Sign the THP certifying knowledge of the plan contents and the requirements of this section.
- (d) Within five working days of change in RPF responsibilities for THP implementation or substitution of another RPF, file with the Director a notice which states the RPF's name and registration number, address, and subsequent responsibilities for any RPF required field work, amendment preparation, or operation supervision. Corporations need not file notification because the RPF of record on each document is the responsible person.
- (e) Provide a copy of the portions of the approved THP and any approved operational amendments to the LTO containing the General Information, Plan of Operations, THP Map, Yarding System Map, Erosion Hazard Rating Map and any other information deemed by the RPF to be necessary for timber operations .
- (f) The plan submitter shall notify the Director prior to commencement of site preparation operations. Receipt of a burning permit is sufficient notice.




(g) Disclose to the LTO, prior to the start of operations, through an on-the-ground meeting, the location and protection measures for any archaeological or historical sites requiring protection if the RPF has submitted written notification to the plan submitter that the plan submitter needs to provide the LTO with this information.

As this is a combination of seed tree seed step, and seed tree removal step, tree planting may not be required. However a partial report of stocking should be submitted at the end of operations. A final report of stocking shall be submitted within five(5) years from conclusion of operations.

In the event that the property is subsequently sold, the new owner(s) should be informed of, and accepts these responsibilities, unless otherwise specified. The change of ownership should be reported in the form of a THP amendment.

Sincerely,

  
Stephen M. Launi  
Stephen M. Launi Forestry Services  
RPF # 2020

cc: THP document

**TIMBER HARVESTING PLAN ADDENDUM'S  
SECTION VI  
Sensitive Species Information (Bibliography)**

**LITERATURE CITED:**

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1952 A study of the breeding biology of the purple martin (*Progne subis*). *Am. Midl. Nat.* 47:606-665.

Altig, R. and P. C. Dumas

1974 *Rana aurora*. P. 160 in R. G. Zweifel, ed. 1974. Catalogue of American amphibians and reptiles. American Society of Ichthyologists and Herpetologists.

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1968 *Rhyacotriton, R. olympicus*. P. 68 in R. G. Zweifel, ed. 1974. Catalogue of American amphibians and reptiles. American Society of Ichthyologists and Herpetologists.

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1989 The ecological niche. Pp. 15-20 in S. Atwater and J. Schnell, eds. *Ruffed Grouse*. Stackpole Books. 370 pp.

Bent, A. C.

1942 Life histories of North American flycatchers, larks, swallows, and their allies. Smithsonian Institution Bulletin 179, U. S. Government Printing Office, Washington, D. C. 555 pp.

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Bisson, P. A. and J. R. Sedell

1984 Salmonid populations in clearcut v. old-growth forests of western Washington. Pp. 121-129 in W. R. Meehan, T. R. Merrell, Jr., and T. A. Hanley (eds.). *Fish and wildlife relationships in old-growth forests*. Amer. Inst. Fish Res. Biol. Juneau Alaska.

TIMBER HARVESTING PLAN ADDENDUM'S  
SECTION VI  
Sensitive Species Information (Bibliography)

LITERATURE CITED:

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1985 The status of the northern goshawk in California, 1981-1983. Calif. Dept. Fish and Game Wild. Manage. Branch Admin. Rep. 85-1. 25 pp.
- Brenner, F. J.  
1989 The essentials of habitat. Pp. 322-326 in S. Atwater and J. Schnell, eds. Ruffed Grouse. Stackpole Books. 370 pp.
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