

CALENDAR ITEM
C34

MINUTE ITEM
This Calendar Item No. C34
was approved as Minute Item
No. 34 by the State Lands
Commission by a vote of 3
to 0 at its 7/6/95
meeting. 07/06/95
PRC 7835 W 25174
J. Ludlow

A 1
S 2

APPROVAL OF A GENERAL LEASE -
RIGHT-OF-WAY USE

APPLICANT:

Viola McBride
P.O. Box 1135
Ferndale, California 95536

AREA, TYPE LAND AND LOCATION:

A 0.149-acre parcel of submerged land located in the bed of
the Eel River at Eel Rock, Humboldt County.

LAND USE:

Placement of one seasonal flat-car bridge and bridge
approach.

EXHIBITS:

- A. Site Map
- B. Timber Harvest Plan

AB 884:

02/01/95

OTHER PERTINENT INFORMATION:

The lease term was established to expire simultaneously on
December 23, 1999, with the U.S. Army Corps of Engineers
Permit.

RECOMMENDED ACTION:

IT IS RECOMMENDED THAT THE COMMISSION:

CEQA FINDING:

FIND THAT AN ENVIRONMENTAL ANALYSIS DOCUMENT (CALIFORNIA
DEPARTMENT OF FORESTRY TIMBER HARVEST PLAN # 1-93-405 HUM)
WAS CERTIFIED FOR THIS PROJECT BY THE CALIFORNIA DEPARTMENT
OF FORESTRY UNDER ITS CERTIFIED PROGRAM (14 CAL. CODE REGS.

| | |
|---------------|------|
| CALENDAR PAGE | 125 |
| MINUTE PAGE | 1006 |

CALENDAR ITEM NO. C34 (CONT'D)

15251 (a)) AND THAT THE COMMISSION HAS CONSIDERED THE INFORMATION THEREIN.

SIGNIFICANT LANDS

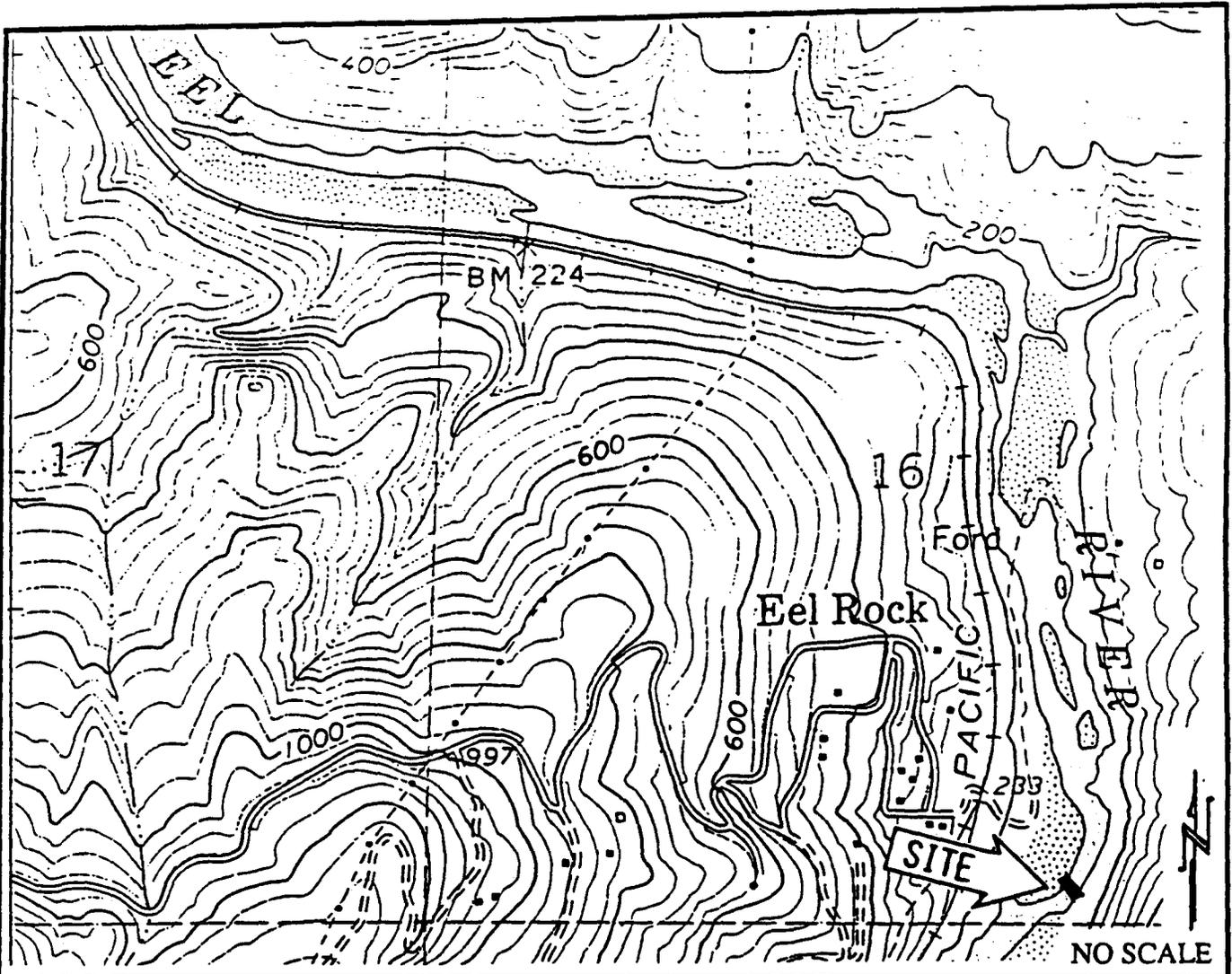
INVENTORY FINDING:

FIND THAT THIS ACTIVITY IS CONSISTENT WITH THE USE CLASSIFICATION DESIGNATED FOR THE LAND PURSUANT TO P.R.C. 6370, ET SEQ.

AUTHORIZATION:

AUTHORIZE THE ISSUANCE OF A FOUR-YEAR, SIX-MONTH AND 23-DAY GENERAL LEASE - RIGHT-OF-WAY USE, TO VIOLA MCBRIDE, BEGINNING JUNE 1, 1995; IN CONSIDERATION OF \$100 PER ANNUM; PROVISION OF PUBLIC LIABILITY INSURANCE FOR COMBINED SINGLE LIMIT COVERAGE OF \$1,000,000; FOR THE PLACEMENT OF A SEASONAL FLATCAR BRIDGE AND BRIDGE APPROACH; ON THE LAND DESCRIBED ON EXHIBIT "A" ATTACHED AND BY REFERENCE MADE A PART HEREOF.

| | |
|---------------|------|
| CALENDAR PAGE | 126 |
| MINUTE PAGE | 1007 |



LOCATION MAP

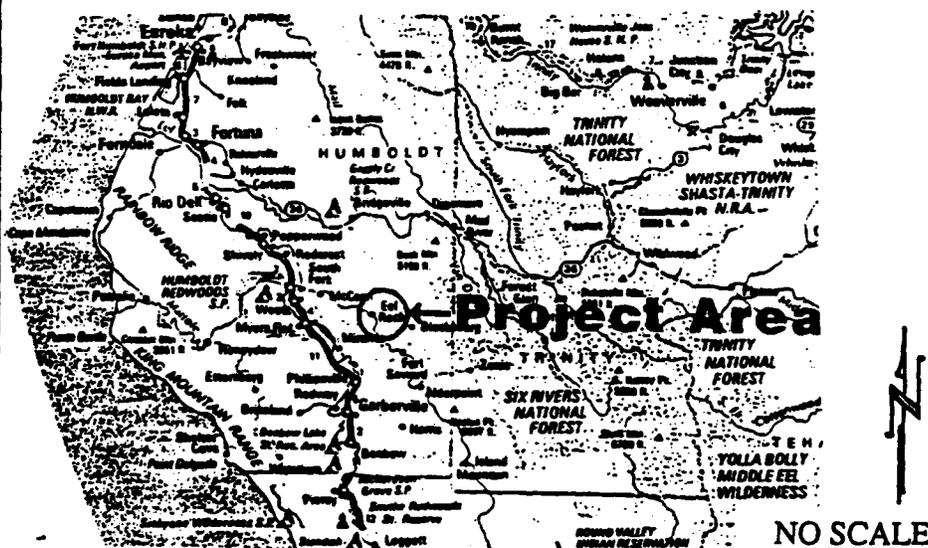


EXHIBIT "A"

W 25174

Summer Crossing R/W Lease

Eel River

HUMBOLDT COUNTY



This Exhibit is solely for purposes of generally defining the lease premises, and is not intended to be, nor shall it be construed as, a waiver or limitation of any State interest in the subject or any other property.

CALENDAR PAGE 127

MINUTE PAGE 1008 CG 6/95

DEPARTMENT OF FORESTRY AND FIRE PROTECTION

COAST REGION
135 RIDGWAY AVENUE
P.O. BOX 670
SANTA ROSA, CA 95402-0670
(707) 576-2275



IM

Date: NOVEMBER 2, 1993
THP: 1-93-405 HUM

CARL A. ANDERSON
P O BOX 1136
ARCATA CA 95521

NOTICE OF CONFORMANCE

Enclosed is a true copy of your Timber Harvesting Plan (THP) identified by the number shown above. The Director of Forestry and Fire Protection finds that the plan conforms with the Rules and Regulations of the Board of Forestry pursuant to the provisions of the Z'Berg-Nejedly Forest Practice Act of 1973. Conformance is indicated by the facsimile signature of his duly constituted representative being shown on the attached copy of the plan.

You may begin the timber operations proposed in the plan according to the conditions specified therein, and subject to the Forest Practice Act, Forest Practice Rules of the Forest District in which the operations will take place, related Board of Forestry regulations and other applicable laws, regulations and ordinances.

The Forest Practice Act requires the filing of the two reports listed below for each timber harvesting operation undertaken:

1. Timber Operations Work Completion Report: Within one month after completion of work described in a Timber Harvesting Plan, excluding work for stocking, a report shall be filed by the timber owner or his agent with Director that all work, except stocking, has been completed.
2. Report of Stocking:
 - a) Within six months after completion of timber operations covered by this THP, a Report of Stocking shall be filed by the timber owner or his agent with the Director.
 - b) Within five years after completion of timber operations covered by this THP, a Report of Stocking shall be filed by the timber owner or his agent with the Director.
 - c) Stocking obligations do not apply because:
 - A Timberland Conversion Permit is in effect.
 - The THP is for road right-of-way construction only.
 - The THP is for a one-time, minor conversion.

In future correspondence, please refer to the THP number in the upper right corner of the attached plan.

Sincerely,

LLOYD I. KEEFER
DEPUTY DIRECTOR, OPERATIONS

[Handwritten signature]
by Thomas P. Osipowich
Resource Manager, RPF #1767

Enclosures

cc: . V. McBride
Unit
File

| | |
|---------------|--------------|
| CALENDAR PAGE | 128 |
| MINUTE PAGE | EXHIBIT 1009 |

TIMBER HARVESTING PLAN

(FOR ADMINISTRATIVE USE ONLY
(THP No. 1-93-405 HUM
(Date Recd SEP 16 1993
(Date Filed SEP 7 1993
(Date Approved NOV 2 1993

247 ac.
73 ac.
Shed. Seed Strip
Shed. Rem. Strip

This Timber Harvesting Plan (THP) form, when properly completed, is designed to comply with the Forest Practice Act (FPA) and Board of Forestry rules. See separate instructions for information on completing this form. NOTE: The form must be printed legibly in ink or typewritten.

1. TIMBER OWNER(S): Name Viola R. McBride
Address P.O. Box 1135
City Ferndale State CA Zip 95536 Phone (707)725-3088

2. TIMBERLAND OWNER(S): Name Viola R. McBride
Address P.O. Box 1135
City Ferndale State CA Zip 95536 Phone (707)725-3088

3. TIMBER OPERATOR(S): Name To be amended later.
Address _____ License # _____
City _____ State _____ Zip _____ Phone _____

4. PLAN SUBMITTER(S): Name Viola R. McBride
If the plan submitter is different from 1, 2, or 3 explain authority to submit plan:

5. Person to contact on-site who is responsible for the conduct of the operation:
Name Carl A. Anderson
Address P.O. Box 1136
City Arcata State CA Zip 95521 Phone (707)822-3628

6. RPF preparing the THP: Name Carl A. Anderson
Address P.O. Box 1136 Registration Number #2457
City Arcata State CA Zip 95521 Phone (707)822-3628

-ek Basin Creek
-1 River

CDF STOCK NO. 7540-130-0063

Received CDF
REGION 1

CALENDAR PAGE 129
MINUTE PAGE 1010
RESOURCE MANAGEMENT

7. Expected commencement date of timber operations: Upon Director's approval & signature of the Plan.
8. Expected completion date of timber operations: 36 months following Director's approval & signature of the Plan. 11/1/96
9. Forest products to be harvested: Conifer & hardwood sawlogs, poles, pilings, merchantable cull logs and misc. forest products.
10. The timber operation is to be within: (check the appropriate boxes)

1. Coast Forest District
 2. Northern Forest District
 3. Southern Forest District
 4. Southern Subdistrict of the Coast Forest District
 5. High-Use Subdistrict of the Southern Forest District

11. Location of the timber operation by legal description:

Base and Meridian: Mount Diablo, Humboldt, San Bernardino

| Section | Township | Range | Approximate Acreage | County | (Optional, Assessors Parcel No.) |
|-----------|------------|------------|---------------------|-----------------|----------------------------------|
| <u>22</u> | <u>2-S</u> | <u>4-E</u> | <u>11</u> | <u>Humboldt</u> | |
| <u>23</u> | <u>2-S</u> | <u>4-E</u> | <u>37</u> | <u>"</u> | |
| <u>26</u> | <u>2-S</u> | <u>4-E</u> | <u>115</u> | <u>"</u> | |
| <u>27</u> | <u>2-S</u> | <u>4-E</u> | <u>157</u> | <u>"</u> | |

TOTAL ACREAGE 320

NOTE: Additional sheets may be necessary.

Received CDF
REGION 1
SEP 18 1993
RESOURCE MANAGEMENT

12. Yes No Is a timberland conversion permit in effect? If yes, list permit number and date of expiration: _____
13. Yes No Is there a THP 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 number: _____
14. Yes No Is any part of the plan within a special treatment area, Tahoe Regional Planning Agency jurisdiction, or a county which has special rules? If yes, identify the special area: See Addendum to Item #14

SILVICULTURE

15. Check the method or treatments which are to be applied, and provide any other information required by the rules in an addendum:
- 1 Clearcutting 2 Shelterwood, preparatory step 3 Shelterwood, seed step
 4 Shelterwood, removal step 5 Seed tree, seed tree step 6 Seed tree, seed tree removal step
- 7 Selection - designate basal area stocking standards to be met: _____
- 8 Commercial thinning - designate basal area stocking standards to be met: _____
- 9 Sanitation salvage - when will stocking be met: _____
- 10 Special treatment areas 11 Rehabilitation of understocked areas
 12 Alternative prescription 13 Transition method

NOTE: Where the level of stocking is based upon timberland site, timberland sites must be shown on the map. See Silviculture Addendum, Item #15

| | |
|---------------|------|
| CALENDAR PAGE | 130 |
| MINUTE PAGE | 1011 |

16.a. Yes No Are any exceptions to the standard silvicultural methods or treatments permitted in the rules proposed for this plan? If yes, explain and justify the exception in an addendum.

b. Yes No Will artificial regeneration be required to restock the logged area?

17. Yes No Are broadleaf or optional species proposed for management? See item 18.

18. Yes No Are broadleaf or optional species to be used to meet stocking standards?

If the answer to items 17 or 18 is yes, list the species and provide the information required by the rules:

HARVESTING PRACTICES AND EROSION CONTROL

19. Indicate type of yarding systems to be used this plan:

- 1 Tractor, skidder, forwarder 2 Balloon, helicopter 3 Cable, ground-lead
4 Cable, high-lead 5 Cable, skyline 6 Animal

7 Other: _____

20. Yes No Will tractor constructed layouts be used?

21. Yes No Will tractors be used for directional tree pulling?

Check items 22 through 25 that apply to the use of tractors.

22. Yes No Operations on unstable soils or slide areas?

23. Yes No Operations on slopes over 65%?

24. Yes No Operations on slopes over 50% with high or extreme EHR?

25. Yes No Operations within cable yarding areas?

Received CDF
REGION 1

SEP 16 1993

RESOURCE MANAGEMENT

If any of items 22 through 25 are answered yes, explain and justify as required by the rules:

See Addendum to Item #22 and Item #23.

26. Indicate erosion hazard ratings present on this THP:

Low, Moderate, High, Extreme

27. Describe soil stabilization measures to be implemented or any additional erosion control measures proposed in this THP where required by the rules:

See Addendum to Item #27.

28. Yes No Are any alternative practices or exceptions to the standard harvesting or practices permitted in the rules proposed for this plan? If yes, explain:

29. Yes No Are timber operations proposed for the winter period? If yes, provide a winter addendum or specify compliance with 14 CAC 914.7(c), 934.7(c) or 954.7(c). No plan is needed for cable, helicopter, or balloon yarding.

Recei
REQ

SEP 1

ROADS AND LANDINGS

30. Yes No Will any roads or landings be constructed or reconstructed? If yes, check items 31 through 37 that apply:

RESOURCE MENT

31. Yes No Will new roads be wider than single lane with turnouts?

32. Yes No Will any landings exceed the maximum size specified in the rules?

33. Yes No Are logging roads or landings proposed in areas of unstable soils or known slides?

34. Yes No Will new roads exceed a grade of 15% or pitches of 20% for distance greater than?

35. Yes No Are roads to be constructed, other than crossings, within the watercourse and lation zone of a class I or II watercourse?

36. Yes No Will roads or landings longer than 100 feet in length be located on slopes over 40 slopes over 50% which are within 100 feet of the boundary of a watercourse or lake proteene?

37. Yes No Are exemptions proposed for flagging or otherwise identifying the location of roads to be constructed?

38. If any of items 31 through 37 are answered yes, explain, justify, and give site-specific measures to adverse impacts or, if there is any additional or special information concerning the construction and maintenance of roads or landings, if required by the rules. Provide necessary information in an addendum.

See Roads and Landings Addendum, Item

WATERCOURSE AND LAKES

39. Yes No Are there any watercourses or lakes which contain class I through IV waters on adjacent to the plan area? If yes, complete items 40 through 50.

40. Yes No Are any in-lieu practices and/or alternative practices proposed for watercourse lake protection? If yes, explain and justify:

Are any exceptions proposed for the following watercourse and lake protection zone practices? Check items 41 through 48 that apply.

41. Yes No Exclusion of the use of watercourses, marshes, wet meadows, and other wet areas, for landings, roads, or tractor roads?

42. Yes No Retention of non-commercial vegetation bordering and covering meadows and wet areas?

| | |
|---------------|------|
| CALENDAR PAGE | 132 |
| MINUTE PAGE | 1013 |

43. Yes No Directional felling of trees within the zone away from the watercourse or lake?
44. Yes No Increase or decrease of width(s) of the zone(s)?
45. Yes No Protection of watercourses which conduct class IV waters?
46. Yes No Exclusion of heavy equipment from the zone?
47. Yes No Retention of 50% of the overstorey canopy in the zone?
48. Yes No Retention of 50% of the understorey in the zone?

Received CDF
REGION 1

SEP 16 1993

RESOURCE MANAGEMENT

If any of items 41 through 48 are answered yes, explain and justify if required by the rules and provide necessary information in an addendum.

49. Yes No Are residual trees or harvest trees going to be marked within the watercourse or lake protection zone? If no, explain:

Harvest trees will be marked within the WLPZ as described in the Addendum to Item #50.

50. In an addendum describe the protective measures and zone widths for the watercourse and lake protection zones that are in the plan area. See Addendum to Item #50.

WILDLIFE

51. Yes No Are any known rare or endangered species or species of special concern, including key habitat, associated with the THP area? If yes, in an addendum identify the species and the provisions to be taken for protection of the species.
52. Yes No Are there any snags which must be felled for fire protection or other reasons? If yes, describe which snags are going to be felled:

See Addendum to Item #52.

53. Yes No Are any other provisions for wildlife protection required by the rules? If yes, describe provisions:

For a complete discussion of Wildlife, see the Other Information Addendum, Item #61,

Biological Resources section.

CULTURAL RESOURCES

- 54.a. Yes No Has an archaeological survey been made of the areas to be harvested?
- b. Yes No Have the California Archaeological Inventory records been checked for any recorded archaeological or historical sites located in the area to be harvested?
55. Yes No Are there any archaeological or historical sites located in the area to be harvested? If yes, describe in an addendum how the sites are to be protected.

See Confidential Archeological and Historical Resources Survey and Impact Assessment.

HAZARD REDUCTION

56. What type of slash treatment will be used in the fire protection zone?

- 1[] Pile and burn , 2[] Lopping, 3[] Other: _____
- 4[X] Not applicable no fire protection zone present

57. [] Yes [] No If the clearcutting method is used, will broadcast burning be used for site preparation?

Not Applicable

58. If piling and burning is to be used for hazard reduction, who will be responsible for compliance?

- 1[] Timber owner, 2[X] Timber operator, 3[] Timberland owner

PUBLIC NOTICE

59. [] Yes [X] No Are there any ownerships within 300 feet of the plan boundary which are owned by persons other than the persons executing this plan? If yes, a list of the names and addresses of the adjacent property owners and a Notice of Intent to Harvest Timber must be included with the plan.

PESTS

60. [] Yes [X] No Are there any adverse insect, disease, or pest problems of significance in the plan area? If yes, describe the mitigation measures, if any, to improve the health and productivity of the stand in an addendum.

OTHER INFORMATION

61. Are there any other existing or planned land use activities including but not limited to other THPs in the area of the proposed THP which may combine with the effects of your timber harvesting operation to cause significant adverse cumulative environmental effects? [] Yes, [X] No If yes, please describe the other land use(s) and the likely effect as well as any mitigation which would reduce the negative effect in an addendum.

ATTACHMENTS

62. Check if the attachments listed are included with the plan:
- 1[X] Notice of Stream Bed Alteration to Department of Fish and Game (A copy of this notice is attached to the instructions for your use.)
 - 2[X] Estimated Surface Soil Erosion Hazard Calculations
 - 3[X] Notice of Intent to Harvest Timber and a list of names and addresses of adjacent property owners
 - 4[X] Maps
 - 5[X] Addendum for silviculture information
 - 6[] Written notice of plan to the timber operator, timberland owner, or timber owner that did not sign the THP.

REGISTERED PROFESSIONAL FORESTER

63. I have the following authority, responsibilities, and limitation for preparation or administration of the THP and timber operation:

Preparation of the THP and any future Amendments, if necessary. Also consultation

with the plan submitter in the operation of the THP.

Received ODF
REGION 1

| | | | |
|---------------------|-------------|------|------|
| CALENDAR | SEP 16 1993 | PAGE | 134 |
| MINUTE | | PAGE | 1015 |
| REPUBLIC MANAGEMENT | | | |

64. I have notified the timber owner and the timberland owner, in writing, of their responsibilities for:
1. Yes No The stocking requirements of the rules
 2. Yes No The maintenance of erosion control structures requirements of the rules
 3. Yes No The marking requirements contained in the rules

65. Yes No I will provide the timber operator with a copy of the approved THP.

66. After considering the rules of the Board of Forestry and the mitigation measures I have proposed I have determined that the timber operation:

will have a significant adverse impact on the environment

will not have a significant adverse impact on the environment.

If the operation will have a significant adverse impact on the environment, in an addendum explain why any alternatives or additional mitigation measures that would reduce the impact are not feasible.

67. Registered Professional Forester: I certify that I, or my designee, personally inspected the plan area, and the plan complies with the Forest Practice Act and the Forest practice rules.

Signature: Carl Anderson Date: 9/14/93

68. CERTIFICATION

The above conforms to my/our plan and, upon filing, I/we agree to conduct harvesting in accordance therewith. Consent is hereby given to the Director of Forestry, his agents and employees, to enter the preises to inspect timber operations for compliance with the Forest Practice Act and forest practice rules.

Timber Owner: Viola R. McBride

Signature: Viola R. McBride Date: Sept 9, 1993

Printed Name: Viola R. McBride

Timberland Owner: Viola R. McBride

Signature: Viola R. McBride Date: Sept 9, 1993

Printed Name: Viola R. McBride

Timber Operator: _____

Signature: _____ Date: _____

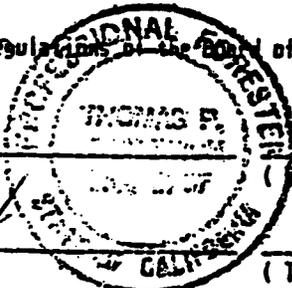
Printed Name: _____

DIRECTOR OF FORESTRY

This Timber Harvesting Plan conforms to the rules and regulations of the Board of Forestry and with the Forest Practice Act.

By: Thomas P. Osipowich (Signature) Date: 11/2/93

Thomas P. Osipowich (Printed Name) RESOURCE MANAGER (Title)



Received CDF

| | | |
|------------|---------------|------|
| REGION 1 | CALENDAR PAGE | 135 |
| SE 16 1993 | MINUTE PAGE | 1016 |

N TYPE OF INTENT TO HARVEST T. TR

1-93-405 HUM

A Timber Harvesting Plan or an amendment to an existing plan that may be of interest to you has been submitted to the California Department of Forestry and Fire Protection. The Department will be reviewing the proposed timber operation for compliance with various laws and rules. This review requires the addressing of any concerns you may have with what is being proposed. The following briefly describes the proposed timber operation and where and how to get more information.

The review times given to the Department to review the proposed timber operation are variable in length, but limited. To ensure the Department receives your comments please note following:

^{estimated}
The earliest date the Department may approve the plan or amendment is: 9/30/93. This is 15 days from the date of receipt of the plan by the Department. The date of receipt for this proposal was: _____. The actual review required will determine the length of the review period beyond the noted minimum. Please check with the Department to determine the date of the decision.

Questions about the proposed timber operation or laws and rules governing timber operations should be directed to:

California Department of Forestry
135 Ridgeway Avenue
P. O. Box 670
Santa Rosa, California 95402
(707) 576-2275

The public may review the plan or amendment at the above department office or purchase a copy of the plan or amendment for \$ 10.65. Information about the plan or amendment follows:

1. Timberland Owner where the timber operation is to occur:

Viola R. McBride

2. Registered Professional Forester who prepared the plan or amendment:

Carl A. Anderson

3. Name of individual who submitted the plan or amendment:

Viola R. McBride

4. Location of the proposed timber operation (county, legal description, & approximate distance of the timber operation from the nearest community or well-known landmark):

Humboldt County/in portions of Section 22, 23, 26 & 27, Township 2-South, Range, 4-East,
H.B.M./ approximately 2 miles Southeast of Eel Rock.

5. Name of and distance from the nearest perennial stream and major watercourse flowing through or downstream from the timber operation:

Mill Creek is ±1/2 mile to the North, Basin Creek is ±1/2 mile to the Southeast and the Eel River is ±1/2 mile to the South

6. Acres proposed to be harvested: 320

7. The regeneration methods and intermediate treatments to be used: Shelterwood-Seed Step and Shelterwood-Removal Step

A map is attached to help in locating where the proposed timber operation is to occur.

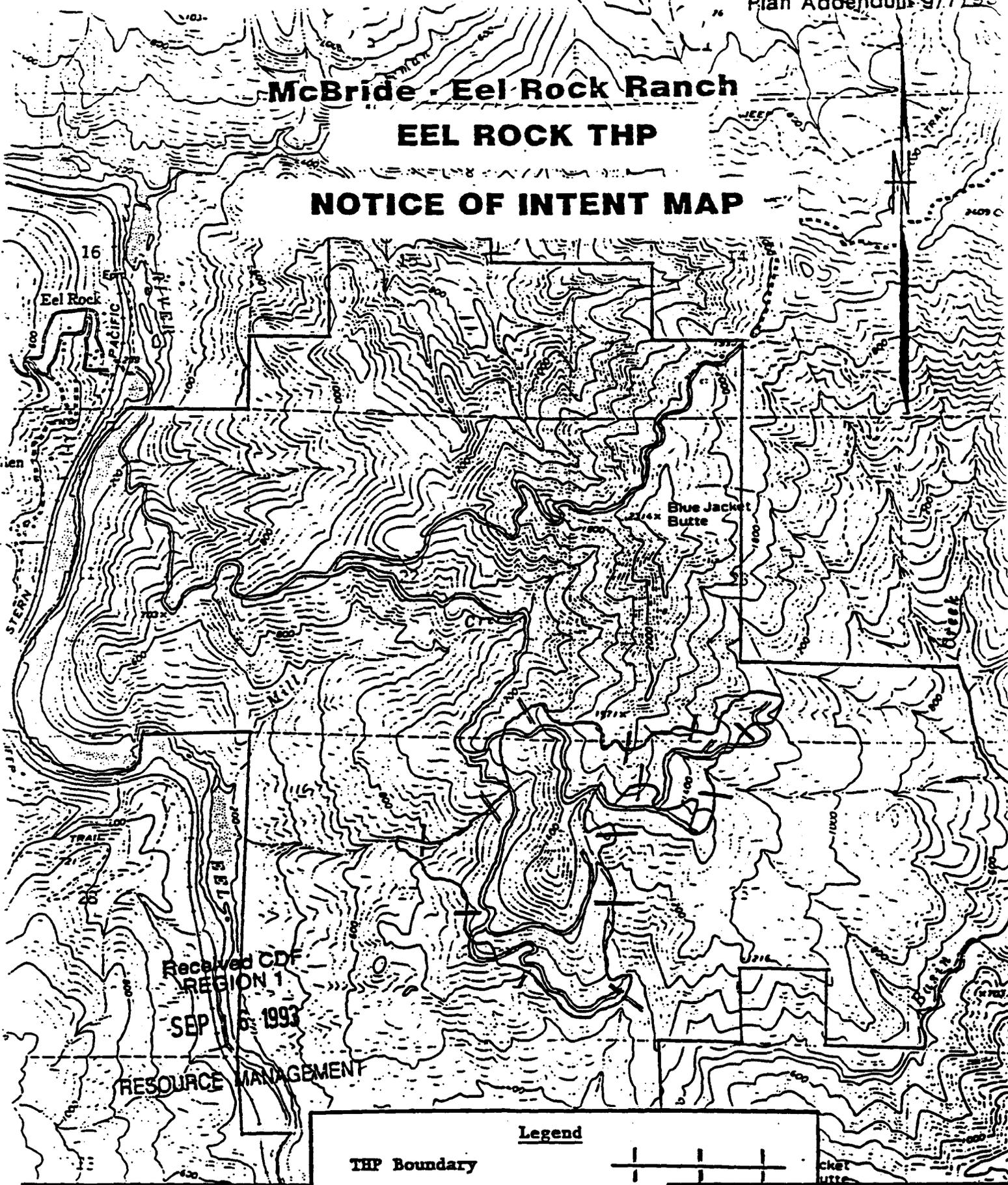
Received CDF
REGION 1

SEP 16 1993

| | |
|---------------|------|
| CALENDAR PAGE | 136 |
| MINUTE PAGE | 1017 |

McBride - Eel Rock Ranch EEL ROCK THP

NOTICE OF INTENT MAP

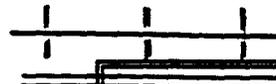


Received CDF
REGION 1
SEP 16 1993

RESOURCE MANAGEMENT

Legend

THP Boundary
Existing Road



From USGS 7.5' "Blockburg" Scale 1:24,000
HUMBOLDT COUNTY

CALENDAR PAGE 137
MINUTE PAGE 1018

by the Geological Survey

Methods from aerial
dated 1969

California coordinate

1:24,000

0

OR T SEWARD 1942
137
1018

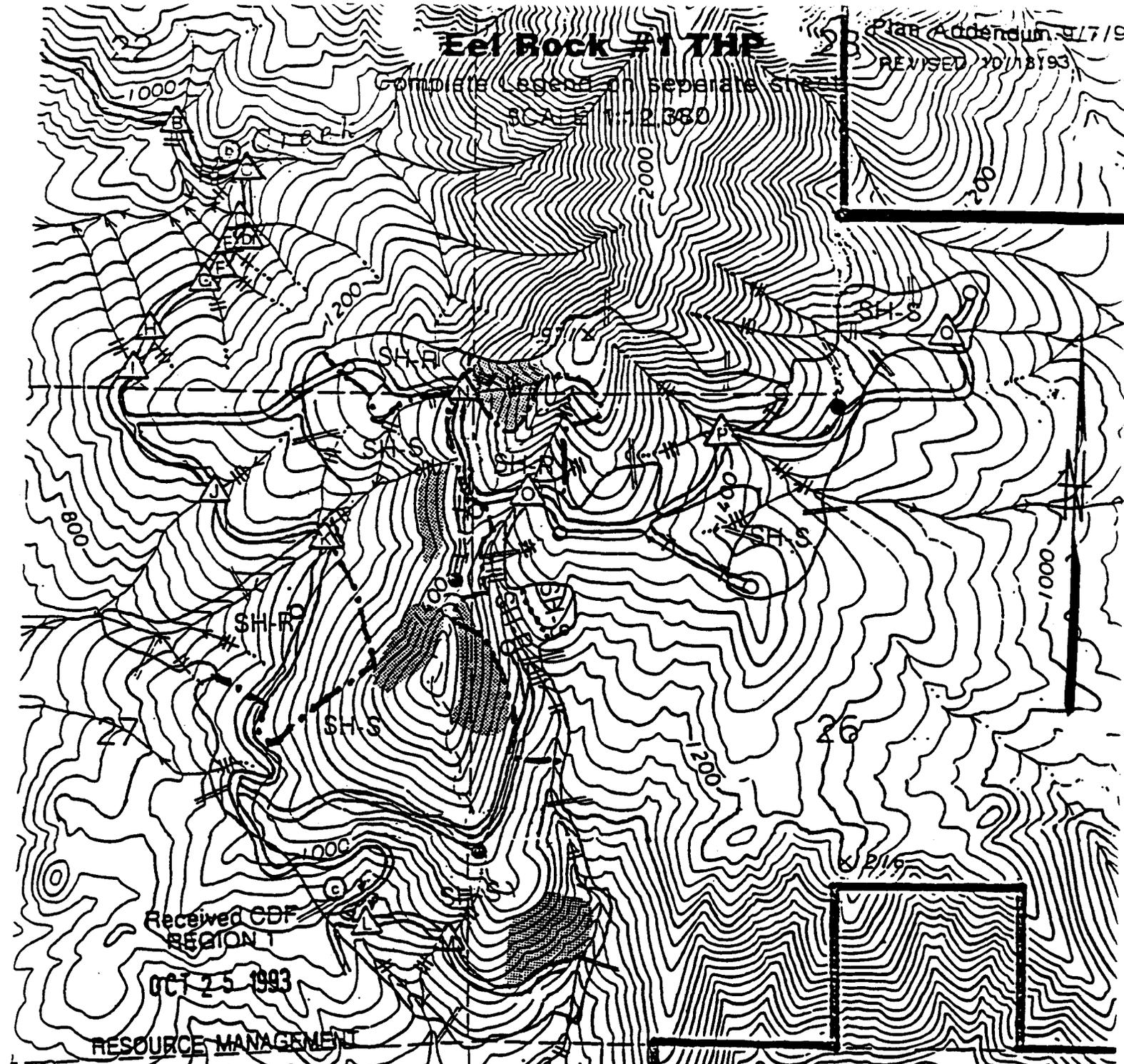
Eel Rock #1 THP

Plan Addendum 9/7/93

REVISED 10/18/93

Complete legend on separate sheet

SCALE 1" = 2,360'



Received CDF REGION I

OCT 25 1993

RESOURCE MANAGEMENT

In Humboldt County in Portions of Sections 22, 23, 26 and 27, Township 2-South, Range 4-East, H.B.M.

This map was reproduced (enlarged) from USGS 7.5' "Blocksburg". The entire plan area is a timber site class III. The entire plan area has a moderate erosion hazard rating. There are no public roads within the plan area. The entire plan area is tractor yarding. The Watercourse Crossing List is on a separate sheet. Watercourse Crossing "A" and THP Reference points "a" & "d" are on the Appurtenant Roads Map.

