

To: Mike Noonan, Unit Chief THP NO. 4-07-37/TUO-6 Cow Camp THP

From: Candace Gregory, Southern Region Chief

\*\*\*\*\*SECTION I\*\*\*\*\*

Review Team Recommendations:

- PHI \_\_\_\_\_ - Complete entire PHI form, Sections I-IV.
- PHI Optional \_\_\_\_\_ - Email Review Team Fresno ASAP if PHI is scheduled.
- Focused PHI \_\_\_\_\_ - Complete Sections I, III, and IV

Reviewed by	<u>AMS</u>	
Dist. by	<u>SA</u>	
Dist. Date:	<u>11/26/07</u>	
<input checked="" type="checkbox"/> RD	<input checked="" type="checkbox"/> TCU	<input type="checkbox"/> PS
<input checked="" type="checkbox"/> FG	<input checked="" type="checkbox"/> L	<input type="checkbox"/> TO
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<input type="checkbox"/> INSP	<input type="checkbox"/>	<input type="checkbox"/> BOE
OTHER:	_____	
FPS	_____	
Status:	<u>PHI</u>	

NOTE: All responses to the preharvest inspection and the preharvest inspection report are due at Southern Region Office no later than the Friday before the second review. Please e-mail completed form to FresnoReviewTeam@fire.ca.gov. If this cannot be accomplished, it is the inspector's responsibility to contact the RPF and secure an extension and notify the Southern Region Office of the extension.

FIRST REVIEW DATE: November 14, 2007 FILING DATE: November 16, 2007

PHI MUST BE CONDUCTED BETWEEN FILING DATE AND November 26, 2007

DATE(s) PHI CONDUCTED: November 19, 2007 INSPECTION NO: 1

PHI/DIRECTORS DETERMINATION DATE EXTENDED BY MUTUAL CONSENT: YES

REVIEW BASED UPON PREVIOUS VISIT: DATE \_\_\_\_\_

PF: Michael Vroman (209) 532-7141 FIELD HOURS: 12 OFFICE HOURS: 14

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DFG REGION: 4 WQ REGION: 5A INSPECTOR: Frese

AGENCIES REQUESTING TO ATTEND PHI:

Regional Water Quality Control Board:

Department of Fish and Game Region:

Central Valley (Region 5)

Rancho Cordova (Region 2)

- (916) 464-4630 Marty Hartzell
- (916) 464-4820 Chris Cochran
- (559) 445-6278 Anthony Toto

- (916) 358-2892 Tina Bartlett
- (916) 358-2900 Tim Nosal
- (916) 358-2916 Sandra Jacks

Lahontan (Region 6)

Fresno (Region 4)

- (530) 542-5426 George Cella
- (530) 542-5417 Doug Cushman

- (209) 588-1879 Dan Applebee
- (559) 243-4014x238 Lisa Gymer
- (559) 243-4014x236 Margarita Gordus

REVIEW TEAM:

- Review Team Chair (559) 243-4153 Bill Solinsky
- Forest Practice Manager (559) 243-4114 Mike Bacca
- Archaeologist (559) 243-4119 Linda Pollack
- Archaeologist (916) 261-1108 Gerrit Fenenga
- Geologist (916) 322-4853 Bill Short
- Geologist (916) 327-2903 John Schlosser

OTHER AGENCIES:

Phone; Individual \_\_\_\_\_

REVIEW TEAM QUESTIONS

RPF - Please provide the following information prior to the PHI (if a PHI is required) and have the information available in writing for the CDF inspector prior to the PHI. Please also send a copy of your response to these questions to the review team in Fresno. Failure to send a copy of these responses to the Fresno office may result in delays of THP approval.

1. Please provide the USGS Quadrangle name(s) and date(s) under Item #8 on page 2 as per 14 CCR 1034(g) (1).
2. Please indicate under Item #13(c) whether or not the RPF is authorized by the Plan Submitter to submit amendments during the life of the plan.
3. Please include under Item #23, Winter Operating Plan, the 14 CCR 895.1 definitions of "Saturated Soil Conditions" and "Hard Frozen Conditions" for the benefit of the LTO.
4. Item #30 indicates that lopping will be used and provides the reference of "Lopping for Fire Hazard Reduction" by stating "to height of 30" or less." In addition please cite the 14 CCR 895.1 definition for "Lopping (for the Southern Forest District)", which states "Severing limbs from the exposed sides of the unutilized portion of trees so that portions of the severed limbs are in contact with ground."
5. Item #30(a) states that "logging slash shall be lopped within 100' of all public roads and within 50' of private seasonal roads open to the public", and Item #30(b) indicates "No" alternatives are proposed for slash treatment along roads. Item #31 appears to be in conflict as it states that "during operations landing slash generated from whole tree logging may be piled in the fire prevention zone within 100 feet of public roads." Please revise.
6. Item #31 indicates that "No" piling and burning will be used for hazard reduction, but then a description is provided indicating that it will. Please revise as necessary.
7. To comply with 14 CCR 1035.4, please identify under THP Item #38 who the Plan Submitter has designated to be the responsible person to notify the Department of start up of timber operations. Additionally, please identify the following as the Department's designated personnel for the notification.

Cal Fire Area Forester  
2 S. Forest Road  
Sonora, Ca 95370  
Phone (209) 532-3063  
Adam.Frese@fire.ca.gov

8. As per 14 CCR 1034(x)(1), "Boundaries of logging area (shall be shown on quadrangle map or its equivalent)". Please provide on at least one map the THP Boundary or Boundaries of Logging Area and associated map symbol in the legend.
9. THP Map 6 of 6 on page 33 shows plantation areas within two selection units in Section 11, and non-timber area within a selection unit in Section 3. If timber operations including skidding are planned in these areas they need to be included in the acreage of the plan.
10. The plan states on page 62 that the Biological Assessment Area (BAA) is the same as the watershed Assessment Area. The BAA should be established which would allow for the assessment of all species identified during the scoping process. The scoping for this THP has identified raptors including the Northern goshawk and the California spotted owl that are within the defined biological assessment area. As stated in Technical Rule Addendum #2, Biological assessment areas will vary with the species being evaluated and its habitat.

