

1                    **Coho Salmon Incidental Take Assistance, 2007**

2  
3 California Code of Regulations, Title 14, Division 1, Subdivision 3,  
4 Chapter 6 Regulations for Implementation of the California Endangered  
5 Species Act, Article 3. Incidental Take Permit Guidelines for Timber  
6 Operations

7                    **[45 Day Notice Published May 11, 2007]**

8  
9 **Amend 14 CCR § 895.1. - Definitions**

10 **\*\*\*\*\*Watercourse or Lake Transition Line**

11        **(a)** for a watercourse with an unconfined channel (a channel with  
12 a valley to width ratio at bankfull stage of 4 or greater) means that  
13 line defined by the landward margin of the most active portion of the  
14 channel zone area readily identified in the field by riverine hardwood  
15 and conifer trees at least twenty-five (25) years in age at breast  
16 height.

17        **(b)** for a watercourse with a confined channel means that line  
18 that is the outer boundary of a watercourse's 20-year return interval  
19 flood event floodplain. This outer boundary corresponds to an  
20 elevation equivalent to twice the maximum depth of the adjacent riffle  
21 at bankfull stage. The bankfull stage elevation shall be determined by  
22 field indicators and may be verified by drainage area/bankfull  
23 discharge relationships.

24        **(c)** for a lake, it is that line closest to the lake where  
25 riparian vegetation is permanently established.

26                    **Watersheds with Coho Salmon** means any planning watershed(s) where  
27 coho salmon (*Oncorhynchus kisutch*) have been documented by the  
28 Department of Fish and Game to be present during or after 1990.

29 In Watersheds with Coho Salmon, the following definitions apply:

30                    **Connected Headwall Swale** means a geomorphic feature  
31 consisting of a concave depression, with convergent slopes typically

1 of 65 percent or greater, that is connected to a watercourse or lake  
2 by way of a continuous linear depression. A linear depression  
3 interrupted by a landslide deposit is considered to be continuous.

4 **Hydrologic Disconnection** means the removal of direct  
5 routes of drainage or overland flow of road runoff to a watercourse or  
6 lake by directing drainage or overland flow onto stable portions of  
7 the forest floor to dissipate energy, facilitate percolation, and  
8 resist or prevent erosion or channelization.

9 **Inside Ditch Hydraulic Capacity** means the ability of  
10 an inboard ditch to contain flow from a runoff event without  
11 overflowing to the road surface or substantially downcutting the  
12 inboard ditch.

13 **Road Decommissioning** means the temporary or permanent  
14 abandonment of a road prism and associated landings resulting in  
15 maintenance-free drainage and erosion control. This includes removal  
16 or stabilization of drainage structures and fills, as well as unstable  
17 road and landing fills, hydrologic disconnection of the road prism,  
18 stabilization of exposed excavated areas or material, and application  
19 of measures to prevent and control erosion.

20 **Road Maintenance** means activities used to maintain and  
21 repair roads involving minor manipulation of the road prism to produce  
22 a stable operating surface and to ensure road drainage facilities,  
23 structures, cutbanks and fillslopes are kept in a condition to protect  
24 the road, minimize erosion, and to prevent sediment discharge into a  
25 watercourse or lake. Examples of road maintenance include shaping

1 and/or rocking a road surface; installation and maintenance of rolling  
2 and critical dips; restoring functional capacity of inboard ditches,  
3 cross drains, or culverts; and repairing water bars.

4 **Road Prism** means all parts of a road including cut  
5 banks, ditches, road surfaces, road shoulders, and road fills.

6 **Scour** means the process of erosion by flowing water.

7 **Sediment Filter Strip** means a structure or vegetation  
8 that substantially prevents concentration, transport, and delivery of  
9 sediment to a watercourse or lake by reducing velocity and filtering  
10 water through features such as gradual slopes treated with vegetation,  
11 gentle slopes, woody debris and mulch or settling basins.

12 **Stable Operating Surface** means a road or landing  
13 surface that can support vehicular traffic and that routes water off  
14 of the road surface or into drainage facilities without concentrating  
15 flow in ruts (tire tracks), pumping of the road bed, or ponding flow  
16 in depressions. A stable operating surface shall include a  
17 structurally sound road base appropriate for the intended use. The  
18 number, placement, and design of drainage facilities or drainage  
19 structures on a stable operating surface prevents the transport of  
20 fine-grained materials from the road or landing surface into  
21 watercourses in quantities deleterious to the beneficial uses of  
22 water.