CALENDAR PAGE 138

MINUTE PAGE OF PLATS

From USGS 7.5 "Blocksburg" (Enlarged)

SCALE

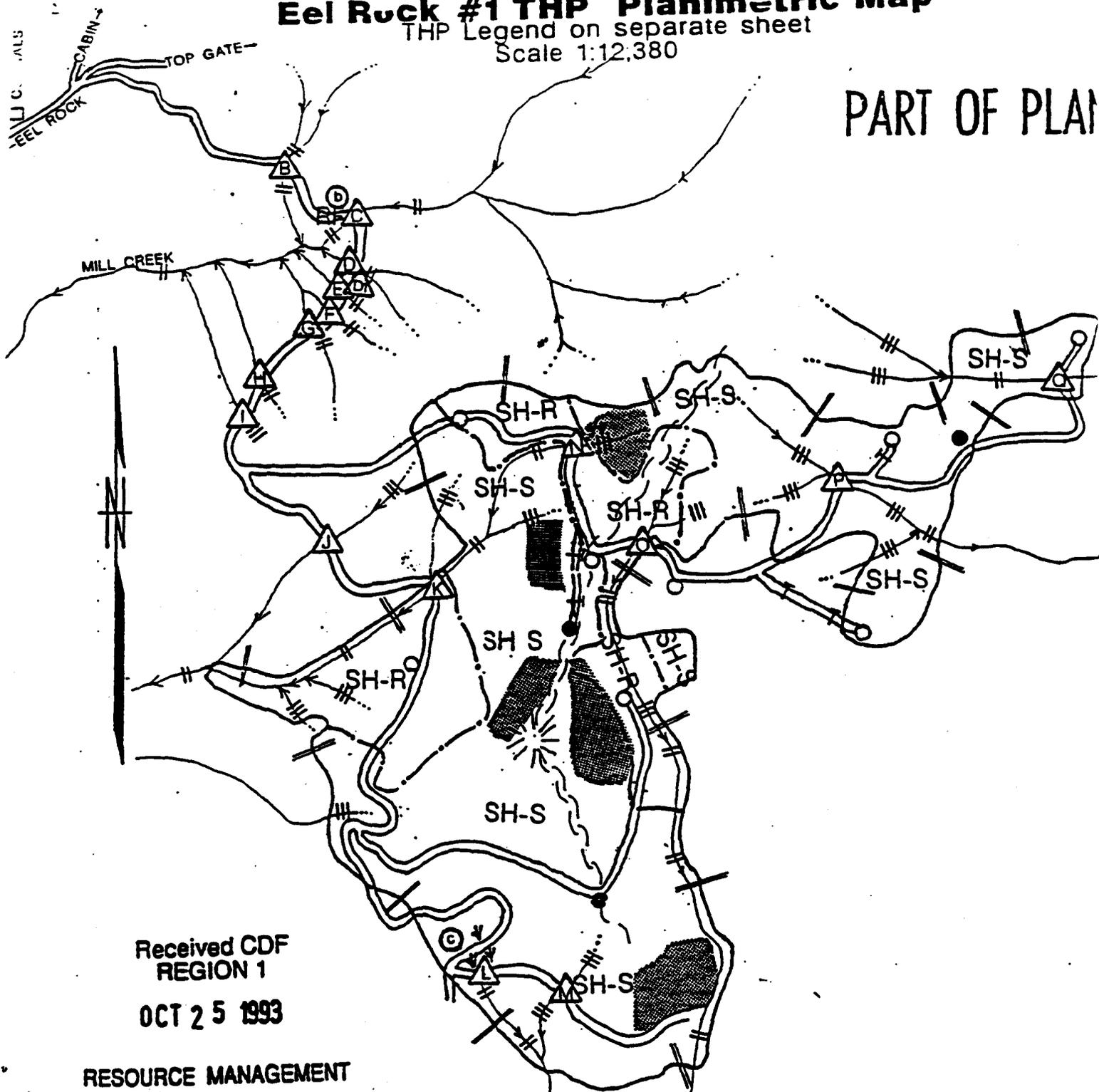
0 FEET

Eel Rock #1 THP Planimetric Map

THP Legend on separate sheet

Scale 1:12,380

PART OF PLAN



Received CDF
REGION 1

OCT 25 1993

RESOURCE MANAGEMENT

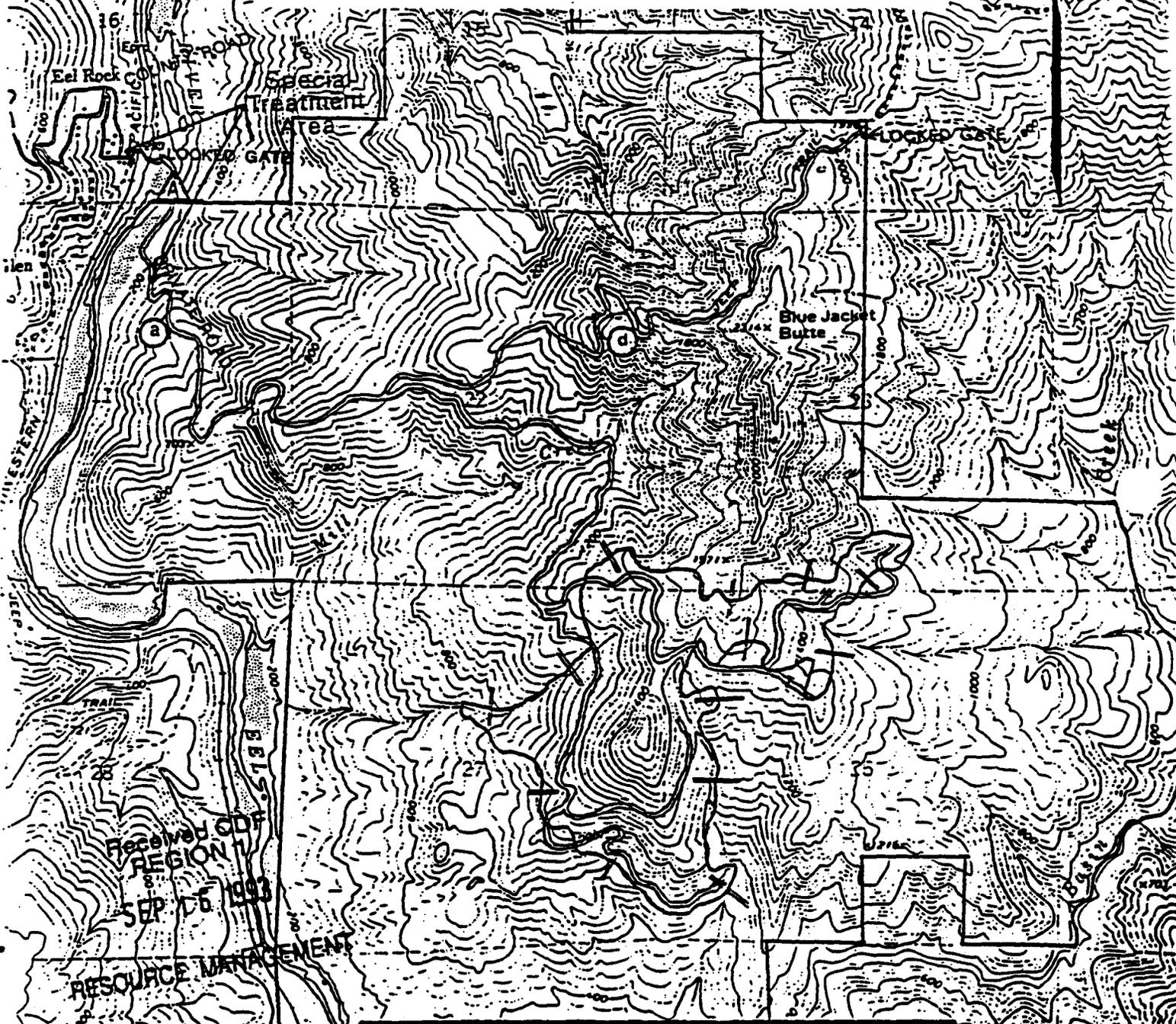
The entire plan area is a timber site class III.
 The entire plan area has a moderate erosion hazard rating.
 There are no public roads within the plan area.
 The entire plan area is tractor yarding.
 The Watercourse Crossing List is on a separate sheet.
 Watercourse Crossing "A" and THP Reference points "a" and "d" are on the Appurtenant Roads Map.
 In Humboldt County in Portions of Sections 22, 23, 26 and 27 Township 2-South, Range 4-East

| | |
|----------------|------|
| CALENDAR PAGE | 139 |
| NUMERICAL PAGE | 1020 |

EEL RIVER

McBride - Eel Rock Ranch EEL ROCK THP

APPURTANENT ROADS MAP



Received CDF
REGION 1
SEP 16 1993

RESOURCE MANAGEMENT

NOTE: This map shows other features that are not on the larger scale THP Map.

Legend is the same for the THP Map

From USGS 7.5' "Blockburg" Scale 1:24,000
HUMBOLDT COUNTY

| | | | |
|-------------|---------------|---------|------|
| THP Map | CALENDAR PAGE | 1:24000 | 140 |
| MINUTE PAGE | 1000 | 1000 | 5000 |

by the Geological Survey

Methods from aerial
checked 1969

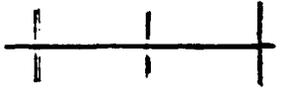
California coordinate

184°

CONTOUR INTERVAL 20 FEET

Eel Rock #1 THP
 Timber Harvesting Plan Map
 In Humboldt County in Portions of Sections 22, 23, 26 and 27,
 Township 2-South, Range 4-East, E.B.M.

Legend

THP Boundary (Logging Area)..... 

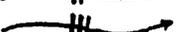
Existing Roads

Permanent..... 
 Seasonal..... 
 Temporary..... 
 Existing Landings*..... O
 Road Failures..... RF

Proposed Roads

Permanent..... N/A
 Seasonal..... N/A
 Temporary..... 
 Proposed Landings*..... ●

Watercourse Classification (14 CCR 916.5)

Class I (one) Watercourse..... 
 Class II (two) Watercourse..... 
 Class III (three) Watercourse..... 
 Springs and Wet Areas..... 
 Watercourse Crossings..... 
 (Watercourse Crossing List and Temporary/Permanent Classification is on Separate Sheet
 THP Reference Point..... 

Regeneration Method Boundaries — . — . — . — . — .

Shelterwood-Seed Step..... SH-S
 Shelterwood-Removal Step..... SH-R
 Understocked areas prior to operations (20 ac. Min.)... N/A
 Slides and Unstable Areas..... SSS
 Areas with slopes over 65%..... 
 Ridge Top Suitable For Fire Suppression Efforts-
 Will require felling of snags..... 
 Special Treatment Areas..... N/A

N/A means that this is not a feature of this THP.

* None within WLPZ or >1/4 acre or requiring substantial excavation.

| |
|---------------------------------------|
| Received CDF CALENDAR REGION 1 141 |
| MINUTE SER 6 19931022 |

Watercourse Crossing List

| Crossing | Watercourse Class | Size | Additional Instructions |
|----------|-------------------|---------------|---|
| A | I | Temp-Bridge | 89 ft. flatcar bridge. |
| B | II | Perm-48" CMP | Install at grade with trash rack. |
| C | II | Temporary CMP | or permanent flatcar bridge, if available. |
| D | II | Perm-18" CMP | Install with downspout. |
| D1 | III | Perm-18" CMP | |
| E | II | Perm-18" CMP | |
| F | II | Perm-18" CMP | |
| G | II | Perm-18" CMP | |
| H | II | Perm-18" CMP | |
| I | III | Temporary | |
| J | III | Perm-18" CMP | |
| K | II | Perm-30" CMP | Replace existing 12" CMP which is insufficient during high flows. West of crossing K, a class III crosses the road. If water is present at the time of operations, it will be diverted into the intake at crossing K, a distance of approximately 20 ft. The class III shall be dipped out upon completion. |
| L | II | Temporary | At this point, THP Reference Point "c", the road makes a switch-back turn thru a series of springs. There is one spring on the upper part of the turn that can be carried beyond the turn by an inside ditch. There are two springs on the lower part of the turn. The water from the second spring can be carried down to the third spring with an inside ditch at which point, it is proposed to install a temporary culvert to carry the water across the road. Upon completion, the road shall be dipped out at all three locations in the original channels. |
| M | III | Temporary | |
| N | II | Existing 12" | Functioning CMP exists. Intake should be cleaned and trash rack installed. Just up the road from "N" is a Temporary class III crossing. |
| O | III | Perm-24" CMP | |
| P | III | Perm-24" CMP | |
| Q | II | Perm-30" CMP | |

Received CDF
 REGION 1
 OCT 25 1993

RESOURCE MANAGEMENT

CALNDAR PAGE
PART OF PLAN
 MINUTE PAGE 7023

Standard Installation Techniques

All intakes and discharges on permanent culvert installations to be rock armored.

Trash racks to be installed on all permanent culvert installations.

Near culvert crossings, road drainage should be directed to the inside of the road, into the culvert intake, rather than over the downstream fill face.

Permanent watercourse crossings shall be constructed to prevent flow from being diverted down the road in the event the culvert is blocked by debris or its capacity is exceeded in a large runoff event. This can be accomplished by constructing rolling dips or large waterbars on either side of the crossing to prevent overflow from running down the road.

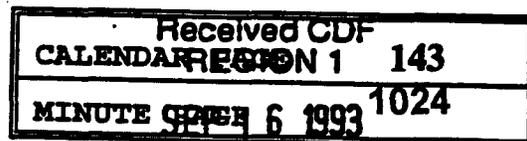
Temporary crossings shall require a culvert if water is present at the time of operations. CMP's, if used, shall be removed and the channels dipped out but made passable for standard production four-wheel drive vehicles for ranch and administrative purposes. Approaches shall be seeded and mulched.

In addition to following the required 1603/1606 process with the Department of Fish and Game, we are also in communication with the U.S. Army Corp of Engineers regarding the permit process for the temporary flatcar crossing of the Eel River at Eel Rock.

* Permanent Culverts have been sized to tolerate a 100 year flow (Talbot's Formula).

Item #14

The Eel River is a Wild and Senic River as defined in PRC 5093.54 (d), and as such, is a Special Treatment Area (STA) within 200 feet of the watercourse transition line. While none of the harvest area is within or even close to the STA, the temporary crossing "A" at Eel Rock and the road approaches are within STA. The only operations proposed within the STA is the installation of the temporary bridge, maintenance of the existing approaches, and the hauling of logs to their mill destinations.



GENERAL DESCRIPTION OF PLAN SITE
14 CCR 1034 (ii)

The plan site straddles a southwest running ridge at approximately 600-2000' above sea level on the east side of the Eel River approximately 1.25 miles southeast of Eel Rock. The slopes are moderate to steep with many flat benches interspersed across the terrain. Approximately 2/3 of the vegetative cover in the general area is grass or oak (or a combination thereof) and the other 1/3 is currently supporting timber. The only conifer species observed in or around the plan area was Douglas-fir. Hardwoods include white oak, black oak, pepperwood, madrone, maple, live oak, tanoak and buckeye.

The predominant soil on the plan area is Hugo 812. Hugo is characterized by a grey/brown surface color and a light yellow brown subsurface color. The depth range is 30-60 inches. The surface texture is loam and the subsurface texture is a gravelly clay loam. The surface ph is moderately acid and the subsoil is strongly acid. The pale yellow subsoil is usually stony. It is the most common timber soil. Also on the plan area is Josephine 815. It has a brown surface color that is typically a loam and is slightly acid. The subsoil is a brownish/red color (sometimes pink) and has a depth range of 40"+. The subsoil texture is a clay and usually has little or no gravel and is strongly acid. The parent rock is usually soft from intense weathering. There are two other soil types that the existing seasonal road crosses from the end of the County road to the plan area. Through the oak stands, Tyson is the predominant soil type and Laughlin is predominant in the grass types. Tyson has a surface color that is a dark gray brown, loam texture and is slightly acid. The subsoil is a light yellow brown, stony clay loam and is strongly acid. It has a depth range of 18-48". Laughlin has a light brown color, slightly acid and a loam texture on the surface and subsoil. it has a depth range of 18-40 inches.

The stand is most accurately described as an even-age Douglas-fir forest approximately 80-100 years old. The stand is typical of a Douglas-fir type, apparently being the result of a fire event some 100+ years ago. There are a few fire survivors scattered throughout the plan site in some of the deeper draws where the fire did not get hot enough to cause complete mortality. It is a single story canopy that varies from 50-100% crown closure. DBH's range from 14-50 inches with approximately 90% of the stems falling in the 18-30 inch class. Heights vary from 90-135 feet with a few taller trees on the more favorable sites. The species distribution based on the percentage of basal area occupied by each species is estimated at 80% Douglas-fir, 20% white oak. Nominal amounts of tanoak, pepperwood and madrone are also present.

Watercourses on and around the plan area are smaller order 1 and 2 streams that originate in the plan area. Most of these watercourses are class III's, being rain dependent for flow. A few are perennial watercourses, and are class II's. The watercourses were surveyed in preparation of the Cumulative Impacts Assessment for watershed resources and a thorough description of that section of the TEP.

MINUTE RECEIVED CDF 1025
REGION 1
CUMULATIVE IMPACTS ASSESSMENT
APPENDIX PAGE 144

SILVICULTURAL ADDENDUM
ITEM #15

Justification of Silvicultural Methods

The forest management goal of the timberland owner is to produce and maintain a forest that is healthy and naturally diverse, with a mixture of tree species and understory plants similar in proportion to those previous to management activities, while providing for the following objectives to the maximum extent permitted under the rules and regulations of the Act and Board: Attempt to achieve a balance between growth and harvest over time; Attempt to maintain functional wildlife habitat in sufficient condition for continued use by the existing wildlife community (listed and non-listed if present) within the planning area; Retain or recruit late and diverse seral stage habitat components for wildlife concentrated in stream zones as required per 14 CCR 916.5 and provide for functional connectivity between habitats in the planning area as appropriate in consideration of known species and applicable defined habitat needs.

In this Timber Harvesting Plan, we are attempting to treat the southwest portion of the Timberland Owner's tract by identifying: 1) areas of residual timber that have successfully seeded in the next generation of conifers and are ready for overstory removal, and; 2) areas of mature second growth timber that are suitable for regeneration cuts.

In areas where previous entries were made, they were successful in regenerating the stand with young, vigorous conifer regeneration and are suitable candidates for overstory removal. In these areas, the Shelterwood-Removal Step has been proposed to treat the stand. This will allow removal of the remaining merchantable conifers while creating more growing space for the advanced regeneration present. Intrusion of grass into these areas has made additional regeneration very difficult without the benefit of soil disturbance. Additional seedling establishment is expected in the disturbed soil areas using trees from the adjacent stand as a seed source.

Fully stocked areas of mature young growth timber have also been identified for regeneration cuts using the Shelterwood-Seed Step. These are areas of moderately dense to dense mature Douglas-fir with little or no regeneration present in the understory. Sample borings in these stands has showed a significant slowing of growth in recent years indicating that the stand has reached its culmination of mean annual increment and that timing of the harvest at this point is prudent before decaying processes impair the production of high quality wood products any further. Less intense harvests, such as the shelterwood preparatory step, would be expected to fail due to the limited soil disturbance (seed bed preparation) and small percentage of crown opening in the overstory. Past experience on similar sites have shown light harvest entries have not been well suited to regeneration of the conifers, but have instead favored grass and brush introduction. Following the experience of previous harvests on this property we have proposed this silvicultural method as the best suited to the

| | |
|---------------|---------|
| CALENDAR PAGE | CDF 145 |
| MINUTE PAGE | 1026 |
| SEP 10 1993 | |

species, site conditions, management constraints for wildlife, and overall resource protection.

Explanation of Silvicultural Methods

There is approximately 73 acres proposed for Shelterwood-Removal and these areas shall have all merchantable timber removed. There is sufficient savable stocking present so that no artificial regeneration is required. Merchantable conifers down to 18" DBH that will make a 32' long by 8" diameter log will be harvested. Smaller "residual type" trees may be harvested if they show no signs of release or otherwise will not produce a future crop tree. These areas shall meet stocking standards set forth in 14 CCR 912.7 (b,1) upon completion of operations. While we did not observe any understocked areas during our inspection of the stands, there may be some isolated small areas that may not meet stocking standards set forth in 14 CCR 912.7 (b,1). Potential understocked areas, if any exist, will not exceed 10% of the area or 20 acres as per 14 CCR 913.1 (b,6) as judged by the RPF.

In the shelterwood-seed step areas, harvest trees shall be marked prior to timber operations by the RPF, or his designee, with a horizontal stripe painted above the cutline and spot marked below the cutline with paint. Approximately 247 acres will be under the shelterwood seed step perscription. The tree density description in the following paragraphs is the minimum allowed in the rules. In marking the units for harvest the RPF, or his designee, shall consider the condition of the individual tree, the condition of the stand, potential for windthrow, aspect, topography, soil conditions, micro-climate and wildlife use in determining the amount of canopy to be removed. Canopy closure after operations is expected to be -40 percent. Other areas may exceed 40% total canopy closure were understory hardwoods exist. Trees to be counted as seed trees (10 seed trees 18 inches dbh or greater per acre, 14 CCR 913.1 c) shall show superior phenotypic characteristics including dominant and co-dominant crowns, height, stem form and resistance to pathogens. Site preparation will not be required and it will in no way resemble a clearcut in extent or intensity.

Found throughout this stand are patches of white oak that may or may not contain sufficient merchantable Douglas-fir to apply this silvicultural method. These hardwood patches typically are densely stocked with young Douglas-fir regeneration. Due to the irregular shapes of the patches and the topographic characteristics of the plan, mapping these small patches would not be practical. In marking these areas for harvest, if the patch contains only 10 or less of the required 18 inch DBH or larger conifers per acre, the patch will simply not be operated. Nowhere on the plan area did the RPF observe any understocked area greater than or equal to 20 acres.

As per 14 CCR 913.1 (b,3), the number of seed trees shall equal or exceed that set forth under the seed tree regeneration method and shall provide adequate shelter for seedling establishment. The minimum residual tree density and spacing as set forth in 14 CCR 913.1 (c,1) is as follows:

| | |
|---------------|------|
| Received CDF | |
| REGION 1 | |
| CALENDAR PAGE | 146 |
| SEP 16 1993 | |
| MINUTE PAGE | 1027 |

An average of at least 25 seed trees, 45.7 cm d.b.h. or greater per ha (10 seed trees 18 inches dbh or greater per acre) must remain on the logged area. In addition, no point within the logged area shall be more than 45.72 m (150 feet) horizontal distance from the nearest seed tree. Also, each seed tree 61 cm (24 inches) d.b.h. or greater shall be equivalent to two (2) seed trees which are less than 61 cm (24 inches) d.b.h., but at least 45.7 cm (18 inches) d.b.h. or greater.

Silviculture Evaluation

To aid the Department in the review of this THP, we are volunteering the following Timber Stand Data for the areas to be harvested although none of the concerns addressed in the "New Guidance For Evaluating Timber Operations" are apparent in this THP.

Timber Stand Data, Shelterwood-Seed Step Area

1. Estimate of current growth (board feet/acre/year or cubic feet/acre/year).

Current growth has slowed considerably in the last 10 years as evidenced by sample increment borings. Ten year diameter increments ranges from 0.8 to 1.4 inches. It is estimated that the stand is currently growing at approximately 1000 board feet/acre/year. The entire plan area is a timber site class III.

2. Estimate of the pre and post volume/acre or general d.b.h. class distribution.

Pre and post volume per acre is estimated at 7,500-30,000 board feet per acre (pre) and 5,000-10,000 board feet per acre (post). This will vary due to existing stand variability and variability in harvest intensity due to condition of the individual tree, the condition of the stand, potential for windthrow, aspect, topography, soil conditions and wildlife use.

3. Estimate of average pre and post basal area/acre.

Average pre and post basal area/acre is estimated at between 140-290 (pre) and 50-150 (post). This will vary also for the same reasons described in #2 above.

4. Estimate of pre and post harvest basal area composition of each species.

This is a almost pure stand of Douglas-fir with patches and fingers of hardwoods mixed throughout. Overall pre and post harvest basal area composition of each species will not differ and is estimated at 80% Douglas-fir and 20% white oak. Nominal amounts of madrone, pepperwood and other hardwoods are scattered throughout the plan area.

| | |
|---------------|------------------|
| Received GDF | |
| CALENDAR PAGE | REGION 1 147 |
| MINUTE PAGE | SEP 16 1993 1028 |

5. *Prediction of the effect of harvest on growth.*

While some release is expected as a result of this harvest, it is not the object. The object is to open the stand significantly to effect natural regeneration. As explained in #1 above, growth has slowed considerably. By establishing a new stand of thrifty, vigorous young conifers the effect of the harvest on growth over time will be a net increase.

6. *Projected future entry.*

The next projected entry into this stand is dependent on the results attained in this entry, the priority of other stand treatments within the ownership, the financial needs of the Timberland Owner and the ever changing Forest Practice Rules. It is estimated that another entry could be made as early as 5-10 years but more realistically it would probably be made in 10-15 years.

7. *Estimated stand age class distribution.*

This is an even-aged stand of Douglas-fir approximately 80-100 years old. There are a few scattered older trees (Douglas-fir, 150-250 years old) that are fire survivors. These are found mostly in the deeper draws and in small isolated pockets. In isolated areas where they are found, these residuals number less than 5 per acre.

8. *Quality (including genetic) and level of residual stocking to produce a future stand.*

Trees to be counted as seed trees (10 seed trees 18 inches dbh or greater per acre) shall show superior phenotypic characteristics including dominant and co-dominant crowns, stem form, height, and resistance to pathogens.

*Timber Stand Data, Shelterwood-Removal Step Area*1. *Estimate of current growth (board feet/acre/year or cubic feet/acre/year).*

Sample borings of residuals in the shelterwood-removal step areas have showed unpredictable growth rates. Some trees have released and are putting on respectable diameter increments. These are trees with dominant and co-dominant crowns and little sign of defect. Other trees have not release and these are typified by poor quality crowns, broken tops and highly defective trees. It is estimated that these stands are currently growing at 100-500 board feet/acre/year.

2. *Estimate of the pre and post volume/acre or general d.b.h. class distribution.*

Pre and post volume per acre is estimated at 3,000-5,000 board feet per acre (pre) and 500-1,000 board feet per acre (post). Since most of the residual timber is to be removed and the

| | |
|---------------|------|
| CALENDAR PAGE | 148 |
| RECEIVED CDF | |
| MINUTE PAGE | 1029 |
| REGION 1 | |

SEP 16 1993

advanced regeneration has not yet reached merchantable size, little volume will remain in these areas after operations.

3. *Estimate of average pre and post basal area/acre.*

Average pre and post basal area/acre is estimated at between 40-100 (pre) and 10-30 (post). These figures are low for the same reasons described in #2 above.

4. *Estimate of pre and post harvest basal area composition of each species.*

Pre and post harvest basal area composition of each species shall not appreciably vary and is estimated at 80% Douglas-fir and 20% white oak. Nominal amounts of madrone, pepperwood and other hardwoods are scattered throughout the plan area.

5. *Prediction of the effect of harvest on growth.*

Removal of the overstory should create more growing space for the existing regeneration. Also additional seeding of conifers is expected from adjacent stands in the newly disturbed soil. By establishing a new stand of thrifty, vigorous young conifers the effect of the harvest on growth over time will be a net increase.

6. *Projected future entry.*

As this is a final removal step and the existing regeneration is -15-20 years old, the next potential entry date would be in 25-35 years when a thinning might be appropriate.

7. *Estimated stand age class distribution.*

This is an even-aged stand of Douglas-fir, the residuals being mostly 80-100 years old, the regeneration being approximately 15-20 years old.

8. *Quality (including genetic) and level of residual stocking to produce a future stand.*

The advanced regeneration in the shelterwood-removal areas shows good genetic characteristics. There is little or no evidence of insect or disease problems in this portion of the tract and growth of the regeneration is best described as thrifty. The level of stocking will meet or exceed the stocking standards of 14 CCR 912.7 upon completion of operations.

Received CDF
REGION 1

| | |
|---------------------|-----------------|
| CALENDAR PAGE | 558 45 1993 149 |
| MINUTE PAGE | 1030 |
| RESOURCE MANAGEMENT | |

HARVESTING PRACTICES AND EROSION CONTROL ADDENDUMITEM #22

While no tractor operations are proposed in slide/unstable areas in any of the harvest area, tractors will be used in the seasonal road reconstruction at TEP Reference Point "a", "b" and "d", as explained and justified in the addendum to Item #38.

ITEM #23

The RPF proposes an exception to 14 CCR 914.2 (f,1), explained as follows: 1) Tractor operations shall be confined to initial construction of skid trails and yarding from said skid trails. No site preparation or layout construction is proposed, however tractors may also be used for tree pulling from the above mentioned skid trails; 2) Skid trails shall be flagged prior to preharvest inspection by the RPF, or his designee, and; 3) Tractor operations shall comply with all of the other provisions of 14 CCR 914.2.

The exception is justified as follows: 1) Areas of slopes over 65% are generally less than 10 acres in size and are broken up by benches; 2) The existing road system does not lend itself well to traditional cable yarding systems; 3) Construction of a new road system to allow access for cable yarding equipment would require extensive new construction on slopes over 65% requiring substantial excavation and end hauling, which would reduce the amount of growing space; 4) Tractor yarding lends itself better to partial cutting by allowing more flexibility in yarding positions, resulting in less damage to residual trees; 5) Tractor yarding allows the area to be stage felled, greatly reducing the amount of breakage of merchantable timber. Cable yarding requires all of the harvest trees felled before the cable rigging is put in place, and; 6) The silvicultural addendum describes what trees will be harvested considering the condition of the individual tree, the condition of the stand, potential for windthrow, aspect, topography, soil conditions, micro-climate and wildlife use in order to meet the goal of maximum sustained production of high quality timber products. Cable yarding would require the cutting of yarding corridors without regard any of these considerations.

Given the limited size of the areas with slopes over 65%, the natural benches found in the terrain, the moderate erosion hazard rating and the other justifications listed above, tractor operations on slopes over 65% as explained above will have substantially less impact on the environment than cable yarding and the required new road construction and associated felling practices.

ITEM #27914.6 Waterbreaks

Waterbreak spacing on truck roads and skid trails shall be as per 14 CCR 914.6 (c) based on erosion hazard rating and road or trail gradient.

| | |
|---------------|------|
| Received CDF | |
| REGION 1 | |
| CALENDAR PAGE | 150 |
| SEP 16 1993 | |
| MINUTE PAGE | 1031 |

RESOURCE MANAGEMENT

MAXIMUM DISTANCE BETWEEN WATERBREAKS

| | Slope 10% or less | 11-25% | 26-50% | >50% |
|----------|-------------------|---------|---------|---------|
| Extreme | 100 ft. | 75 ft. | 50 ft. | 50 ft. |
| High | 150 ft. | 100 ft. | 75 ft. | 50 ft. |
| Moderate | 200 ft. | 150 ft. | 100 ft. | 75 ft. |
| Low | 300 ft. | 200 ft. | 150 ft. | 100 ft. |

916.7 Reduction of Soil Loss

Within the watercourse and lake protection zone adjacent to Class I and II waters, areas where mineral soil exceeding 800 continuous square feet in size, exposed by timber operations, shall be treated for reduction of soil loss. Treatment shall be done prior to October 15th except that such bare areas created after October 15th shall be treated within 10 days, or as agreed to by the director. Stabilization measures shall include seeding with State Mix* at a rate of 50 lbs. per acre and hay mulched at the rate of 2-4 inches covering at least 90% of the area so treated. The LTO shall consult with CDF concerning the use of mulch on those areas that exceed 800 square feet adjacent to the class II watercourses.

*45% Barley, 45% Annual Rye, and 10% Fescue

923.2 (m) Road Construction

Sidecast or fill material extending more than 20 feet (6.1 m) in slope distance from the outside edge of the roadbed which has access to a watercourse or lake which is protected by a WLPZ shall be seeded with State Mix at a rate of 50 lbs. per acre and hay mulched at the rate of 2-4 inches covering at least 90% of the area so treated.

923.5 (f) Landing Construction

The following specification shall be met upon completion of timber operations for the year or prior to October 15, whichever occurs first:

Overhanging or unstable concentrations of slash, woody debris and soil along the downslope edge or face of the landings shall be removed or stabilized when they are located on slopes over 65 percent or on slopes over 50 percent within 100 feet of a WLPZ.

Any obstructed ditches and culverts shall be cleaned.

Landings shall be sloped or ditched to prevent water from accumulating on the landings. Discharge points shall be located and designed to reduce erosion.

Sidecast or fill material extending more than 20 feet in slope distance from the outside edge of the landing and which has access to a watercourse or lake shall be seeded with State Mix at a rate of 50 lbs. per acre and hay mulched at the rate of 2-4 inches covering at least 90% of the area so treated.

Received CDF
 REGION 1

OCT 25 1993

RESOURCE MANAGEMENT

| | |
|---------------|--------|
| CALENDAR PAGE | 151 |
| MINUTE PAGE | PLAN 2 |

ROADS AND LANDINGS ADDENDUMItem #38

Except for one short segment of new road construction, all roads within and appurtenant to the plan area are existing. Mostly minor regrading and shaping of the road surface, along with proper reconstruction of watercourse crossings, is required to bring the roads up to seasonal truck road standards. A rolling grade will be used where possible with rolling dips at natural draws to better drain the road surface. Currently, roads are being used for ranch purposes and forest administrative use. There are three road failures, other than watercourse crossings, on the appurtenant roads leading to the plan area.

The first is at THP Reference Point "a", and is shown on the appurtenant roads map. This is an outer fill failure and can be fixed by making a slightly deeper cut into the bank. This appears to have been caused by allowing water to discharge onto some unstabilized fill, something that is not permitted under current forest practice rules. At the end of operations, waterbars will be installed directly above and below this point, to avoid discharging directly onto the fill.

At THP Reference Point "b", the upper bank has slumped down on the road, covering approximately 1/4 of the existing road surface. The road prism is intact and requires simple regrading and feathering away from the WLPZ to make it passable for truck traffic.

At THP Reference Point "d", a small debris chute has developed at the head of a Class III drainage. An upper bank slump near the head of the drainage was carried down slope by rain water concentrated on the road surface. The debris chute intercepts the road again after the road makes a switchback turn. The road prism is intact and needs only regrading and slight widening to make it usable. The problem can be avoided in the future by installing waterbars or rolling dips as per the Forest Practice Rules to minimize concentrated runoff situations and by diverting road runoff before it reaches the chute and just past the chute. A 12 inch berm shall be put in place along the head of the chute to prevent runoff from discharging onto the chute. It should be noted that this section of road is not planned for log hauling for this THP. Regrading and correction measures at "d" are an off-site mitigation to improve drainage problems and make for a lower maintenance road system.

All that is required at any of these points is one pass with a tractor to make it passable for truck traffic. What we are proposing is high standard correction mitigations that will allow use of these roads for ranch and administrative use long after the end of timber operations with minimal maintenance. The proposed rehabilitation of the roads at these points along with regrading and installation of proper drainage facilities as required by modern forest practice rules would in our opinion improve present conditions, allow for continued maintenance and ultimately add to the protection of the resources involved.

Received CDF

| | |
|------------------|-----|
| REGION 1 | |
| CALENDAR PAGE | 152 |
| SEP 16 1993 1033 | |
| MINUTE PAGE | |

RESOURCE MANAGEMENT

Road Abandonment Plan

Upon completion of timber operations, temporary roads as designated on the TEP Map and associated landings and watercourse crossings shall be abandoned in accordance with 14 CCR 923.8. The guidelines for abandonment are as follows:

- a. Blockage of roads so that standard production four wheel-drive highway vehicles cannot pass the point of closure at the time of abandonment shall be accomplished with an oversized waterbar or "tank trap" at the closure point.
- b. Stabilization of exposed soil on cuts, fills, or sidecast where deleterious quantities of eroded surface soils may be transported into a watercourse shall be accomplished as per the guidelines specified in the Harvesting Practices and Erosion Control Addendum. Such areas shall be seeded with State Mix at a rate of 50 lbs. per acre and hay mulched at the rate of 2-4 inches covering at least 90% of the area so treated or as per the CDF inspector's recommendation. The LTO shall consult with CDF concerning the use of mulch on those areas that exceed 800 square feet adjacent to the class II watercourses.
- c. Grading and shaping of road and landing surfaces to provide dispersal of water flow shall be accomplished by outsloping and using rolling grades where possible and as specified in the Roads and Landings Addendum.
- d. Pulling or shaping of fills or sidecast where necessary to prevent discharge of materials into watercourses due to failure of cuts, fills, or sidecast.
- e. All watercourse crossings associated with temporary roads shall be removed and associated fills removed upon completion of operations in accordance with 14 CCR 923.3 (d) as follows:
 1. Fills shall be excavated to form a channel which is as close as feasible to the natural watercourse grade and orientation and is wider than the natural channel.
 2. The excavated material and any resulting cut bank shall be sloped back from the channel and stabilized to prevent slumping and to minimize soil erosion. Where needed, this material shall be stabilized by seeding, mulching, rock amoring, or other suitable treatment. The LTO shall consult with CDF concerning the use of mulch on those areas that exceed 800 square feet adjacent to the class II watercourses.

Received CDF
REGION 1

OCT 25 1993

RESOURCE MANAGEMENT

| | |
|---------------|--------------|
| CALENDAR PAGE | PART OF PLAN |
| MINUTE PAGE | 1034 |

WATERCOURSE AND LAKE PROTECTION ZONE WIDTHS
AND PROTECTION MEASURES
ITEM #50

14 CCR 916.5

Class I (one): None on the plan area.

Class II (two): Unnamed tributaries to Mill Creek, Basin Creek and the Eel River.

| <u>Slope Class</u> | <u>Zone Width (ft.)</u> |
|--------------------|-------------------------|
| 0-30 | 50 |
| 30-50 | 75 |
| >50 | 100 <u>2/</u> |

2/ Subtract 25 feet in width for cable yarding operations.

As per 14 CCR 916.5, we are listing the following required protections for Class II watercourses.

"B"- WLPZ shall be clearly identified on the ground by the RPF who prepared the plan, or his designee, with paint and flagging prior to the start of timber operations.

"E"- To ensure retention of shade canopy filter strip properties and the maintenance of wildlife values described in 14 CCR 916.4 (b), a base mark shall be placed below the cutline of the harvest trees within the zone and shall be done in advance of timberfalling operations by the RPF who prepared the plan, or his designee.

"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.

Recruitment of large woody debris for instream habitat shall be provided by retaining at least two living conifers per acre at least 16 inches diameter breast high and 50 feet tall within 50 feet of all Class II watercourses, 14 CCR 916.3 (g), and within the WLPZ, at least 75 percent surface cover and undisturbed area shall be retained to act as a filter strip for raindrop energy dissipation, and for wildlife habitat, 14 CCR 916.4 (b,6). As an added mitigation, no harvesting of hardwoods shall be allowed within a class II WLPZ. The widths given above are minimum widths. These may be expanded to the break in slope in site specific cases by the RPF or his designee.