Typically, raptor species would be assessed for an area within 1 to 1.5 miles of the THP area, such as the Northern goshawk and California Spotted Owl. Mammals such as the Pacific fisher or California wolverine may have a home range considerably larger and would require an even larger assessment area. To complete scoping for potential special status plants, a nine quadrangle area should be used to scope for potential plants. In this case, the boundary of the THP and the watershed/biological assessment area is adjacent or well within a one mile radius of the THP. The goal of forest management is to maintain functional wildlife habitat within the planning watershed, and in addition assess if project activities directly or indirectly affect protected species. Please revisit the biological assessment to include an assessment area large enough to assess the plan's potential to impact all of the species identified during the scoping process. Please also include a map showing the boundaries of the biological assessment area.

11. Item 32(a) General Surveys For All Raptor Species - What level of survey is proposed for areas in which field work can not be scheduled during the May-August period? (DFG #1)
12. Item 32(a), Procedure Upon Discovery of Raptors or Raptor Nests - Who will determine the species of nesting raptor and whether it is listed or non-listed? Are the designated persons qualified to make the determination? (DFG #2)
13. Item 32(a), Goshawk (*Accipiter gentillis*) - Why are protocol goshawk surveys not proposed for the plan area when 92% of the watershed is suitable goshawk habitat (p. 97)? (DFG #3)
14. Item 32(a), 32(b), Goshawk and California spotted owl (*Strix occidentalis occidentalis*) - How will the SPI biologist determine the status of the historic territories? How large of an area will be searched? What survey protocols will be used? (DFG #4)

15. Item 32(a), Goshawk states that the SPI biologist will apply proper protection measures to the historic goshawk territory. Protection measures must be developed in consultation with the Department of Fish and Game and approved by the Director of CDF. (DFG #5)
16. Item 32(a), Plants - *Lomatium stebbinsii* is incorrectly identified as a CESA listed Rare plant. (DFG #6)
17. Item 32(a), Plants - The discussion of *Mimulus filicaulis* appears to be identical to the discussion of *M. pulchellus*. *M. filicaulis* is not currently known to occur in Calaveras County. (DFG #7)
18. Item 32(a), Plants - What protection measures are proposed for *Clarkia australis* and *C. biloba* ssp. *australis* should they be found on the plan area? (DFG #8)
19. Item 32(a), Plants - The information provided regarding plant surveys is insufficient to evaluate the effectiveness of the surveys. What survey methods were used, what personnel were involved and what are their qualifications? Are maps of identified habitat and survey routes available? Were reference sites and materials used? Are more detailed survey results, including an overall species list of plants encountered in the field available? (DFG #9)
20. Item 32(b) states that walk-through surveys for raptors are optional when harvesting occurs during the non-nesting period. How will active nest trees, screen trees, and perch trees be identified and protected if surveys do not take place? (DFG #10)
21. Item 32(b), Non-listed Raptors - Is it feasible to delay operations in the vicinity of nests until after fledging? (DFG #11)
22. Item 35 - Why is retention of less than 19 ft<sup>2</sup> of oak basal area per 40 acres proposed (one 16" diameter oak per 3 acres) when the Forest Practice Rules recommend retention of 400 ft<sup>2</sup> per 40 acres? (DFG #12)
23. The 1602 Addendum (p. 27) states a mulching specification of 80% coverage of areas of exposed soil larger than 800 square feet. The Streambed Alteration Agreement (SAA) which will be issued for this plan will likely specify 100% coverage of all areas of exposed soil associated with jurisdictional projects. This specification should be changed or deleted to maintain consistency between the THP and the SAA. (DFG #13)
24. Late Seral Cumulative Impacts Discussion (p. 111) - Late seral characteristics appear to be confused with "Late Successional Forest Stands" as defined in FPR section 895.1. Late seral characteristics are described in Technical Rule Addendum #2. These characteristics should be analyzed in the correct context. (DFG #14)

25. Late Seral and Late Seral Connectivity (P. 111) - The analysis is incorrectly focused at the THP area scale. Technical Rule Addendum #2 requires analysis at the Biological Assessment Area scale. Cumulative impacts to these resources should be analyzed at the correct scale. (DFG #15)