23 **Watercourse Sideslope** means the hillslope immediately  
24 adjacent to a watercourse or lake measured from the watercourse or  
25 lake transition line to a point 100 feet upslope.

1                    **Watercourse Sideslope Class** means the steepness of the  
2 watercourse sideslope categorized into one of three classes: <30  
3 percent, 30 percent - 50 percent, >50 percent). Where watercourse  
4 sideslope configurations are variable, a weighted average of the  
5 percent slope shall be used to determine the watercourse sideslope  
6 class. The weighted average shall be calculated based on distances of  
7 200 feet or less along the watercourse.

8                    **Watersheds with threatened or impaired values** means any planning  
9 watershed where populations of anadromous salmonids that are listed as  
10 threatened, endangered, or candidate under the State or Federal  
Endangered Species Acts with their implementing regulations, are  
currently present or can be restored.\*\*\*\*\*

11 Note: Authority cited: Sections 4551, 4551.5, 4553, 4561, 4561.5,  
12 4561.6, 4562, 4562.5, 4562.7 and 4591.1, Public Resources Code.  
Reference: Sections 4512, 4513, 4526, 4551, 4551.5, 4561, 4561.6,  
13 4562, 4562.5, 4562.7, 4583.2, 4591.1, 21001(f), 21080.5, 21083.2 and  
21084.1, Public Resources Code; CEQA Guidelines Appendix K (printed  
14 following Section 15387 of Title 14 Cal.Code of Regulations), and  
*Laupheimer v. State* (1988) 200 Cal.App.3d 440; 246 Cal.Rptr. 82.

15  
16 **Amend 14 §§ 916.9, 936.9, 956.9 Protection and Restoration in**  
17 **Watersheds with Threatened or Impaired Values [All Districts]**

18  
19                    In addition to all other district Forest Practice Rules, the  
20 following requirements shall apply in any planning watershed with  
21 threatened or impaired values, except in watersheds with coho salmon  
22 where the standards listed under 916.9.1 and 916.9.2 shall apply:\*\*\*\*\*

23 \*\*\*\*\* (y) This section shall expire on December 31, 2008.

24 Note: Authority cited: Sections 4551, 4562.7 and 21000(g), Public  
Resources Code. Reference: Sections 751, 4512, 4513, 4551.5,  
25 21000(g), 21001(b) and 21002.1, Public Resources Code; Sections 100,  
1243, 13050(f) Water Code; and Sections 1600 and 5650(c), Fish and  
Game Code.

1 **Adopt New 916.9.1 and 936.9.1 Protection Measures in Watersheds with**  
2 **Coho Salmon**

3 In addition to all other district Forest Practice Rules, the  
4 following requirements shall apply in any planning watershed with coho  
5 salmon:

6 (a) GOAL - Every timber operation shall be planned and conducted  
7 to prevent deleterious interference with the watershed conditions that  
8 primarily limit the values set forth in 14 CCR 916.2 [936.2](a) (e.g.,  
9 sediment load increase where sediment is a primary limiting factor;  
10 thermal load increase where water temperature is a primary limiting  
11 factor; loss of instream large woody debris or recruitment potential  
12 where lack of this value is a primary limiting factor; substantial  
13 increase in peak flows or large flood frequency where peak flows or  
14 large flood frequency are primary limiting factors). To achieve this  
15 goal, every timber operation shall be planned and conducted to meet  
16 the following objectives where they affect a primary limiting factor:

17 (1) Comply with the terms of a Total Maximum Daily Load  
18 (TMDL) that has been adopted to address factors that may be affected  
19 by timber operations if a TMDL has been adopted, or not result in any  
20 measurable sediment load increase to a watercourse system or lake.

21 (2) Not result in any measurable decrease in the stability  
22 of a watercourse channel or of a watercourse or lake bank.

23 (3) Not result in any measurable blockage of any aquatic  
24 migratory routes for coho salmon or listed species.  
25

1           (4) Not result in any measurable stream flow reductions  
2 during critical low water periods except as part of an approved water  
3 drafting plan pursuant to 14 CCR 916.9.1(r) [936.9.1(r)].

4           (5) Consistent with the requirements of 14 CCR § 916.9.1(i)  
5 or 14 CCR § 936.9.1(i); protect, maintain, and restore trees  
6 (especially conifers), snags, or downed large woody debris that  
7 currently, or may in the foreseeable future, provide large woody  
8 debris recruitment needed for instream habitat structure and fluvial  
9 geomorphic functions.