Received CDF
REGION 1

| | | |
|---------------------|-------------|-----|
| CALENDAR | SEP 16 1993 | 154 |
| MINUTE PAGE | 1035 | |
| RESOURCE MANAGEMENT | | |

Class III (three): Unnamed watercourses.

| <u>Slope Class</u> | <u>Zone Width (ft.)</u> |
|--------------------|-------------------------|
| 0-50 | 25 |
| 50+ | 50 |

PART OF PLAN

An unmarked Equipment Limitation Zone (ELZ) shall be afforded to protect water quality, wildlife, and other resources listed in 916.4 (b). All heavy equipment shall be excluded from the ELZ's except at crossings and approaches for truck roads and skid trails and existing landings.

To further mitigate any potential negative impact to the resource, the following protection for Class III watercourses shall be applied. At least 50% of the understory vegetation present before timber operations shall be left living and well distributed within the ELZ to maintain soil stability within the zone and to act as a filter strip.

Soil deposited during timber operations in a Class III watercourse other than a temporary crossing shall be removed and debris deposited during timber operations shall be removed or stabilized before the conclusion of timber operations, or before October 15. 14 CCR 916.4 (c,3).

Received CDF
REGION 1

OCT 25 1993

Wet Areas and Springs

Wet areas and springs shall be afforded a 25 foot marked Equipment Exclusion Zone (EEZ) to protect water quality, wildlife, and other resources listed in 916.4 (b) and associated with wet areas and springs. Heavy equipment shall be excluded from EEZ's except on existing truck roads where it will be necessary for the transportation of the forest products. This exception is necessary because of the tendency for springs and seeps to occur along road cuts.

To further mitigate any potential negative impact to the resource, the following protection for Wet Areas and Springs shall be applied. At least 50% of the understory vegetation present before timber operations shall be left living and well distributed within the EEZ to maintain soil stability within the zone and to act as a filter strip.

SNAG RETENTION ADDENDUM
ITEM #52

All snags will be felled that are within 100 feet of the ridge top delineated on the THP map as suitable for fire suppression, within 100 feet of all seasonal roads and landings or where federal or state safety laws require the felling of snags for safety. All unmerchantable snags (dead trees) and large down woody debris shall be left distributed to the extent they occur prior to operations that does not conflict with safety and hazard reduction requirements. Unmerchantable for the purpose of this harvest is defined as trees producing all logs with less than 250 net volume.

| | |
|---------------|------|
| CALENDAR PAGE | 155 |
| MINUTE PAGE | 1036 |

OTHER INFORMATION ADDENDUM
ITEM # 61

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 future projects?

Yes X No

If the answer is yes, identify the project(s) and affected resource subjects.

SEE CUMULATIVE IMPACTS ASSESSMENT ADDENDUM

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

Yes No X

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 future projects identified in items (1) and (2) above, have a reasonable potential to cause or add to significant cumulative impacts in any of the following resource subjects.

| | Yes after mitigation (a) | No after mitigation (b) | No reasonably potential significant effects (c) |
|----------------------|-----------------------------|----------------------------|--|
| 1. Watershed | | X | |
| 2. Soil Productivity | | | X |
| 3. Biological | | X | |
| 4. Recreation | | | X |
| 5. Visual | | | X |
| 6. Traffic | | | X |
| 7. Other | | | X |

Received CDF
 REGION 1

SEP 16 1993

RESOURCE MANAGEMENT

| | |
|---------------|------|
| CALENDAR PAGE | 156 |
| MINUTE PAGE | 1037 |

- a) Yes, means that potential significant adverse impacts are left after application of the Forest Practice Rules and mitigation or alternatives proposed by the plan submitter.
- b) No after mitigation means that any potential for the proposed timber operation to cause significant adverse impacts has been substantially reduced or avoided by mitigation measures or alternatives proposed in the THP and application of the Forest Practice Rules.
- c) No reasonably potential significant effects means that the operations proposed under the THP do not have a reasonable potential to join with the impacts of any other project to cause a cumulative impact.

(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 impact. 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 ADDENDUM

(5) Provide a brief description of the assessment area used for each resource subject.

SEE CUMULATIVE IMPACTS ASSESSMENT ADDENDUM

(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 CUMULATIVE IMPACTS ASSESSMENT ADDENDUM

Received CDF
REGION 1

SEP 16 1993

| | |
|---------------------|------|
| CALENDAR PAGE | 157 |
| RESOURCE MANAGEMENT | 1038 |
| MINUTE PAGE | |

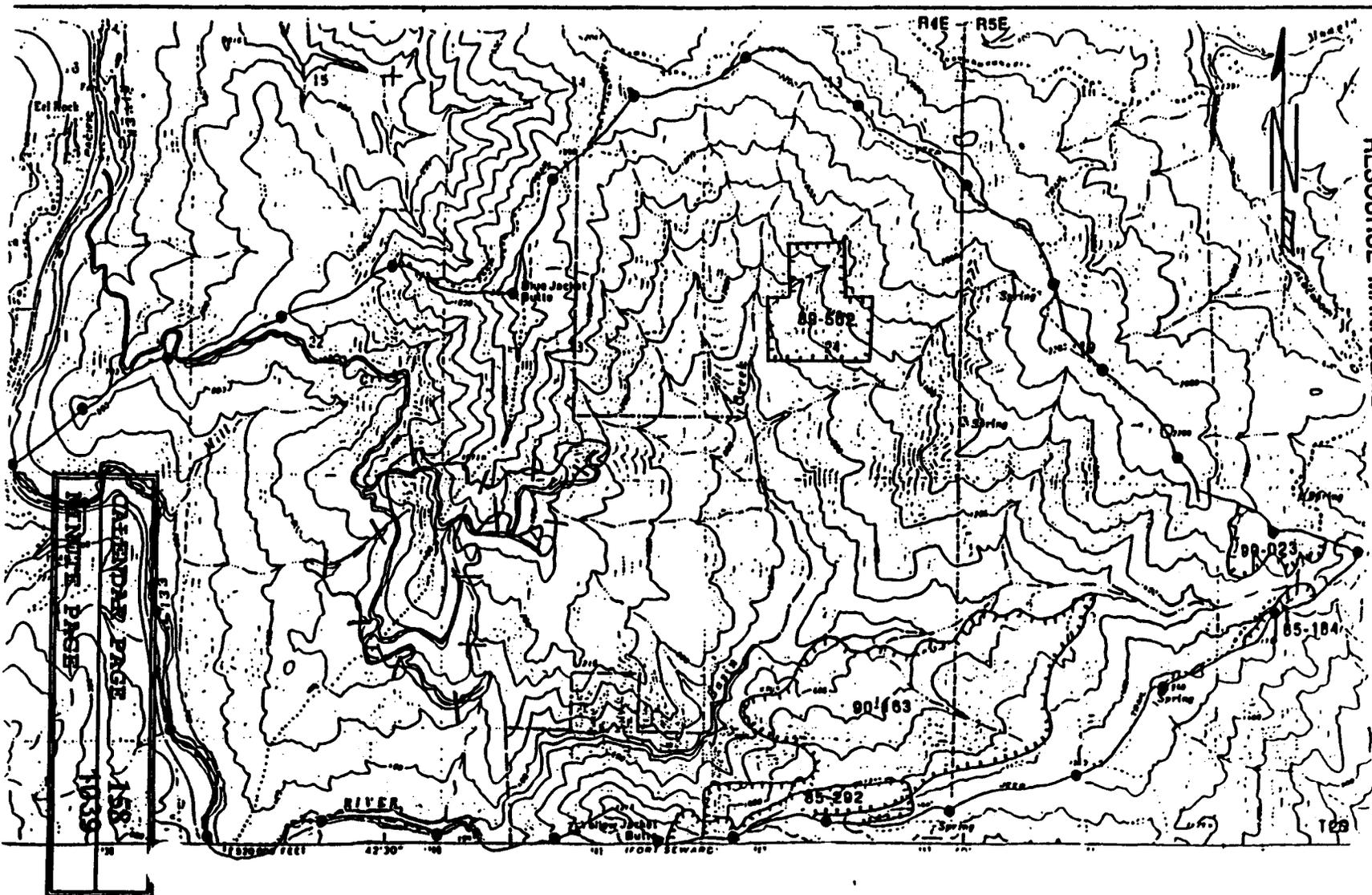
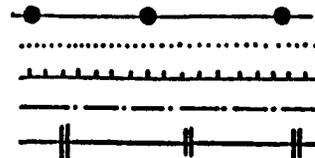
Eel Rock THP Watershed Assessment Area

HUMBOLDT COUNTY

USGS TOPOG 7.5' 'BLOCKSBURG' (REDUCED)

SCALE 
LEGEND

WATERSHED ASSESSMENT AREA
DIVISION BETWEEN MILL CR. & BASIN CR. DRAINAGES
PAST 10 YR. THP BOUNDARIES
McBRIDE OWNERSHIP BOUNDARY
PROPOSED THP



RESOURCE MANAGEMENT

Received CDF
REGION 1
OCT 25 1993

PART OF PLAN

TIMBER HARVESTING PLAN ATTACHMENT
CUMULATIVE IMPACTS ASSESSMENT ADDENDUM

Watershed Resources

The watershed assessment area for this THP is the entire Mill Creek and Basin Creek drainages which drain into the Eel River approximately 1.5 miles and 4 miles respectively upstream from Eel Rock. It totals approximately 5,700 acres with 1,231 acres in the Mill Creek drainage and 4,469 acres in the Basin Creek drainage. The watershed assessment area includes approximately 3.4 miles of the Eel River. The location of the assessment area was chosen because it includes the drainage basin where the plan is located and also includes areas where other watershed effects could combine with any potential watershed effects from the proposed project to form a cumulative impact. The assessment area includes both upper drainage steep gradient segments that are a good place to look for and evaluate singular impacts and lower portions of the watershed where individual effects can combine to form cumulative impacts. These are typically low gradient sections and areas where sediment accumulation is likely to occur.

PAST PRESENT AND FUTURE PROJECTS

Past Projects

Past activities in the assessment area include timber harvesting and livestock grazing. A summary of the past 10 years THPs follows.

PAST 10 YEAR THPs WITHIN WATERSHED ASSESSMENT AREA

| THP NUMBER | PLAN SUBMITTER | ACRES* | YARDING METHOD | PRESCRIPTION | STATUS |
|------------|----------------|--------|----------------|--------------|-----------|
| 85-292 | Fearrien | 60 | Tractor | Shw-removal | Closed |
| 89-562 | Willis | 91 | Tractor | Shw-removal | Withdrawn |
| 90-023 | Fearrien | 33 | Tractor | Shw-removal | Closed |
| 90-163 | Fearrien | 420** | Tractor | Shw-removal | Closed |

* Acres are as planimetered off of Past THP Maps at CDF-Fortuna.
** The acreage listed in the plan was 375 acres but the area drawn on the Past THP Map at CDF-Fortuna is clearly larger.

Visual inspection on the ground as well as aerial photo interpretation of the past projects indicate that this area is suited for a combination of timber production and range management. Approximately 9 percent of the assessment area has been under an approved THP within the last 10 year period which is certainly not considered excessive. The most common silvicultural method used in the assessment area has been the shelterwood system which uses partial cutting techniques. Regeneration success has been normal using this technique in the past.

Received CDF
REGION I
CALENDAR PAGE 159
SEP 16 1993
MINUTE PAGE 1040
RESOURCE MANAGEMENT

Present Projects

To the best of our knowledge, using information currently available, there are no other THP's being operated within this assessment area nor are there any other THP's in the planning stages except for the proposed project.

Future Projects

This will be the first entry in this management block since 1981. Although there were several other areas noted that are in need of some form of stand treatment there are no specific areas under consideration at this time. It would be safe to say, however, that future stand improvements are expected to occur within the next five to ten years.

Beneficial Uses

The beneficial uses of water on-site and downstream within the assessment area are agricultural supplies (livestock watering), cold freshwater habitat, wildlife habitat, fish spawning and recreational. Livestock use is quite visible in this portion of the county. Typically, livestock will water from perennial streams and from developed water sources, both of which are present within the assessment area. The class II's in the plan area (there are no class I's) provide coldwater habitat that supports amphibians and invertebrates within the plan area and fish downstream in the class I streams in the assessment area and also provides water and shelter for other wildlife in the area. Fish spawning occurs in the Eel River and the lower stretches Basin Creek. Little recreational opportunities are available on this portion of the Eel River due to limited access. Some local residents of Eel Rock make use of the Eel River for fishing, picnicking and sun bathing.

In the reasonably foreseeable future, water demands are expected to remain constant for all uses.

Current Watercourse Conditions

Watercourses were visually inspected within the THP and the assessment area. No significant sources of major sediment input were noted during visual inspections nor were any significant recently active landslides observed either on the ground or through aerial photo interpretation. The most significant feature of the appurtenant road system is the number of failed watercourse crossings. Some sediment input is occurring at these failed crossings and the THP proposes replacement with high standard permanent and temporary crossings. No serious negative characteristics were observed including bank cutting, mast wasting, downcutting, scouring debris clearing or recent flooding. Canopy closure was typically in the form of a hardwood and conifer overstory, except of course, where watercourses flowed through open prairies. Many watercourses that flowed water year round were heavily vegetated with willow.

Received CDF
REGION 1

CALENDAR PAGE 6 1993 160

MINUTE PAGE

1041

RESOURCE MANAGEMENT

Watershed Effects

Possible watershed effects from a timber operation include sediment deposit, increased water temperature, altering the availability of organic debris, chemical contamination and increased peak flows.

Sediment effects can be either short term (suspended sediment) or long term (bedload) effects. Increased suspended sediment (above historic backgrounds) caused by logging operations is usually the result of surface soil loss from roads and large areas of exposed mineral soil on the harvest area that has access to a watercourse.

An interesting characteristic of this site is that the conifer timber types are concentrated upslope on or near the ridgetops and the grasslands and hardwoods are on the lower slopes. Usually, the opposite is the case with the grass and oaks on the ridgetops and the timber in the creeks, putting operations closer to the major watercourses and increasing the risk of sediment input. While there are watercourses within the plan area, most are class III's with only a few class II's. The physical distance alone of the THP to any major watercourse shall lessen the risk of sediment input.

Soil types and characteristics are discussed in the attachments addendum and erosion hazard ratings for the plan area were determined to be moderate (see Estimated Surface Soil Erosion Hazard Worksheet in Attachments Addendum). The partial cutting of the plan area, with no mechanical site preparation proposed, shall reduce the risk of soil detachment by raindrop impact significantly by leaving a substantial amount of vegetative cover remaining after operations.

In light of the EHR, the silvicultural system proposed, the watercourse protection measures provided for in the Rules and the RPF's experience in the area, it is concluded that the greatest chance for sediment effects will come from runoff of roads, landings and skidtrails.

Presently, the existing road system is being used for ranch management purposes. The most significant impact noted in this road system is a number of failed watercourse crossings, or crossings that were never installed. This THP proposes to reconstruct these crossings to high standard permanent and temporary crossings. All new permanent watercourse crossings have been sized using Talbot's Formula and should be adequate when properly installed to withstand a 100 year flood.

This plan has been designed around the existing road system, requiring only -500 feet of new construction of temporary road. This is on a ridgetop location with no watercourses involved. Sediment effects shall be lessened significantly by adhering to the requirements of the Forest Practice Rules which include treatment of exposed mineral soil within WLPZ's as described in the addendum to Item #27 of the THP. Soil stabilization treatments, the restriction of tree felling across WLPZ's, installation of drainage structures and facilities and other features or actions to reduce surface erosion, gulying, channel erosion and mass erosion will reduce the risk of sediment induced effects.

| | |
|-----------------|------|
| CALENDAR PAGE | 161 |
| MINUTE REGION 1 | 1042 |

SEP 16 1993

Water temperature effects occur when enough canopy cover is removed to allow direct sunlight to reach the water. Dark colored stream bottom material, shallow water and slow running water can combine to increase this effect. Maintenance of multilevel canopies in WLPZ's shall provide adequate solar protection to the watercourses so that no increase in water temperature is expected to occur.

Organic debris effects can be either positive or negative, depending on the size of debris, type and the location introduced. Possible negative effects include a decrease in dissolved oxygen in the water, increase in acidity levels, diversion stream flow into erodible materials, cause fish barriers and create debris flows during high water events. No trees shall be felled or skidded across Class II watercourses and if accidentally deposited, shall be removed immediately and the banks stabilized. Any slash that may enter Class III watercourses shall be removed or stabilized as required in the rules. Introduction of organic debris is best left to natural processes and maintenance of WLPZ's including leaving at least two live 16" or larger conifers per acre within 50 feet of the watercourse shall provide for this.

Chemical contamination effects from logging operations are in the form of herbicide or pesticide application or run-off, fuel spills, dust retardates (not water) and excess nutrients released during slash burning. No herbicide or pesticide usage is prescribed, nor is the use of chemical dust retardates in this THP. The only slash burning will be for hazard reduction in piles around landings. These piles will be placed in such a position as required so as to not have direct access to a WLPZ. No Chemical contamination is expected from the result of this project.

Peak flow effects occur when management activities have occurred that reduce vegetative water use, create large openings where heavy snow loads can accumulate or design roads that concentrate run-off through insloping and poorly spaced drainage structures and facilities. At 600-1900 ft. above sea level, snow load accumulation should not be a problem. Roads on the plan area are outsloped in most places and drainages facilities will be installed as per the Forest Practice Rules. Partial cutting is prescribed on 100% of the plan area.

Extra mitigation measures that go beyond the Forest Practice Rules that are proposed in order to insure that no significant negative effects to watershed resources will occur include:

1. Partial Cutting on 100% of the plan area.
2. Only limited new road construction.
 - a. No new road construction within WLPZ's.
 - b. No new road construction on slopes over 65% or on slopes over 50% within 100 ft. fo a WLPZ boundary.
 - c. New road construction designated as temporary.
3. No hardwoods to be harvested within WLPZ's.

Received CDF
REGION 1

| | |
|---------------------|------|
| CALENDAR PAGE | 162 |
| MINUTE PAGE | 1043 |
| SEP 16 1993 | |
| RESOURCE MANAGEMENT | |

4. No new watercourse crossings. All crossings are either existing or reconstruction of failed crossings.
5. Equipment Limitation Zones (ELZ's) on all Class III's.
6. Equipment Exclusion Zones (EEZ's) on springs and wet areas.
7. Reclamation of existing road at THP Reference Points "a", "b" and "c".
8. Sizing of all new permanent culverts to withstand 100 year storm event.

The project, as proposed, shall have little or no impact on the beneficial uses of water. While there may be some increase in turbidity and suspended sediment in the short term, it should be insignificant and lessened and mitigated by proper road maintenance and reconstruction of the failed watercourse crossings as prescribed in the plan. This should reduce the sediment input from the project area in the long-term. The watercourse protections, as outlined in Item #50 and the harvesting practices limitations, as outlined in Item #27 shall provide adequate protection for the beneficial uses of water addressed herein and minimize the chance of exportable watershed products including sediment, heat, increased peak streamflows, organic debris and nutrients from entering the watercourses. This plan poses no significant adverse impact to the beneficial uses of water listed herein or to any fishery or other aquatic inhabitants found in the Eel River system considering the mitigations as proposed for watercourse and resource protections.

Received CDF
REGION 1

SEP 16 1993

| | |
|---------------------|-----|
| CALENDAR PAGE | 163 |
| RESOURCE MANAGEMENT | |
| MINUTE PAGE | |

References

- "Water Quality Control Plan For The Northcoast Region" - including amendments up through September 26, 1991.
- "Wildland Watershed Management", by Donald R. Satterlund and Paul W. Adams, 2nd. Edition.
- "Geology of Northern California" - California Division of Mines and Geology, Bulletin 190.
- "Monitoring Guidelines To Evaluate Effects of Forestry Activities On Streams In The Pacific Northwest and Alaska" published by the United States Environmental Protection Agency.
- "Recent Publications Of The Pacific Northwest Research Station, Third Quarter 1992" published by the United States Department of Agriculture, Forest Service.
- "Long-term Experiments On Log Decomposition At The H.J. Andrews Experimental Forest" published by the United States Department of Agriculture, Forest Service.
- "The RAPID Technique: A New Method For Evaluating Downstream Effects of Forest Practices On Riparian Zones" published by the United States Department of Agriculture, Forest Service.
- "Research Publications of The H.J. Andrews Experimental Forest, Cascade Range, Oregon: 1988 Supplement" published by the United States Department of Agriculture, Forest Service.
- "Past THPs Maps" CDF&FP, Humboldt-Del Norte Ranger Unit, 118 So. Fortuna Blvd., Fortuna, CA 95540
- William E. Kleiner, Western Timber Services, Inc. P.O. Box 1136, Arcata, CA 95521. (707)822-3628.
- Eric Behn, U.S. Army Corp of Engineers, 211 Main st., S.F. CA 94105. (415)744-3318
- Lou Bugenig, Centerville Road, Ferndale CA 95536. (707)786-9646
- Viola R. McBride, P.O. Box 1135, Ferndale CA 95536. (707)725-3088
- William R. McBride, P.O. Box 608, Ferndale CA 95536. (707)786-9460
- Fred Nunnemaker, 438 10th St., Fortuna CA 95540. (707)725-2046
- 1974 Aerial Photographs - Black and White.
- 1983 Aerial Photographs - Color.
- 1991 Aerial Photographs - Color.

Received CDF
REGION 1

| |
|----------------------------|
| SEP 16 1993 |
| CALENDAR PAGE 164 |
| MINUTE RESOURCE MANAGEMENT |

Soil Productivity

Cumulative soil productivity impacts occur when the effects of two or more activities, from the same or different projects, combine to produce a significant decrease in soil biomass production potential. These impacts most often occur onsite within the project boundary, and the relative severity of productivity losses for a given level of impact generally increases as site quality declines. The assessment area for cumulative soil productivity impacts is limited to the area of the proposed THP as this is where impacts to soil productivity are most likely to occur. The geographic description of this assessment area is such that an individual assessment area map would serve no purpose and need not be provided.

Within the assessment area for soil productivity, there has been no projects in the past 10 years. Portions of the assessment area that are now prescribed for shelterwood removal were previously harvested approximately 15 to 20 years ago. No negative impacts on soil productivity from this harvest were noted during field inspections.

There are no significant negative impacts expected due to the loss of organic matter associated with harvesting operations in the assessment area. Typically after logging, organic matter in the form of limbs, tops and brush is left scattered around the plan area. No site preparation is prescribed for this THP. Large woody debris are also a major contributor to the amount of organic matter available, particularly those in late stages of decay. It is unlikely that the plan will have any negative effect on the amount of large woody debris available. Logs that are obviously culls and of no economic value will be left in a natural position in a well distributed manner. Underground litter will increase due to the harvest as stumps from harvested trees decay. This will be a gradual process with rates of decay dependent on species beginning with the abundant root hairs and continuing until all of the root system has decomposed.

No long-term surface soil loss is anticipated due to the operation of the THP. The main defense against soil erosion is the porosity of the surface soil. Porosity is maintained by the natural decay of dead organic matter being fed upon by soil organisms. If the organic material is removed and prevented from rebuilding, the porosity of the soil would gradually diminish. The forest stand treatments prescribed in this plan will insure the continued production of organic material necessary to maintain soil porosity. All soil series present on the plan area are classified as well-drained soils. The EHR was calculated to be moderate.

Soil compaction is likely to occur when the soil is saturated and subject to use by heavy equipment. No yarding or hauling is proposed during periods when the soil is saturated by rainfall. Considering the soil family, soil depth, soil structure, presence of coarse fragments in the soil, the logging history of the area, and the silviculture and yarding systems proposed, there is no significant risk of soil compaction associated with this THP.

| | |
|---------------|------|
| Received CDF | 165 |
| CALENDAR PAGE | 1046 |
| MINUTE PAGE | 1046 |
| SEP 16 1993 | |

Operation of this THP would cause no significant negative impacts to the soil productivity on the project area due to a loss of growing space. Silviculture and yarding systems were planned around the existing road system. Very limited new road construction is proposed (less than 500 ft. total new road) and tractors will use existing skid trails where possible.

Partial cutting and natural regeneration of douglas-fir along with revegetation of shrubs, grasses and herbaceous plants, limited new road construction and use of use of tractors on designated skid trails on the steeper slopes will combine to lessen any potential impacts to soil productivity.

Future projects within the assessment area for soil productivity will be further timber harvesting and use as range land. Portions of the plan area designated as shelterwood-removal step will most probably not be operated until the stand is in need of a thinning, probably in about 20-30 years. In the areas designated for shelterwood-seed step, future entries will be dependent upon how soon we have regeneration success but, barring acts of nature and other unforeseen events, will probably be in about 5-15 years.

In studying the cumulative impacts on soil productivity resources in this assessment area for this proposed project in combination with past and future projects, and given due consideration to the silviculture prescribed, the selection of yarding systems and the areas ability to naturally re-vegetate, it is our opinion that no negative impacts will incur.

References

"California Forest Practices Rules" - Technical Rule Addendum Number One.

"California Forest Soils" University of Agricultural Sciences, University of California publication.

"Forest Soils" - Lutz and Chandler

"Forest-Soil Relationships in North America" - edited by Chester T. Youngberg.

"SAF Forestry Handbook", edited by Karl F. Wenger, 2nd. Edition.

"Forest Ecology" - Stephen H. Spurr and Burton V. Barnes, 3rd. Edition.

"Geology of Northern California" - California Division of Mines and Geology, Bulletin 190.

| | |
|---------------|------|
| Received CDF | |
| REGION 1 | |
| CALENDAR PAGE | 166 |
| SEP 16 1993 | 1047 |
| MINUTE PAGE | |

RESOURCE MANAGEMENT

Following are some listed species that could possibly occur within the assessment area and how the RPF looked for them.

Birds

Bald Eagle (*Haliaeetus leucocephalus*)

Management Status: State listed Endangered, Federally listed Endangered, California Species of Special Concern (NDDB Special Animals List, December 1992).

Reported in THP area: No

Reported in Biological Assessment area: No

Range (California): Coastal areas, and remainder of state from central California north (see list of reference publications for source of range maps). Breeding mostly in Butte, Lake, Lassen, Modoc, Plumas, Shasta, Siskiyou, and Trinity Counties (Zeiner, et al, 1990).

Habitat: Forages over large bodies of water, or free flowing rivers with abundant fish, and adjacent snags or other perches. May also feed on water birds and or small mammals (voles). Perches high in snags, broken topped or stoutly limbed trees or rocks near water. Nests in large mature dominant or old growth trees with open branching. Nests usually in stands with less than 40% canopy, but with some shade afforded the nest. Often utilizes largest tree in the stand for stick platform nest located approximately 50-200 feet above ground, usually below tree crown. Species is not so important as height and size. Nearest nest tree location is usually near a permanent water source. In California, 87% of nest sites are within 1 mile of water (Zeiner, et al, 1990).

No bald eagles have been observed by the RPF or Staff during the course of working on this and adjacent property, nor have any been seen by wildlife biologists hired to do other wildlife surveys or by local ranchers. As bald eagles and their nests are usually quite visible it is highly unlikely that bald eagles are nesting in the area. That they may peripherally use the area is possible, since some elements of the habitat requirements exist. Operation of the THP should not alter the potential use of the area by bald eagles.

Golden Eagle (*Aquila chrysaetos*)

Management Status: California Species of Special Concern (NDDB Special Animals List, December 1992).

Range: Entire state with some small exceptions, most notably in this case area along coast from south of Humboldt Bay north to the Oregon Border (Zeiner, et al, 1990).

Reported in THP area: No

Reported in Biological Assessment area: No

Habitat: needs open terrain for hunting, grasslands, deserts, savannahs, and early successional stages of forest and shrub habitats. Soars in search of prey 98-297 feet above ground, or in low quartering flights often 23-26 feet above ground. Occasionally hunts from a perch and flies directly to prey. Sometimes steals food from other predators. Hunting in pairs (Zeiner, et al, 1990).

| | |
|---|---|
| RECEIVED CALIFORNIA CDF REGION 1 SEP 16 1993 | COMMON (Zeiner et al, 1990) 167 MINUTE PAGE 1048 |
|---|---|

No golden eagles or nests have been detected on or near the subject THP by the RPF or Staff during preliminary field work for this THP and other forestry related work on adjacent properties. Specific habitat requirements for the golden eagle suggest that they could occur in the area. No golden eagles have been reported to the RPF by wildlife biologists hired to do wildlife surveys and by local ranchers. No golden eagles have been reported to the NDDB. Operation of the THP should not effect any potential use of the area by golden eagles and may improve it by increasing forage opportunities. It is unlikely that operation of the THP would adversely affect any potential habitat for golden eagles.

Northern Spotted Owl (*Strix occidentalis*)

Management Status: Federally listed threatened, California Species of Special Concern (NDDB Special Animals List, December 1992).

Reported in THP area: No

Reported in Biological Assessment area: No

Range (California): Northern California from Cascades west through Coast Ranges (Zeiner, et al, 1990).

Habitat: Habitat requirements vary by location but typically are found in medium to dense, multi-layered coniferous forests (Zeiner, et al, 1990). It has long been held that mature or old growth stands were required but consensus is now that habitat structure and not age is most important .

This THP is being submitted after consultation with the Department of Fish & Game in compliance with 14 CCR 919.9 (a). The Spotted Owl Plan Review Checklist/Worksheet is attached as a confidential part to this addendum.

Northern Goshawk (*Accipiter gentilis*)

Management Status: U.S. Forest Service Sensitive, Federal Category 2, California Species of Special Concern (NDDB Special Animals List, December 1992).

Reported in THP area: No

Reported in Biological Assessment area: No

Range (California): North Coast Ranges through Sierra Nevada, Klamath, Cascade and Warner Mts., and possibly in Mt. Pinos and San Jacinto, San Bernadino, and White Mts (Zeiner, et al, 1990).

Habitat: Prefers middle and higher elevations, and mature, dense conifer forests. Hunts in wooded areas and uses snags and dead-topped trees for observation and prey-plucking perches. The goshawk uses mature and old-growth stands of conifer and deciduous habitats as cover. They usually nest on north slopes, near water, in the densest parts of stands, but close to openings. In general, they like dense, mature conifer and deciduous forests with at least a 35% canopy closure, interspersed with meadows, other openings, and riparian areas (Zeiner, et al, 1990).

Northern goshawks were surveyed for in the plan area with negative results. Survey protocol was based on Survey Protocol For Northern Goshawk On National Forest Lands In The Pacific Southwest Region (Woodridge, 1992). Given the plan areas road density, a road

| | |
|---------------|------|
| CALENDAR PAGE | 168 |
| REGION 1 | |
| MINUTE PAGE | 1049 |

SEP 10 1993

survey was chosen as the most appropriate survey technique. Two surveys were conducted, once in June and once in August. Survey efforts were confined to the plan area as it is the only area within 1/2 mile that contains suitable habitat. We waited until our survey efforts were near completion for northern spotted owls to begin goshawk surveys to avoid harassment of any spotted owls that may have been present in the area. After we were certain that spotted owls were absent from the area we surveyed for goshawks.

In addition to our survey efforts, Esther Burkett (CDF&G, Wildlife Management Div.) was contacted by letter dated June 8, 1993 concerning known Goshawk Territories within 1/2 mile of the plan area. No response from CDF&G has been forthcoming.

Cooper's Hawk (*Accipiter cooperi*)

Management status: California Species of Special Concern (NDDB Special Animals List, December 1992).

Reported in THP area: No

Reported in Biological Assessment area: No

Range (California): Breeds throughout most wooded portions on the state, more uncommon in the northwest and southeast (Zeiner, et al, 1990).

Habitat: Usually nest in patchily distributed open stands of deciduous or mixed forests rather than in the interior of contiguous stands. Frequently found in dense stands of live oak, riparian deciduous or other forest habitats near water (Zeiner, et al, 1990).

No Cooper's hawks have been observed by the RPF or staff while doing THP field work and other forestry related activities on this property or by wildlife biologists hired to do wildlife surveys within the plan area or assessment area. Certain elements of their habitat requirements can be found on the plan area and within the assessment area. Habitat modification should have no significant negative effect on the Cooper's hawk (if it does exist within the assessment area) and certain elements may be improved including creating a more patchy woodland landscape with more edge for prey opportunities.

Sharp-shinned Hawk (*Accipiter striatus*)

Management status: California Species of Special Concern (NDDB Special Animals List, December 1992).

Reported in THP area: No

Reported in Biological Assessment area: No

Range (California): Wintering populations are fairly common, breeding distribution is not well documented (Zeiner, et al, 1990).

Habitat: Usually nests in dense pole and small tree stands (25-50 years) of conifers. Not usually found in early or late seral habitats. Climate of nesting habitat should be cool, moist and well shaded with little ground cover, near water (Zeiner, et al, 1990).

Sharp-shinned hawks have been observed by wildlife biologists within the assessment area (but not on the plan area) while doing other wildlife surveys. It is not expected that harvest of this THP will have any adverse impacts on the sharp-shinned hawk given the preference of younger pole-sized stands. It would seem that this

| | |
|---------------|------|
| CALENDAR PAGE | 169 |
| Received CDF | |
| MINUTEBOOK 1 | 1050 |

species would benefit from this type of operation by creating more edge for prey opportunities while maintaining an even-age structure.

Marbled Murrelet (*Brachyramphus marmoratus*)

Management Status: California Endangered, Federal Threatened (NDDB Special Animals List, December 1992).

Reported in THP area: No

Reported in Biological Assessment area: No

Range (California): Occurs from the Oregon border south to Point Sal, Santa Barbara Co (Zeiner, et al, 1990).

Habitat: In non-breeding season occurs in pelagic habitats. Habitat requirements for nesting sights for the murrelet are subject to opinion and current literature provides no definite guidelines. General requirements are for large, unbroken tracts of old growth forests with dense canopy closure and large limb structure. Inland nesting ranges vary from a few miles inland to 24-50 miles from the coast. Minimum habitat block size ranges from a low estimate of 25 acres to a high of 40 acres. Minimum canopy closures range from 40 percent or more to a less than 40 percent standard.

The proposed plan was discussed with Ken Moore of CDF&G regarding the potential use of the area by marbled murrelets. and the need for surveys. Considering distance from coast (24-25 air miles from nearest coastal point), vegetative types (ranch type grasslands/oaks with patches and ribbons of Douglas-fir 20-30" DBH with occasional residual 4-6' DBH, arid micro climate, elevation (1,000-1,500 ft. above sea level, lack of redwood/Douglas-fir timber types and no known historical use in that area, Mr. Moore concluded that no surveys would be necessary (Ken Moore, per. comm.).

Great Blue Heron (*Ardea herodias*) and Great Egret (*Casmerodius albus*)

Status: California Species of Special Concern (NDDB Special Animals List, December 1992).

Reported in THP area: No

Reported in Biological Assessment area: No

Range: Most all California except several interior mountain areas and deserts (egrets) (Zeiner et al. 1990).

Habitat: Shallow estuaries and fresh and saline emergent wetlands, egrets also utilize slow moving streams, mudflats, salt ponds, and irrigated croplands and pastures. Great blue herons are less common along riverine and rocky marine shores, in croplands, pastures, and in mountains above foothills. 75% Of diet is fish, mostly species not sought by humans. Also eats small rodents, amphibians, snakes, lizards, insects, crustaceans, and occasionally small birds. Stands motionless or walks slowly when searching for prey in shallow water less than 12 inches, or sometimes in open fields. Perches and roosts in secluded tall trees or also in kelp beds off shore (Zeiner et al. 1990).

No great blue herons or great egrets (including nest trees and colonies) have been observed nor has evidence of their presence been observed by the RPF or Staff on or near the plan area during forestry related work on and adjacent to the

| | |
|-------------------|------|
| subject property. | |
| CALENDAR PAGE | 170 |
| Received CDF | |
| MINUTE PAGE | 1051 |

SEP 16 1993

Range maps indicate that the plan area is outside the range of the great egret. Herons have been observed along the Eel River and it is possible that they may venture up Basin Creek to forage although none have been observed. Watercourse protections addressed in the addendum to Item #50 shall be sufficient to protect watershed resources downstream and that the potential use of herons to forage in the Eel River and Basin Creek shall not be impaired. No negative impacts are expected to occur to great blue herons or great egrets as a result of timber operations.

Osprey (*Pandion haliaetus*)

Management status: California Species of Special Concern (NDDB Special Animals List, December 1992).

Reported in THP area: No

Reported in Biological Assessment area: No

Range: Breeds in northern California from Cascade Ranges south to Lake Tahoe, and along coast south to Marin County (Zeiner et al. 1990).

Habitat: Breeding takes places along major rivers, lakes and estuaries such as Klamath River, Sacramento River, Shasta Lake, Eagle lake, Lake Almanor, Humboldt Bay and Noyo Harbor. Breeding population estimated in 1975 at 350-400 pairs in northern California, number apparently increasing in recent years. Associated strictly with large, fish-bearing waters. Preys mostly on fish, also takes a few mammals, birds, reptiles, amphibians, and invertebrates. Ospreys require open, and clear waters for foraging. Swoops from flight, hovers, or perches to catch fish near surface of water. Uses large trees, snags, and dead topped trees in open forest habitats for cover and nesting. Large platform nests at tops or near top of dead trees, snags, cliffs, or human made structures such as power line poles. Nests as high as 250 feet, or occasionally on ground. Needs tall, opened branched perch trees (pilot trees) for landing before approaching nest and for flight practice for young. Nests averaged 30-81 inch DBH and 135 feet. Nests may exist in colonies with only a portion of the nests being utilized within any one year (Zeiner et al. 1990).