**CDF Inspector - respond to the following questions:**

- a. The request for exceptions to FPR 954.2(j) in the Site Preparation Addendum (p. 9) appears to state the standard rule incorrectly and the locations of the requested exception are not mapped in units 104 and 120 per 1034(x) (15). (DFG #1) *The standard rule is stated incorrectly, and the exception locations are not mapped. During the preharvest inspection (PHI), the RPF agreed to make the appropriate corrections. Please refer to CDF PHI recommendation #2. The proposed exception areas were evaluated during the PHI. No additional mitigation measures were recommended.*
- b. Peak Flow Effects (p. 92) - Could significant increases in peak flows result from the proposed THP at scales smaller than the planning watershed scale? For example the Little Beaver Creek or Crane Creek sub-watersheds? (DFG #2) *Approximately 249 acres are proposed for harvest under even-aged regeneration methods. Forest openings where snow can accumulate, and management activities that reduce vegetative water use have the potential to result in peak flow increases. During the PHI, I did not observe any site specific instances where peak flows would be significantly increased as a result of the proposed project. The plan proposes a combination of even and uneven aged silviculture. Roads observed within the plan area were generally well drained, and allowed for runoff to be directed off of the roads as much as possible. I did not observe long segments of in-sloped roads that would concentrate runoff. No additional mitigation measures were recommended regarding potential increases to peak flows.*
- c. Please contact Dan Applebee (209) 588-1879 or [dapplebee@dfg.ca.gov](mailto:dapplebee@dfg.ca.gov) to arrange a mutually agreeable PHI date. *Dan Applebee was contacted, and attended the PHI.*
- d. Please notify Chris Cochrane (916) 464-4820 of the PHI date. *Chris Cochrane was contacted, but was not able to attend the PHI.*
- e. Please notify CGS Bill Short (916) 322-4853 of the PHI date. *Bill Short was contacted, but was not able to attend the PHI.*
- f. Please notify Archaeologist Gerrit Fenenga (916) 261-1108 of the PHI date. *Gerrit Fenenga was notified, but was not able to attend the PHI.*
- g. Please notify Mike Bacca at (559) 243-4114 of the PHI date. *Mike Bacca was notified, but was not able to attend the PHI.*
- h. Please notify Bill Solinsky at (559) 243-4153 of the PHI date. *Bill Solinsky was notified, but was not able to attend the PHI.*

/s/ Solinsky

4-07-37/TUO-6 Cow Camp THP

TO: Candace Gregory, Southern Region Chief

DATE: 11-20-07

FROM: Mike Noonan Unit Chief

\*\*\*\*\*SECTION II\*\*\*\*\*

Check items that are applicable to the proposed THP.

YES	/	NO	/	NA	
x	/	/	/		- Silvicultural method appropriate?
x	/	/	/		- Does site index appear correct?
x	/	/	/		- EHR accurate?
/	/	/	/	x	- Unstable areas properly indicated?
x	/	/	/		- Winter operations appropriate (if proposed)?
/	/	/	/	x	- If winter operations are proposed in the future, should the amendment be considered "substantial"?
/	x	/	/		- Watercourse classifications accurate?
x	/	/	/		- Watercourse protection adequate?
x	/	/	/		- Meadow and wet area protection adequate?
x	/	/	/		- Road locations feasible?
x	/	/	/		- Erosion control adequate?
x	/	/	/		- THP map and addenda accurate?
/	/	/	/	x	- Are domestic water supplies adequately protected?
/	/	/	/	x	- Archeological information complete?

If any of the above answers are answered NO, provide explanation in PHI report.

/	x	/	/		- Special Treatment Area required?
/	x	/	/		- Does THP overlap an existing THP, or is stocking or completion outstanding on all or a portion of the proposed plan?
/	x	/	/		- Wild & Scenic River affected?
/	x	/	/		- Is THP adjacent to a state or national park? If so, was park contacted to attend preharvest inspection?
x	/	/	/		- Will a response to concerns be required from the RPF prior to approval to mitigate potential impacts?
x	/	/	/		- T & E plant or wildlife species affected?

PREHARVEST INSPECTION REPORT

1. Did weather conditions interfere with conducting the PHI?

Yes  No

2. a. Personnel attending the preharvest inspection were: On November 19, 2007 the following people attended the preharvest inspection (PHI):

Mike Vroman- RPF  
Tim Tate-SPI  
Clayton Code-SPI  
Kevin Roberts-SPI Biologist  
Dan Applebee-DFG  
Tom Tinsley-CDF  
Adam Frese-CDF

b. Personnel contacted regarding the preharvest inspection: The following people were notified of the PHI, but were not able to attend:

Linda Pollack- CDF ARCH  
Gerrit Fenenga-CDF ARCH  
Bill Short-CGS  
Chris Cochrane-WQ  
Mike Baca-CDF  
Bill Solinsky-CDF

3. Was Notice of Intent properly posted at timber harvesting plan site (14 CCR 1032.7)?

Yes  No (explain below)

A Notice of Intent was posted in a conspicuous location at the intersection of Forest Roads 5N02 (Boards Crossing Road) and 5N03, near the Beaver Creek Bridge. Forest Roads 5N02 and 5N03 are public roads.

4. If timber operations including road and landing construction or skidding will occur on adjacent ownerships, have the adjacent owners been added to the Timber Harvesting Plan and Notice of Intent as additional timberland owners?

YES  NO (explain below)  N/A

PROJECT DESCRIPTION

5. Has the project area been accurately described within the THP as per 14 CCR 1034 (jj)?

Yes  No If no, summarize below:

The description of the plan area provided on pages 36 and 37 of the plan is consistent with observations made during the PHI. Page 36 of the plan states the plan area is 579 acres in size. Section II of the plan states the actual harvest area is 567 acres, and 672 acres in size, including the "operational buffer" areas. Page 36 should be revised to reflect the actual plan acreage. Prior to Second Review, the RPF shall revise page 36

of the plan to specify the correct plan acreage (CDF PHI recommendation #1).