10           (6) Consistent with the requirements of 14 CCR § 916.9.1(g)  
11 or 14 CCR § 936.9.1(g); protect, maintain, and restore the quality and  
12 quantity of vegetative canopy needed to: (A) provide shade to the  
13 watercourse or lake, (B) minimize daily and seasonal temperature  
14 fluctuations, (C) maintain daily and seasonal water temperatures  
15 within the preferred range for coho salmon or listed species where  
16 they are present or could be restored, and (D) provide hiding cover  
17 and a food base where needed.

18           (7) Result in no substantial increases in peak flows or  
19 large flood frequency.

20           (b) Pre-plan adverse cumulative watershed effects on the  
21 populations and habitat of coho salmon shall be considered. The plan  
22 shall specifically acknowledge or refute that such effects exist.  
23 Where appropriate, the plan shall set forth measures to effectively  
24 reduce such effects.

25           (c) Any timber operation or silvicultural prescription within 150

1 feet of any Class I watercourse or lake transition line or 100 feet of  
2 any Class II watercourse or lake transition line shall have  
3 protection, maintenance, or restoration of the beneficial uses of  
4 water or the populations and habitat of coho salmon or listed aquatic  
5 or riparian-associated species as significant objectives.

6 Additionally, for evenaged regeneration methods and rehabilitation  
7 with the same effects as a clearcut that are adjacent to a WLPZ, a  
8 special operating zone shall retain understory and mid-canopy conifers  
9 and hardwoods. These trees shall be protected during falling, yarding  
10 and site preparation to the extent feasible. If trees that are  
11 retained within this zone are knocked down during operations, that  
12 portion of the trees that is greater than 6" in diameter shall remain  
13 within the zone as Large Woody Debris. The zone shall be 25 feet above  
14 Class I WLPZs with slopes 0-30% and 50 feet above Class I WLPZs with  
15 slopes > 30%.

16 (d) (1) The plan shall fully describe: (A) the type and  
17 location of each measure needed to fully offset sediment loading,  
18 thermal loading, and potential significant adverse watershed effects  
19 from the proposed timber operations, and (B) the person(s) responsible  
20 for the implementation of each measure, if other than the timber  
21 operator.

22 (2) In proposing, reviewing, and approving such measures,  
23 preference shall be given to the following: (A) measures that are both  
24 onsite (i.e., on or near the plan area) and in-kind (i.e., erosion  
25 control measures where sediment is the problem), and (B) sites that

1 are located to maximize the benefits to the impacted portion of a  
2 watercourse or lake. Out-of-kind measures (i.e., improving shade where  
3 sediment is the problem) shall not be approved as meeting the  
4 requirements of this subsection.

5 (e) Channel zone requirements

6 (1) There shall be no timber operations within the channel  
7 zone with the following exceptions:

8 (A) timber harvesting that is directed to improve coho  
9 habitat through the limited use of the selection or commercial  
10 thinning silvicultural methods with review and comment by DFG.

11 (B) timber harvesting necessary for the construction  
12 or reconstruction of approved watercourse crossings.

13 (C) timber harvesting necessary for the protection of  
14 public health and safety.

15 (D) to allow for full suspension cable yarding when  
16 necessary to transport logs through the channel zone.

17 (E) Class III watercourses where exclusion of timber  
18 operations is not needed for protection of coho salmon.

19 (2) In all instances where trees are proposed to be felled  
20 within the channel zone, a base mark shall be placed below the cut  
21 line of the harvest trees within the zone. Such marking shall be  
22 completed by the RPF that prepared the plan prior to the preharvest  
23 inspection.

24 (f) The minimum WLPZ width for Class I waters shall be 150 feet  
25 from the watercourse or lake transition line.

1 (g) Within a WLPZ for Class I waters, at least 85 percent  
2 overstory canopy shall be retained within 75 feet of the watercourse  
3 or lake transition line, and at least 65 percent overstory canopy  
4 within the remainder of the WLPZ. The overstory canopy must be  
5 composed of at least 25% overstory conifer canopy post-harvest.  
6 Harvesting of hardwoods shall only occur for the purpose of enabling  
7 conifer regeneration.