In preparation of this THP and other forestry related work on this and adjoining properties, no ospreys have been observed on or near the plan area. As obvious as ospreys are (especially during the breeding season) is highly unlikely that there are any using the area at this time. The Eel River is a large, fish bearing water and the use of the area by ospreys is possible. The THP calls for leaving unmerchantable snags that would be suitable for nest and perch trees, should ospreys every use the area in the future. Operation of this harvest plan would not impair any current or future use of the area by osperys.

American Peregrine Falcon (*Falco peregrinus anatum*)

Management Status: Federal Endangered, California Endangered (NDDB Special Animals List, December 1992).

Reported in THP area: No

Reported in Biological Assessment area: No

| | |
|---------------|----------|
| Received CDF | |
| REGION 1 | |
| CALENDAR PAGE | 1993 171 |
| SEP 16 1993 | |
| MINUTE PAGE | 1052 |

RESOURCE MANAGEMENT

Range: Most of state except portion of southeast (Zeiner et al. 1990).

Habitat: Very uncommon, breeds mostly in woodland, forest and coastal habitats. 39 Known breeding pairs in California 1981, decline associated mostly with DDE contamination. Swoops from flight onto flying prey, chases in flight, rarely hunts from perches. Preys on number of birds up to duck size, occasionally taking mammals, insects, and fish. Requires protected cliffs, and ledges for cover. Breeds near wetlands, lakes and rivers, or other water on high cliffs, banks, dunes, mounds. Nest is a scrape on a depression or ledge in an open site. Will nest on human-made structures, and occasionally uses tree or snag cavities or old nests of other raptors (Zeiner et al. 1990).

No Peregrine falcons were observed on or near the plan area by the RPF or Staff or by wildlife biologists hired to do wildlife surveys within the plan area or assessment area. None of the required protected cliffs or ledges exist on the plan area. There are some small rock outcroppings on Blue Jacket Butte, North of the plan area, that may be marginal habitat. No peregrines have been observed flying around this rock area or any where else in the assessment area. Operations are -.5 miles away from these rock outcroppings. It is unlikely that operation of this plan will impact any current or future use of the area by peregrines.

Mountain Quail (*Oreortyx pictus*)

Management Status: Category 2 (NDDB Special Animals List, December 1992), also a harvest species (DF&G 1992 Hunting Regulations).

Reported in THP area: No

Reported in Biological Assessment area: No

Range: Most major montane habitats throughout California.

Habitat: Montane habitats, brushy vegetation interspersed with grass/forb areas; steep slopes and thickets for cover.

Mountain Quail have been observed by wildlife biologists within the assessment area while doing other wildlife surveys. It is not expected that harvest of this THP will have any adverse impacts on the Mountain Quail and they may actually benefit from operation of the plan. It has been observed by the RPF that mountain quail populations tend to escalate following timber harvesting operations. Whether this is associated with habitat alteration that improves nesting and escape areas or if it increases forage (seeds and insects) is not known. It would seem that this species would benefit from this type of operation by creating more ground cover and nesting structure.

Ruffed Grouse (*Bonasa umbellus*)

Management Status: California Species of Special Concern (NDDB Special Animals List, December 1992), harvest species (DF&G 1992 Hunting Regulations).

Reported in THP area: No

Reported in Biological Assessment area: No

Received CDF
REGION 1

| | | |
|---------------------|------------|-----|
| CALENDAR | SEP 6 1993 | 172 |
| MINUTE PAGE | 1053 | |
| RESOURCE MANAGEMENT | | |

Range: Northwestern California from Del Norte County south to southern Humboldt County and eastward to northern Trinity County and southwestern Siskiyou County (Zeiner, et al, 1990).

Habitat: Valley foothill riparian and surrounding conifer forests at low to middle elevations. Requires a mosaic of habitats; riparian stands with young and old deciduous trees, brushy areas interspersed with herbaceous inclusions and conifer stands for cover (Zeiner, et al, 1990).

No ruffed grouse have been observed on or near the plan area by the RPF or Staff or by wildlife biologists hired to do wildlife surveys within the plan area or assessment area. Blue grouse are abundant on and around the plan area and operation of the THP is not expected to adversely effect the use of the area by blue grouse, in fact, they often do well in second-growth stands following logging (Zeiner, et al, 1990).

Purple Martin (*Progne subis*)

Management Status: California Species of Special Concern, Category 2 (NDDB Special Animals List, December 1992).

Reported in THP area: No

Reported in Biological Assessment area: No

Range: Central and Northern California in low-elevation habitats in summer. Rare in spring and fall, absent in winter.

Habitat: Uses valley foothill and montane hardwood, valley foothill and montane hardwood-conifer, and riparian habitats. Also occurs in some coniferous habitats including Douglas-fir. Frequents old-growth, multi-layered, open forest and woodland with snags in breeding season. Forages over riparian areas, forest and woodland. Found in a variety of open habitats in migration (Zeiner, et al, 1990). Also found in towns, farms, open and semi-open country near water (Peterson, 1990). Loss of riparian habitat, removal of snags and competition for nest cavities from European starlings and house sparrows are said to be causes for the decline in population.

No purple martins have been observed by the RPF or staff while doing THP field work and other forestry related activities on this property or by wildlife biologists hired to do wildlife surveys within the plan area or assessment area. Certain elements of their habitat requirements can be found on the plan area and within the assessment area. Habitat modification should have no significant negative effect on purple martins (if they do migrate through the assessment area). Retention of riparian habitat and maintaining snag densities are incorporated into the plan.

Mammals

California Red Tree Vole (*Arborimus pomo* (=longicaudus))

Management Status: California Species of Special Concern (NDDB Special Animals List, December 1992).

Reported in THP area: No

Reported in Biological Assessment area: No

Range (California): From the Oregon border south to Sonoma County, mainly restricted to fog belt (Zeiner, et al, 1990).

CALENDAR PAGE 173

Received CDF
MINUTE PAGE REGION 1 1054

SEP 16 1993

Habitat: Occurs in old-growth and other forests, mainly Douglas-fir, redwood and montane hardwood-conifer habitats. Dependent on Douglas-fir and/or grand fir for food and shelter. The needles of Douglas-fir and grand fir and the tender bark from terminal twigs are eaten and nests are constructed in the trees (Zeiner, et al., 1990).

The plan area is within the range of the red tree vole according to the California Wildlife Habitat Relationship range mapping system and the possibility of their presence was acknowledged since some of their habitat requirements are present. The red-tree vole is difficult to locate due to a number of factors including their size, nocturnal activity, lack of vocalizations and similarity of their nests with the nests of other forest animals. One technique is to look for partially eaten Douglas-fir or grand fir needles at the base of trees. Red tree voles eat all but the resin ducts and sometimes use these to line their nests, but may also discard them where they can be found on the forest floor.

No red tree voles or red tree vole nests were observed during other wildlife surveys and in THP preparation and none are known to exist on the plan area, however, given the habitat conditions present on the plan area and the range of the red-tree vole it is likely that they do exist on the plan area. Partial cutting and retention of a multi-storied canopy in the WLPZ's shall allay any short-term disruption to the potential use of the plan area by red-tree voles caused by harvesting operations. In addition, tree marking crews shall be instructed to look for and leave trees with nests for the benefit of all wildlife well distributed throughout the plan area and to look for resin duct piles at the bases of trees and leave them for the specific protection of red-tree voles.

Marten (*Martes americana*)

Management status : Forest Service Sensitive (Zeiner, et al., 1990), *M.a. humboldtenis* is listed as a California Species of Special Concern (NDDB Special Animals List, December 1992).

Reported in THP area: No

Reported in Biological Assessment area: No

Range (California): North Coast regions, Sierra Nevada, Klamath and Cascades Mts (Zeiner, et al., 1990).

Habitat: Require a variety of different-aged stands, with access to old-growth conifers and snags which provide cavities for denning and nesting. Small clearings, meadows and riparian areas provide foraging habitats (Zeiner, et al., 1990).

No martens have been observed within the assessment area in preparation of this THP and other forest management work on this property by the RPF, staff or by wildlife biologists hired to do wildlife surveys for this THP, nor were there occurrences recorded in the NDDB. According to range maps the plan area is outside the range of the marten (Zeiner, et al., 1990). The plan area and surrounding stands provide habitat conducive to martens and the proposed timber operation should not impact their potential use of this area if their range should ever expand.

Received CDF

| | |
|---------------|------|
| REGION 1 | |
| CALENDAR PAGE | 174 |
| SEP 16 1993 | |
| MINUTE PAGE | 1055 |

RESOURCE MANAGEMENT

Pacific Fisher (*Martes pennanti*)

Management Status: California Species of Special Concern, Category 2 (NDDB Special Animals List, December 1992).

Reported in THP area: No

Reported in Biological Assessment area: No

Range: Found in the Sierra Nevada, Cascades, Klamath Mts. and in a few areas in the North Coast Ranges (Zeiner, et al., 1990).

Habitat: Fishers require large areas of mature, dense stands of coniferous forests with snags and deciduous - riparian habitats greater than 50% canopy closure (Zeiner, et al., 1990).

The plan area is outside the range of the fisher according the WHR range mapping system (Zeiner, et al., 1990). No Pacific fishers were observed, nor was evidence of their presence observed during other wildlife surveys, inventory work on this property, preliminary field work of this THP and in other forestry related work in the immediate area. During field work, cavity trees, snags and down logs were thumped and visually inspected for evidence of fishers with negative results. The plan area is upslope and well out of any major riparian corridors.

Mountain Lion (*Felis concolor*)

Management status : *F.c. browni*, California Species of Special Concern, Federal Category 2 (NDDB Special Animals List, December 1992).

Reported in THP area: No

Reported in Biological Assessment area: No

Range (California): Widespread, uncommon permanent resident, ranging from sea level to alpine meadows. Found in most habitats except some desert habitats that don't support mule deer populations. Most agree that numbers appear to be increasing. *F.c. browni*, Yuma mountain lion is native to the Colorado River Valley (Zeiner, et al., 1990).

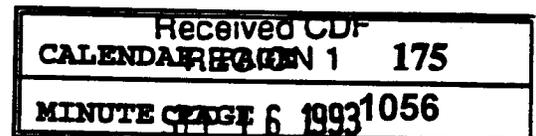
Habitat: Most abundant in riparian and early brushy stages of most habitats. Attracted to areas of irregular terrain, rocky outcrops, and edge habitat (Zeiner, et al., 1990).

Mountain lions have been observed near the plan area by wildlife biologists and local ranchers and sightings are increasingly more common in the area. None of their specific habitat requirements including feeding, cover, reproduction and water will be impeded by the proposed timber operations. Habitat conditions will not be significantly altered, however such alterations that will occur will favor the mountain lion by increasing brushy (early) stages of various habitats and tree/brush edges.

Amphibians

Olympic Salamander (*Rhyacotriton olympicus*)

Management status : California Species of Special Concern (NDDB Special Animals List, December 1992).



Range (California): Occurs in coastal forests of northwestern California south to Mendocino Co., and is common in prime habitat (Zeiner, et al., 1988).

Habitat: Requires cold, well-shaded permanent streams and seepages in shady coastal forests. When found out of water it is usually within the splash zone or on moss-covered rock rubble with trickling water. It is found primarily in redwood, Douglas-fir, mixed-conifer, montane riparian and montane hardwood-conifer habitats (Zeiner, et al., 1988).

While year round watercourses do exist on the plan area that could support Olympic salamanders, none were observed in preparation of this plan. Searches were made in Class II (two) watercourses among pebbles and rock rubble where they would normally be found.

Del Norte Salamander (*Plethodon elongatus*)

Management Status: California Species of Special Concern, Federal Category 2 (NDDB Special Animals List, December 1992).

Range: The Del Norte Salamander is found in Del Norte, Humboldt, Siskiyou and western Trinity Counties at elevations from sea-level to 2500 ft. (Zeiner, et al., 1988).

Habitat: This species occurs in open-to-dense, sapling-to-mature stages of valley-foothill riparian, montane hardwood-conifer, Douglas-fir and redwood habitats, in stabilized talus, in rotten logs, or under surface objects in moist, but not wet, microhabitats (Zeiner, et al., 1988).

It is highly unlikely that Del Norte salamanders exist on the plan area as it is outside the known range of the Del Norte salamander according to the WHR range mapping system. During watercourse surveying and amphibian investigation work, no evidence was found to indicate the presence of Del Norte salamanders.

Tailed Frog (*Ascaphus truei*)

Management Status: California Species of Special Concern (NDDB Special Animals List, December 1992).

Range (California): The present range in California extends from Del Norte County in the north to as far south as possibly central Sonoma County and east to Shasta and Tehama Counties (Zeiner, et al., 1988).

Habitat: Occurs in montane hardwood-conifer, redwood, Douglas-fir and ponderosa pine habitats, in perennial montane streams in steep-walled valleys with dense vegetation (Zeiner, et al., 1988).

Informal searches for the tailed frog, both adult and tadpole stages, were made in the class II watercourses, in densely vegetated areas with sufficient year-round flow and a rocky bottom. Although none were found certain elements of their habitat requirements were present and the assessment area does fall within their known range. Given the restrictions placed on the Class II WLPZ's, no negative impacts are likely to occur on the tailed frog if they do inhabit the assessment area.

Received CDF

| | |
|---------------|------|
| REGION 1 | |
| CALENDAR PAGE | 176 |
| SEP 16 1993 | |
| MINUTE PAGE | 1057 |

RESOURCE MANAGEMENT

Northern Red-legged Frog (*Rana aurora*)

Management Status: California Species of Special Concern, Federal Category 1 (NDDB Special Animals List, December 1992).

Range: In California occurs west of the Sierra-Cascade crest and along the Coast Ranges the entire length of the State. Usually below 3936 feet but may occur up to 8000 feet (Zeiner, et al., 1988).

Habitat: Found in a variety of habitats, including humid forest, woodlands, grasslands and streamsides, but most common in lowlands and foothills (Zeiner, et al., 1988).

Microhabitat: Associated with standing bodies of water such as ponds, lakes, marshy areas and occasionally quiet pools in streams. Breeding sites need to have little or no flow, last long enough for metamorphosis to occur, and have underwater or bankside vegetation for egg attachment (Zeiner, et al., 1988).

Red-legged Frogs were not detected during amphibian surveys. Appropriate breeding habitat is absent within the proposed harvest area, and harvest activities are not expected to have negative impacts upon potential *R. aurora* populations within the biological assessment area.

Foothill Yellow-legged Frog (*Rana boylei*)

Management Status: California Species of Special Concern, Federal Category 2 (NDDB Special Animals List, December 1992).

Range: Present in most of northern California west of the Cascade crest from sea level to around 7000 feet; occurring in the Coast Ranges from the Oregon border to Los Angeles County, east to the western flank of the Sierra Nevadas and south to Kern County (Zeiner, et al., 1988).

Habitat: Found in a variety of habitats, including valley-foothill hardwood, valley-foothill hardwood-conifer and riparian, ponderosa pine, mixed conifer, coastal scrub, mixed chaparral and wet meadows (Zeiner, et al., 1988).

Microhabitat: Confined to the immediate vicinity of permanent streams, most common along streams having rocky, gravelly or sandy bottoms, but may occur in those with muddy bottoms (Zeiner, et al., 1988).

Informal surveys were made for foothill yellow-legged frogs and they were not detected on any of the plan area but were found within the assessment area. Given that *R. boylei* is confined to the immediate vicinity of permanent streams and exhibits a home range of 33 feet or less in the longest dimension (Calif. Dept. of Fish and Game 1983) as well as the wide variety of habitat conditions that it is found in, Class II watercourse protections will provide a more than adequate buffer for preserving the necessary structural habitat and temperature requirements of this species if they do exist on the plan area.

Other listed species

Listed plant species considered in preparation of this plan include Humboldt milk vetch, Lassics sandwort, Lassics ceanothus, Lassics lupine, beaked Tracyina and Tracy's sandalwood of the 1977

MINUTE REGION 1
 Received CDF 1058

species were observed on or near the plan area or along any of the roads appurtenant to the plan area. There were no occurrences on the Natural Diversity Data Base.

After consideration of potential impacts to watershed resources as discussed in the watershed resources section of this addendum and mitigated for, there shall be no reasonably potential negative impacts on any downstream fisheries, listed or non-listed, within or downstream from the assessment area.

There is no habitat on the plan area suitable for the western pond turtle and no other listed species of reptiles are known to occur on the plan area.

Non-listed species

Some non-listed species known to occur in the assessment area of the proposed timber operations are populations of game species such as black-tailed deer, black bears, brush rabbits, gray squirrels, California quail, blue grouse, turkeys and band-tailed pigeons. Other birds observed or known to occur in the area include red-tailed hawks, great horned owls, screech owls, flammulated owls, saw-whet owls, turkey vultures, ravens, Stellar jays and numerous other song birds. Other mammals observed or known to occur include porcupines, coyotes, raccoons, striped skunks, spotted skunks, bobcats, gray foxes, ground squirrels and mice. Tree frogs were observed within the assessment area.

Habitat Description

Within the assessment area there is a diverse variety of wildlife habitats available. Grasslands, deciduous and non-deciduous hardwood stands, Douglas-fir stands, mixed Douglas-fir/hardwood stands, riparian habitats, brush fields and barren habitats are all present within the assessment area. Using the Wildlife Habitat Relationship System (WHR) there is Douglas-fir (DFR) habitats that range from 2P to 4D and coastal oak woodlands (COW) that range from 3M to 5D. The COW habitats sometimes overlap the DFR habitats to form montane hardwood conifer (MCH) in similar size ranges. A major feature of this assessment area is the large portion of grassland and grassland/woodland habitats.

The THP lies on a ridge which runs south of Blue Jacket Butte at an elevation range of 680-1800 ft. It has a predominantly south aspect but also contains east and west facing slopes. Slopes on the THP range from Flat to 70%. DFR4P and DFR4D are the predominant habitat types, but MEC4M is also present. There are few watercourses with year round water in the plan area but most are rainfall dependent and are class III's. There is one known wet area on the THP.

Snags/Den/Nest Trees

As stated in the Addendum to Item #52, all unmerchantable snags (dead trees) and large down woody debris shall be left well distributed to the extent they occur prior to operations that does

| | |
|---------------|------|
| CALENDAR YEAR | 1993 |
| MINUTE PAGE | 1059 |

SEP 16 1993

not conflict with safety and hazard reduction requirements for harvesting, site preparation, and reforestation. Unmerchantable for the purpose of this harvest is defined as trees producing all logs with less than 25% net volume.

Due to the fire history in this stand, current snag density is low. Snags on the plan area suitable for den or nest trees occur in small pockets and it is impractical to try to put a numerical value such as stems per acre in this stand. In consideration of snags, dens and nest trees, tree marking crews shall be instructed to look for and leave snags and trees with cavities and obvious nests well distributed throughout the plan area to the extent they occur prior to operations.

Down Large, Woody Debris

At present, there is very little down large, woody debris on the plan area. As mentioned earlier, this stand is the apparent result of some fire event that occurred 100+ years ago. The stand age is approximately 90-100 years and has not decayed enough from natural processes to produce much down large, woody debris. This is a characteristic of late seral stage and is not characteristic of this stand. Operation of this THP should produce more downed large, woody debris than is currently present. It is estimated that -5-10 tons per acre will be left on the ground after operations. Slash burning operations are only proposed in small landing piles for hazard reduction and even there, fires generally do not consume the larger fuels and so should not greatly effect the amount of large downed, woody debris present after operations.

Multi-storied Canopy

Multi-storied habitat is found near main watercourses throughout the plan area and in small hardwood stands with scattered larger douglas-fir mixed in. Typically, in these areas, there is a conifer overstory, another layer of smaller conifers and hardwoods and a ground cover of either grass or small trees. Multi-storied habitat near watercourses shall remain after operations. Vegetative cover within the WLPZ's are moderate to dense with Douglas-fir making up the overstory (10-50% canopy closure), Douglas-fir and white oak making up the mid-story (30-70% canopy closure) and grass and Douglas-fir saplings comprising the ground cover (10-50%). Retaining 50% of the overstory present in class II WLPZ's shall maintain multi-storied canopies and benefit water quality and wildlife. Only limited, if any, operations are expected to occur in the hardwood pockets.

Road Density

There is -500 feet of temporary road to be constructed in the plan area. Within the biological assessment area there is 23 miles of permanent, seasonal and temporary road as planimetered from aerial photos or one mile per 245 acres. The road density has caused no apparent deterrence to animal movement or use of the area, probably because they are small and lightly traveled. The degree of road density should remain constant after the plan has been operated.

| | |
|------------------------|-----|
| Received CDF | 179 |
| CALENDAR PAGE REGION 1 | |
| MINUTE PAGE 1060 | |
| SEP 14 1993 | |

Hardwood Cover

Hardwood cover is quite abundant in the assessment area. An estimated 40% of the assessment area is coastal oak woodland with white oak being the predominant species. This is an important feature of this assessment area due to its cover, proximity to perennial water sources and mast producing capabilities. None of these coastal oak woodland habitats will be impacted by this THP. Some hardwoods are found on the plan area in small pockets and along perennial watercourses. Only limited operations are proposed in these areas and no significant impacts are expected to occur.

Late Seral (Mature) Forest Characteristics

The plan area does not conform to characteristics attributed to "Late Seral".

Late Seral Habitat Continuity

The assessment area does not feature any continuous late seral habitats. This is not from a result of past projects, but simply the physiography of the assessment area. It is a mosaic of prairie, oak woodland and conifer forest. Continuity of late seral habitat will not be threatened by the operation of the proposed project. The proposed plan will not create isolated islands of habitat or degrade adjacent habitat in any way. Retention of multi-storied habitat along WLPZ's will provide an adequate functional corridor for wildlife and also provide near-water, edge habitat favorable to populations of black-tailed deer in the assessment area.

Special Habitat Elements

There are no special habitat elements listed in "A Guide To Wildlife Habitats In California" on pages 13-15 that would be threatened by the operation of this THP. Large decadent snags and green culls trees will be retained for nesting/denning within the plan area and multi-storied canopies along watercourses will be retained or recruited. There will be more slash (both small and large), logs (medium and large) and brush piles. A few new habitat edge elements will be further defined after operations including tree/shrub, tree/grass and tree/water.

Significant Wildlife Uses

There are no known significant wildlife uses of the plan area.

Past and Future Projects

Past projects are defined in the watershed resources section. Past projects in the biological assessment area have caused little or no impact on the biological resources in the area, due to the highly fragmented nature of the area. Previously harvested stands of Douglas-fir have regenerated, insuring continued successional development of habitat stages in the future. Future projects will be continued timber stand improvements and harvesting of timber, along with range management and will be planned and reviewed in such

| | | |
|----------|----------|------|
| CALENDAR | PAGE | 180 |
| MINUTE | REGION 1 | 1061 |

SEP 16 1993

a manner as to have little or no significant impact on biological resources.

Mitigations Proposed To Reduce Impacts To Biological Resources

1. Retention of all hardwoods within WLPZ's and ELZ's.
2. No mechanical site preparation or broadcast burning.
3. Establishment of ELZ's on class III's will help provide protection for amphibians and fish in class II and I watercourses downstream.
4. Partial cutting on 100% of the plan area.
5. The tree marking crews shall be instructed to look for and leave trees with nests for the benefit of all wildlife well distributed throughout the plan area

Conclusion

The assessment area as a whole is quite extensive by nature as some species forage over a very large area. However, the project area is small in relation to the assessment area which will minimize any short-term effect. Operation of the proposed project will alter a small portion of the habitat within the assessment area, making it less desirable for some species and more attractive to others. Timber harvesting, being what it is, may cause a few individual animals to perish, but significant effects on entire populations of animals within the assessment area are not expected. Considering the interactions between the biological resources of the assessment area, the current habitat condition on-site and off-site (a mosaic of divergent habitat types of varying degrees of succession), the anticipated change in habitat, the ongoing effects of past projects and the effects of future projects and given modern forest practice rules there is no reasonably potential significant negative effects expected to occur on the biological resources on the assessment area as a result of the proposed project combined with the effects of past projects with or without the effects of future projects is low.

It is our opinion that, based on the best information available, the proposed project will not likely produce significant adverse cumulative impacts to the biological resources within the assessment area after mitigation measures proposed in the plan and application of the Forest Practice Rules.

Reference List

"Mammalian Species of Special Concern in California" - by: Daniel F. Williams, Department of Biological Sciences California State University, Stanislaus, Turlock, California 95380 State of California The Resources Agency Department of Fish and Game.

"Bird Species of Special Concern in California" - by: J.V. Remsen, Jr. Western Field Ornithologist for California Department of Fish and Game.

| | |
|---------------|------|
| CALENDAR PAGE | 181 |
| Received CDF | |
| REGION 1 | 1062 |
| MINUTE PAGE | |

SEP 16 1993

"Methods and Materials for Locating and Studying Spotted Owls" by:
Eric D. Forsman - USDA - USFS - PNW #162.

"Spotted Owl Inventory and Monitoring Handbook" - February 16,
1988.

"Ecology and Management of the Spotted Owl in the Pacific Northwest"
- by: Ralph J. Gutierrez and Andrew B. Carey - USDA - USFS - PNW
#185.

"The Pacific Seabird Groups Marbled Murrelet Survey and Intensive
Inventory Handbook" - by: Peter W. C. Paton and C. John Ralph -
Redwood Sciences Laboratory, USFS and Harry R. Carter, Point Reyes
Bird Observatory.

"Surveying Marbled Murrelets at Inland Forested Sites: A Guide" -
USDA-Forest Service General Technical Report PSW-120 - Peter W. C.
Paton, C. John Ralph, Harry R. Carter, S. Kim Nelson.

"Red Tree Vole - Habitat and Microhabitat Utilization in Douglas fir
Forests of Northern California" - by: Nina Meiselman to the
California Department of Fish and Game and USFS - PSW.

"Consideration of Wildlife and Their Habitat for a Timber Harvest
Plan (THP)" - by: Henry W. Elliot, PHD - Certified Wildlife
Biologist.

"Special Animals" - California Department of Fish and Game, Natural
Diversity Data Base - December, 1992.

"Cavity-Nesting Birds of North American Forest" - by: USDA Forest
Service - Agriculture Handbook No. 511.

"1990 Status Review, Northern Spotted Owl" - by: USDI U.S. Fish and
Wildlife Service, April 30, 1990.

"Endangered and Threatened Wildlife and Plants; Determination of
Threatened Status for the Northern Spotted Owl; Final Rule" - by:
Federal Register Tuesday June 26, 1990, Part VI Department of the
Interior, Fish and Wildlife Service.

"Endangered Species Act of 1973" - by: USDI U.S. Fish and Wildlife
Service - 1988.

"A Conservation Strategy for the Northern Spotted Owl" - Report of
the Interagency Scientific Committee to Address the Conservation of
the Northern Spotted Owl.

"Western Birds" - by: Peterson Field Guides, Roger Tory Peterson.
1990.

"Inventory of Rare and Endangered Vascular Plants of California" -
Special Publication No. 1 (2nd Edition) California Native Plant
Society, April, 1980.

Received CDF
REGION 1
CALENDAR PAGE 182
SEP 15 1993
MINUTE PAGE 1063
RESOURCE MANAGEMENT

"Recommendations to the California State Board of Forestry on the Management of Wildlife Habitats under the Forest Practice Act" - by: The Wildlife Habitat/Forest Practice Task Force, April, 1990.

"Natural Diversity Data Base Special Plant List 11/90" - by: Department of Fish and Game, Natural Diversity Data Base, Natural Heritage Division.

"The Audubon Society Field Guide To North American Wildflowers - Western Region" - Richard Spellenberg.

"Redwood Empire Wildflowers" - Dorothy King Young.

"State and Federal Endangered and Threatened Animals of California" California Department of Fish and Game (Revised October, 1990).

"California's Wildlife - Volume I - Amphibians and Reptiles" - CDF&G, Ziener, Laudenslayer, and Mayer. May 2, 1988.

"California's Wildlife - Volume II - Birds" - CDF&G, Ziener, Laudenslayer, Mayer and White. November, 1990.

"California's Wildlife - Volume III - Mammals" - CDF&G, Ziener, Laudenslayer, Mayer and White. April, 1990.

"Western Reptiles and Amphibians" - by: Peterson Field Guides, Robert C Stebbins.

"Survey Protocol For Northern Goshawk (Accipiter gentilis) On National Forest Lands In The Pacific Southwest Region" - June 5, 1992.

"Pacific Coastal Wildlife Region" - Charles Yocom and Ray Dasmann, Revised Edition.

"Recommendations To The California State Board Of Forestry On the Management Of Wildlife Habitats Under The Forest Practice Act" - The Wildlife Habitat/Forest Practice Task Force, April 1990.

Dave Nielsen, Pacific Northwestern Biological, P.O. Box 150, Trinidad, CA 95570-0150. (707)839-4643.

Tim Knutsen, Pacific Northwestern Biological, P.O. Box 150, Trinidad, CA 95570-0150. (707)839-4643.

Lou Bugenig, Centerville Road, Ferndale CA 95536. (707)786-9646

Ken Moore, Department of Fish and Game, 619 2nd St., Eureka CA 95501. (707)445-6493

Jim Able, Consulting Forester, 819 7th St., Eureka CA 95501. (707)445-4130

William E. Kleiner, Western Timber Services, Inc. P.O. Box 1136 Arcata, CA 95521. (707)822-3628

Received CDF
REGION 1

| | |
|---------------------|------|
| CALENDAR PAGE | 183 |
| MINUTE PAGE | 1064 |
| RESOURCE MANAGEMENT | |

Recreation Resources

The recreational assessment area is generally the area of the THP plus 300 feet. This is specified in the Board Of Forestry, Technical Rule Addendum Number 2. The geographic description of this assessment area is such that an individual assessment area map would serve no purpose and need not be provided.

The proposed plan is on private property that is not open to the public for recreation. Road access is controlled and there are no developed recreational sites on or near the plan area.

There are no past or future projects in the recreational assessment area that were or are under the ownership or control of the timber/timberland owner that did or could interact to cause a significant recreational resource impact.

There are no known past or future projects in the recreational assessment area that are not under the control of the timber/timberland owner that could interact with any identified recreational resource.

The proposed project, as presented, in combination with the impacts of past and future projects, does not have a reasonable potential to cause or add to significant cumulative impacts to recreational resources within the assessment area.

Received CDF
REGION 1

SEP 16 1993

| | |
|---------------|---------------------|
| CALENDAR PAGE | 184 |
| MINUTE PAGE | RESOURCE MANAGEMENT |

Visual Resource

The visual assessment area is generally the logging area that is readily visible to significant numbers of people who are no further than three miles from the timber operation. At distances of greater than 3 miles from viewing points, activities are not easily discernible and will be less significant. Due to the topography and geographic location of the plan area, it shall not be readily visible to a significant number of people. Probably the most significant viewing spot would be at Bel Rock. The RPF has viewed the plan area from Eel Rock and expects little, if any, difference in the way the public would perceive the stand due to partial cutting and viewing the stand at over one mile obliquely.

Due to the topography and location of the plan and its inaccessibility due to locked gates, it will not be readily visible from any road, foot trail or public viewing point.

There are no known Special Treatment Areas designated as such by the Board of Forestry because of their visual values on or near the harvest area. The Eel River is a Wild and Scenic River as defined in PRC 5093.54 (d), and as such, is a Special Treatment Area (STA) within 200 feet of the watercourse transition line. While none of the harvest area is within or even close to the STA, the temporary crossing "A" at Eel Rock and the road approaches are within STA. The only operations proposed within the STA is the installation of the temporary bridge, maintenance of the existing approaches, and the hauling of logs to their mill destinations.

There are no past or future projects in the visual assessment area that were or are under the ownership or control of the timber/timberland owner that did or could interact to cause a significant visual resource impact.

There are no known past or future projects in the visual assessment area that are not under the control of the timber/timberland owner that could interact with any identified visual resource.

The proposed project, as presented, in combination with the impacts of past and future projects, does not have a reasonable potential to cause or add to significant cumulative impacts to visual resources within the assessment area.

Received CDF
REGION 1

SEP 16 1993

| | |
|---------------------|-----|
| CALENDAR PAGE | 185 |
| RESOURCE MANAGEMENT | 66 |
| MINUTE PAGE | |

Vehicular Traffic Resource

The traffic assessment area involves the first roads not part of the logging area on which logging traffic must travel. Logging truck traffic will cross the Eel River at the temporary crossing at Eel Rock and connect with the County road at this location via existing private roads. The designated route shall then be over county road (Fruitland Ridge) to the Avenue of the Giants (U.S. Highway 254) and then to U.S. Highway 101 at Myers Flat. The geographic description of this assessment area is such that an individual assessment area map would serve no purpose and need not be provided. Eel Rock Road is on the Appurtenant Roads Map.

All public roads to be used to transport wood products have been recently used for this purpose. Logging vehicles will nominally increase the amount of existing traffic, logging or otherwise, in the traffic assessment area both during heavy and light traffic conditions. General traffic may at times be slowed by logging traffic which usually travels at slower speeds. Logging truck and trailer fees and fuel taxes will generate funds for the maintenance of the public roads.

There are no past or future projects in the vehicular traffic assessment area that are not under the ownership or control of the timber/timberland owner that could interact to cause a significant adverse impact to vehicular traffic.

The proposed project will not have a reasonable potential to cause or add to significant cumulative negative impacts to vehicular traffic on public roads, but will help to provide some needed funds for maintenance.

Received CDF
REGION 1

| | |
|-----------------------------|------|
| SEP 16 1993 | |
| CALENDAR PAGE | 186 |
| MINERAL RESOURCE MANAGEMENT | 1067 |

ATTACHMENTS ADDENDUM

ITEM #62

The following items are attached in this portion of the TEP:

A copy of the Notice of Stream Bed Alteration sent to the Department of Fish and Game.

Estimated Surface Soil Erosion hazard Calculations and Soil-Vegetation Map.

A copy of the letter notifying the timber owner and timberland owner of their responsibilities for: the stocking requirements of the rules, the maintenance of erosion control structures requirements in the rules, and the marking requirements contained in the rules.

Confidential Addendums

A Notice of Intent to Harvest Timber, with map, is found on pages 8 and 9 of this TEP. There are no other owners within 300 ft. of the plan boundary.

Maps - TEP Maps are found following the Notice Of Intent in this TEP.

The Addendum for silviculture information can be found in the Silvicultural Addendum, Item #15.

A description of plan site per 14 CCR 1034 (jj) precedes the Silviculture Addendum.

Received CDF
REGION 1

SEP 16 1993

| | |
|---------------------|------|
| CALENDAR PAGE | 187 |
| RESOURCE MANAGEMENT | 0000 |
| MINUTE PAGE | |

The department has 30 days from date of receipt of a completed application in which to make its recommendations. This time period does not begin until the department receives the appropriate fee (see attached fee schedule).

STATE OF CALIFORNIA
THE RESOURCES AGENCY
FOR WATER CONTROL
ORIGINAL MAILED TO DF&G 9/7/93

**NOTIFICATION OF REMOVAL OF MATERIALS AND/OR ALTERATION
OF LAKE, RIVER, OR STREAMBED BOTTOM, OR MARGIN**

A. APPLICANT Pursuant to Sections 1601-1607 of the California Fish and Game Code

I, CARL A. ANDERSON of P.O. Box 1136 ARCATA CA 95521
Name of Applicant Mailing Address

Representing Viola R. McBRIDE P.O. Box 1135 FERNDALE CA 95536
Name and address of Individual, Agency, Company, etc. owning property or doing work.

Hereby notify the California Department of Fish and Game of operations to be carried out by or for me

from UPON APPROVAL to THREE YEARS FOLLOWING APPROVAL or after
Starting Date Ending Date

ER RIVER & MILL CREEK of Humboldt County, tributary to EEL RIVER
Name of Stream, River, or Lake Major Water Body

Located EEL ROCK
Distance and Direction to Landmark

Sections 16, 22, 23, 24, 27 Township 2-SOUTH Range 4-EAST

USGS Map BRIDGE BLVD 7.5' Co. Assessor's Parcel No. N/A

Property owners name and address (if different from applicant) (SAME)

Carl A. Anderson is responsible for operations at the
Name of Person to Be Contacted at Site During Operations

He/she can be reached at P.O. Box 1136 ARCATA CA 95521 (707) 222-5628
Mailing Address Telephone

B. Description of operation 1. The nature of said operations will be as follows:

- Check all squares which apply.
- Soil, sand, gravel, and/or boulder removal or displacement
- Water diversion or impoundment
- Mining—other than aggregate removal
- Road or bridge construction
- Levee or channel construction
- Timber harvesting or any related activity required for harvesting timber
- Temporary, recreational or irrigation dam
- Fill or spoil in bed, bank, or channel
- Other—Describe below

Received CDF
REGION 1
SEP 16 1993

2. Type of material removed, displaced or added Soil Sand Gravel Boulders
Volume VARIES 5-200 YARDS

RESOURCE MANAGEMENT

3. Equipment to be used in the described site TRACTOR AND/OR BACKHOE

4. Use of water (i.e., domestic, irrigation, gravel, washing, etc.) N/A Quantity _____

5. Describe type and density of vegetation to be affected, and estimate area involved.
GRASS & HERBACEOUS PLANTS AT APPROACHES TO CROSSINGS

6. What actions are proposed to protect fish and wildlife resources and/or mitigate for project impacts? IMPLEMENTED AND THE THP ARE MITIGATIONS TO PROTECT FISH & WILDLIFE.

7a. Does project have a local or state lead agency or require other permits? Yes No CDF & FDP

7b. If 7a answer is yes, please attach or identify any available environmental document. THP NOT APPROVED AS OF YET

7c. For state-designated wild and scenic rivers, a determination of the project's consistency with the California Wild and Scenic Rivers must be made by the Secretary for Resources. Until the Secretary determines the project is consistent with the Act, the Department cannot issue a valid agreement. A tentative agreement will be issued, conditioned upon a finding of consistency by the Resource Secretary.