TIMBER STAND DESCRIPTION

6. Is the proposed harvest area zoned *Timber Production Zone* by the county [933.1(a)(7)]?  
 Unknown       Yes       No
7. Are timber stands correctly described in the Timber Harvesting Plan?  
 Yes       No (list corrections below)
8. Have timber site classes been correctly identified and accurately depicted [14 CCR 1034(x)(12)]? Consider even-aged regeneration method limitations, and differences in minimum stocking requirements.  
 Yes       No (explain below)

*The entire plan area has been appropriately identified as Site I timberland.*

SILVICULTURE

9. Are the silvicultural methods prescribed appropriate for stand conditions?  
 Yes       No (explain below)
10. For even-aged management: If a "regeneration step" harvest is proposed, will the provisions of 14 CCR 953.1(a) be met?  
 Yes       No       N/A

*Proposed even-aged regeneration units observed during the PHI were appropriate. Timber stands in these units appeared to consist of primarily shade tolerant species such as white fir and incense cedar. Very little regeneration was observed in proposed even-aged units. Mistletoe, dead tops etc. were observed in much of the white fir, and blister rust was observed on many of the sugar pines. The proposed even-aged regeneration units will be 20 acres in size or less, with the exception of Unit 59, which is 25 acres in size. The plan includes explanation and justification for this unit. The THP map(s) show Unit 88 is 22 acres in size. During the PHI, the RPF said the unit is only 20 acres in size, and the plan would be revised to reflect the change. Proposed even-aged regeneration units are separated by logical logging units. Existing plantations were observed next to Units 646 and 647. Existing plantations next to these units are well established and obviously average over five feet in height.*

11. For uneven-aged management: Are enforceable mitigation measures needed to ensure the establishment and/or maintenance of a balanced stand structure, and establishment of new reproduction?

No       Yes (explain below)       N/A

12. If Group B species are proposed for management [14 CCR 952.7(c)]: Will the site occupancy of Group A species be reduced relative to Group B species?

No  Yes  N/A

13. Comments/general observations regarding silviculture. A sample mark was observed in the proposed selection units. Trees from a variety of species, sizes, and ages were designated for harvest. Based on the sample mark, selection units are expected to be obviously stocked upon completion of timber operations. Superior phenotypes will be retained in the post harvest stands.

MAXIMUM SUSTAINED PRODUCTION OF HIGH QUALITY WOOD PRODUCTS

14. Does the THP comply with goals of 14 CCR 953.10 to restore, enhance, and maintain the productivity of the state's timberlands?

Yes  No (explain below)

15. Will any growing stock be harvested in a manner which significantly delays reaching or maintaining MSP [14 CCR 953]?

No  Yes (explain below)

16. Does the THP comply with the MSP requirements of 14 CCR 953.11?

Yes  No (explain no answer to option "C" below, and explain yes or no answer if using option A or

B)

Will the post-harvest stand:

- a. Obviously satisfy minimum stocking requirements(countable trees only)?

Yes  No  N/A

- b. Contain required numbers of seed trees (if required)?

Yes  No  N/A

- c. Contain leave trees that are of good form (at least 30% live crown ratio with pointed tops) and that are capable of good future growth capacity?

Yes  No  N/A

- d. Leave trees are uniformly distributed throughout the area?

Yes  No  N/A

- e. Contain a species mixture similar to preharvest and/or favoring high-value species?

Yes  No  N/A

- f. Post-harvest average stand diameters are larger than preharvest (for thinning prescriptions)?

Yes  No  N/A

- g. A regeneration and site preparation plan has been submitted, where required, that is sufficient to ensure prompt regeneration of the site?

Yes       No       N/A

- h. Stand information was verified by:

Ocular       Sample Plots       Cactos/Cryptos  
 Other (explain below)

- i. Stands have been marked as follows (including stump mark if necessary):

All Trees       None       Percent       N/A  
 Cut Tree       Leave Tree

*Trees have been designated for harvest with blue paint in the selection units. Trees have been designated for retention with orange paint in visual retention units. Groups have been designated for retention within visual retention units with blue and yellow flagging.*

Was the mark representative and sufficient to evaluate the prescription?

Yes       No       N/A

- j. Will additional marking, to be approved by CDF, be required prior to the start of operations?

No       Yes (explain below)

#### HARVESTING OPERATIONS

17. Are exceptions or alternative practices proposed that are not fully explained and justified? If yes, discuss potential impacts and recommendations below:

No       Yes (explain below)       N/A

*The plan proposes an exception to the requirements of 14 CCR 952.4(j) regarding the use of heavy equipment on steep slopes for site preparation. The exception to 952.4(j), found on page 9 of the plan, states the standard rule incorrectly. As noted in First Review Team questions, 14 CCR 1034(x)(15) requires the RPF to map areas where tractor use is proposed beyond the limitations of the standard rule. Slopes greater than 50% have been mapped in Units 59 and 103. Tractor exception areas are also located in Units 104 and 120. The proposed exception is appropriate based on observations made during the PHI; however, the plan needs to be revised to correctly state the standard rule, and to map the proposed exception areas. Prior to Second Review, the RPF shall revise the plan to correctly reference the requirements of 14 CCR 952.4(j), and shall revise the THP map(s) to show the location of tractor exception areas (CDF PHI recommendation #2).*

18. Are tractor operations proposed on: [14 CCR 934.2(f)(1)]?

- a.  No  Yes Slopes >65%.
- b.  No  Yes Slopes >50% with a HIGH or EXTREME EHR?
- c.  No  Yes Slopes >50% that lead without flattening to sufficiently trap sediment before reaching a watercourse or lake?

If yes to a, b, or c above:

- d. Is such tractor use appropriate?

Yes  No (explain)  N/A

- e. In your opinion, has the RPF met the standards of 954.2(f)(3) with a clear explanation, and justification as to why the application of the standard rule is either not feasible, or would not comply with 14 CCR 954?

Yes  No (explain)  N/A

Tractor yarding operations are proposed on slopes greater than 50%, where the erosion hazard rating is "high" in Units 59, and 104. Both of these units contain existing skid trails that are stable. I did not observe any erosion problems associated with skid trails in either unit. In both units, areas of slopes greater than 50% can be efficiently yarded using the existing trails. The plan needs to be revised to address this exception to the standard rule, and provide instructions to the LTO regarding restricting tractors to existing skid trails on slopes greater than 50% where the erosion hazard rating is "high". Prior to Second Review, the RPF shall revise the plan to address the use of ground based yarding equipment on slopes greater than 50% where the erosion hazard rating is "high" (CDF PHI recommendation #3).

19. Will tractor operations be limited to existing tractor roads that do not require reconstruction on slopes between 50 and 65% where the EHR is moderate [14 CCR 954.2(f)(2)]?

Yes  No (answer a & b below)  N/A

- a. Is such tractor use appropriate?

Yes  No (explain)  N/A

- b. In your opinion, has the RPF met the standards of 14 CCR 954.2(f)(3) with a clear explanation, and justification as to why the application of the standard rule is either not feasible, or would not comply with 14 CCR 934?

Yes  No (explain)  N/A

Please see the discussion above, and refer to CDF PHI recommendation #3.

20. Did the RPF flag tractor roads prior to the PHI as required by 14 CCR 954.2(f)(3)?

Yes  No (explain below)  N/A

New skid trails are not proposed on slopes greater than 50%.

21. Comments/general observations regarding harvesting operations. The proposed plan area has been tractor logged in the past, and is well suited for ground based yarding equipment. One skid trail was observed to the southwest of Crossing 59.13, outside of the proposed plan area, but within 100 feet of the plan and appurtenant road. This trail should be shown on the THP map(s) as a designated skid trail. Prior to Second Review, the RPF shall revise the THP map(s) to show the location of the designated skid trail the southwest of Crossing 59.13 (CDF PHI recommendation #4).

#### ROADS AND LANDINGS

22. Have all THP roads and landings and all appurtenant roads been correctly located and classified on the THP map?  
 Yes       No (explain below)       N/A
23. Are any exceptions or alternative practices proposed that do not meet the standards outlined in the rules for exceptions or alternative practices?  
 No       Yes (explain below)       N/A
- THP sufficient to protect resource values?  
 Yes       No (explain below)       N/A

25. Comments/general observations regarding roads and landings. Two temporary road segments are proposed. Both proposed roads were evaluated during the PHI. The proposed roads primarily follow existing skid trails. The proposed road segments do not cross steep side slopes, and have relatively gentle grades. Portions of the roads located within even-age units will be obliterated during site preparation. The new roads do not involve any watercourse crossings. No additional mitigation measures were recommended regarding road construction.

#### WATERCOURSE PROTECTION

26. Have watercourses been correctly described and classified within the THP?  
 Yes       No (explain below)       N/A

Watercourses observed during the PHI had been correctly described and classified with one exception. The watercourse in the northern portion of Unit 59, associated with Map Point 59.12, has been classified as a Class II watercourse. The watercourse segment between Crossing 59.12 and Beaver Creek has a gentle gradient, and no barriers exist to prohibit the passage of fish. Approximately 20 feet above 59.12 the gradient increases, and the presence of fish is not likely above this point. It is appropriate to classify the watercourse from Beaver Creek to approximately 20 feet above 59.12 as a Class I watercourse, because it is possible that fish are seasonally present. The Humboldt crossing proposed at 59.12 needs to include a culvert to allow for the passage of fish. Prior to Second Review, the RPF shall revise the plan to classify the northernmost watercourse in Unit 59 as a Class I watercourse, from Beaver Creek to approximately 20 feet southeast of Crossing 59.12. Prior to Second Review, the RPF shall

revise the plan to specify the proposed Humboldt crossing at 59.12 shall include a culvert of sufficient size to accommodate the estimated flow and allow for the passage of fish (CDF PHI recommendation #5).

7. Are there any in-lieu or alternative practices proposed that do not meet the standards outlined in the rules for in-lieu or alternative practices?

No  Yes (explain below)  N/A

Pages 17 and 18 of the plan describe two proposed in-lieu practices regarding the use of heavy equipment within a WLPZ. An existing landing and an existing skid trail are proposed for use within the WLPZ of a Class II watercourse. Both the landing and the skid trail were evaluated during the inspection. The landing is stable, and is approximately 43 feet from the watercourse. No additional mitigation measures were recommended regarding the use of the existing landing. The skid trail within the WLPZ is stable and well drained. Brow logs will be used to prevent accidental side cast. The entire trail within the WLPZ will be mulched. No additional mitigation measures were recommended regarding the skid trail within the WLPZ.

28. Are proposed protection measures for watercourses, lakes and wet areas adequate to protect the beneficial uses of water and riparian habitat?

Yes  No (explain below)  N/A

29. Are watercourse crossings necessary, appropriate and properly located?

Yes  No (explain below)  N/A

Watercourse crossings will be necessary to facilitate the proposed timber operations. Watercourse crossings were evaluated during the PHI. The following changes were recommended regarding watercourse crossings as a result of the PHI:

The existing culvert accommodating the Class II watercourse in Unit 648 is about a foot too short, and minor erosion to the fill slope of the road was observed. Construction of a berm along the outside edge of the road at this location is expected to minimize further erosion at the site. Prior to Second Review, the RPF shall revise the plan to specify a berm shall be constructed along the outside edge of the road to prevent runoff from being concentrated onto the fill slope above the culvert in Unit 648 (CDF PHI recommendation #6).

An old box culvert will be replaced with a 42-inch diameter culvert at THP Map Point 104.8. The proposed culvert installation is appropriate; however, the plan should specify the inlet and outlet of the new culvert will be armored with rock. Prior to Second Review, the RPF shall revise the plan to specify the inlet and outlet of the proposed culvert at THP Map Point 104.8 shall be rip rapped in accordance with the specifications listed on page 27 of the plan (CDF PHI recommendation #7).