7d. THIS AGREEMENT IS NOT INTENDED AS AN APPROVAL OF A PROJECT OR OF SPECIFIC PROJECT FEATURES. THE DEPARTMENT OF FISH AND GAME INDEPENDENT REVIEW AND RECOMMENDATIONS WILL PROVIDED BY THE DEPARTMENT AS APPROPRIATE ON THOSE PROJECTS WHERE LOCAL, STATE, OR FEDERAL PERMITS OR OTHER ENVIRONMENTAL REPORTS ARE REQUIRED.

8. Briefly describe proposed construction methods. Attach diagram or sketch of the location of your operation to clearly indicate "on-stream" or other water and access and distance from named public road. Indicate locked gates with an "X". Show existing features with a solid line (————) and proposed features with a broken line (-----). Show compass direction. Attach larger scale map if necessary.

Signature of Applicant _____

CALENDAR PAGE 188

NOTE PAGE 1069/3

DEPARTMENT OF FISH AND GAME

Plan Addendum 9/7/93

1416 NINTH STREET
P.O. BOX 944709
SACRAMENTO, CA 94244-7090

SCHEDULE OF FEES

LAKE/STREAMBED ALTERATION AGREEMENTS

Effective May 14, 1992

Title 14, California Code of Regulations, Section 699.5
Fees for Lake/Streambed Alteration Agreements

- (a) 1601 Applications (from Public Agencies) - \$132.00 non-refundable application fee, plus:
- (1) No additional fee for projects costing less than \$25,000.
 - (2) \$530.00 additional processing fee for projects costing from \$25,000 to \$500,000.
 - (3) \$1059.00 additional processing fee for projects costing over \$500,000.
- (b) 1601 Routine Maintenance Activities (public agencies) if performed under a Memorandum of Understanding with the Department of Fish and Game:
- (1) \$111.00 each for the first 20 maintenance projects.
 - (2) \$88.00 each for the second 20 maintenance projects.
 - (3) \$67.00 each for maintenance project in excess of 40.
 - (4) Projects under this subsection pertain to those waterways under prior 1601 agreement upon which public agencies propose to perform routine maintenance; to be submitted at least 30 days prior to commencement of work.
- (c) 1603 Applications (private) excluding commercial gravel operations and timber harvest - \$132.00 non-refundable application fee, plus:
- (1) No additional fee for private individuals who do the work themselves or projects costing less than \$25,000.
 - (2) \$530.00 additional processing fee for projects costing \$25,000 to \$500,000.
 - (3) \$1,059.00 additional processing fee for projects costing over \$500,000.

Received CDF
REGION 1

SEP 16 1993
CALENDAR PAGE 189
RESOURCE MANAGEMENT 1070

- (d) 1603 Applications - Commercial Gravel Operations
 - (1) \$530.00 fee per application.
- (e) 1603/1606 Applications - Timber Harvest
 - (1) \$530.00 fee per application with 1 or 2 stream encroachments.
 - (2) \$662.00 fee per application with 3 or 4 stream encroachments.
 - (3) \$794.00 fee per application with 5 to 9 stream encroachments.
 - (4) \$883.00 fee per application with 10 or more stream encroachments.
- (f) One year time extensions for 1601/1603 agreements, excluding gravel operations, if the project has not changed.
 - (1) \$109.00 fee per application for renewal of a one-year extension.
 - (2) For the purpose of this subsection, extensions include those agreements which expire before completion of the project and which have no changes in the work described in the original agreement. If the agreement expires prior to a request for an extension, a new notification will be required and all appropriate fees will be charged.
- (g) Amendments to 1601/1603 existing agreements:
 - (1) 50% of the fee of the existing agreement.
- (h) Unusual Project Applications. Public or private projects which are unusually extensive and/or protracted, including but not limited to projects that (1) involve more than one departmental administrative region, or (2) involve more than 15 streams (excluding timber harvest applications), shall be charged fees under the following provisions:
 - (1) The project sponsor shall submit the appropriate application fee required in the above fee schedule. Should this application fee be insufficient to defer the department's costs, then the department and the project sponsor shall arrange for a billing schedule to recover the department's additional project-related costs.

Note: Authority cited: Section 1607, Fish and Game Code
Reference: Section 1607, Fish and Game Code

Received CDF
REGION 1

SEP 16 1993
CALENDAR PAGE 190
RESOURCE MANAGEMENT 071
MINUTE PAGE

NOTE: Authority cited: Section 1607, Fish and Game Code
Reference: Section 1607, Fish and Game Code

We cannot process your application until the appropriate fee has been received. When submitting your notification, complete the following information and make your check or money order payable to the "Department of Fish and Game". PLEASE DO NOT SUBMIT CASH. Under provisions of the Fish and Game Code, work cannot begin until agreement is reached.

Notifier's Name: CARL ANDERSON
(Please Print)

[Signature]
(Signature)

Address: P.O. Box 1136
ARCATA CA 95521

8/3/93
(Date)

Name of Stream: EEL RIVER, MILL CREEK BASIN CA

Total Cost of Project: \$ 883⁰⁰

MAIL TO:

Fee Submitted: \$ 883⁰⁰

Department of Fish and Game
601 Locust Street
Redding, California 96001

Received CDF
REGION 1

SEP 16 1993

CALENDAR PAGE 191
RESOURCE MANAGEMENT
MINUTE PAGE 1072

| I. SOIL FACTORS Soil series on plan area: Hugo & Josephine | | | | FACTOR RATING BY AREA | | |
|--|------|----------|--------|-----------------------|---|---|
| A. SOIL TEXTURE | Fine | Medium | Coarse | A | B | C |
| 1. DETACHABILITY | Low | Moderate | High | 17 | | |
| Rating | 1-9 | 10-18 | 19-30 | | | |
| 2. PERMEABILITY | Slow | Moderate | Rapid | 2 | | |
| Rating | 5-4 | 3-2 | 1 | | | |

B. DEPTH TO RESTRICTIVE LAYER OR BEDROCK

| | Shallow | Moderate | Deep | | | |
|--------|---------|----------|-------------|---|--|--|
| | 1"-19" | 20"-39" | 40"-60" (+) | 7 | | |
| Rating | 15-9 | 8-4 | 3-1 | | | |

C. PERCENT SURFACE COARSE FRAGMENTS GREATER THAN 2 MM IN SIZE INCLUDING ROCKS OR STONES

| Rating | Low | Moderate | High | 4 | | | FACTOR RATING BY AREA | | |
|----------|------------|----------|---------|---|--|--|-----------------------|---|---|
| | (-) 10-39% | 40-70% | 71-100% | | | | A | B | C |
| | 10-6 | 5-3 | 2-1 | | | | | | |
| SUBTOTAL | | | | | | | 30 | | |

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 | 15 | | |

III. PROTECTIVE VEGETATIVE COVER REMAINING AFTER DISTURBANCE

| Rating | Low | Moderate | High | 6 | | |
|--------|-------|----------|---------|---|--|--|
| | 0-40% | 41-80% | 81-100% | | | |
| | 15-8% | 7-4 | 3-1 | | | |

IV. TWO-YEAR, ONE-HOUR RAINFALL INTENSITY (Hundredths Inch)

| Rating | Low | Moderate | High | Extreme | 6 | | |
|--------|-----------|----------|-------|-----------|---|--|--|
| | (-) 30-39 | 40-59 | 60-69 | 70-80 (+) | | | |
| | 1-3 | 4-7 | 8-11 | 12-15 | | | |

TOTAL SUM OF FACTORS 57

EROSION HAZARD RATING

| <50 | 50-65 | 66-75 | >75 | | | |
|---------|--------------|----------|-------------|--|--|--|
| LOW (L) | MODERATE (M) | HIGH (H) | EXTREME (E) | | | |

THE DETAIL MAP PAGE 192

MINUTE PAGE 7510730-043

Received by
REGION 1

SEP 16 1993

RESOURCE MANAGEMENT

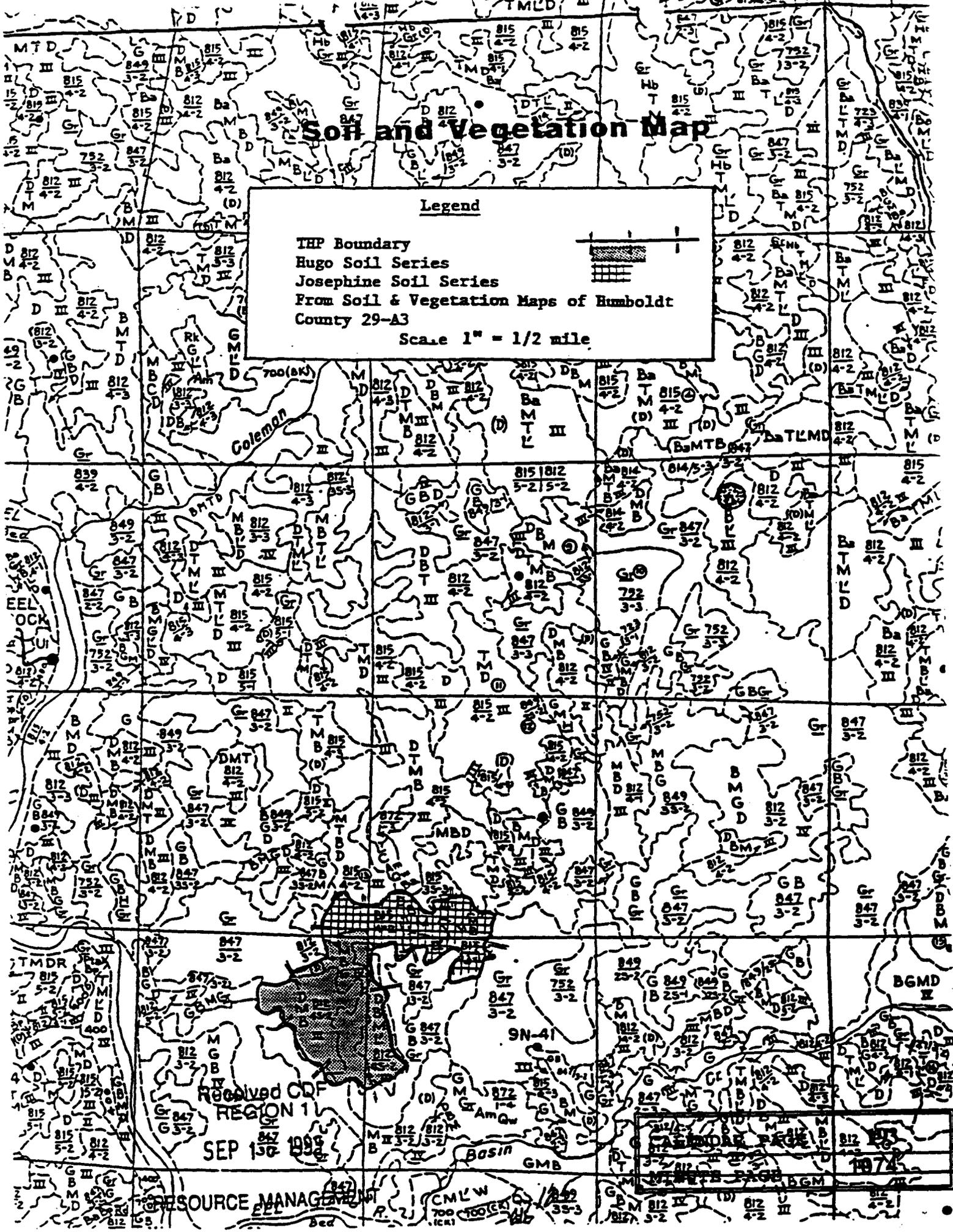
Soil and Vegetation Map

Legend

- THP Boundary
- Hugo Soil Series
- Josephine Soil Series

From Soil & Vegetation Maps of Humboldt County 29-A3

Scale 1" = 1/2 mile



Received CDF
REGION 1
SEP 13 1999

CAMPBELL PAGE 1974
WILSON PAGE BGM

RESOURCE MANAGEMENT

CMLW
700 700 (K)

WESTERN TIMBER SERVICES, Inc.

Serving California - Oregon - Washington

P. O. BOX 1136
ARCATA, CALIFORNIA 95521
PHONE (707) 822-3628

August 23, 1993

MRS. VIOLA R. MCBRIDE
P.O. BOX 1135
FERNDALE, CA 95536

Re: Proposed Timber Harvesting Plan (THP) ON EEL ROCK RANCH.

Dear Timber and Timberland Owners:

As required by Title 14 CCR 1035.1 (b) the Registered Professional Forester (RPF) must notify the timberland owner(s) of their responsibilities for compliance with the requirements of the Forest Practice Act and rules regarding stocking, maintenance of roads, landings and erosion control facilities as such apply to their timber harvesting plan (THP). Since you are listed as owners of the timber and timberland of the proposed THP you are receiving this written notification.

Following I have listed the specific references in the Forest Practice Act and Rules regarding the areas of your responsibility. Attached are copies of these referenced sections from the FPA and Rules.

Once you have read these documents should you have any questions please contact our office.

STOCKING AND WORK COMPLETION

"Z' Berg-Nejedly Forest Practice Act"
4585 Work Completion Report
4587 Stocking Reports
"Title 14 CCR"
912.7 Resource Conservation Standards
for Minimum Stocking
913 silvicultural systems

MAINTENANCE OF ROADS, LANDINGS AND EROSION CONTROL FACILITIES

"Title 14 CCR"
914.6 Waterbreaks
923.3 Watercourse Crossings
923.4 Road Maintenance
923.6 Conduct of Operations of Roads and Landings
923.8 Planned Abandonment of Roads, Watercourse
Crossings and Landings
1050 Erosion Control Maintenance

Sincerely,


Carl A. Anderson, RPF #2457

Received CDF
REGION 1

CALENDAR SEP 16 1993

MINUTE PAGE 1075
RESOURCE MANAGEMENT

4585. Work Completion Report (a) Within one month after completion of the work described in the timber harvesting plan, excluding work for stocking, a report shall be filed by the timber owner or the owner's agent with the department that all work except stocking has been completed.

(b) If all of the work described in the plan has not been completed, a report may be filed annually with respect to a portion of the area covered by the plan which has been completed. The portion completed shall be adequately identified on a map submitted with the report.

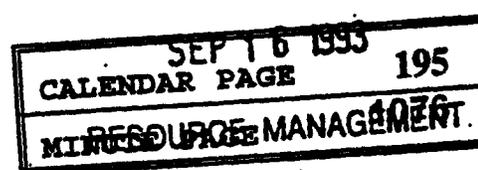
(c) This section shall remain in effect only until January 1, 1990, and as of that date is repealed, unless a later enacted statute, which is enacted before January 1, 1990, deletes or extends that date. If that date is not deleted or extended, then, on and after January 1, 1990, pursuant to Section 9611 of the Government Code, Section 4585 of the Public Resources Code, as amended by Section 91 of Chapter 1300 of the Statutes of 1976, shall have the same force and effect as if this temporary provision had not been enacted.

4587. Stocking Reports (a) Within five years after completion of timber operations on an area identified in a report submitted pursuant to Section 4585, a report of stocking with respect to that area shall be filed by the timber owner or the owner's agent with the department. The board, by regulation, shall establish one or more statistically valid standardized sampling procedures designed to measure the number of trees and their dispersion.

(b) Notwithstanding subdivision (a), the board shall promulgate regulations which specify the conditions and manner in which the necessity of employing sampling procedures may be waived. The regulations shall provide that, in addition to any other possible conditions which may be required by the board, the standard sampling procedures may be waived only if the director or the director's representative and the timber owner or a registered professional forester acting as the owner's agent agree that the area is adequately stocked to meet the standards of this chapter and other applicable rules or regulations of the board. The regulations shall require that, if the director or the director's representative does not agree that the area is so stocked, a standardized sample shall be required.

(c) This section shall remain in effect only until January 1, 1990, and as of that date is repealed, unless a later enacted statute, which is enacted before January 1, 1990, deletes or extends that date. If that date is not deleted or extended, then, on and after January 1, 1990, pursuant to Section 9611 of the Government Code, Section 4587 of the Public Resources Code, as amended by Section 3 of Chapter 1181 of the Statutes of 1978, shall have the same force and effect as if this temporary provision had not been enacted.

Received CDF
REGION 1



lic. This assessment should also account for the effects of vegetation screening and the relative importance of an area to wildlife on a seasonal basis (e.g. winter range).

e. Hardwood Cover

Hardwoods provide an important element of habitat diversity in the coniferous forest and are utilized as a source of food and/or cover by a large proportion of the state's bird and mammal species. Productivity of deer and other species has been directly related to mast crops. Hardwood cover can be estimated using the basal area per acre provided by hardwoods of all species.

f. Late Seral (Mature) Forest Characteristics

Determination of the presence or absence of mature and over-mature forest stands and their structural characteristics provides a basis from which to begin an assessment of the influence of management on associated wildlife. These characteristics include large trees as part of a multi-layered canopy and the presence of large numbers of snags and downed logs that contribute to an increased level of stand decadence. Late seral stage forest amount may be evaluated by estimating the percentage of the land base within the project and the biological assessment area occupied by areas conforming to the following definitions:

Forests not previously harvested should be at least 80 acres in size to maintain the effects of edge. This acreage is variable based on the degree of similarity in surrounding areas. The area should include a multi-layered canopy, two or more tree species with several large coniferous trees per acre (smaller subdominant trees may be either conifers or hardwoods), large conifer snags, and an abundance of large woody debris.

Previously harvested forests are in many possible stages of succession and may include remnant patches of late seral stage forest which generally conform to the definition of unharvested forests but do not meet the acreage criteria.

g. Late Seral Habitat Continuity

Projects containing areas meeting the definitions for late seral stage characteristics must be evaluated for late seral habitat continuity. The fragmentation and resultant isolation of late seral habitat types is one of the most significant factors influencing the sustainability of wildlife populations not adapted to edge environments.

This fragmentation may be evaluated by estimating the amount of the on-site project and the biological assessment area occupied by late seral stands greater than 80 acres in size (considering the mitigating influence of adjacent and similar habitat, if applicable) and less than one mile apart or connected by a corridor of similar habitat.

h. Special Habitat Elements

The loss of a key habitat element may have a profound effect on a species even though the habitat is otherwise suitable. Each species may have several key limiting factors to consider. For example, a special need for some large raptors is large decadent trees/snags with broken tops or other features. Deer may have habitat with adequate food and cover to support a healthy population size and composition but dependent on a few critical meadows suitable for fawning success. These and other key elements may need special protection.

D. Recreational Resources

The recreational assessment area is generally the area that includes the logging area plus 300 feet.

To assess recreational cumulative impacts:

1. Identify the recreational activities involving significant numbers of people in and within 300 feet of logging area (examples: fishing, hunting, hiking, picnicking, camping).

2. Identify any recreational Special Treatment Areas described in the Board of Forestry rules on the plan area or contiguous to the area.

E. Visual Resources

The visual assessment area is generally the logging area that is readily visible to significant numbers of people who are no further than three miles from the timber operation.

To assess visual cumulative effects:

1. Identify any Special Treatment Areas designated as such by the Board of Forestry because of their visual values.

2. Determine how far the proposed timber operation is from the nearest point that significant numbers of people can view the timber operation. At distances of greater than 3 miles from viewing points, activities are not easily discernible and will be less significant.

3. Identify the manner in which the public identified in 1 and 2 ab will view the proposed timber operation (from a vehicle on a public road from a stationary public viewing point or from a pedestrian pathway).

F. Vehicular Traffic Impacts

The traffic assessment area involves the first roads not part of the logging area on which logging traffic must travel.

To assess traffic cumulative effects:

1. Identify whether any publicly owned roads will be used for the transport of wood products.

2. Identify any public roads that have not been used recently for the transport of wood products and will be used to transport wood products from the proposed timber harvest.

3. Identify any public roads that have existing traffic or maintenance problems.

4. Identify how the logging vehicles used in the timber operation will change the amount of traffic on public roads, especially during heavy traffic conditions.

NOTE: Authority cited: Sections 4551 and 21080.5, Public Resources Code. Reference: Sections 4512, 4513, 4551.5, 4582.6, 21000(g), 21002 and 21080.5, Public Resources Code; *Natural Resources Defense Council, Inc. v. Arcata Nat. Corp.* (1975) 59 CalApp3d 959; 131 CalRptr. 172; and *Leupheimer v. State* (1988) 200 CalApp3d 440; 246 CalRptr. 82.

HISTORY

1. New section, Technical Rule Addendum #2, and Appendix filed 8-26-91; operative 8-26-91 pursuant to Government Code section 11346.2(d) (Register 92, No. 20).

Article 3. Silvicultural Methods

§ 913. Silvicultural Systems.

The objective of this article is to describe standard silvicultural systems and to provide for alternatives that when applied shall meet the objectives of the Act, including the provisions of stocking that will meet the stocking standards of the rules; and which will provide for future continuous timber growth on timberlands which, where feasible, will be at or near the productive capacity of the land for the forest products desired considering the soil, timber site, and species to be regenerated.

A major element of the silvicultural system is the regeneration method. The plan shall designate one or a combination of regeneration methods or intermediate treatments prescribed by these regulations. If a regeneration method or intermediate treatment not defined in the rules and described in Table 1 (or a modification of one defined in the rules), is to be used an alternative prescription shall be included in the plan.

NOTE: Authority cited: Sections 4551 and 4561, Public Resources Code. Reference: Sections 4551.5 and 4561, Public Resources Code.

HISTORY

1. Amendment of NOTE filed 2-21-79 as procedural and organizational; effective upon filing (Register 79, No. 9).

2. Repealer and new section filed 1-11-83; effective thirtieth day thereafter (Register 83, No. 3).

§ 913.1. Regeneration Methods Used in Even-Aged Management.

The following types of regeneration methods are designed to replace a harvestable stand with well spaced growing trees of commercial species.

(a) Clearcutting. The clearcutting regeneration method involves the removal of a stand in one cut on an area. The cut area is then prepared for either natural or artificial regeneration. Clearcutting may be applied to a whole stand or in patches or strips.

(1) Except as otherwise provided in this section, clearcut areas shall not exceed 32.37 ha (80 acres) in size and shall be limited to 16.19 ha (40 acres) if over half of the proposed clearcut area has an extreme erosion hazard rating and average slope exceeds fifty percent (50%).

Received CDF REGION 1

Page 222

SEP 16 1993

CALENDAR PAGE 196
MINUTE PAGE 1077

(2) Exceptions to these acreage limits may be proposed by the RPF and agreed to by the Director. The acreage exception shall be explained and justified in the plan and the exception shall not exceed the acreage limits by more than fifty percent (50%). Exceptions are justified when additional acreage will: (A) reduce the overall detrimental effects of erosion thereby providing better protection of soil, water, fish and/or wildlife resources; or (B) provide for the inclusion of "long corners"; or (C) create a more natural logging unit by taking maximum advantage of the topography. The Director may request and the RPF may agree to decrease the above acreage limitations not to exceed fifty percent (50%) based on the same considerations. Such changes will be designated in the plan.

(3) To minimize contrast and reduce adverse visual impact, clearcut areas shall, when practical, be irregularly shaped and variable in size so as to blend with natural patterns (openings) and features of the landscape (topography).

(4) Successive clearcut areas within the same ownership shall be separated by an area of not less than 91.4 m (300 feet) or a logical logging unit not less than 91.4 m (300 feet) in width between clearcut areas.

(A) No other harvesting shall take place in the unit adjacent to clearcut areas unless one of the following conditions is met:

1. Commercial thinning treatment, sanitation-salvage or selection method will be used in the adjacent unit.

2. The RPF proposes an exception in the THP and the Director concurs that the exception meets the standards of this subsection, where the area to be harvested adjacent to the clearcut meets the stocking standards of section 912.7 immediately upon completion of timber operations and where the extent and intensity of ground and vegetative disturbance is less than that which would be caused by a clearcut.

3. A satisfactory report of stocking has been issued for the entire adjacent previously cut plan area; and at least 3 years have passed since submission of the work completion report for the entire adjacent previously cut area.

The RPF may propose exceptions to 3. above when explained and justified in the plan where clearcut areas are on opposite slopes along ridges.

(5) Where the total clearcut acreage of a previously approved plan has not been harvested prior to plan expiration, a new plan to harvest the remaining unlogged clearcut portion of the original plan may be approved by the Director. The new plan must be filed within six months following expiration of the previous plan.

Regeneration after harvesting shall be obtained by direct seeding, planting, sprouts, or by natural seed fall. Site preparation and slash disposal measures will generally be necessary for successful regeneration and these measures shall be included in the plan.

(6) When the erosion hazard rating is extreme and average slope exceeds fifty percent (50%), or when the erosion hazard rating is moderate or high and average slope exceeds seventy percent (70%), cable, helicopter, or balloon yarding systems shall be used for the protection of soil resources. The RPF may propose exceptions when explained and justified in the plan.

(b) Shelterwood. The shelterwood regeneration method involves reproducing a stand by a series of cuttings (preparatory, seed, removal), one or more of which are designed to open the stand sufficiently to stimulate natural regeneration or provide cover for planted trees. The shelter of older trees is normally removed only when the new stand is well established.

(1) On stands harvested under this regeneration method, the timber operator shall remove trees individually, to establish a new crop of trees under the protection (overhead or side) of the residual trees, the resultant new crop of trees being even-aged.

(2) If the preparatory cutting step under the shelterwood method is used, the RPF must indicate in the plan whether the objective is to naturally or artificially regenerate the stand. Stocking must equal or exceed the requirements of 14 CCR 912.7(b)(2) upon completion of timber operations if this step is used. If a stand is to be naturally regenerated, in addition to meeting the requirements of 14 CCR 912.7(b)(2) those trees counted toward meeting the requirements of 14 CCR 912.7(b)(2) must include as a minimum the numbers and sizes of trees required under the seed tree regeneration method. Within six months following completion

of work described in the plan, a report of stocking shall be filed as required in PRC 4587.

(3) If the seed cutting step is used, the number of seed trees must equal or exceed that set forth under the seed tree regeneration method and must provide adequate shelter for seedling establishment. Either the trees to be cut or left in the seed cutting step shall be marked by or under the supervision of an RPF in advance of timber falling operations. When an RPF or RPF designee supervises cutting, marking of seed trees is optional.

(4) If the extent and intensity of the ground disturbance caused by the harvest is essentially the same as would have been caused by a clearcut, the size limitations, separation (spacing) by logical logging unit requirements, and yarding equipment limitations of 14 CCR 913.1(a) are applicable. The RPF may justify with the approval of the Director, an exception to these requirements if the seed cutting step will cause significantly less disturbance than that caused by clearcutting. The stocking requirements of 14 CCR 912.7 shall apply.

(5) If natural stocking is inadequate two years after the first August following completion of timber operations under the seed cutting step, seed and shelter trees may be removed before artificial regeneration is used if removal is justified by the RPF in the plan.

(6) The removal cutting step is used when regeneration has become established following the seed cutting step, or where another regeneration method has left a number of seed trees and shelter under which reproduction has become established. This is the last stage of a shelterwood regeneration method.

If, as judged by the RPF, more than 10 percent of the area or 8.09 ha (20 acres) whichever is less, will not meet the stocking standards of 14 CCR 912.7 upon completion of timber operations, the RPF preparing the plan shall delineate the plan into areas up to a ten acre maximum that either probably will or will not meet stocking standards. The requirements and exceptions of 14 CCR 913.1(a) and stocking requirements of 14 CCR 912.7 shall apply to the areas not meeting stocking.

(c) Seed Tree. The seed tree regeneration method provides for the removal of a stand in one cut except for well distributed seed trees of desired species which are left singly or in small groups to restock the logged area.

(1) An average of at least 25 seed trees, 45.7 cm d.b.h. or greater per ha (10 seed trees 18 inches d.b.h. or greater per acre) must remain on the logged area. In addition, no point within the logged area shall be more than 45.72 m (150 feet) horizontal distance from the nearest seed tree. Also, each seed tree 61 cm (24 inches) d.b.h. or greater shall be equivalent to two (2) seed trees which are less than 61 cm (24 inches) d.b.h., but at least 45.7 cm (18 inches) d.b.h. or greater.

(2) Seed tree species and site preparation measures shall be specified by the RPF in the plan.

(3) Seed trees shall be marked by or under the supervision of an RPF in advance of timber falling operations. When an RPF or an RPF designee supervises cutting, marking of seed trees is optional.

(4) If the extent and intensity of the ground disturbance caused by the harvest is essentially the same as would have been caused by a clearcut, the size limitations, separation (spacing) by logical logging unit requirements, and yarding equipment limitations of 14 CCR 913.1(a) are applicable. The RPF may justify, with the approval of the Director, an exception to these requirements if the seed tree regeneration method will cause significantly less disturbance than that caused by clearcutting. The stocking requirements of 14 CCR 912.7 shall apply.

(5) If natural stocking is inadequate two years after the first August following completion of timber operation seed trees may be harvested and artificial regeneration shall be used to meet the stocking requirements of 14 CCR 912.7. A plan shall be submitted for such harvest (seed tree removal) and regeneration effort, and regeneration shall be initiated during the first regeneration season after seed tree removal unless an exception is approved by the Director.

(6) The seed trees may be removed where the stocking requirements of 14 CCR 912.7 have been met. A plan shall be submitted for such harvest and the stocking requirements of 14 CCR 912.7 shall be met upon completion of timber operations.

Received CDF
REGION 1

Page 223

SEP 16 1993

CALENDAR PAGE 197

MINUTE PAGE

1078

Regulation 92, No. 40, 10-3-92

NOTE: Authority cited: Sections 4551 and 4561, Public Resources Code. Reference: Sections 4561 and 4582(h), Public Resources Code.

HISTORY

1. New NOTE filed 2-21-79 as procedural and organizational effective upon filing (Register 79, No. 9).
2. Repealer and new section filed 1-11-83: effective thirtieth day thereafter (Register 83, No. 3).
3. Change without regulatory effect filed 5-24-89 (Register 89, No. 23).
4. Editorial correction of subsection (b)(2) (Register 91, No. 28).
5. Amendment of section heading and section filed 11-25-91 as an emergency; operative 11-25-91 (Register 92, No. 25). A Certificate of Compliance must be transmitted to OAL 3-24-92 or emergency language will be repealed by operation of law on the following day.
6. Repealer of emergency amendments filed 11-25-91 and reinstatement of prior text filed 9-22-92 by operation of Government Code section 11346.1(f) (Register 92, No. 40).

§ 913.1.5. Regeneration Methods Used in Even-Aged Management and Limitations.

NOTE: Authority cited: Sections 4551, 4553, 4561, and 21160, Public Resources Code. Reference: Sections 4512, 4513, 4551.5, 4561 and 4582(h), Public Resources Code.

HISTORY

1. New section filed 11-25-91 as an emergency; operative 11-25-91 (Register 92, No. 25). A Certificate of Compliance must be transmitted to OAL 3-24-92 or emergency language will be repealed by operation of law on the following day.
2. Repealer of emergency adoption filed 11-25-91 by operation of Government Code section 11346.1(g) (Register 92, No. 40).

§ 913.2. Regeneration Method Used in Uneven-Aged Management.

Selection is the regeneration method used in uneven-aged management. An uneven-aged condition is established and maintained through selection cutting. This regeneration method depends on maintaining a balanced stand structure and providing for establishment of trees. Under the selection regeneration method the trees are removed individually or in small groups to realize the yield and continually establish a new crop. Such removals may be repeated at relatively short time intervals to encourage periodic establishment of natural regeneration and an uneven-aged timber stand.

(a) Trees to be cut or trees to be left shall be marked by or under the supervision of an RPF prior to cutting. When an RPF or RPF designee supervises cutting, marking is optional.

(b) Immediately following completion of timber operations the following stocking standards shall be met:

(1) On Site I lands at least 28.7 m²/ha (125 square feet per acre) of basal area shall be left.

(2) On Site II and III lands at least 17.22 m²/ha (75 square feet per acre) of basal area shall be left.

(3) On Site IV and V lands at least 11.48 m²/ha (50 square feet per acre) of basal area shall be left.

(c) Exceptions to these stocking standards may be proposed by the RPF when explained and justified in the plan, but in no case will the exceptions be less than specified in 14 CCR 912.7(b)(2).

(d) Within six months following completion of timber operations as described in the plan a report of stocking shall be filed as stated in PRC 4587.

NOTE: Authority cited: Sections 4551 and 4561, Public Resources Code. Reference: Sections 4561 and 4582(h), Public Resources Code.

HISTORY

1. Amendment of subsection (a) and new NOTE filed 2-21-79: effective thirtieth day thereafter (Register 79, No. 9).
2. Repealer and new section filed 1-11-83: effective thirtieth day thereafter (Register 83, No. 3).
3. Change without regulatory effect of subsection (c) filed 5-24-89 (Register 89, No. 23).
4. Editorial correction of subsection (c) (Register 91, No. 28).

§ 913.2.5. Even-Aged Size Limits.

NOTE: Authority cited: Sections 4551, 4553 and 4561, Public Resources Code. Reference: Sections 4512, 4513, 4561, 4582(h) and 21001, Public Resources Code.

HISTORY

1. New section filed 11-25-91 as an emergency; operative 11-25-91 (Register 92, No. 25). A Certificate of Compliance must be transmitted to OAL 3-24-92 or emergency language will be repealed by operation of law on the following day.
2. Repealer of emergency adoption filed 11-25-91 by operation of Government Code section 11346.1(g) (Register 92, No. 40).

§ 913.3. Intermediate Treatments.

(a) Commercial Thinning. Commercial thinning is the removal of trees in a young-growth stand to accelerate diameter increment on each residual tree and promote timber growth.

(1) Immediately following completion of timber operations, the following stocking standards shall be met:

(A) On Site I lands at least 28.7 m²/ha (125 square feet per acre) of basal area shall be left.

(B) On Site II and III lands at least 17.22 m²/ha (75 square feet per acre) of basal area shall be left.

(C) On Site IV and V lands at least 11.48 m²/ha (50 square feet per acre) of basal area shall be left.

(2) Exceptions to these stocking standards may be proposed by the RPF when explained and justified in the plan, but in no case will the standards be below those specified in 14 CCR 912.7(b)(2).

(3) Within six months following completion of timber operations as described in the plan a report of stocking shall be filed as stated in PRC 4587.

(b) Sanitation-Salvage. The sanitation-salvage treatment is a combination of the two treatments, sanitation and salvage, that are done in conjunction with one another. Sanitation is the removal of insect-attacked or diseased trees in order to maintain the health of the stand. Salvage is the removal of only those trees which are dead, dying or deteriorating, because of damage from fire, wind, insects, disease, flood or other injurious agents, in order to obtain an economic gain before their value is lost.

After a sanitation-salvage cutting, stocking shall immediately meet the stocking standards of 14 CCR 912.7 unless justified in the plan. If stocking is to be met immediately following completion of timber opera-

Received CDF
REGION 1

SEP 16 1993

RESOURCE MANAGEMENT 198
MINUTE PAGE 1079

tions then a report of stocking shall be filed within six months of completion. If stocking will not be met, then restocking shall commence the first planting season after completion of treatment.

(c) Transition Method. The transition method may be used to develop an uneven-aged stand from a stand that currently has an irregular or even-aged structure. Under the transition method, trees are removed individually or in small groups as needed to realize a yield while developing a balanced stand structure and providing for establishment of a new crop. Such removals may be repeated at relatively short time intervals to encourage periodic establishment of natural regeneration and an uneven-aged timber stand.

(1) Trees to be cut or trees to be left shall be marked by or under the supervision of an RPF before cutting. When an RPF or RPF designee supervises cutting, marking is optional.

(2) Immediately following completion of timber operations, the following stocking standards shall be met:

(A) Minimum stocking shall be the point count standard specified in 14 CCR 912.7(b)(2), 932.7(b)(2), 952.7(b)(2).

(B) In addition to the above requirement, the residual stand shall contain sufficient trees to meet at least 50 percent of the basal area requirement specified in 14 CCR 912.7(b)(2), 952.7(b)(2), 952.7(b)(2).

(3) Within six months following completion of timber operations as described in the plan, a report of stocking shall be filed as stated in PRC 4587.

Note: Authority cited: Sections 4551 and 4561, Public Resources Code. Refer to: Sections 4582(d), (d) and 4587, Public Resources Code.

Harvest

1. New NOTE filed 2-21-79 as procedural and organizational; effective upon filing (Register 79, No. 91).

2. Repealer and new section filed 1-11-83; effective thirty day thereafter (Register 83, No. 31).

3. New subsection (c) filed 1-23-85; effective thirty day thereafter (Register 85, No. 41).

4. Change without regulatory effect filed 5-25-89 (Register 89, No. 231).

5. Editorial correction of subsections (a)(2) and (c)(2) (Register 91, No. 281).

§ 913.4. Special Harvesting Methods.

The following special harvesting methods are appropriate under certain conditions:

(a) Special Treatment Areas. Special consideration in Special Treatment Areas shall be given to selection of silvicultural treatments and timber operations that will be compatible with the objectives for which the special area was established. Such areas shall be identified in the plan. To assure the integrity of legally designated historical and archaeological sites and legally designated ecological reserves, and that the objectives of the special treatment areas are met, the RPF and the Director may agree, after on-the-ground inspection. If requested by either party, on specific measures needed to protect such areas. The Director shall notify affected agencies or groups with expertise in the resource involved in the special treatment area of any such areas located during the THP review process.

(b) Rehabilitation of Understocked Areas. For the purposes of restoring and enhancing the productivity of commercial timberlands which do not meet the stocking standards defined in 14 CCR 912.7 prior to any timber operations on such lands, an area may be harvested provided it is restocked in accordance with sub-sections (1), (2), or (3).