A 24-inch diameter culvert is proposed at THP Map Point 59.11 to accommodate a Class II watercourse. An existing inside ditch and waterbreak are currently draining this location. The areas above and below the road are springy. During the PHI, the RPF proposed to construct two rocked fords at this location, rather than one culvert. One rocked ford

would be constructed at the existing waterbreak, and another would be constructed at what appears to be the natural channel, approximately 50 feet northeast of the existing waterbreak. The RPF's revised proposal is a better alternative. Prior to Second Review, the RPF shall revise the plan to specify THP Map Point 59.11 shall consist of two rocked fords, one at the existing crossing, and another approximately 50 feet to the northeast. The rocked fords shall be constructed with 4-inch by 6-inch rock, with a cap of drain rock to provide a running surface (CDF PHI recommendation #8).

THP Map Point 107.6 is a road drainage mitigation point. The existing road was built down a swale, and road drainage is problematic. Erosion to the road surface was observed. The plan proposes the construction of an inside ditch to accommodate the runoff, and direct runoff from the road surface. The proposed road mitigation is appropriate; however, due the amount of concentrated runoff, a rocked energy dissipator is appropriate at the outlet of the ditch. During the inspection, the addition of a 10-foot long, rocked energy dissipator at the outlet of the inside ditch was recommended. Prior to Second Review, the RPF shall revise the plan to specify a 10-foot long, rocked energy dissipator shall be constructed at the outlet of the proposed inside ditch at Map Point 107.6 (CDF PHI recommendation #9).

THP Map Point 59.5 consists of an existing Class II crossing, and some road mitigation work. During the PHI, development of an in-channel waterhole was discussed at this location. The site is a good location for a waterhole. The following revisions were agreed to: The site shall consist of an in channel waterhole, including a two-inch diameter bypass flow pipe. The existing 18-inch diameter culvert shall be removed and replaced with a new 18-inch diameter culvert. The proposed inside ditch and road rocking described in the plan shall remain unchanged. Prior to Second Review, the RPF shall revise the plan to include the construction of an in-channel waterhole at Map Point 59.5. The waterhole shall include a two-inch diameter bypass flow pipe, the removal of the existing culvert, and the installation of a new 18-inch diameter culvert (CDF PHI recommendation #10).

A culvert is proposed at Crossing 70.2 to accommodate a Class II watercourse. The watercourse was dry at the time of the inspection. The watercourse has diverted down the existing road for a short distance. The proposed culvert installation is appropriate; however, the outlet of the proposed culvert will discharge onto the surface of an existing spur road below the mapped road. Construction of a rocked dip at the outlet of the proposed culvert will minimize potential erosion at this site. Prior to Second Review, the RPF shall revise the plan to specify a rocked dip shall be constructed at the outlet of the culvert at THP Map Point 70.2. The rocked dip shall be at least three feet deep, and ten feet in width (CDF PHI recommendation #11).

a. Are watercourse crossings to be used when water is present?

No  Yes (explain below)

The plan proposes the use of watercourse crossings when water is present. The plan provides clear, enforceable instructions to the LTO to prevent equipment to come in contact with flowing water.

30. Are winter operations appropriate?

Yes       No (explain below)       N/A

31. If winter operations are appropriate, are additional mitigations needed to protect the beneficial uses of water?

No       Yes (explain below)       N/A

A long segment of road is in the WLPZ of Little Beaver Creek. This road segment is identified as a WLPZ road on THP Maps 4 of 6, and 6 of 6. The road is in good condition, and is well drained with waterbreaks; however, due to its proximity to Little Beaver Creek, as Class I watercourse, it is appropriate to prohibit the use of this road during the winter period. Prior to Second Review, the RPF shall revise the plan to specify the WLPZ road on the northwest side of Little Beaver Creek, shall not be used for timber operations during the winter period (CDF PHI recommendation #12).

32. Have the downstream domestic water supply notification requirements been properly met (14 CCR 1032.10)?

Yes       No (explain below)       N/A

Please refer to pages 124 through 126 of the plan.

33. Is this THP in a watershed declared "sensitive" by the Board of Forestry?

No       Yes (If yes, provide discussion below.)

34. Comments/general observations regarding watercourse protection. In general, watercourses have been appropriately classified and provided protection measures that comply with the California Forest Practice Rules. As a result of the proposed timber harvest operations, several watercourse crossings, and road drainage problems will be improved. Item 18 and page 14 of the plan conflict regarding the stabilization of exposed soil at the approaches to watercourse crossings. During the PHI, I requested the plan be revised to specify that exposed soil on the approaches to Class I, Class II, and Class III watercourses be treated with straw mulch or logging slash. Exposed soil on approaches to watercourse crossings has a high potential for delivery. Prior to Second Review, the RPF shall revise the plan to specify exposed soil on the approaches to watercourse crossings of Class I, Class II, and Class III watercourses shall be effectively stabilized with straw mulch or logging slash (CDF PHI recommendation #13).

#### GEOLOGY, EROSION HAZARD RATING & HAZARD TREATMENT

35. Have soils within the THP area been correctly classified?

Yes       No (explain below)       N/A

36. Has the erosion hazard rating for soils within the operating area been correctly calculated, as per Technical Rule Addendum #1?

Yes       No (explain below)       N/A

Conditions observed in the field during the PHI are consistent with the erosion hazard ratings assigned by the RPF.

37. Are operations proposed on unstable areas not fully explained and justified in the THP?

No  Yes (explain below)  N/A

The RPF has not identified any unstable areas within the proposed plan area. During the PHI, I did not observe any unstable areas within the proposed timber harvest area.

38. Are proposed hazard reduction mitigations sufficient to prevent buildup of insect populations thus preventing the spread of disease?

Yes  No (explain below)  N/A

39. Will proposed hazard reduction mitigations be sufficient to reduce risk to nearby structures and provide defensible space around buildings and along roads?

Yes  No (explain below)  N/A

40. Comments/general observations regarding geology, EHR and hazard treatment. The erosion hazard ratings assigned by the RPF are consistent with observations made during the PHI. While traversing the plan area, very little evidence of erosion was observed on roads and skid trails. Where erosion was observed, the plan proposes effective mitigation measures to stop further erosion. I did not observe any unstable areas during the PHI, and none were identified by the RPF. No additional mitigation measures were recommended regarding hazard reduction.

#### ARCHAEOLOGY

NOTE: IF CONFIDENTIALITY IS REQUIRED OF YOUR RESPONSE, PLEASE PROVIDE THE RESPONSE ON A SEPARATE PAGE MARKED "CONFIDENTIAL".

41. Does the RPF's archaeological survey appear adequate based upon spot checks of potentially sensitive areas?

Yes  No (explain below)  N/A

42. If sites are present, are the archaeological site descriptions and/or site records accurate with regard to site size, content, and mapped location?

Yes  No (explain below)  N/A

43. If sites are present, is the proposed archaeological site protection adequate to prevent significant adverse impacts?

Yes  No (explain below)  N/A

44. Comments/general observations regarding archaeology. No archaeological sites have been identified within the proposed plan area. During the PHI, I did not observe any historic or prehistoric sites.

#### WILDLIFE, FISHERIES, AND PLANTS

45. Are any state or federal (T&E) listed species or habitat present in

the THP area?

No  Yes (explain below)

The plan area contains habitat for the Northern Goshawk (*Accipiter gentiles*). Northern Goshawks are known to nest near the plan area; however, there are not any known nest sites within the proposed plan area. The plan includes protection measures for this species in the event an occupied nest is discovered during timber operations.

The proposed plan area, including the 100 foot "operational buffer", provides potential habitat for several sensitive plant species. Several species were surveyed for, but the plan states that additional surveys will be conducted during the appropriate blooming period. During the PHI, I recommended the RPF include the results of the surveys into the plan as an amendment regardless of the outcome of the surveys. Prior to Second Review, the RPF shall revise the plan to specify the results of future botanical surveys shall be included in the plan as an amendment, regardless of the outcome of the surveys (CDF PHI recommendation #14).

46. Is a CESA or FESA consultation required? If questionable, contact DFG for assistance.

No  Yes (explain below)

47. Have impacts to wildlife and plants, including listed and non-listed species, been correctly assessed within the THP and appropriate protection provided?

Yes  No If not, discuss and list recommendations below:

First Review Team question #10 requests the RPF to provide additional scoping for wildlife species within a 1 to 1.5 mile radius of the proposed plan area. The issue was discussed during the PHI, and the RPF agreed to revise the discussion on page 95 of the plan to include additional scoping within a mile of the proposed plan.

48. Is late successional forest present on this THP (14 CCR 959.16)?

No  Yes (explain below)

Late succession forest stands, as defined by 14 CCR 895.1, are not present within the proposed plan area.

49. If late successional forest is present and proposed for harvesting, will such harvest significantly reduce the amount and distribution of late succession forest stands, or their functional wildlife habitat value so it constitutes a significant adverse impact of the environment as defined in Section 895.1?

No  Yes (explain below)  N/A

50. Are coho salmon considerations applicable to this plan?

No (Go TO 59)  Yes If yes, answer questions 51-58.  
Explain all No and N/A responses in  
Comments/General Observations.

51. Are proposed protection measures (zones and widths) for all watercourses adequate for the protection of coho salmon habitat?

Yes  No  N/A

52. Is proposed total vegetation retention in the first 25 feet of the WLPZ of the post-harvest stand sufficient to provide shade cover over watercourses and maintain water temperatures? What is the percentage of shade cover over Class I and II watercourses?

Percentage of Shade Cover:

Yes  No  Preharvest  Post Harvest

53. If water temperatures were taken during the PHI or temperature information was supplied by the RPF, is water temperature relative to coho habitat within the preferred temperature range?

Yes  No  N/A

54. Will the post-harvest stand in the WLPZ provide for adequate recruitment of large woody debris on Class I and II watercourses?

Yes  No  N/A

55. Are proposed erosion control and soil stabilization measures for the following adequate to protect coho habitat?

a. Operations in the WLPZ (roads, landings, or tractor operations)?

Yes  No  N/A

b. Watercourse crossings (permanent and temporary)?

Yes  No  N/A

c. Winter operations?

Yes  No  N/A

d. Site preparation?

Yes  No  N/A

56. Are protection measures adequate to deal with adverse impacts from significant rain events, even during the non-winter period?

Yes  No

57. Are protection measures adequate to prevent significant adverse impacts on downstream flows from water drafting operations?

Yes  No  N/A

58. Will chemical treatments (herbicides, pesticides, or road treatments) be applied?

No  Yes If yes, answer a.

- a. Is an adequate buffer provided to assure nutrient sources are not supplied to watercourses?

Yes  No

59. Comments/general observations regarding wildlife and fisheries. Potential impacts to biological resources have been evaluated in the plan, and the RPF has proposed protection measures to minimize or avoid potential impacts to wildlife and plants. During the PHI, additional mitigation measures were recommended to further minimize or avoid the potential for the proposed timber harvest to result in a significant adverse impact. Mr. Dan Applebee of the Department of Fish and Game recommended walk through surveys for raptors be conducted for all even-age units prior to harvest, regardless of the timing of the harvest. Please refer to Mr. Applebee's PHI report for more information regarding this recommendation. *Clarkia australis* and *Clarkia biloba ssp. Australis* may exist within the plan area. These species were surveyed for, but additional surveys will be conducted. The plan does not specify how these species will be protected if they are identified. During the PHI, Dan Applebee recommended an equipment exclusion zone, but said directional felling of trees, away from the plants, within the EEZ would be appropriate for the *Clarkia* species. Please refer to Mr. Applebee's PHI report for more information.