(1) On Site I, II and III lands the stocking must equal or exceed the stocking standards in 14 CCR 912.7. Site IV and V lands shall be classified as acceptably stocked, if, as a result of restocking it contains at least 10 countable trees for each tree harvested, but in no event less than 50% of the stocking prescribed in 14 CCR 912.7.

(2) On understocked timberlands that are subject to a California Forest Improvement Program (CFIP) reforestation contract, which provides for planting equal to or exceeding the stocking requirements specified in 14 CCR 912.7, prior to the submittal of a plan, the following standards apply:

(A) On Sites I, II and III, stocking shall consist of at least 10 countable trees for each tree harvested, but need not exceed that specified in PRC 4561(a).

(B) On Sites IV and V, stocking shall consist of at least 5 countable trees for each tree harvested, but need not exceed that specified in PRC 4561(a).

If for any reason the planting provisions of the CFIP contract are not complied with, the minimum stocking provisions of (1) above shall apply.

(3) On understocked timberlands where only broadleaf species are to be harvested and the broadleaf species are not designated for management, the stocking standards of 14 CCR 912.7 shall be met. An exception to this is where there is an approved reforestation contract under the California Forest Improvement Program, which provides for planting equal to or exceeding the stocking requirements specified in 14 CCR 912.7 prior to the submittal of the plan.

If for any reason the planting provisions of the contract under the California Forest Improvement Program are not complied with, the minimum stocking provisions of 14 CCR 912.7 shall apply.

Note: Authority cited: Sections 4551, 4553 and 4561, Public Resources Code. Refer to: Section 4582.5, Public Resources Code.

Harvest

1. New NOTE filed 2-21-79 as procedural and organizational; effective upon filing (Register 79, No. 91).

2. Repealer and new section filed 1-11-83; effective thirty day thereafter (Register 83, No. 31).

3. Change without regulatory effect filed 5-24-89 (Register 89, No. 231).

4. Amendment of subsection (a) and Note filed 11-27-91; operative 12-27-91 (Register 92, No. 251).

§ 913.5. Stocking Status.

Under any regeneration method where artificial regeneration is specified in the plan to restock the logged area, a preliminary report on the degree of stocking shall be submitted to the Director annually, between October 1 and December 31, beginning two years following completion of logging by the timber owner or his/her agent until the stocking standard of 14 CCR 912.7 is met or exceeded or as otherwise required. This report shall indicate the degree of stocking achieved and any additional measures that will be taken to stock the logged area.

Note: Authority cited: Sections 4551 and 4561, Public Resources Code. Refer to: Sections 4561, 4587 and 4588, Public Resources Code.

Harvest

1. New NOTE filed 2-21-79 as procedural and organizational; effective upon filing (Register 79, No. 91).

2. Amendment filed 7-2-79; effective thirty day thereafter (Register 79, No. 271).

3. Repealer and new section filed 1-11-83; effective thirty day thereafter (Register 83, No. 31).

§ 913.6. Alternative Prescriptions.

(a) An alternative prescription shall be included in a THP when, in the judgment of the RPF, an alternative regeneration method or intermediate treatment offers a more effective or more feasible way of achieving the objectives of Section 913 than any of the standard silvicultural methods provided in this article.

(b) An alternative prescription, as defined in 14 CCR 895.1, shall normally contain at least the following information:

(1) A description of the stand before timber operations, including:

(A) The RPF's professional judgment of the species composition of the stand before harvest.

(B) The RPF's professional judgment of the current stocking on the area expressed in basal area or a combination of basal area and point count.

(C) The RPF's estimate of the basal area per acre to be removed from the stand during harvest.

(2) A description of the stand after timber operations, including: natural damage, storm damage, insect, disease, or other conditions, or other problems which may affect stand health.

Received CDF
REGION 1

Page 225

SEP 16 1993

MINUTE PAGE
1080

(3) A statement of which silvicultural method in the current District rules is most nearly appropriate or feasible and an explanation of why it is not appropriate or feasible.

(4) An explanation of how the proposed alternative prescription will differ from the most nearly feasible method in terms of securing regeneration; protection of soil, water quality, wildlife and disease protection.

(5) A description of the stand expected after completion of timber operations, including the following:

(A) The management objective under which the post-harvest stand is to be managed (even-aged, uneven-aged, or neither);

(B) The desired tree species composition of the post-harvest stand and the RPF's judgment as to the remaining stocking after harvest expressed as basal area or a combination of basal area and point count.

(C) The treatment of the stand to be used in harvesting, including:

(A) The guidelines to be used in determining which trees are to be harvested or left;

(B) The type of field designation to be followed, such as marking, sample marking of at least 20 percent of the area to be harvested, professional supervision of fallers, or other methods; and

(C) The site preparation and regeneration method and time table to be used for restocking.

(c) If an alternative prescription will have the practical on-the-ground effect of a clearcut, regardless of name or description, then the acreage limitations, and requirement for separation by a typical logging unit, yarding equipment limitations, exceptions, and stocking requirements for the clearcut regeneration method, shall apply.

(d) The Director shall approve the alternative if in his judgment it complies with 14 CCR 898 and if, considering the entire area to which the alternative is to be applied, it would, when compared with the standard method identified in Subsection (b)(3) above, have an effect equal to or more favorable than such standard method in the factors listed in Section 898(a)(1).

NOTE: Authority cited: Sections 4551 and 4561, Public Resources Code. Reference: Sections 4551.5 and 4561, Public Resources Code.

HISTORY

1. New NOTE filed 2-21-79 as procedural and organizational; effective upon filing (Register 79, No. 9).

2. Repealer and new section filed 1-11-83; effective thirtieth day thereafter (Register 83, No. 31).

3. Change without regulatory effect filed 6-19-89 (Register 89, No. 28).

§ 913.7. Exceptions.

The requirements of this article shall not prohibit the operator from cutting or removing trees for purposes of clearing rights-of-way, log landings, campsites, or fire breaks necessary for the conduct of timber operations. The harvesting of Christmas trees and construction of a public fire protection agency fuelbreak is also permitted.

NOTE: Authority cited: Section 4551, Public Resources Code. Reference: Section 4584, Public Resources Code.

HISTORY

1. New NOTE filed 2-21-79 as procedural and organizational; effective upon filing (Register 79, No. 9).

2. Repealer of former Section 913.7 and renumbering of Section 913.10 to Section 913.7 filed 1-11-83; effective thirtieth day thereafter (Register 83, No. 31).

§ 913.8. Special Harvesting Methods for Southern Subdistrict.

Only the following regeneration methods and stocking requirements shall apply in the Southern Subdistrict of the Coast Forest District. Timber operations shall be conducted in accordance with subsections (a), (b), (c), or (d) below. If the provisions of more than one subsection will be used within any individual timber operation or logging area, a line separating the areas to be cut under provisions of each shall be shown in the plan and clearly defined on the ground by paint or other means prior to filing the plan and so as to be readily identifiable during and after completion of logging.

(a) Leave uncut a well-distributed timber stand after timber operations have been completed on the logging area that is at least 40% by number of those trees 45.7 cm (18 inches) and more d.b.h. present prior to com-

mencement of current timber operations and at least 50% by number of those trees over 30.5 cm (12 inches) d.b.h., but less than 45.7 cm (18 inches) d.b.h. Leave trees shall be thrifty coniferous trees which were dominant or co-dominant in crown class prior to timber harvesting or which have crowns typical of such dominant or co-dominant trees. They shall be free from significant damage caused by the timber operations. No conifer shall be cut which is more than 22.9 m (75 feet) from a leave tree 30.5 cm (12 inches) d.b.h. or larger located within the logging area. Average top stump diameter, outside bark, shall be considered 2.5 cm (1 inch) greater than d.b.h. No area may be cut in excess of the leave tree standards of this rule in any 10 year period. Upon completion of timber operations one of the following stocking standards for coniferous trees shall be met:

(1) Basal Area. The average residual basal area, measured in stems 2.5 cm (1 inch) or larger in diameter at least 27.6 m²/ha (120 square feet per acre) on Site I lands, and at least 22.7 m²/ha (100 square feet per acre) on Site II lands, and 17.22 m²/ha (75 square feet per acre) on Site III lands, and 11.48 m²/ha (50 square feet per acre) on Sites IV and V lands.

(2) Countable Trees. The area contains a well-distributed stand of trees with an average of at least 1112 countable trees per ha (450 point count per acre) as determined by using the following countable tree equivalents:

(A) 1112 countable trees per ha (450 countable trees per acre) not more than 10.2 cm (4 inches) d.b.h.; each tree to count as one toward meeting stocking requirements.

(B) 371 countable trees per ha (150 countable trees per acre) over 10.2 cm (4 inches) d.b.h. and not more than 30.5 cm (12 inches) d.b.h.; each tree to count as 3 toward meeting stocking requirements.

(C) 185 countable trees per ha (75 countable trees per acre) over 30.5 cm (12 inches) d.b.h. and not more than 45.7 cm (18 inches) d.b.h.; each tree to count as 6 toward meeting stocking requirements.

(D) 124 countable trees per ha (50 countable trees per acre) over 45.7 cm (18 inches) d.b.h.; and not more than 61 cm (24 inches) d.b.h.; each tree to count as 9 toward meeting stocking requirements.

(E) 74 countable trees per ha (30 countable trees per acre) over 61 cm (24 inches) d.b.h.; each tree to count as 15 toward meeting stocking requirements.

(F) Redwood root crown sprouts over 3 m (1 foot) in height will be counted using the average stump diameter 3 m (1 foot) above average ground level of the original stump from which the redwood root crown sprouts originate counting 1 sprout for each 3 m (1 foot) of stump diameter to a maximum of 6 per stump. Any countable redwood root crown sprout over 3 m (1 foot) in height but less than 10.2 cm (4 inches) d.b.h. shall count as 1 toward meeting stocking requirements.

(b) An alternative regeneration method may be approved only if all of the following are met:

(1) The regeneration method described in subsection (a) above is not silviculturally appropriate or feasible in the professional judgment of the Director and the RPF who prepared the plan.

(2) Cutting methods prescribed under the provisions of this section must maintain a well-distributed tree crown cover of at least 50% of the pre-existing tree crown canopy. At no time shall the crown cover be reduced to a level where the productivity of the land is jeopardized or to a level which would create a threat to soil and/or water resources. Provided the required crown cover can be maintained, the removal of all trees in small groups not exceeding .202 ha (one-half acre) in size may be approved as part of the overall cutting prescription.

(3) The alternative method shall provide overall protection at least equal to that of the standard provided by subsection (a) for watershed, wildlife, soil and aesthetic resources considering the silvicultural method, conditions necessary for regeneration, tree growth rate, annual rainfall, summer temperature and length of dry season, critical problems of erodible soils, unstable areas, need for high water quality, increased fire potential and exposure to more intensive use.

(4) A plan agreed upon between the RPF and the Director is prepared which gives timber stand information concerning stocking levels, con-

Received CDF REGION 1

SEP 16 1993

CALENDAR PAGE 1081 MINUTE PAGE

goals, timber stand growth and future harvest timing expectations. The plan must also include information on site location and preparation for planning required under (6) below.

(5) The timber operator is responsible for carrying out timber operations as described in the plan. The plan submitter is responsible for retaining an RPF to provide professional advice to the timber operator and timberland owner on a continuing basis throughout the timber operations. The RPF or the designee of the RPF works closely with the timber operator to help assure compliance with the approved alternative prescription and the terms and specifications of the approved plan. The RPF or the designee of the RPF is present on the harvest area sufficient hours each week to know the operations' progress and advise the timber operator. The RPF informs the timber operator of potential environmental impacts and the mitigation measures to be taken to minimize such impacts. The timber operator shall sign the plan and major amendments thereto, or shall sign and file with the Director a facsimile thereof prior to commencement or continuation of operation thereunder agreeing to abide by the terms and specifications of the plan. An RPF may be responsible for the conduct of timber operations under contractual arrangements with the timber owner.

(6) The logging area shall meet the stocking standards described in 14 CCR 913.8(a) within five years following completion of timber operations. Hardwoods, as per 14 CCR 912 "Commercial Species," designated for management may be counted for stocking. If such hardwoods are counted to meet stocking requirements, at least 20% of the total harvest area cut under 14 CCR 913.8(a) shall be planted with conifer trees at the rate of at least 1112 well-distributed trees per ha (450 trees/acre).

(c) The harvest of dead, dying or deteriorating trees resulting from fire, wind, insect, disease, flood, or other injurious agents as provided in 14 CCR 913.3(b) shall be exempt from 14 CCR 913.8(a) and (b) except for stocking under 14 CCR 913.8(b) provided there has been a preharvest inspection and a plan has been approved.

(d) Eucalyptus stands designated for management as a commercial crop may be harvested under the evenage silvicultural system provided the following conditions and limitations are met:

(1) Except as provided in 14 CCR 913.1 (a) (2), clearcut shall be limited to 10 acres in size, and must conform with all other provisions of 14 CCR 913.1 (a).

(2) Clearcut areas shall be screened from direct public view by having screening vegetation between the clearcut area and public areas utilized by substantial numbers of viewers. Screening vegetation shall be a minimum of 100 feet in width. Screening shall be retained until vegetative regrowth effectively covers all areas of visible bare soil.

(3) Regenerated stands may be re-entered for harvest not sooner than ten (10) years after harvest.

NOTE: Authority cited: Sections 4551, 4553, 4561 and 4562.5, Public Resources Code. Reference: Sections 4561, 4561.1, 4562.5 and 4562.7, Public Resources Code.

History

1. New NOTE filed 2-21-79 as procedural and organizational; effective upon filing (Register 79, No. 91).
2. Repealer and new section filed 7-2-79; effective thirtieth day thereafter (Register 79, No. 27).
3. Repealer of former section 913.8 and renumbering and amendment of section 913.9 to section 913.8 filed 1-11-83; effective thirtieth day thereafter (Register 83, No. 3).
4. Amendment of first paragraph and new subsection (d) filed 8-10-87; operative 9-9-87 (Register 87, No. 331).
5. Amendment of subsection (b)(3) filed 2-11-91; operative 3-13-91 (Register 91, No. 14).

§ 913.9. Southern Subdistrict—Cutting Method and Stocking Provisions.

History

1. Renumbering and amendment of Section 913.9 to Section 913.8 filed 1-11-83; effective thirtieth day thereafter (Register 83, No. 3).

§ 913.10. Exceptions.

NOTE: Authority cited: Section 4551, Public Resources Code. Reference: Section 4584, Public Resources Code.

History

1. New NOTE filed 2-21-79 as procedural and organizational; effective upon filing (Register 79, No. 91).
2. Renumbering of Section 913.10 to Section 913.7 filed 1-11-83; effective thirtieth day thereafter (Register 83, No. 3).

§ 913.11. Sustained Forestry Planning Addendum.

After July 1, 1992, a timber or timberland owner of 5,000 acres or more of timberland in California shall submit an addendum as part of any plan which sets out a 100-year planning period for one or more planning watersheds, within which it is demonstrated how the objectives of 14 CCR 897(b)(1) are met. This addendum will at a minimum cover the one planning watershed within which the THP is located and may include the timber ownership. Subsequent THPs in the same planning watershed shall incorporate by reference a previously submitted addendum.

(a) To achieve the sustained forestry objective of a balance between growth and harvest across an ownership, the landowner shall develop and maintain an estimate of inventory, growth, yield, area occupied by each stand age and structure, seral stage class and a harvest schedule per decade. The addendum to the THP shall project for at least 100 years in the future the annual or periodic 10-year inventory, harvests, and the extent of areas occupied by each seral stage. Separate projections shall be provided for each combination of commercial forest site class, vegetation type and management prescription proposed for the planning area. The addendum shall clearly and understandably demonstrate the following:

1) How the harvest provides for the maximum sustained production of high quality timber products.

2) How management and harvesting provide for long-term conservation of native wildlife normally found in the area across the ownership and within planning watersheds, including wildlife associated with late seral stages and ancient forests. Vegetation shall be distributed in necessary sizes, ages, and spatial arrangements to provide functional continuity of wildlife habitat.

3) Where maximum sustained production is not occurring or where existing wildlife habitat is lacking, how improvement within site limitations will be made during the planning period.

4) Where harvesting has exceeded growth over the decade before the effective date of these rules, how future growth will approach maximum sustained production of high-quality timber products.

(b) The timber or timberland owner shall provide upon the Director's request the analytical methodologies and any computer projection techniques used to develop the information provided pursuant to this section. The Director may also require a confidential audit of the landowner's inventory, growth, and harvest projections to verify the balance between harvest and growth and the presence of age and size classes necessary to provide diverse functional wildlife habitat particularly those associated with critical habitat components.

(c) Where a timber or timberland owner is relying upon an addendum on file with the Director such addendum shall be updated every ten years. Proprietary information shall be treated consistent with Public Resources Code Section 21160.

3) A specific discussion shall be provided which describes the accuracy of the data and projection techniques used to produce estimates of inventory, growth, yield, percent area occupied by each stand age class, structure class, and how late seral state distribution will be maintained or improved over time.

NOTE: Authority cited: Sections 4551, 4561, and 21160, Public Resources Code. Reference: Sections 4551.5 and 4561, Public Resources Code.

History

1. New NOTE filed 2-21-79 as procedural and organizational; effective upon filing (Register 79, No. 91).
2. Repealer filed 1-11-83; effective thirtieth day thereafter (Register 83, No. 3).
3. New section filed 11-25-91 as an emergency; operative 11-25-91 (Register 92, No. 25). A Certificate of Compliance must be submitted to the Director by the landowner or emergency language will be repealed by operation of law on the following day.

CALENDAR PAGE

MINUTE PAGE

201

1082

Register 92, No. 25, 6-11-92

Received CDF
REGION 1

Page 227

SEP 16 1993

Article 4. Harvesting Practices and Erosion Control

§ 914. Purposes.

Timber operations shall be conducted to: meet the goal of maximum sustained production of high quality timber products; minimize breakage of merchantable timber; prevent unreasonable damage to residual trees, fish and wildlife habitat as identified in the THP, or contained in the rules, reproduction, and riparian vegetation; prevent degradation of the quality and beneficial uses of water, and maintain site productivity by minimizing soil loss.

The following provisions shall be applied in a manner which achieves this standard.

Note: Authority cited: Sections 4551, 4551.5 and 4553 Public Resources Code. Reference: 33 U.S.C.A. Section 1288; Sections 4512, 4513, 4514.3, 4527, 4562.7 and 4582, Public Resources Code.

History

1. Repealer of Article 4 (Sections 914-914.7) and new Article 4 (Sections 914-914.9, not consecutive) filed 8-4-83; designated effective 10-1-83 (Register 83, No. 32). For prior history, see Register 79, No. 9.

2. Amendment filed 12-4-89; operative 2-1-90 (Register 89, No. 50).

§ 914.1. Felling Practices.

The following standards are applicable to felling practices:

(a) To the fullest extent possible and with due consideration given to topography, lean of trees, landings, utility lines, local obstructions, and safety factors, trees shall be felled to lead in a direction away from watercourses and lakes.

(b) Desirable residual trees and tree seedlings of commercial species, and those oak trees requiring protection pursuant to 14 CAC 953.10 shall not be damaged or destroyed by felling operations, except where unavoidable due to safety factors, lean of trees, location of obstructions or roads, or lack of sufficient openings to accommodate felled trees.

(c) Trees shall be felled in conformance with watercourse and lake protection measures incorporated in timber harvesting plans and consistent with Article 6 of these rules.

(d) Felling practices shall conform to requirements of 914.4, 934.4, 954.4 to protect bird nesting sites.

Note: Authority cited: Sections 4551, 4551.5, 4553, 4562.5 and 4562.7, Public Resources Code. Reference: Sections 4512, 4513, 4562.5, 4562.7, 4581, 4582 and 4582.5, Public Resources Code.

§ 914.2. Tractor Operations.

The following standards are applicable to tractor operations:

(a) Tractor operations shall be conducted in a manner which complies with 14 CCR 914.

(b) Tractor, or other heavy equipment which is equipped with a blade, shall not operate on skid roads or slopes that are so steep as to require the use of the blade for braking.

(c) Tractor roads shall be limited in number and width to the minimum necessary for removal of logs. When less damage to the resources specified in 14 CCR 914 will result, existing tractor roads shall be used instead of constructing new tractor roads.

(d) Tractor or other heavy equipment shall not be operated on unstable areas. The RPF may propose an exception where the exception is explained and justified in the THP and the exception includes measures to minimize the effect of timber operations on slope stability and to meet the requirements of 14 CCR 914.

(e) Slash and debris from timber operations shall not be bunched adjacent to residual trees required for silvicultural or wildlife purposes or placed in locations where they could be discharged into a Class I or II watercourse, or lake.

(f) Tractor operations shall not be conducted on any of the following:

(1) Any slopes over 65 percent.

(2) Slopes over 50 percent which lead without flattening to a Class I or Class II watercourse or lake.

Received CDF
REGION 1

Page 228

SEP 16 1993

(3) Areas having average slopes over 50 percent, where the erosion hazard rating is high or extreme. The area sampled for the average shall not exceed 20 acres. The RPF may propose exceptions to (1) and (3) above if:

The exception will comply with 14 CCR 914, and the THP clearly explains the exception and justifies why application of the standard rule is not feasible, or would not comply with 14 CCR 914. Tractor roads under such exception shall be flagged prior to the preharvest inspection or the start of timber operations, whichever is first.

(g) Where tractor roads are constructed, timber operators shall use tractor roads only, both for skidding logs to landings and on return trips.

(h) Timber operators shall exercise due diligence so that desirable residual trees and seedlings will not be damaged or destroyed in tractor operations.

(i) Where waterbreaks cannot effectively disperse surface runoff, other erosion controls shall be installed as needed.

Note: Authority cited: Sections 4551, 4551.5 and 4553, Public Resources Code. Reference: Sections 4512, 4513, 4562.5, 4562.7 and 4582, Public Resources Code.

History

1. Amendment filed 1-24-89; operative 2-1-90 (Register 89, No. 50).

2. Amendment of subsection (d) filed 2-11-91; operative 3-13-91 (Register 91, No. 14).

3. New subsection (i) filed 9-25-91; operative 9-23-91 (Register 92, No. 25).

§ 914.3. Cable Yarding.

The following standards are applicable to cable yarding:

(a) Due diligence shall be exercised in the installing, and operating, of cable lines so that residual trees will not incur unreasonable damage by such installation or use.

(b) Residual trees required to be left upon completion of timber operations shall not be used for rub trees, corner blocks, rigging or other cable ties unless effectively protected from damage.

(c) The practice of tight-lining for the purpose of changing location of cable lines is prohibited unless such practice can be carried on without damaging residual trees.

(d) Cable yarding settings shall take maximum advantage of the natural topography and timber types so that yarding operations will protect residual trees.

(e) Tractors shall not be used in areas designated for cable yarding except to pull trees away from streams, to yard logs in areas where deflection is low, or where swing yarding is advantageous; and when explained and justified in the THP and approved by the Director, to construct firebreaks and/or layouts.

Note: Authority cited: Sections 4551, 4551.5 and 4553, Public Resources Code. Reference: Sections 4512, 4513, 4527, 4562.5, 4562.7 and 4582, Public Resources Code.

History

1. Amendment of subsection (e) filed 8-17-84; effective thirtieth day thereafter (Register 84, No. 33).

§ 914.5. Servicing of Logging Equipment, Disposal of Refuse, Litter, Trash and Debris.

The following standards shall be adhered to in servicing logging equipment and disposing of refuse, litter, trash and debris:

(a) Equipment used in timber operations shall not be serviced in locations where servicing will allow grease, oil, or fuel to pass into lakes or watercourses.

(b) Non-biodegradable refuse, litter, trash, and debris resulting from timber operations, and other activity in connection with the operations shall be disposed of concurrently with the conduct of timber operations.

Note: Authority cited: Sections 4551, 4551.5 and 4553, Public Resources Code. Reference: Sections 4512 and 4513, Public Resources Code.

§ 914.6. Waterbreaks.

The following standards are applicable to the construction of waterbreaks:

(a) All waterbreaks shall be installed no later than the beginning of the winter period of the current year of timber operations, except as otherwise provided for in the rules.

CALENDAR PAGE 202
MINUTE PAGE 1083
Register 92, No. 25, 6-19-92

(b) Waterbreaks shall be constructed concurrently with the construction of firebreaks and immediately upon conclusion of use of tractor roads, roads, layouts, and landings which do not have permanent and adequate drainage facilities, or drainage structures.

(c) Distances between waterbreaks shall not exceed the following standards:

MAXIMUM DISTANCE BETWEEN WATERBREAKS

| Estimated Hazard Rating | U.S. Equivalent Measure Road or Trail Gradient | | | Metric Measure Road or Trail Gradient | | | | |
|-------------------------|--|-------|-------|---------------------------------------|------------|--------|--------|--------|
| | 10 or less | 11-25 | 26-50 | >50 | 10 or less | 11-25 | 26-50 | >50 |
| | Feet | Feet | Feet | Feet | Meters | Meters | Meters | Meters |
| Extreme | 100 | 75 | 50 | 50 | 30.48 | 22.86 | 15.24 | 15.24 |
| High | 150 | 100 | 75 | 50 | 45.72 | 30.48 | 22.35 | 15.24 |
| Moderate | 200 | 150 | 100 | 75 | 60.96 | 45.72 | 30.48 | 22.35 |
| Low | 300 | 200 | 150 | 100 | 91.44 | 60.96 | 45.72 | 30.48 |

The appropriate waterbreak spacing shall be based upon the erosion hazard rating and road or trail gradient.

(d) Cable roads that are so deeply cut as to divert and carry water away from natural drainage patterns for more than 100 feet shall have waterbreaks installed on them at 100 feet intervals, or other appropriate erosion control measures may be applied if specified in the plan.

(e) Waterbreaks shall be installed at all natural watercourses on tractor roads and firebreaks regardless of the maximum distances specified in this section except where permanent drainage facilities are provided.

(f) Waterbreaks shall be located to allow water to be discharged into some form of vegetative cover, duff, slash, rocks, or less erodible material wherever possible, and shall be constructed to provide for unrestricted discharge at the lower end of the waterbreak so that water will be discharged and spread in such a manner that erosion shall be minimized. Where waterbreaks cannot effectively disperse surface runoff, including where waterbreaks on roads and skid trail cause surface run-off to be concentrated on downslopes, roads or skid trails, other erosion controls shall be installed as needed to comply with 14 CCR 914.

(g) Waterbreaks shall be cut diagonally a minimum of 15.2 cm (6 inches) into the firm roadbed, cableroad, skid trail or firebreak surface and shall have a continuous firm embankment of at least 15.2 cm (6 inches) in height immediately adjacent to the lower edge of the waterbreak cut. In the Southern Subdistrict of the Coast Forest District, on truck roads having firmly compacted surfaces, waterbreaks installed by hand methods need not provide the additional 15.2 cm (6 inch) embankment provided the waterbreak ditch is constructed so that it is at least 15.2 cm (6 inches) deep and 15.2 cm (6 inches) wide on the bottom and provided there is ample evidence based on slope, material amount of rainfall, and period of use that the waterbreaks so constructed will be effective in diverting water flow from the road surface without the embankment.

(h) Waterbreaks or any other erosion controls on skid trails, cable roads, layouts, firebreaks, abandoned roads, and site preparation areas shall be maintained during the prescribed maintenance period and during timber operations as defined in PRC sections 4527 and 4551.5 so that they continue to function in a manner which minimizes soil erosion and slope instability and which prevents degradation of the quality and beneficial uses of water. The method and timing of waterbreak repair and other erosion control maintenance shall be selected with due consideration given to protection of residual trees and reproduction and the intent of 14 CCR 914.

(i) The prescribed maintenance period for waterbreaks and any other erosion control facilities on skid trails, cable roads, layouts, firebreaks, abandoned roads, and site preparation areas, shall be at least one year.

The Director may prescribe a maintenance period extending as much as three years after filing of the work completion report in accordance with 14 CCR 1050.

NOTE: Authority cited: Sections 4551, 4551.5 and 4553, Public Resources Code. Reference: Sections 4512, 4513, 4562.5, 4562.7, and 4582, Public Resources Code.

History

1. Amendment of subsection (h) and new subsection (i) filed 12-20-89; operative 2-1-90 (Register 90, No. 31).
2. Amendment of subsection (d) filed 8-9-90; operative 9-10-90 (Register 90, No. 41).
3. Amendment of subsection (f) filed 2-11-91; operative 3-13-91 (Register 91, No. 14).

§ 914.7. Timber Operations, Winter Period.

During the winter period:

(a) Mechanical site preparation and timber harvesting, shall not be conducted unless in winter period operating plan is incorporated in the timber harvesting plan and is followed, or unless the requirements of subsection (c) are met. Cable, helicopter and balloon yarding methods are exempted.

(b) The winter period operating plan shall include the specific measures to be taken in winter timber operations to minimize damage due to erosion, soil movement into watercourses and soil compaction from felling, yarding, loading, mechanical site preparation, and erosion control activities. A winter period operating plan shall address the following subjects:

- (1) Erosion hazard rating.
- (2) Mechanical site preparation methods.
- (3) Yarding system (constructed skid trails).
- (4) Operating period.
- (5) Erosion control facilities timing.
- (6) Consideration of form of precipitation—rain or snow.
- (7) Ground conditions (soil moisture condition, frozen).
- (8) Silvicultural system—ground cover.
- (9) Operations within the WLPZ.
- (10) Equipment use limitations.
- (11) Known unstable areas.

(c) In lieu of a winter period operating plan, the RPF can specify the following measures in the THP:

(1) Tractor yarding or the use of tractors of constructing layouts, firebreaks or other tractor roads shall be done only during dry, rainless periods where soils are not saturated.

(2) Erosion control structures shall be installed on all constructed skid trails and tractor roads prior to the end of the day if the U.S. Weather Service forecast is a "chance" (30 percent or more) of rain before the next day, and prior to weekend or other shutdown periods.

The provisions of this subsection do not apply to mechanical site preparation.

(3) Site specific mitigation measures needed to comply with 14 CCR 914 for operations within the WLPZ and unstable areas during the winter period.

NOTE: Authority cited: Sections 4551, 4551.5 and 4553, Public Resources Code. Reference: Sections 4512, 4513, 4527, 4562.5, 4562.7 and 4582, Public Resources Code.

Received CDF
REGION 1

SEP 16 1993

History
203
1084
MINUTE PAGE
Register 92, No. 23, 6-19-92

2. Amendment of subsections (a), (b) and (c)(3) filed 2-11-91; operative 3-13-91 (Register 91, No. 14).

§ 914.8. Tractor Road Watercourse Crossing.

Watercourse crossing facilities on tractor roads shall be planned, constructed, maintained, and removed according to the following standards:

- (a) The number of crossings shall be kept to a minimum. Existing crossings shall be used wherever feasible.
- (b) A prepared watercourse crossing using a structure such as a bridge, culvert, or temporary log culvert shall be used to protect the watercourse from siltation where tractor roads cross a watercourse in which water may be present during the life of the crossing.
- (c) Crossing facilities on watercourses that support fish shall allow for unrestricted passage of fish and water.

(d) Watercourse crossing facilities not constructed to permanent crossing standards on tractor roads shall be removed before the beginning of the winter period. If a watercourse crossing is to be removed, it shall be removed in accordance with 14 CCR 923.3(d).

(e) The kind and location of all permanent watercourse crossing facilities shall be designated in the THP. If the watercourse crossing facility is a culvert, the diameter of the culvert shall be indicated in the THP.

(f) Consistent with the protection of water quality, exceptions may be provided through the Fish and Game Codes and shall be indicated in the plan.

NOTE: Authority cited: Sections 4551, 4551.5 and 4553, Public Resources Code. Reference: Sections 4512, 4513, 4527, 4562.5 and 4562.7, Public Resources Code.

HISTORY

1. Amendment of subsection (d) filed 9-23-91; operative 10-23-91 (Register 92, No. 25).

§ 914.9. Alternatives to Standard Rules.

(a) Alternative practices may be developed by the RPF on a site-specific basis provided the following conditions are complied with and the alternative practices will achieve environmental protection at least equal to that which would result from using measures stated in Sections 914.1-914.8.

(1) Environmental impacts with potential for significant adverse effects on the beneficial uses of water, on the residual timber, and on the soil productivity are identified and measures proposed to mitigate such impacts are included in an approved THP. The THP shall also contain a clear statement as to why alternative harvesting and erosion control measures are needed.

(2) The alternative practice(s) must be explained in sufficient detail and standards provided in the THP so that they can be adequately evaluated and enforced by the Director and implemented by the licensed timber operator.

(3) On a THP in which alternatives covering harvesting and erosion control measures have been incorporated, the timber operator shall agree to the alternative specifications by signing and filing with the Director a copy of the plan, the amended plan or a facsimile thereof, prior to beginning or continuing operations on the portion of the plan to which the alternatives apply.

(b) The Director shall not accept for inclusion in a THP alternative harvesting and erosion control measures proposed under this section which do not meet the standard of subsection (a) of this section. In the event that there is more than one written negative position showing that the alternative practice(s) does (do) not meet the standard of subsection (a) received from among the agencies listed in 14 CAC 1037.3 and the Department of Forestry which participated in the review of the plan including on-the-ground inspection, the Director shall reject the proposed alternative.

(c) Alternative practices stated in an approved THP shall have the same force and authority as those practices required by the standard rule.

NOTE: Authority cited: Sections 4551, 4551.5, 4552, 4562.5, 4562.7 and 21080, Public Resources Code. Reference: Sections 4512, 4513, 4551.5, 4552, 4562.5, 4562.7, 4582, 21002 and 21080.5, Public Resources Code; *Natural Resources Defense Council, Inc. v. Arcata Nat. Corp.* (1975) 59 C.A.3d 939, 131 Cal Rptr. 172.

Received CDF
REGION 1

SEP 16 1993

Article 5. Site Preparation

§ 915. Purposes.

Site preparation shall be planned and conducted in a manner which encourages maximum timber productivity, minimizes fire hazard, prevents substantial adverse effects to soil resources and to fish and wildlife habitat, and prevents degradation of the quality and beneficial uses of water. The following provisions shall be applied in a manner which complies with this standard.

NOTE: Authority cited: Sections 4551, 4551.5 and 4551.7, Public Resources Code. Reference: Sections 4512, 4513, 4527, 4551.5, 4551.7, 4562.5 and 4562.7, Public Resources Code.

HISTORY

1. New section filed 12-4-89; operative 2-1-90 (Register 89, No. 50). For prior history, see Register 83, No. 32.

§ 915.1. Use of Heavy Equipment for Site Preparation.

(a) Use of heavy equipment for site preparation shall comply with the provisions set forth in 14 CCR 914.2.

(b) Heavy equipment shall not be used for site preparation under saturated soil conditions or when it cannot operate under its own power due to wet conditions.

(c) Watercourse crossings for heavy equipment shall be planned, constructed, maintained, and removed in accordance with the requirements for tractor roads in 14 CCR Section 914.8.

(d) Undisturbed areas or energy dissipators shall be used to control and disperse concentrated runoff from roads, landings, tractor roads, fire-breaks and erosion control facilities where it flows into site preparation areas.

NOTE: Authority cited: Sections 4551, 4551.5 and 4551.7, Public Resources Code. Reference: Sections 4512, 4513, 4527, 4551.5, 4551.7, 4562.5 and 4562.7, Public Resources Code.

HISTORY

1. New section filed 12-4-89; operative 2-1-90 (Register 89, No. 50). For prior history, see Register 83, No. 32.

§ 915.2. Treatment of Vegetative Matter.

(a) Piling, burning, and other treatment of snags, slash and vegetative matter and protection of desirable residual trees during site preparation shall comply with 14 CCR Sections 917 through 917.7.

(b) Broadcast burning shall not fully consume the larger organic debris which retains soil on slopes and stabilizes watercourse banks. The Director may approve exceptions to this requirement when such exceptions are explained and justified in the THP and the exceptions would provide for the protection of the beneficial uses of water or control erosion to a standard at least equal to that which would result from application of the standard rule.

NOTE: Authority cited: Sections 4551, 4551.5 and 4551.7, Public Resources Code. Reference: Sections 4512, 4513, 4527, 4551.5, 4551.7, 4562.5 and 4562.7, Public Resources Code.

HISTORY

1. New section filed 12-4-89; operative 2-1-90 (Register 89, No. 50). For prior history, see Register 83, No. 32.

§ 915.3. Protection of Natural Resources.

(a) Site preparation activities shall comply with the watercourse and lake protection requirements in 14 CCR Article 6 and 917.3.

(b) Site preparation activities shall comply with the wildlife and habitat protection provisions of 14 CCR Article 9.

(c) Site preparation shall be performed in a manner which does not deleteriously affect species which are threatened, endangered, or designated by the Board as species of special concern. The director may allow exceptions to this standard in the plan, after consultation with the Department of Fish and Game pursuant to the California Endangered Species Act (F&G Code 2050-2098).

NOTE: Authority cited: Sections 4551, 4551.5 and 4551.7, Public Resources Code. Reference: Sections 4512, 4513, 4527, 4551.5, 4551.7, 4562.5 and 4562.7, Public Resources Code.

CALENDAR PAGE

MINUTE PAGE

1085

Register 92, No. 23, 6-18-93

courses or near existing nesting sites of threatened or endangered bird species.

(e) Minimization of the number of watercourse crossings.

(f) Location of roads on natural benches, flatter slopes and areas of stable soils to minimize effects on watercourses.

(g) Use of logging systems which will reduce excavation or placement of fills on unstable areas.

NOTE: Authority cited: Sections 4551, 4551.5, 4553 and 4562.5, Public Resources Code. Reference: Sections 4512, 4551.5, 4562.5 and 4562.7, Public Resources Code; California Case Law: *Natural Resources Defense Council, Inc. v. Arcata Nail Corp.* (1972) 59 Cal.App.3d 959, 131 Cal. Rptr. 172.

HISTORY

1. Amendment filed 7-3-86; effective thirtieth day thereafter (Register 86, No. 27).

2. Amendment of first paragraph and subsections (d) and (g) filed 2-11-91; operative 3-13-91 (Register 91, No. 14).

§ 923.1. Planning for Roads and Landings.

The following standards for logging roads and landings shall be adhered to:

(a) All logging roads shall be located and classified on the THP map as permanent, seasonal, or temporary. Road failures on existing roads which will be reconstructed shall also be located on the THP map. In addition to the requirements of 14 CCR 1034(v), the probable location of those landings which require substantial excavation or which exceed one quarter acre in size, shall be shown on the THP map.

(b) New logging roads shall be planned in accordance with their classification and maintenance requirements.

(c) Logging roads and landings shall be planned and located, when feasible, to avoid unstable areas. The Director shall approve an exception if those areas are unavoidable, and site-specific measures to minimize slope instability due to construction are described and justified in the THP.

(d) Where roads and landings will be located across 100 feet or more of lineal distance on any slopes over 65% or on slopes over 50% which are within 100 feet of the boundary of a WLPZ, measures to minimize movement of soil and the discharge of concentrated surface runoff shall be incorporated in the THP. The Director may waive inclusion of such measures where the RPF can show that slope depressions, drainage ways, and other natural retention and detention features are sufficient to control overland transport of eroded material. The Director may require end-hauling of material from areas within 100 feet of the boundary of a WLPZ to a stable location if end-hauling is feasible and is necessary to protect water quality. The Director shall require maintenance provisions in the THP for drainage structures and facilities provided that such maintenance is feasible and necessary to keep roadbeds and fills stable.

(e) New logging roads shall not exceed a grade of 15% except that pitches of up to 20% shall be allowed not to exceed 500 continuous feet (152.4 m). These percentages and distances may be exceeded only where it can be explained and justified in the THP that there is no other feasible access for harvesting of timber or where in the Northern or Southern Districts use of a gradient in excess of 20% will serve to reduce soil disturbance.

(f) Roads and landings shall be planned so that an adequate number of drainage facilities and structures are installed to minimize erosions on roadbeds, landing surfaces, sidecast and fills.

(g) Unless exceptions are explained and justified in the THP, general planning requirements for roads shall include:

(1) Logging roads shall be planned to a single-lane width compatible with the largest type of equipment used in the harvesting operation with turnouts at reasonable intervals.

(2) Roads shall be planned to achieve as close a balance between cut volume and fill volume as is feasible.

(3) When roads must be planned so that they are insloped and ditched on the uphill side, drainage shall be provided by use of an adequate number of ditch drains.

(h) Road construction shall be planned to stay out of Watercourse Lake Protection Zones. When it is a better alternative for protective water quality or other forest resources, or when such roads are the feasible access to timber, exceptions may be explained and justified in the THP and shall be agreed to by the Director if they meet the requirements of this subsection.

(i) The location of all logging roads to be constructed shall be flag or otherwise identified on the ground before submission of a THP or for amendment. Exceptions may be explained and justified in the THP and agreed to by the Director if flagging is unnecessary as a substantial aid to examining (1) compatibility between road location and yarding silvicultural systems, or (2) possible significant adverse effects of road location on water quality, soil productivity, wildlife habitat, or other special features of the area.

NOTE: Authority cited: Sections 4551, 4551.5 and 4553, Public Resources Code. Reference: Sections 4512, 4513, 4551 and 4551.5, Public Resources Code; USC 1234(b) and 40 CFR 130.21(q); California Case Law: *Natural Resources Defense Council, Inc. v. Arcata Nail Corp.* (1972) 59 Cal.App.3d 959, 131 Cal. Rptr. 172.

HISTORY

1. Amendment of subsections (a), (c) and (d) filed 2-11-91; operative 2-13-91 (Register 91, No. 14).

§ 923.2. Road Construction.

Logging roads shall be constructed or reconstructed in accordance with the following requirements or as proposed by the RPF, justified in the THP, and found by the Director to be in conformance with the requirements of this article.

(a) Logging roads shall be constructed in accordance with the approved THP. If a change in designation of road classification is subsequently made, the change shall be reported in accordance with 14 CCR 1039 or 1040, as appropriate.

(b) Where a road section which is greater than 100 feet in length crosses slopes greater than 65 percent, placement of fill is prohibited and placement of sidecast shall be minimized to the degree feasible. The Director may approve an exception where site specific measures to minimize slope instability, soil erosion, and the discharge of concentrated surface runoff are described and justified in the THP.

(c) On slopes greater than 50 percent, where the length of road section is greater than 100 feet, and the road is more than 15 feet wide (as measured from the base of the cut slope to the outside of the berm or shoulder of the road) and the fill is more than 4 feet in vertical height at the road shoulder for the entire 100 feet the road shall be constructed on a bench that is excavated at the proposed toe of the compacted fill and the fill shall be compacted. The Director may approve exceptions to this requirement where on a site-specific basis a Registered Professional Forester has described and justified an alternative practice that will provide equal protection to water quality and prevention of soil erosion.

(d) Fills, including through fills across watercourses shall be constructed in a manner to minimize erosion of fill slopes using techniques such as insloping through-fill approaches, waterbars, berms, rock armor-ing of fill slopes, or other suitable methods.

(e) Through fills shall be constructed in approximately one foot lifts.

(f) On slopes greater than 35 percent, the organic layer of the soil shall be substantially disturbed or removed prior to fill placement. The RPF may propose an exception in the THP and the Director may approve the exception where it is justified that the fill will be stabilized.

(g) Excess material from road construction and reconstruction shall be deposited and stabilized in a manner or in areas where downstream beneficial uses of water will not be adversely affected.

(h) Drainage structures and facilities shall be of sufficient size, number and location to carry runoff water off of roadbeds, landings and fill slopes. Drainage structures or facilities shall be installed so as to minimize erosion, to ensure proper functioning, and to maintain or restore the natural drainage pattern. Permanent watercourse crossings, associated fills and approaches shall be constructed where feasible to prevent

Received CDF
REGION 1

Page 240.9

MINUTE PAGE

SEP 16 1993

CALENDAR PAGE
1086

diversion of stream overflow down the road and to minimize fill erosion should the drainage structure become plugged.

(i) Where there is evidence that soil and other debris is likely to significantly reduce culvert capacity below design flow, oversize culverts, trash racks, or similar devices shall be installed in a manner that minimizes culvert blockage.

(j) Waste organic material, such as uprooted stumps, cull logs, accumulations of limbs and branches, and unmerchantable trees, shall not be buried in road fills. Wood debris or cull logs and chunks may be placed and stabilized at the toe of fills to restrain excavated soil from moving downslope.

(k) Logging roads shall be constructed without overhanging banks.

(l) Any tree over 12 inches (30.5 cm) d.b.h. with more than 25 percent of the root surface exposed by road construction, shall be felled concurrently with the timber operations.

(m) Sidecast or fill material extending more than 20 feet (6.1 m) in slope distance from the outside edge of the roadbed which has access to a watercourse or lake which is protected by a WLPZ shall be seeded, planted, mulched, removed, or treated as specified in the THP, to adequately reduce soil erosion.

(n) All culverts at watercourse crossings in which water is flowing at the time of installation shall be installed with their necessary protective structures concurrently with the construction and reconstruction of logging roads. Other permanent drainage structures shall be installed no later than October 15. For construction and reconstruction of roads after October 15, drainage structures shall be installed concurrently with the activity.

(o) Drainage structures and drainage facilities on logging roads shall not discharge on erodible fill or other erodible material unless suitable energy dissipators are used. Energy dissipators suitable for use with waterbreaks are described in 14 CCR 914.6(f).

(p) Where roads do not have permanent and adequate drainage, the specifications of section 914.6 shall be followed.

(q) Drainage facilities shall be in place and functional by October 15. An exception is that waterbreaks do not need to be constructed on roads in use after October 15 provided that all such waterbreaks are installed prior to the start of rain that generates overland flow.

(r) No road construction shall occur under saturated soil conditions, except that construction may occur on isolated wet spots arising from localized ground water such as springs, provided measures are taken to prevent material from significantly damaging water quality.

(s) Road construction not completed before October 15 shall be drained by outsliping, waterbreaks and/or cross-draining before the beginning of the winter period. If road construction does take place after October 15, roads shall be adequately drained concurrent with construction operations.

(t) Roads to be used for log hauling during the winter period shall be, where necessary, surfaced with rock in depth and quantity sufficient to maintain a stable road surface throughout the period of use. Exceptions may be proposed by the RPF, justified in the THP, and found by the Director to be in conformance with the requirements of this subsection.

(u) Slash and other debris from road construction shall not be bunched against residual trees which are required for silvicultural or wildlife purposes, nor shall it be placed in locations where it could be discharged into Class I or II watercourses.

(v) Road construction activities in the WLPZ, except for stream crossings or as specified in the THP, shall be prohibited.

NOTE: Authority cited: Sections 4551, 4551.5 and 4553, Public Resources Code. Reference: Sections 4512, 4513, 4551, 4551.5, 4562.5 and 4562.7, Public Resources Code; 33 USC 1288(b) and 40 CFR 130.21(q); California Case Law: *Natural Resources Defense Council, Inc. v. Arcata Nail Corp.* (1972) 59 Cal.App.3d 959, 131 Cal. Rptr. 172.

HISTORY

1. Amendment of first paragraph and subsections (a), (b), (h), (m), (n), (o), (q) and (v), and new subsections (c), (f), (i), and renumbering filed 2-11-91; operative 3-15-91 (Register 91, No. 14).

§ 923.3. Watercourse Crossings.

Watercourse crossing drainage structures on logging roads shall be planned, constructed, and maintained or removed, according to the following standards. Exceptions may be provided through application. Fish and Game Code Sections 1601 and 1603 and shall be included in the THP.

(a) The location of all new permanent watercourse crossing drainage structures and temporary crossings located within the WLPZ shall be shown on the THP map. If the structure is a culvert intended for permanent use, the minimum diameter of the culvert shall be specified in the plan. Extra culverts beyond those shown in the THP map may be installed as necessary.

(b) The number of crossings shall be kept to a feasible minimum.

(c) Drainage structures on watercourses that support fish shall allow for unrestricted passage of fish.

(d) When watercourse crossings, other drainage structures, and associated fills are removed the following standards shall apply:

(1) Fills shall be excavated to form a channel which is as close as feasible to the natural watercourse grade and orientation and is wider than the natural channel.

(2) The excavated material and any resulting cut bank shall be sloped back from the channel and stabilized to prevent slumping and to minimize soil erosion. Where needed, this material shall be stabilized by seeding, mulching, rock armoring, or other suitable treatment.

(e) Permanent watercourse crossings and associated fills and approaches shall be constructed or maintained to prevent diversion of stream overflow down the road and to minimize fill erosion should the drainage structure become obstructed. The RPF may propose an exception where explained in the THP and shown on the THP map and justified how the protection provided by the proposed practice is at least equal to the protection provided by the standard rule.

NOTE: Authority cited: Sections 4551, 4551.5 and 21004, Public Resources Code. Reference: Sections 4512, 4513, 4551, 4551.5, 4562.5 and 4562.7, Public Resources Code; 33 USC 1288(b) and 40 CFR 130.21(q); California Case Law: *Natural Resources Defense Council, Inc. v. Arcata Nail Corp.* (1972) 59 Cal. App. 959, 131 Cal. Rptr. 172.

HISTORY

1. New subsection (d) filed 12-20-89; operative 2-1-90 (Register 90, No. 3).
2. Amendment of subsection (a) and new subsection (e) filed 9-23-91; operative 10-23-91 (Register 92, No. 25).

§ 923.4. Road Maintenance.

Logging roads, landings, and associated drainage structures used in a timber operation shall be maintained in a manner which minimizes concentration of runoff, soil erosion, and slope instability and which prevents degradation of the quality and beneficial uses of water during timber operations and throughout the prescribed maintenance period. In addition those roads which are used in connection with stocking activities shall be maintained throughout their use even if this is beyond the prescribed maintenance period.

(a) The prescribed maintenance period for erosion controls on permanent and seasonal roads and associated landings and drainage structures which are not abandoned in accordance with 14 CCR 923.8 shall be at least one year. The Director may prescribe a maintenance period extending up to three years in accordance with 14 CCR 1050.

(b) Upon completion of timber operations, temporary roads and associated landings shall be abandoned in accordance with 14 CCR 923.8.

(c) Waterbreaks shall be maintained as specified in 14 CCR 914.6.

(d) Unless partially blocked to create a temporary water source, watercourse crossing facilities and drainage structures, where feasible, shall be kept open to the unrestricted passage of water. Where needed, trash racks or similar devices shall be installed at culvert inlets in a manner which minimizes culvert blockage. Temporary blockages shall be removed by November 15.

Received CDF
REGION 1

Page 240.10

SEP 16 1993

| | |
|---------------|------|
| CALENDAR PAGE | 206 |
| MINUTE PAGE | 1087 |

(e) Before the beginning of the winter period, all roadside berms shall be removed from logging roads or breached, except where needed to facilitate erosion control.

(f) Drainage structures, if not adequate to carry water from the fifty-year flood level, shall be removed in accordance with 14 CCR 923.3(d) by the first day of the winter period, before the flow of water exceeds their capacity if operations are conducted during the winter period, or by the end of timber operations whichever occurs first. Properly functioning drainage structures on roads that existed before timber operations need not be removed. The RPF may utilize an alternative practice, such as breaching of fill, if the practice is approved by the Director as providing greater or equal protection to water quality as removal of the drainage structure.

(g) Temporary roads shall be blocked or otherwise closed to normal vehicular traffic before the winter period.

(h) During timber operations, road running surfaces in the logging area shall be treated for stabilization (rocked, watered, chemically treated, asphalted or oiled) where necessary to prevent excessive loss of road surface materials.

(i) Soil stabilization treatments on road or landing cuts, fills, or sidecast shall be installed or renewed when such treatment could minimize surface erosion which threatens the beneficial uses of water.

(j) Drainage ditches shall be maintained to allow free flow of water and to minimize soil erosion.

(k) Action shall be taken to prevent failures of cut, fill, or sidecast slopes from discharging materials into watercourses or lakes in quantities deleterious to the quality or beneficial uses of water.

(l) Each drainage structure and any appurtenant trash rack shall be maintained and repaired as needed to prevent blockage and to provide adequate carrying capacity. Where not present, new trash racks shall be installed if there is evidence that woody debris is likely to significantly reduce flow through a drainage structure.

(m) Inlet and outlet structures, additional drainage structures (including ditch drains) and other features to provide adequate capacity and to minimize erosion of road and landing fill and sidecast to minimize soil erosion and to minimize slope instability shall be repaired, replaced, or installed wherever such maintenance is needed to protect the quality and beneficial uses of water.

(n) Permanent watercourse crossings and associated approaches shall be maintained to prevent diversion of stream overflow down the road should the drainage structure become plugged. Corrective action shall be taken before the completion of timber operations or the drainage structure shall be removed in accordance with 14 CCR section 923.3 (d).

(o) Except for emergencies and maintenance needed to protect water quality, use of heavy equipment for maintenance is prohibited during wet weather where roads or landings are within a WLPZ.

(p) The Director may approve an exception to a requirement set forth in subsections (b) through (o) above when such exceptions are explained and justified in the THP and the exception would provide for the protection of the beneficial uses of water or control erosion to a standard at least equal to that which would result from the application of the standard rule.

Note: Authority cited: Sections 4551, 4551.5, 4553, 4561.7, and 4562.9, Public Resources Code. Reference: Sections 4512, 4513, 4551, 4551.5, 4562.5 and 4562.7, Public Resources Code; 33 USC 1288(b) and 40 CFR 130.21(q); California Case Law: *Natural Resources Defense Council, Inc. v. Arcata Natl. Corp.* (1972) 59 Cal.App.3d 959, 131 Cal. Rptr. 172.

History

1. Amendment filed 12-20-89; operative 2-1-90 (Register 90, No. 3).
2. Amendment of subsections (c), (d), (m) and (o) filed 2-11-91; operative 3-13-91 (Register 91, No. 14).

§ 923.5. Landing Construction.

Landings shall be constructed according to the following standards:

- (a) On slopes greater than 65 percent, no fill shall be placed and sidecast shall be minimized to the degree feasible. The Director may approve an exception if, site specific measures to minimize slope instability, soil

erosion, and discharge of concentrated surface runoff are described and justified in the THP.

(b) On slopes greater than 50 percent, fills greater than 4 feet in vertical height at the outside shoulder of the landing shall be:

(1) constructed on a bench that is excavated at the proposed toe of the fill and is wide enough to compact the first lift, and

(2) compacted in approximately 1 foot lift from the toe to the finished grade. The RPF shall flag the location of this bench or shall provide a description of the bench location (narrative or drawing) in the THP for fills meeting the above criteria, where the length of landing section is greater than 100 feet. The RPF may propose an exception in the THP and the Director may approve the exception where it is justified that the landing will be stabilized.

(c) Waste organic material, such as uprooted stumps, cull logs, accumulations of limbs and branches, or unmerchantable trees, shall not be buried in landing fills. Wood debris or cull logs and chunks may be placed and stabilized at the toe of landing fills to restrain excavated soil from moving downslope.

(d) Constructed landings shall be the minimum in width, size, and number consistent with the yarding and loading system to be used. Landings shall be no larger than one-half acre (.202 ha) unless explained and justified in the THP.

(e) No landing construction shall occur under saturated soil condition.

(f) The following specifications shall be met upon completion of timber operations for the year or prior to October 15, whichever occurs first:

(1) Overhanging or unstable concentrations of slash, woody debris and soil along the downslope edge or face of the landings shall be removed or stabilized when they are located on slopes over 65 percent or on slopes over 50 percent within 100 feet of a WLPZ.

(2) Any obstructed ditches and culverts shall be cleaned.

(3) Landings shall be sloped or ditched to prevent water from accumulating on the landings. Discharge points shall be located and designed to reduce erosion.

(4) Sidecast or fill material extending more than 20 feet in slope distance from the outside edge of the landing and which has access to a watercourse or lake shall be seeded, planted, mulched, removed or treated as specified in the THP to adequately reduce soil erosion.

(5) Sidecast or fill material extending across a watercourse shall be removed in accordance with standards for watercourse crossing removal set forth in 14 CCR 943.3(d).

(g) On slopes greater than 35 percent, the organic layer of the soil shall substantially removed prior to fill placement.

(h) When landings are constructed after October 15 they shall be adequately drained concurrent with construction operations and shall meet the requirements of (f)(1) through (f)(4) of this subsection upon completion of operations at that landing.

(i) The RPF may propose and the Director may approve waiver of requirements in (f)(1) through (f)(4) of this subsection if the Director finds they are not necessary to minimize erosion or prevent damage to downstream beneficial uses. The Director may also approve an exception to the October 15th date for treatment of slash and debris, including the practice of burning.

Note: Authority cited: Sections 4551, 4551.5 and 4553, Public Resources Code. Reference: Sections 4512, 4513, 4551, 4551.5, 4562.5 and 4562.7, Public Resources Code; 33 USC 1288(b) and 40 CFR 130.21(q); California Case Law: *Natural Resources Defense Council, Inc. v. Arcata Natl. Corp.* (1972) 59 Cal.App.3d 959, 131 Cal. Rptr. 172.

History

1. Deletion of former subsection (a); addition of new subsections (a), (b), (f)(5) and (i); amendment of subsections (f)(1), (f)(3), (f)(4), (h) and (i); and renumbering filed 2-11-91; operative 3-13-91 (Register 91, No. 14).

§ 923.6. Conduct of Operations on Roads and Landings.

Routine use and maintenance of roads and landings shall not take place when, due to general wet conditions, equipment cannot operate under its own power. Operations shall take place when roads and landings are generally firm and easily passable or during hard frozen conditions. Wet spots on these roads or landings shall be rocked or otherwise treated.

Received CDF
REGION 1

Page 240.11

MINUTE PAGE

1088

SEP 16 1993

to permit passage. However, operations and maintenance shall not occur when sediment discharged from landings or roads will reach watercourses or lakes in amounts deleterious to the quality and beneficial uses of water.

This section shall not be construed to prohibit activities undertaken to protect the road or to reduce erosion.

NOTE: Authority cited: Sections 4551, 4551.5, 4453, and 4562.9, Public Resources Code. Reference: Sections 4512, 4513, 4551, 4551.5, 4562.5 and 4562.7, Public Resources Code; 33 USC 1228(b) and 40 CFR 130.21(q); California Case Law: *Natural Resources Defense Council, Inc. v. Arcata Natl. Corp.* (1972) 59 Cal.App.3d 959, 131 Cal. Rptr. 172.

HISTORY

- 1. Amendment filed 12-20-89; operative 2-1-90 (Register 90, No. 3).
2. Amendment filed 2-11-91; operative 3-13-91 (Register 91, No. 14).

§ 923.7. Licensed Timber Operator Responsibility for Roads and Landings.

The licensed timber operator who is responsible for the implementation or execution of the plan shall not be responsible for the construction and maintenance of roads and landings, unless the licensed timber operator is employed for that purpose.

NOTE: Authority cited: Section 4551, Public Resources Code. Reference: Sections 4512 and 4513, Public Resources Code.

§ 923.8. Planned Abandonment of Roads, Watercourse Crossings, and Landings.

Abandonment of roads, watercourse crossings and landings shall be planned and conducted in a manner which provides for permanent maintenance-free drainage, minimizes concentration of runoff, soil erosion and slope instability, prevents unnecessary damage to soil resources, promotes regeneration, and protects the quality and beneficial uses of water. General abandonment procedures shall be applied in a manner which satisfies this standard and include the following:

(a) Blockage of roads so that standard production four wheel-drive highway vehicles cannot pass the point of closure at the time of abandonment.

(b) Stabilization of exposed soil on cuts, fills, or sidecast where deleterious quantities of eroded surface soils may be transported into a watercourse.

(c) Grading or shaping of road and landing surfaces to provide dispersal of water flow.

(d) Pulling or shaping of fills or sidecast where necessary to prevent discharge of materials into watercourses due to failure of cuts, fills, or sidecast.

(e) Removal of watercourse crossings, other drainage structures, and associated fills in accordance with 14 CCR 923.3 (d). Where it is not feasible to remove drainage structures and associated fills, the fill shall be excavated to provide an overflow channel which will minimize erosion of fill and prevent diversion of overflow along the road should the drainage structure become plugged.

The Director may approve an exception to a requirement set forth in (b) through (e) above when such exceptions are explained and justified in the THP and the exception would provide for the protection of the beneficial uses of water or control erosion to a standard at least equal to that which would result from the application of the standard rule.

NOTE: Authority cited: Sections 4551, 4551.5, 4562.7 and 4562.9, Public Resources Code. Reference: Sections 4512, 4513, 4551, 4551.5, 4562.7 and 4562.9, Public Resources Code.

HISTORY

- 1. New section filed 12-20-89; operative 2-1-90 (Register 90, No. 3).

Article 13. County Rules

§ 924. County Rules Within the Southern Subdistrict of the Coast Forest District.

In lieu of 14 CAC 1032.7 subsections (c), (e), (f), (g), and (h)(1) and 1037, the rules contained in 924.1 through 924.5 shall apply in any county for which rules have been adopted pursuant to PRC 4516.5.

Received CDF REGION 1

Page 240.12

SEP 16 1993

NOTE: Authority cited: Section 4516.5, 4551 and 4551.5, Public Resources Code. Reference: Section 4516.5, Public Resources Code.

HISTORY

- 1. New section filed 7-5-84; effective upon filing pursuant to Government Code Section 11346.2(d) (Register 84, No. 28).

§ 924.1. Plan Submittal and Notice of Intent.

(a) The plan submitter shall prepare and submit to the Director, with the plan, a Notice of Intent to Harvest Timber as described in 14 CAC 1032.7(d).

(b) The plan submitters shall furnish to the Department at the time of submission of the plan the names and addresses of all property owners within 300 feet of the exterior boundaries of assessor's parcels upon which a plan has been submitted, and the names and addresses of property owners with property fronting or bordering that portion of the haul route lying between the plan area and the nearest public road. The list shall be compiled from the latest equalized assessment roll of the county or a list provided by a title insurance company.

(1) The plan submitter shall submit business size envelopes stamped with first class postage properly addressed to the property owners identified in (b). These will be used by the Department for mailing the Notice of Filing.

(c) The plan submitter shall mail copies of the Notice of Intent to all names in (b) prior to plan submission. At the time of plan submission, the plan submitter shall certify in writing that this procedure has been followed.

(d) For plan amendments, the submitter of the amendment shall certify in writing at the time the amendment is submitted that copies of a new Notice of Intent have been mailed to:

(1) All property owners not previously noticed under subsection (b) who, because of the plan amendment, would be required to receive the notice provided for in subsection (b).

(2) All property owners previously noticed under subsection (b) when there is a change in silvicultural method.

NOTE: Authority cited: Sections 4516.5, 4551, 4551.5, 21080 and 21092, Public Resources Code; NRDC v. Arcata National Corp. (1976), 59 Cal. Ap. 3d 5 Horn v. Ventura County (1979), 24 Cal 3d 605. Reference: Sections 4516.5, 4551, 4581, 4582, 4582.5, 4592, 21080 and 21092, Public Resources Code.

HISTORY

- 1. New section filed 7-5-84; effective upon filing pursuant to Government Code Section 11346.2(d) (Register 84, No. 28).

§ 924.2. Plan Filing.

A plan found by the Director to be accurate, complete and in proper order shall be filed on the 10th day following the date of its receipt by the Department. When the Director finds a plan inaccurate, incomplete, or otherwise not in proper order, the plan shall be returned to the submitter with written specifications of the deficiencies.

NOTE: Authority cited: Sections 4516.5, 4551, 4551.5, 4552, 4582.7 and 21080.5, Public Resources Code; NRDC v. Arcata National Corp. (1976), 50 Cal. Ap. 3d 959. Reference: Sections 4516.5, 4581, 4582.5, 4582.6, 4582.7.5, 4583, 4592 and 21092, Public Resources Code.

HISTORY

- 1. New section filed 7-5-84; effective upon filing pursuant to Government Code Section 11346.2(d) (Register 84, No. 28).

§ 924.3. Preharvest Inspection.

On or before the date the plan is filed, the Director shall determine if a preharvest inspection is necessary. A preharvest inspection shall be conducted on all plans for which a public hearing is to be held.

NOTE: Authority cited: Sections 4516.5, 4551, 4551.5, 4552, 4582.7 and 21080.5, Public Resources Code; NRDC v. Arcata National Corp. (1976), 50 Cal. Ap. 3d 959. Reference: Sections 4516.5, 4581, 4582, 4582.5, 4582.6, 4582.7.5, 4592, 21081 and 21092, Public Resources Code.

HISTORY

- 1. New section filed 5-7-84; effective upon filing pursuant to Government Code Section 11346.2(d) (Register 84, No. 28).

§ 924.4. Notice of Filing.

In addition to those items required by 14 CAC 1037.1, the following shall apply:

(a) The Notice of Filing shall contain:

CALENDAR PAGE 208
MINUTE PAGE Register 92, 1089

PLAN NAME Eel River Rock

NSO ASSIGN # 858 ORIG # _____
THP # UNK

Date Referral Received by DFG: _____ Date RPF Notified: _____ Alternative Used: _____
Date Received by PNWB: _____ USGS Quad Name _____
by Designated Biologist: _____ (17.5" (115"

CALIFORNIA DEPARTMENT OF FISH AND GAME

NORTHERN SPOTTED OWL CONSULTATION CHECKLIST

A1 Plan Name Eel River Rock
Plan Submitter William Kleiner, Western Timber Service, Inc
Watershed/Tributaries Basin Creek & Mill Creek/Eel River
Township 2S Range 4E Sections 22, 23, 26, 27 County Humboldt

Plan Acres/Silviculture 247 ac Shelterwood (320 ac for plan area)

A2 Document Review Submitted Needed _____ Explanation _____
Plan Description _____
Planimetric/Topographic Map _____
Habitat Map (acres/location) On/Off Site _____
Aerial Photos (if available) Source: Series/Date: 7-7-91 #: _____
NSO Location Map (1.3 Miles) Nest/Roost _____
DataBase (CDF Printout) Date/Results _____
(DFG Territory #) MA

(submit database printout with referral request and consultation checklist)
Survey Data _____ Results 6 VISITS IN 1993
negative response within 0.2 miles of plan area. Responses were received on the 1.3 mile radius - suspected singles.

A3 Field Review
Review Participants John Hummel & Dave Nelson PNWB

RESOURCE MANAGEMENT

Adequate Review Route () no () yes Date _____ Explain _____
Accurate Maps () no yes Explain _____
Accurate Habitat Mapping () no yes Explain _____
Adequate Surveys () no yes Explain _____

Habitat Characteristics A previous entered stand with many of the sites converted to pasture. Hardwoods are dense and intrude into the forest habitat. Surrounding habitat is biologically unsuitable for NSO's. Survey (6) were negative.

A4 Adequate information to complete this consultation has been submitted () no yes

Received CDF
REGION 1
SEP 16 1993

PLAN NAME Eel River Rock

NSO ASSIGN # 858 ORIG # 2
THP # unk

Project Evaluation

B1 NSO's detected within 1.3 miles of operations area? () no () yes Date last detected 6-16-93
NSO's present now? ~~Unknown~~ () yes: () onsite () 500' () 1000' () 0.7mi () 1.3mi
Will NSO habitat retention standards be met post-harvest? ~~no~~ () yes Describe post-harvest habitat characteristics to support NSO's: Existing habitat is below retention levels.

Estimated Habitat Retention Acres (pre/post harvest):

| | 500' | 1000' | 0.7mi | 1.3mi |
|-------------|------|-------|-------|-------|
| Nest | / | / | / | / |
| Roost | / | / | / | / |
| Forage | / | / | / | / |
| Non-Habitat | / | / | / | / |

Will the proposed plan significantly disrupt, impair or modify (if YES of UNK, explain in B4):

| | NO | N/A | UNK | YES |
|--|----|-----|-----|-----|
| a. Local Movement (onsite or within 0.5 mi of NSO) | / | - | - | - |
| b. Dispersal Opportunity (within 1 mi of NSO) | / | - | - | - |
| c. Prey Base (within 0.5 mi of NSO) | / | - | - | - |
| d. Foraging Habitat | / | - | - | - |
| e. Roosting Structure | / | - | - | - |
| f. Roosting Behavior | / | - | - | - |
| g. Nesting Structure | / | - | - | - |
| h. Nesting Behavior | / | - | - | - |
| i. Other (predation, exposure, etc.) | / | - | - | - |

RESOURCE MANAGEMENT 2

B3 Is this consultation for more than one (1) THP? ~~no~~ () yes
List all known NSO consultations within 1.3 mi of this survey area None known

B4 Comments (evaluate adequacy of information provided, compliance with accepted guidelines, and features specific to this survey area) Plan evaluation package was adequate

(Name of preparer for Parts A & B, if different from designated biologist: _____)

Received CDF REGION 1 SEP 16 1993

PLAN NAME EB/River Rock

NSO ASSIGN # 858 ORIG # _____
THP # unk

C Determination
Pursuant to the Protocol for Surveying Proposed Management Activities that may Impact Northern Spotted Owls, endorsed and revised by the U.S. Fish and Wildlife Service (USFWS) on March 17, 1992, subsequent revisions to the protocol issued by the USFWS, and other scientific information available to me, I have concluded that (cross out inappropriate language and initial above each cross out):

C1 The information provided is/is not sufficient to complete my evaluation. *JWH*

C2 The surveys provided to me do/do not conform to the Protocol issued and revised by USFWS. *JWH*

C3 The information provided to me and the field review of the plan and surrounding area lead me to conclude that:

Received CDF
REGION 1
SEP 16 1993

1. The plan area is/is not suitable northern spotted owl habitat; *JWH*

2. The plan area has/has not been adequately evaluated for the presence of northern spotted owls; *JWH*

3. The potential that undetected northern spotted owls or northern spotted owl territories exist in or near the plan has/has not been minimized; and *JWH*

The potential for this plan to result in the unauthorized "incidental take" of a northern spotted owl has/has not been minimized. *JWH*

RESOURCE MANAGEMENT

A determination that the potential for unauthorized incidental take has been minimized (C3, above) remains valid until the start of the breeding season in the year For *JWH* operations to be conducted after the start of the breeding season in that year, surveys must be completed during the breeding season prior to the start of operations and submitted to DFG for evaluation.

This consultation checklist applies to a plan or proposal that (initial applicable findings):

- Does not need to be revised to minimize unauthorized incidental take. *JWH*
- Has been revised to minimize unauthorized incidental take.
- Requires revisions in order to minimize unauthorized incidental take. The necessary revisions are described in the attached comments.
- For which the consultation checklist cannot be completed until additional information is submitted (Sections 919.10(C), 939.10(C)). The necessary information is described in the attached comments.

This consultation checklist does/does not include additional pages as indicated below: *JWH*

Comments describing necessary revisions or information, DFG 726-FORM 3A (number of pages _____).

Confidential site information, DFG 726-FORM 3B (number of pages _____). (may include Spotted Owl Observation Report Form)

Signature *John E. Hummel*
Designated Biologist

Print Name John E. Hummel

Date Completed 8-6-93

Form Distribution:

- Original ESD (HQ) Program Office
- Copies RPF 8-6-93
- CDF (Referral Office)
- DFG (NSO Consultation Coordinator)

NOTE

Information concerning archeological sites has been removed from this THP, 1-93-405 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. Native American Heritage Commission
3. Local Tribal Governments-
Table Bluff Reservation
Bear River, Mattole, and Wiyot Tribe
4. Northwest Information Center @ Sonoma State University
N/A - sent by RPF

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

WESTERN TIMBER SERVICES, Inc.

Serving California - Oregon - Washington

P. O. BOX 1136
ARCATA, CALIFORNIA 95521
PHONE (707) 822-3828
FAX (707) 822-1823

October 19, 1993

Mr. Mike Howe
Reviewteam Chairman
California Department of Forestry
and Fire Protection
Humboldt-Del Norte Ranger Unit
P.O. Box 118
Fortuna, CA 95540

PART OF PLAN

Ref.: THP 1-93-405 HUM

Dear Mr. Howe:

Following is the RPF's response to the question brought up by the first review of the plan and directed toward the RPF.

Question: Please compare your Archeological Survey Coverage map with the "Sensitive Areas Map" marked by the Northwest Information Center. You did not mark as surveyed one small area in the southeast portion of the plan area immediately southeast of a proposed landing along the existing seasonal road, which was marked "sensitive." Did you survey that small area? If not, why not?

Response: The area in question was surveyed. Why it was overlooked on the Survey Coverage Map can only be explained as an unmindful error. It is a short, somewhat level bench on the ridge and I surveyed from the existing road, along the ridge and out to the point where the slope breaks off sharply. No artifacts, flakes, midden or any other item or feature of archeological or historical significance was noted.

Following are the RPF's responses to recommendations generated from the PHI of THP 1-93-405 HUM by John Allardice (CDF&FP).

Recommendation 1: If any roads are to be abandoned provide a road abandonment plan.

Response: The only roads to be abandoned are temporary roads and associated landings as designated on the THP Map. This is required in the rules in 14 CCR 923.4 (b). The general abandonment procedures for roads & associated landings and watercourse crossings are outlined in 14 CCR 923.8. As specified in 14 CCR 1035 (hh) a Road Abandonment Plan shall be included and

Received CDF
REGION 1

OCT 25 1993

RESOURCE MANAGEMENT

Page 1

| | |
|---------------|------|
| CALENDAR PAGE | 213 |
| MINUTE PAGE | 1094 |

shall become part of the plan. See attached Road Abandonment Plan.

Recommendation 2: Any additional crossings on the appurtenant or plan roads shall be provided with the appropriate size culvert and shown on an amended plan map. Designate, for example, as D1 if it is between culvert D and culvert E.

Response: RPF agrees. Included are revised maps and a watercourse crossing list showing crossing D1. The revision also shows crossing B upgraded to a 48" CMP and crossing C designated as a temporary CMP or permanent bridge.

Recommendation 3. Consult with CDF concerning the use of mulch on those areas that exceed 800 square feet adjacent to the class II watercourses.

Response: RPF agrees. See revised Harvesting Practices and Erosion Control Addendum.

Recommendation 4. Change the statement under addendum item 50 that says soil in the class III will be stabilized to - - soil in the class III watercourse shall be removed- -.

Response: RPF agrees. See revised addendum to item 50.

Recommendation 5. Include the omitted portion of THP 1-85-184 on a revised Watershed Assessment map.

Response: RPF agrees. See revised Watershed Assessment map.

Sincerely,
Western Timber Services, Inc.



Carl A. Anderson, RPF #2457

PART OF PLAN

Received CDF
REGION 1

OCT 25 1993

RESOURCE MANAGEMENT

| | |
|---------------|------|
| CALENDAR PAGE | 214 |
| MINUTE PAGE | 1095 |

REVIEW TEAM CHAIRMAN'S RECOMMENDATIONS FOR TIMBER HARVESTING PLAN
OR AMENDMENT NUMBER: 1-93-405 HUM
DATE: 10-20-93
PAGE: 2

1. No new tractor road construction or reuse of existing skid trails shall occur on slopes of 65% or greater without prior submittal of an amendment and field inspection by CDF.
2. At the time of installation, RPF to provide a minor amendment specifying whether watercourse crossing "C" is a temporary or permanent structure.
3. The RPF shall provide an additional EHR computation for those areas designated on slopes greater than 65% if the area involved is 10 acres or greater (CCR 912.5).