I did not observe very much oak within the proposed plan area. Most units appeared to contain one or two oaks. Unit 120 had an abundance of black oak, and wildlife retention areas were centered on concentrations of oak. In order to maintain oaks in the post harvest stands, Mr. Applebee recommended, with the exception of Unit 120, 75% of oaks greater than 12-inches dbh be retained. Please refer to Mr. Applebee's PHI report for more information.

#### CUMULATIVE IMPACTS

60. Are resource assessment areas appropriate?

Yes  No (explain below)  N/A (for modified THP)

The resource assessment areas discussed on pages 62 and 63 of the plan are appropriate, with the exception of the Wildlife Assessment Area. The RPF agreed to revise the Wildlife Assessment Area to include additional scoping within one mile of the plan area.

61. Has the RPF correctly assessed the potential for significant cumulative impacts upon resource values within the assessment areas?

Yes  No (explain below)  N/A

The RPF has assessed the potential for the proposed timber harvest operations to result in a significant adverse cumulative effect. Based on conditions observed during the inspection, I agree with the RPF's conclusion that the proposed operations will not result in a significant adverse cumulative impact. The plan proposes a combination of even-aged and uneven-aged silviculture. The proposed silviculture was evaluated during the inspection, and is appropriate. During the inspection, and on previous inspections within the watershed, I observed timber stands of

various stages of development, ranging from young plantations to mature forest stands. On a watershed level, this provides a diverse structure providing habitat for a variety of species. The plan proposes protection measures for wildlife which, in conjunction with additional mitigation measures recommended during the inspection, are expected to avoid potential adverse impacts to wildlife, or minimize them to a level of insignificance. As a result of the proposed timber operations, existing watercourse crossings and road drainage problems will be improved, minimizing potential sediment delivery to watercourses. Watercourses have been correctly classified, and the plan proposes watercourse protection measures that comply with the Forest Practice Rules.

62. Has the RPF accurately listed all known past/present/future projects within the assessment area?

Yes       No (explain below)       N/A

Past, present and future projects have been addressed on pages 60 and 61 of the plan. Past plans have been mapped on pages 129 through 36 of the plan.

\*\*\*\*\*SECTION III\*\*\*\*\*

OTHER CONCERNS

63. Are there other concerns which are not covered under the subject areas listed above in PHI Report Items 1-62?

No       Yes (explain below)

THP symbol for the proposed in-lieu practices and water inventory points are the same on THP Map 2 of 6. For operational clarity, the map should be revised. Prior to Second Review, the RPF shall revise the THP map(s) to eliminate overlapping use of symbols (CDF PHI recommendation #15).

64. Was a focused PHI conducted?

No       Yes If yes, note general comments and observations below in Item 66.

RESPONSES TO PUBLIC CONCERNS

65. Has the public raised concerns regarding the proposed harvest? If yes, list concerns and provide responses below:

No       Yes (explain below)

66. Comments/general observations to other and public concerns. At the time this PHI report was prepared, I had not received any written public comment regarding the proposed project.

\*\*\*\*\*SECTION IV\*\*\*\*\*

PHI REPORT RESPONSE

Registered Professional Forester's response to the CDF preharvest inspection recommendations for:

THP or Amendment # 4-07-037/TUO-6

Date: 11/27/2007

1. Prior to Second Review, the RPF shall revise page 36 of the plan to specify the correct plan acreage.
2. Prior to Second Review, the RPF shall revise the plan to correctly reference the requirements of 14 CCR 952.4(j), and shall revise the THP map(s) to show the location of tractor exception areas.
3. Prior to Second Review, the RPF shall revise the plan to address the use of ground based yarding equipment on slopes greater than 50% where the erosion hazard rating is "high".
4. Prior to Second Review, the RPF shall revise the THP map(s) to show the location of the designated skid trail the southwest of Crossing 59.13.
5. Prior to Second Review, the RPF shall revise the plan to classify the northernmost watercourse in Unit 59 as a Class I watercourse, from Beaver Creek to approximately 20 feet southeast of Crossing 59.12. Prior to Second Review, the RPF shall revise the plan to specify the proposed Humboldt crossing at 59.12 shall include a culvert of sufficient size to accommodate the estimated flow and allow for the passage of fish.
6. Prior to Second Review, the RPF shall revise the plan to specify a berm shall be constructed along the outside edge of the road to prevent runoff from being concentrated onto the fill slope above the culvert in Unit 648.
7. Prior to Second Review, the RPF shall revise the plan to specify the inlet and outlet of the proposed culvert at THP Map Point 104.8 shall be rip rapped in accordance with the specifications listed on page 27 of the plan.
8. Prior to Second Review, the RPF shall revise the plan to specify THP Map Point 59.11 shall consist of two rocked fords, one at the existing crossing, and another approximately 50 feet to the northeast. The rocked fords shall be constructed with 4-inch by 6-inch rock, with a cap of drain rock to provide a running surface.
9. Prior to Second Review, the RPF shall revise the plan to specify a 10-foot long, rocked energy dissipator shall be constructed at the outlet of the proposed inside ditch at Map Point 107.6.
10. Prior to Second Review, the RPF shall revise the plan to include the construction of an in-channel waterhole at Map Point 59.5. The waterhole shall include a two-inch diameter bypass flow pipe, the removal of the existing culvert, and the installation of a new 18-inch diameter culvert.



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