Received CDF
REGION 1

OCT 22 1993

RESOURCE MANAGEMENT

I agree to the above mitigation measures


Signature

Date: 10/20/93

CARL A. ANDERSON RPF #2457
RPF's Typed or Printed Name

PART OF PLAN

CALENDAR PAGE 215

MINUTE PAGE 1096

AGREEMENT REGARDING PROPOSED STREAM OI. LAKE ALTERATION

THIS AGREEMENT, entered into between the State of California, Department of Fish and Game, hereinafter called the Department and CARL ANDERSON of ARCATA, State of CALIF., hereinafter called the operator, is as follows:

WHEREAS, pursuant to Division 2, Chapter 6 of California Fish and Game Code, the operator, on the 8 day of SEPT 1993, notified the Department that he intends to substantially divert or obstruct the natural flow of, or substantially change the channel, or bank of, or use material from the streambed of, the following water: EEL R. / BASIN CRK / MILL CRK, in the County of HUMBOLDT, State of California, S. 16, 22, T. 25 R. 4E.

WHEREAS, the Department (represented by JIM FROLANO) has made an inspection of subject area (5 day of OCTOBER, 1993, and) has determined such operations may substantially adversely affect existing fish and wildlife resources including: SALMON / STEELHEAD TROUT / OTHER AQUATIC AND RIPARIAN SPECIES

THEREFORE, the Department hereby proposes measures to protect fish and wildlife during the operator's work. The operator hereby agrees to accept the following recommendations as part of his work: Numbers 1, 2, 3, 10, 15, 18, 19, 20, 21 from the list of recommendations on the back of this page and the following special recommendations:

1. All work in or near the stream or lake shall be confined to the period 1 APRIL - 15 OCTOBER 1993
2. PERMANENT CROSSINGS WILL USE CMP CULVERTS OF ADEQUATE SIZE TO ACCOMMODATE HIGH SEASONAL FLOW. PIPES WILL BE LONG ENOUGH SO THAT ROAD FILL DOES NOT EXTEND PAST ENDS, AND WILL BE PLACED AT STREAM GRADE OR HAVE DOWNSPOUTS OR ROCK ENERGY DISSIPATORS AT OUTFALL TO REDUCE EROSION. ROLLING DIPS OVER PIPES SHOULD BE CONSTRUCTED WHEREVER POSSIBLE. CROSSINGS B, D, Q, K WILL HAVE HEAD AND TAIL OF FILL RIPRAPPED TO TOP OF PIPE. INSTALL CROSSINGS WITH AN EXCAVATOR AND USE TRACKBACK WHERE APPROPRIATE.
3. CROSSING C WILL BE A PERMANENT BRIDGE, OR A TEMPORARY CULVERT.
4. TEMPORARY CROSSINGS WILL USE PIPES OR LOG CULVERTS IF FLOW IS PRESENT. CLEAN OUT ALL FILL AND RESTORE CHANNEL AT END OF WORK PERIOD.
5. MULCH OR SEED BARE DIRT AREAS AT CROSSING SITES PRIOR TO 15 OCT 93.
6. NO SIDECAST OR CONSTRUCTION DEBRIS WILL BE PLACED WHERE IT CAN ENTER STREAMS.

The operator, as designated by the signature on this agreement, shall be responsible for the execution of all elements of this agreement. A copy of this agreement must be provided to contractors and subcontractors and must be in their possession at the work site.

If the operator's work changes from that stated in the notification specified above, this agreement is no longer valid and a notification shall be submitted to the Department of Fish and Game. Failure to comply with the provisions of this agreement and with pertinent Code Sections, including but not limited to Fish and Game Code Sections 5650, 5652 and 5948, may result in prosecution.

Nothing in this agreement authorizes the operator to trespass on any land or property, nor does it relieve the operator of responsibility for compliance with applicable federal, state, or local laws or ordinances.

THIS AGREEMENT IS NOT INTENDED AS AN APPROVAL OF A PROJECT OR OF SPECIFIC PROJECT FEATURES BY THE DEPARTMENT OF FISH AND GAME. INDEPENDENT REVIEW AND RECOMMENDATIONS MUST BE PROVIDED BY THE DEPARTMENT AS APPROPRIATE ON THOSE PROJECTS WHERE LOCAL, STATE, FEDERAL PERMITS OR OTHER ENVIRONMENTAL REPORTS ARE REQUIRED.

This agreement becomes effective on 5 OCT 93

Operator [Signature]

Title FORESTER

Organization WESTERN TIMBER SERVICES

Date 11/2/93

[Signature]
Department Representative

Title WARDEN

Department of Fish and Game, State of California

Date 29 OCT 93

| | |
|---------------|------|
| CALENDAR PAGE | 216 |
| MINUTE PAGE | 1097 |

*If inspection was not made, cross out words within parentheses.

WESTERN TIMBER SERVICES, Inc.*Serving California - Oregon - Washington*

P. O. BOX 1136

ARCATA, CALIFORNIA 95521

PHONE (707) 822-3828

FAX (707) 822-1823

July 15, 1994

Mr. Tom Osipowich
 Resource Manager
 California Department of Forestry
 and Fire Protection
 Resource Management
 P.O. Box 670
 Santa Rosa, CA 95402

Received CDF
 REGION 1

JUL 19 1994

RESOURCE MANAGEMENT

Ref.: THP 1-93-405 HUM

Dear Mr. Osipowich:

We request an amendment to the THP map of THP 1-93-405 HUM that would show the existing seasonal road that links the plan area to the existing permanent rock surfaced road that is northeast of plan area. This amended map would also show a permanent watercourse crossing "R" which would be a 42" corrugated metal pipe (CMP). This alternate route was discovered on May 9, 1994 by myself, Bill Kleiner and rancher Lou Bugenig. It is obvious that this was used as a primary trucking route in early harvests (probably in the 1950's and 60's).

The road prism is intact and stable and would only require the removal of vegetation on the running surface to make it usable.

The existing watercourse crossing is an old log or Humboldt crossing that failed. Installation of the 42" CMP would improve a presently deteriorating condition by allowing water to flow through the culvert rather than downcutting through the existing road fill. This downcutting action that takes place during peak winter flows is currently inputting sediment into the Basin Creek system and degrading the water quality for downstream beneficial uses. The 42" CMP is adequate to accommodate a 100 yr. flow.

The proposed haul route would use a private road, referred to as the subdivision road, that is governed by the Larabee Creek Road Board (LCRB). McBride's use of the subdivision road is currently being challenged in court. The LCRB has raised some traffic and maintenance concerns that would have to be resolved prior to McBride's use of the subdivision road. These concerns will apparently have to be

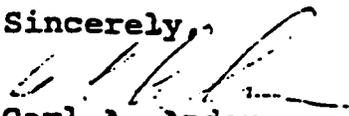
| | |
|---------------|------|
| CALENDAR PAGE | 217 |
| MINUTE PAGE | 1098 |

resolved in court. The subdivision road shall not be used in the operation of THP 1-93-405 HUM until the litigation is resolved.

This proposal was discussed with CDF inspector John Allardice and he agreed that this would be the best course of action. In addition CDFG Warden Jim Froland has been contacted to add the crossing to the 1603 permit.

If you have any questions or concerns regarding this matter, please contact our office.

Sincerely,


Carl A. Anderson, RPF #2457

Received CDF
REGION 1

JUL 19 1994

RESOURCE MANAGEMENT

| | |
|---------------|------|
| CALENDAR PAGE | 218 |
| MINUTE PAGE | 1099 |

REVISED THP MAP
FROM USGS 7.5 BLOCKSBURG ENLARGED
LEGEND ON SEPARATE SHEET

Blue Jacket
Butte

**AREA OF PROPOSED
DEVIATION**

Revised CDP
REGION 3
JOB 1-9 1994

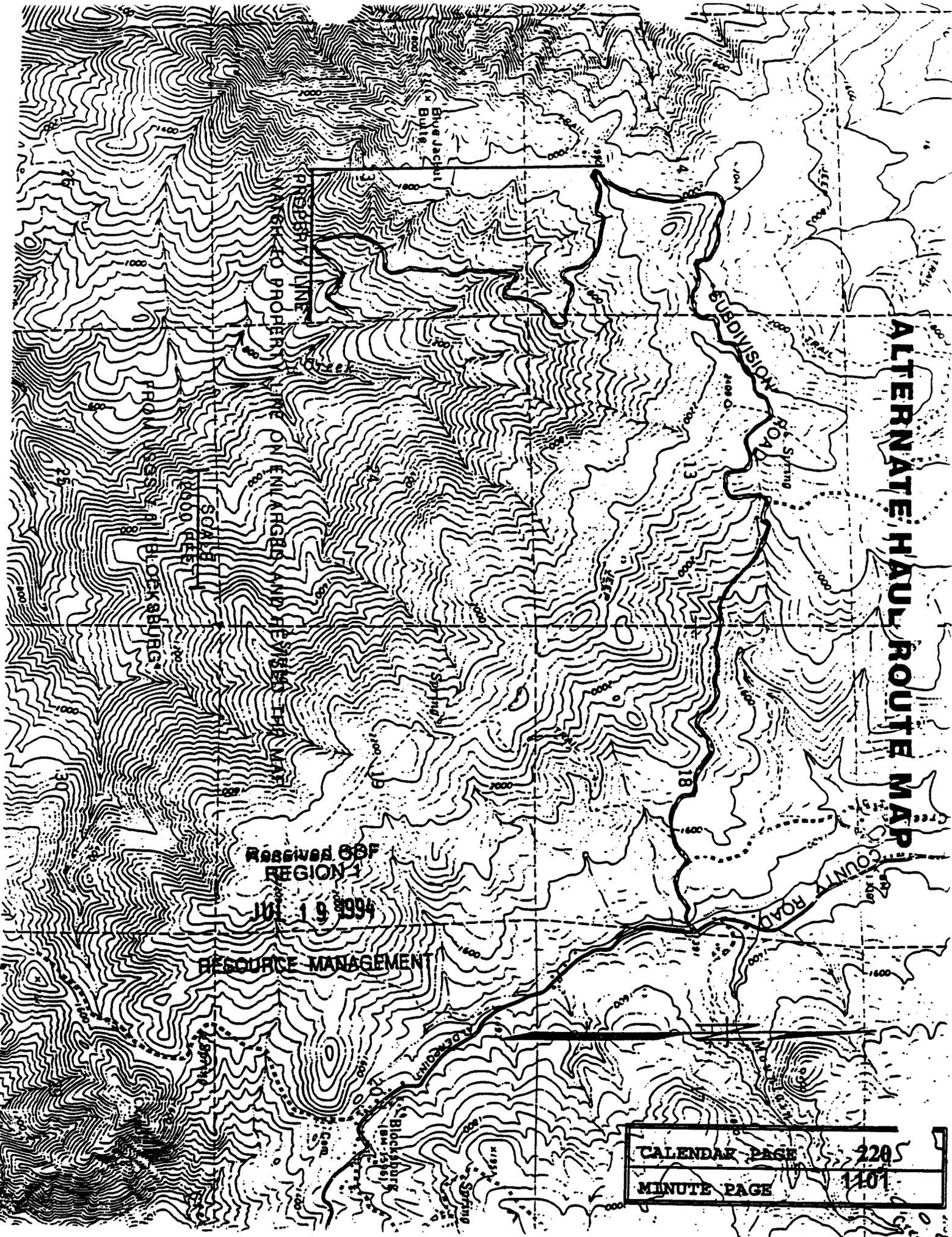
RESOURCE MANAGEMENT

In Humboldt County in Portions of Sections
Township 2-South, Range 4-East, T.2S.R.4E.

MINUTE PAGE 27,

100

ALTERNATE HAUL ROUTE MAP



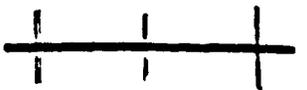
Received GDF
REGION 1
JUL 19 1994

RESOURCE MANAGEMENT

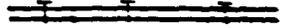
| | |
|---------------|------|
| CALENDAR PAGE | 2205 |
| MINUTE PAGE | 1101 |

Eel Rock #1 THP
Timber Harvesting Plan Map
 In Humboldt County in Portions of Sections 22, 23, 26 and 27,
 Township 2-South, Range 4-East, E.B.M.

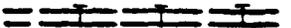
Legend

THP Boundary (Logging Area)..... 

Existing Roads

Permanent..... 
 Seasonal..... 
 Temporary..... 
 Existing Landings*..... O
 Road Failures..... RF

Proposed Roads

Permanent..... N/A
 Seasonal..... N/A
 Temporary..... 
 Proposed Landings*..... ●

Watercourse Classification (14 CCR 916.5)

Class I (one) Watercourse..... 
 Class II (two) Watercourse..... 
 Class III (three) Watercourse..... 
 Springs and Wet Areas..... 
 Watercourse Crossings..... 
 (Watercourse Crossing List and Temporary/Permanent Classification is on Separate Sheet)
 THP Reference Point..... 

Regeneration Method Boundaries — . — . — . — . — .

Shelterwood-Seed Step..... SH-S
 Shelterwood-Removal Step..... SH-R
 Understocked areas prior to operations (20 ac. Min.)... N/A
 Slides and Unstable Areas..... SSS
 Areas with slopes over 65%..... 
 Ridge Top Suitable For Fire Suppression Efforts-
 Will require felling of snags..... 
 Special Treatment Areas..... N/A

N/A means that this is not a feature of this THP.

* None within WLPZ or >1/4 acre or requiring substantial excavation.

Received BDF
 REGION 1

| | |
|---------------------|-------------|
| CALENDAR PAGE | JUL 19 1994 |
| MINUTE PAGE | 1102 |
| RESOURCE MANAGEMENT | |

WESTERN TIMBER SERVICES, Inc.

Serving California - Oregon - Washington

P. O. BOX 1136
ARCATA, CALIFORNIA 95521
PHONE (707) 822-3828
FAX (707) 822-1823

August 17, 1994

Mr. Tom Osipowich
Resource Manager
California Department of Forestry
and Fire Protection
Resource Management
P.O. Box 670
Santa Rosa, CA 95402

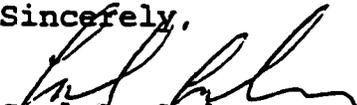
Ref.: THP 1-93-405 HUM
Amendment #1

Dear Mr. Osipowich:

This letter is to clarify Viola Russ McBride's use of the haul route described in Amendment No. 1 of THP 1-93-405 HUM. In addition to a deeded right-of-way, Mrs. McBride has a right of way under other legal principles. She will act accordingly.

If you have any questions or concerns regarding this matter, please contact our office.

Sincerely,


Carl A. Anderson, RPF #2457

| | |
|---------------|------|
| CALENDAR PAGE | 222 |
| MINUTE PAGE | 1103 |

AGREEMENT REGARDING PROPOSED STREAM OR LAKE ALTERATION

THIS AGREEMENT, entered into between the State of California, Department of Fish and Game, hereinafter called the Department and CARL ANDERSON of ARCATA, State of CALIF, hereinafter called the operator, is as follows:

WHEREAS, pursuant to Division 2, Chapter 6 of California Fish and Game Code, the operator, on the 8 day of SEPT 1993, notified the Department that he intends to substantially divert or obstruct the natural flow of, or substantially change the channel, or bank of, or use material from the streambed of, the following water: EEL R. / BASIN CRK / DALL CRK, in the County of HUMBOLDT, State of California, S. 16 22 T T. 7 S R 4 E.

WHEREAS, the Department (represented by JIM FROLANDO ^{23, 26, 27} has made an inspection of subject area on 5 day of OCTOBER, 1993, and) has determined such operations may substantially adversely affect existing fish and wildlife resources including: HUMANN / STEELHEAD TROUT / OTHER AQUATIC AND RIPARIAN SPECIES

THEREFORE, the Department hereby proposes measures to protect fish and wildlife during the operator's work. The operator hereby agrees to accept the following recommendations as part of his work: Numbers 1, 2, 3, 10, 15, 18, 19, 20, 21 from the list of recommendations on the back of this page and the following special recommendations:

- All work in or near the stream or lake shall be confined to the period 1 APRIL - 15 OCTOBER 1993
- PERMANENT CROSSINGS WILL USE CMP CULVERTS OF ADEQUATE SIZE TO ALLOW HIGH SEASONAL FLOWS. PILES WILL BE LONG ENOUGH SO THAT ROADFILL DOES NOT EXTEND PAST ENDS, AND WILL BE PLACED AT STREAM GRADE OR HIGHER. DIVERSITY OF ROCK ENOUGH DISSIPATORS AT OUTFALL TO PREVENT EROSION. ROLLING DIPS OVER PILES SHOULD BE CONSTRUCTED WHEREVER POSSIBLE. CROSSINGS OF P.O.K. WILL HAVE HEAD AND TAIL OF FILL REPAIRED TO TOP OF FILL. INSIDE CROSSINGS WITH NO EXCAVATION AND USE TRASH RACKS WHERE APPROPRIATE.
- CROSSING CULVERTS WILL BE A PERMANENT BRIDGE OR A TEMPORARY CULVERT
- TEMPORARY CROSSINGS WILL USE PILES OR LOG CULVERTS IF FLOW IS FREE. CLEAR OUT ALL FILL AND RESTORE CHANNEL AT END OF WORK PERIOD.
- TRUCK OR SEED BARE DIRT AREA AT CROSSING SITES PRIOR TO 15 OCT 93.
- NO SIGNPOST OR CONSTRUCTION BARRIERS WILL BE PLACED WHERE IT CAN ENTER STREAMS

The operator, as designated by the signature on this agreement, shall be responsible for the execution of all elements of this agreement. A copy of this agreement must be provided to contractors and subcontractors and must be in their possession at the work.

If the operator's work changes from that stated in the notification specified above, this agreement is no longer valid and a notification shall be submitted to the Department of Fish and Game. Failure to comply with the provisions of this agreement and with pertinent Code Sections, including but not limited to Fish and Game Code Sections 5650, 5652 and 5948, may result in prosecution.

Nothing in this agreement authorizes the operator to trespass on any land or property, nor does it relieve the operator of responsibility for compliance with applicable federal, state, or local laws or ordinances.

THIS AGREEMENT IS NOT INTENDED AS AN APPROVAL OF A PROJECT OR OF SPECIFIC PROJECT FEATURES BY THE DEPARTMENT OF FISH AND GAME. INDEPENDENT REVIEW AND RECOMMENDATIONS WILL BE PROVIDED BY THE DEPARTMENT AS APPROPRIATE ON THOSE PROJECTS WHERE LOCAL, STATE, FEDERAL PERMITS OR OTHER ENVIRONMENTAL REPORTS ARE REQUIRED.

This agreement becomes effective on 15 OCT 93

Operator [Signature]

Title _____

Organization _____

Date _____

Department Representative [Signature]

Title _____

Department of Fish and Game, State of California

Date _____

| | |
|---------------|------|
| CALENDAR PAGE | 223 |
| MINUTE PAGE | 1104 |

*If insertion was not made, cross out words within parentheses.

RECOMMENDATIONS

1. Disturbance or removal of vegetation shall not exceed the minimum necessary to complete operations. The disturbed portions of any stream channel or lake margin within the high water mark of the stream or lake shall be restored to as near their original condition as possible.
2. Restoration shall include the revegetation of stripped or exposed areas.
3. Rock, riprap, or other erosion protection shall be placed in areas where vegetation cannot reasonably be expected to become reestablished.
4. Installation of bridges, culverts, or other structures shall be such that water flow is not impaired and upstream or downstream passage of fish is assured at all times. Bottoms of temporary culverts shall be placed at or below stream channel grade. Bottoms of permanent culverts shall be placed below stream channel grade.
5. Plans for design of concrete sills and other features that could potentially impede fish migrations must be approved by Department engineers.
6. When any dam (any artificial obstruction) is being constructed, maintained, or placed in operation, sufficient water shall at all times be allowed to pass downstream to maintain fishlife below the dam.
7. An adequate fish passage facility must be incorporated into any barrier that obstructs fish passage.
8. Any temporary dam (any artificial obstruction) constructed shall only be built from material such as clean gravel which will cause little or no siltation.
9. No equipment will be operated in live-stream channels.
10. Equipment shall not be operated in the stream channels of flowing live streams except as may be necessary to construct crossings or barriers and fills at channel changes.
11. When work in a flowing stream is unavoidable, the entire streamflow shall be diverted around the work area by a barrier, temporary culvert, and/or a new channel capable of permitting upstream and downstream fish movement. Construction of the barrier and/or the new channel shall normally begin in the downstream area and continue in an upstream direction, and the flow shall be diverted only when construction of the diversion is completed. Channel bank or barrier construction shall be adequate to prevent seepage into or from the work area. Channel banks or barriers shall not be made of earth or other substances subject to erosion unless first enclosed by sheet piling, rock-riprap, or other protective material. The enclosure and the supportive material shall be removed when the work is completed and the removal shall normally proceed from downstream in an upstream direction.
12. Temporary fills shall be constructed of nonerrodible materials and shall be removed immediately upon work completion.
13. Equipment shall not be operated in the lake or its margin except during excavation and as may be necessary to construct barriers or fills. If work in the lake is unavoidable, a curtain enclosure to prevent siltation of the lake beyond the immediate working area shall be installed. The enclosure and any supportive material shall be removed when the work is completed.
14. Silt settling basins shall be located away from the stream or lake to prevent discolored, silt-bearing water from reaching the stream or lake.
15. Preparation shall be made so that runoff from steep, erodible surfaces will be diverted into stable areas with little erosion potential. Frequent water checks shall be placed on dirt roads, cut tracks, or other work trails to control erosion.
16. Wash water containing mud or silt from aggregate washing or other operations shall not be allowed to enter a lake or flowing streams.
17. a) A silt catchment basin shall be constructed across the stream immediately below the project site. This catchment basin shall be constructed of gravel which is free from mud or silt.
b) Upon completion of the project and after all flowing water in the area is clear of turbidity, the gravel along with the trapped sediment shall be removed from the stream.
18. If operations require moving of equipment across a flowing stream, such operations shall be conducted without substantially increasing stream turbidity. For repeated crossings, the operator shall install a bridge, culvert, or rock-fill crossing as specified in comment below.
19. If a stream channel has been altered during the operations, its low flow channel shall be returned as nearly as possible to its natural state without creating a possible future bank erosion problem, or a flat wide channel or sluice-like area. If a lake margin has been altered, it shall be returned as nearly as possible to its natural state without creating a future bank erosion problem. The gradient of the streambed or lake margin shall be as nearly as possible the same gradient as existed prior to disturbance.
20. Structures and associated materials not designed to withstand high seasonal flows shall be removed to areas above the high water mark before such flows occur.
21. No debris, soil, silt, sand, bark, slash, sawdust, rubbish, cement or concrete or washings thereof, oil or petroleum products or other organic or earthen material from any logging, construction, or associated activity of whatever nature shall be allowed to enter into or placed where it may be washed by rainfall or runoff into waters of the State. When operations are completed, any excess materials or debris shall be removed from the work area. No rubbish shall be deposited within 150 feet of the high water mark of any stream or lake.
22. The operator will notify the Department of Fish and Game of the date of commencement of operations at the date of completion of operations at least five days prior to such completion.

AGREEMENT REGARDING PROPOSED STREAM OR LAKE ALTERATION

THIS AGREEMENT, entered into between the State of California, Department of Fish and Game, hereinafter called the Department and CARL ANDERSON of ARCATA, State of CALIF, hereinafter called the operator, is as follows:

WHEREAS, pursuant to Division 2, Chapter 6 of California Fish and Game Code, the operator, on the 8 day of SEPT 1993, notified the Department that he intends to substantially divert or obstruct the natural flow of, or substantially change the channel, or bank of, or use material from the streambed of, the following water: SELR/BASINCR/MILLER, in the County of HUMBOLDT, State of California, S16 22 T. 25 R4E.

WHEREAS, the Department (represented by JIM FROLANO ^{23, 26, 27} has made an inspection of subject area on 23, 26, 27 day of _____, 19_____, and) has determined such operations may substantially adversely affect existing fish and wildlife resources including: SALMON/ STEELHEAD TROUT/ OTHER AQUATIC AND RIPARIAN SPECIES

THEREFORE, the Department hereby proposes measures to protect fish and wildlife during the operator's work. The operator agrees to accept the following recommendations as part of his work: Numbers 1, 2, 3, 10, 15, 18, 19, 20, 21 from the list of recommendations on the back of this page and the following special recommendations:

1. All work in or near the stream or lake shall be confined to the period 1 JUNE - 15 OCTOBER 1994
2. ADD CROSSING "R" - A PERMANENT C&D CULVERT OF ADEQUATE SIZE TO ACCOMMODATE HIGH WINTER FLOWS WILL BE INSTALLED AT LOCATED SITE. PIPE WILL BE AT GRADE OR HAVE ENERGY DISSIPATOR HEAD OF FILL SHALL BE ROCKED TO TOP OF PIPE
3. ADD CROSSING "S" - TEMPORARY CROSSING USING BRIDGE OR CULVERTS ARE USED FILL SHALL BE CLEAN AND USE - RUN ROCK. D WILL BE PLACED BELOW AND INTO STREAM DOWN TO ALLOW FISH PASSAGE. PIPE AND FILL SHALL BE REMOVED BY 15 OCTOBER OR WHEN FLOW EXCEEDS PIPE CAPACITY. UNLESS OTHERWISE SPECIFIED IF PERMANENT BRIDGE IS PROPOSED, CONTACT DEPT FOR FURTHER DISCUSSION.

The operator, as designated by the signature on this agreement, shall be responsible for the execution of all elements of this agreement. A copy of this agreement must be provided to contractors and subcontractors and must be in their possession at the work.

If the operator's work changes from that stated in the notification specified above, this agreement is no longer valid and a notification shall be submitted to the Department of Fish and Game. Failure to comply with the provisions of this agreement and with pertinent Code Sections, including but not limited to Fish and Game Code Sections 5650, 5652 and 5948, may result in prosecution.

Nothing in this agreement authorizes the operator to trespass on any land or property, nor does it relieve the operator of responsibility for compliance with applicable federal, state, or local laws or ordinances.

THIS AGREEMENT IS NOT INTENDED AS AN APPROVAL OF A PROJECT OR OF SPECIFIC PROJECT FEATURES BY THE DEPARTMENT OF FISH AND GAME. INDEPENDENT REVIEW AND RECOMMENDATIONS WILL BE PROVIDED BY THE DEPARTMENT AS APPROPRIATE ON THOSE PROJECTS WHERE LOCAL, STATE, FEDERAL PERMITS OR OTHER ENVIRONMENTAL REPORTS ARE REQUIRED.

This agreement becomes effective on 22 AUGUST 1994

Operator [Signature]
 Title _____
 Organization _____
 Date _____

[Signature]
 Department Representative
 Title _____
 Department of Fish and Game, State of California
 Date _____

| | |
|---------------|------|
| CALENDAR PAGE | 225 |
| MINUTE PAGE | 1106 |

*If inspection was not made, cross out words within parentheses.

RECOMMENDATIONS

- Disturbance or removal of vegetation shall not exceed the minimum necessary to complete operations. The disturbed portions of any stream channel or lake margin within the high water mark of the stream or lake shall be restored to as near their original condition as possible.
2. Restoration shall include the revegetation of stripped or exposed areas.
 3. Rock, riprap, or other erosion protection shall be placed in areas where vegetation cannot reasonably be expected to become reestablished.
 4. Installation of bridges, culverts, or other structures shall be such that water flow is not impaired and upstream or downstream passage of fish is assured at all times. Bottoms of temporary culverts shall be placed at or below stream channel grade. Bottoms of permanent culverts shall be placed below stream channel grade.
 5. Plans for design of concrete sills and other features that could potentially impede fish migrations must be approved by Department engineers.
 6. When any dam (any artificial obstruction) is being constructed, maintained, or placed in operation, sufficient water shall at all times be allowed to pass downstream to maintain fishlife below the dam.
 7. An adequate fish passage facility must be incorporated into any barrier that obstructs fish passage.
 8. Any temporary dam (any artificial obstruction) constructed shall only be built from material such as clean gravel which will cause little or no siltation.
 9. No equipment will be operated in live stream channels.
 10. Equipment shall not be operated in the stream channels of flowing live streams except as may be necessary to construct crossings or barriers and fills at channel changes.
 11. When work in a flowing stream is unavoidable, the entire streamflow shall be diverted around the work area by a barrier, temporary culvert, and/or a new channel capable of permitting upstream and downstream fish movement. Construction of the barrier and/or the new channel shall normally begin in the downstream area and continue in an upstream direction, and the flow shall be diverted only when construction of the diversion is completed. Channel bank or barrier construction shall be adequate to prevent seepage into or from the work area. Channel banks or barriers shall not be made of earth or other substances subject to erosion unless first enclosed by sheet piling, rock riprap, or other protective material. The enclosure and the supportive material shall be removed when the work is completed and the removal shall normally proceed from downstream in an upstream direction.
 12. Temporary fills shall be constructed of nonerodible materials and shall be removed immediately upon work completion.
 13. Equipment shall not be operated in the lake or its margin except during excavation and as may be necessary to construct barriers or fills. If work in the lake is unavoidable, a curtain enclosure to prevent siltation of the lake beyond the immediate working area shall be installed. The enclosure and any supportive material shall be removed when the work is completed.
 14. Silt settling basins shall be located away from the stream or lake to prevent discolored, silt-bearing water from reaching the stream or lake.
 15. Preparation shall be made so that runoff from steep, erodible surfaces will be diverted into stable areas with little erosion potential. Frequent water checks shall be placed on dirt roads, cut tracks, or other work trails to control erosion.
 16. Wash water containing mud or silt from aggregate washing or other operations shall not be allowed to enter a lake or flowing streams.
 17. a) A silt catchment basin shall be constructed across the stream immediately below the project site. This catchment basin shall be constructed of gravel which is free from mud or silt.
b) Upon completion of the project and after all flowing water in the area is clear of turbidity, the gravel along with the trapped sediment shall be removed from the stream.
 18. If operations require moving of equipment across a flowing stream, such operations shall be conducted without substantially increasing stream turbidity. For repeated crossings, the operator shall install a bridge, culvert, or rock-fill crossing as specified in comments below.
 19. If a stream channel has been altered during the operations, its low flow channel shall be returned as nearly as possible to its natural state without creating a possible future bank erosion problem, or a flat wide channel or sluice-like area. If a lake margin has been altered, it shall be returned as nearly as possible to its natural state without creating a future bank erosion problem. The gradient of the streambed or lake margin shall be as nearly as possible the same gradient as existed prior to disturbance.
 20. Structures and associated materials not designed to withstand high seasonal flows shall be removed to areas above the high water mark before such flows occur.
 21. No debris, soil, silt, sand, bark, slash, sawdust, rubbish, cement or concrete or washings thereof, oil or petroleum products or other organic or earthen material from any logging, construction, or associated activity of whatever nature shall be allowed to enter into or placed where it may be washed by rainfall or runoff into, waters of the State. When operations are completed, any excess materials or debris shall be removed from the work area. No rubbish shall be deposited within 150 feet of the high water mark of any stream or lake.
 22. The operator will notify the Department of Fish and Game of the date of commencement of operations and the date of completion of operations at least five days prior to such completion.

WESTERN TIMBER SERVICES, Inc.

Serving California - Oregon - Washington

P. O. BOX 1136
ARCATA, CALIFORNIA 95521
PHONE (707) 822-3628
FAX (707) 822-1823

August 24, 1994

Mr. Tom Osipowich
Resource Manager
California Department of Forestry
and Fire Protection
Resource Management
P.O. Box 670
Santa Rosa, CA 95402

Ref.: THP 1-93-405 HUM

Dear Mr. Osipowich:

We request this second amendment to THP 1-93-405 HUM that would add an additional crossing "S". This is shown on the Alternate Haul Route Map and Alternate Crossing Site Map, attached herewith. This alternate haul route will also be referred to as the "Homestead Road" which is more historically correct.

There is an existing flatcar bridge on Larabee Creek near the Alderpoint county road and residents have expressed concerns regarding the safety of the bridge at this location. The site was inspected on 8/17/94 and at that time the stream was low with little or no flow, however, there was some ponded water.

We are proposing to either brace the existing bridge or provide a crossing at an existing ford just to the north and downstream of the existing bridge. The alternate crossing may be either permanent or temporary depending on whether a suitable flatcar can be acquired.

If the existing bridge is to be used, the abutments would need to be extended to provide proper support for the structure.

If a permanent crossing is used at the alternate site, a flatcar of sufficient length to clearspan the channel shall be used.

If a temporary crossing is used, 3 18" steel culverts will be placed in the stream channel and backfilled over the top with river run gravel. This drainage structure shall be installed in such a way as to allow for the unrestricted passage of fish. The temporary crossing shall be removed by

| | |
|---------------|------|
| CALENDAR PAGE | 227 |
| MINUTE PAGE | 1108 |

October 15 or when flow exceeds pipe capacity, whichever occurs first. This date may be extended if approved by Department of Fish and Game Warden Jim Froland if stream and weather conditions permit. The fill shall be excavated to form a channel as close as feasible to the natural watercourse grade and orientation and wider than the natural channel. The approach on the west side (which is somewhat steeper) shall be pulled back slightly and seeded and mulched.

Department of Fish and Game Warden Jim Froland has been contacted to amend this crossing on the 1603 permit. Attached is copy of the amended 1603 which includes this crossing and crossing "S". Crossing "S" was added in Amendment No. 1.

If you have any questions or concerns regarding this matter, please contact our office.

Sincerely,

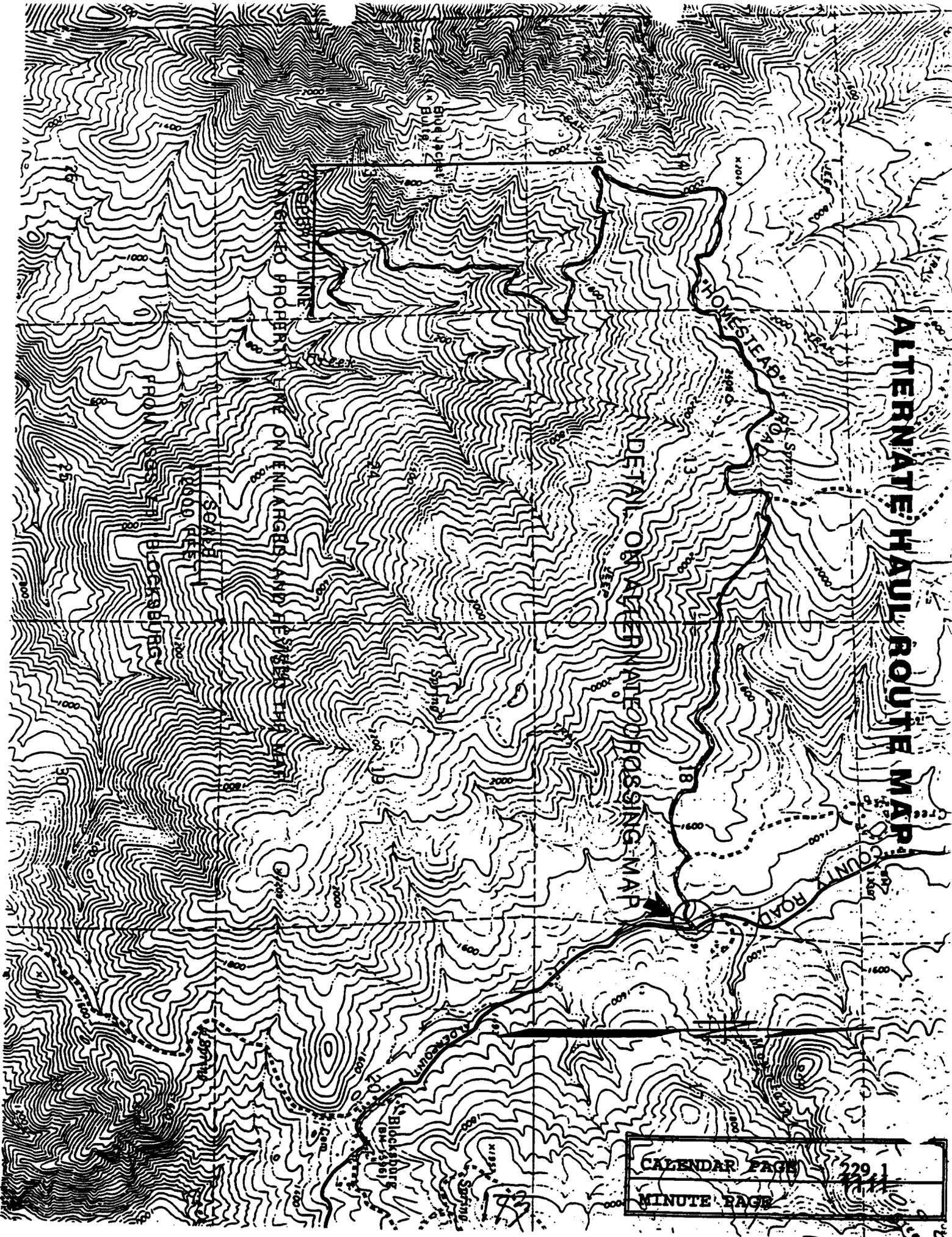


Carl A. Anderson, RPF #2457

| | |
|---------------|------|
| CALENDAR PAGE | 228 |
| MINUTE PAGE | 1109 |

ALTERNATE HAUL ROUTE MAP

DETAIL OR MASTER ALTERNATE CROSSING MAP



| | |
|---------------|-----|
| CALENDAR PAGE | 229 |
| MINUTE PAGE | 11 |

73