8 (h) For Class I waters, any plan involving timber operations  
9 within the WLPZ shall contain the following information:

10 (1) A clear and enforceable specification of how any  
11 disturbance or log or tree cutting and removal within the Class I WLPZ  
12 shall be carried out to conform with 14 CCR 916.2 [936.2](a) and  
13 916.9.1 [936.9.1](a).

14 (2) A description of all existing permanent crossings of  
15 Class I waters by logging roads and clear specification regarding how  
16 these crossings are to be modified, used, and treated to minimize  
17 risks, giving special attention to allowing fish to pass both upstream  
18 and downstream during all life stages.

19 (3) Clear and enforceable specifications for construction  
20 and operation of any new crossing of Class I waters to prevent direct  
21 harm, habitat degradation, water velocity increase, hindrance of fish  
22 passage, or other potential impairment of beneficial uses of water.

23 (i) Recruitment of large woody debris for aquatic habitat in  
24 Class I coho salmon-bearing waters shall be ensured  
25 by retaining the ten largest dbh conifers (live or dead) per 330 feet

1 of stream channel length that are the most conducive to recruitment to  
2 provide for the beneficial functions of riparian zones. The retained  
3 conifers shall be selected from within the THP area that lies within  
4 50 feet of the watercourse transition line. Where the THP boundary is  
5 an ownership boundary, a class I watercourse, and the WLPZ on both  
6 sides of the watercourse currently meets the stocking standards listed  
7 under 14 CCR § 912.7 [932.7,952.7](b)(2)}; the five (5) largest dbh  
8 conifers (live or dead) per 330 feet of stream channel length that are  
9 the most conducive to recruitment to provide for the beneficial  
10 functions of riparian zones within the THP area shall be retained  
11 within 50 feet of the watercourse transition line.

12 The RPF may propose alternatives to substitute smaller diameter trees,  
13 trees that are more than 50 feet from the watercourse transition line,  
14 or other alternatives on a site specific basis. The RPF must explain  
15 and justify in the THP why the proposed alternative is more conducive  
16 to current and long-term Large Woody Debris recruitment, shading, bank  
17 stability, and the beneficial functions of riparian zones.

18 (j) Where an inner gorge extends beyond a Class I WLPZ and slopes  
19 are greater than 55%, a special management zone shall be established  
20 where the use of evenaged regeneration methods is prohibited. This  
21 zone shall extend upslope to the first major break-in-slope to less  
22 than 55% for a distance of 100 feet or more, or 300 feet as measured  
23 from the watercourse or lake transition line, which ever is less. All  
24 operations on slopes exceeding 65% within an inner gorge of a Class I  
25 or II watercourse shall be reviewed by a Professional Geologist prior

1 to plan approval, regardless of whether they are proposed within a  
2 WLPZ or outside of a WLPZ.

3 (k) From October 15 to May 1, the following shall apply: (1) no  
4 timber operations shall take place unless the approved plan  
5 incorporates a complete winter period operating plan pursuant to 14  
6 CCR § 914.7(a) [934.7(a)], (2) unless the winter period operating plan  
7 proposes operations during an extended period with low antecedent soil  
8 wetness, no tractor roads shall be constructed, reconstructed, or used  
9 on slopes that are over 40 percent and within 200 feet of a Class I,  
10 II, or III watercourse, as measured from the watercourse or lake  
11 transition line, and (3) operation of trucks and heavy equipment on  
12 roads and landings shall be limited to those with a stable operating  
13 surface.

14 (l) Construction or reconstruction of logging roads, tractor  
15 roads, or landings shall not take place during the winter period  
16 unless the approved plan incorporates a complete winter period  
17 operating plan pursuant to 14 § CCR 914.7(a) [934.7(a), 954.7(a)] that  
18 specifically address such road construction. Use of logging roads,  
19 tractor roads, or landings shall not take place at any location where  
20 saturated soil conditions exist, where a stable logging road or  
21 landing operating surface does not exist, or when visibly turbid water  
22 from the road, landing, or skid trail surface or inside ditch may  
23 reach a watercourse or lake. Grading to obtain a drier running surface  
24 more than one time before reincorporation of any resulting berms back  
25 into the road surface is prohibited.

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

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

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

18                   (A) They shall be described in the plan.

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

22                   (C) For areas disturbed from October 16 through April  
23 30, treatment shall be completed prior to any day for which a chance  
24 of rain of 30 percent or greater is forecast by the National Weather  
25 Service or within 10 days, whichever is earlier.

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

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

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

24           (o) As part of the plan, the RPF shall identify active erosion  
25 sites in the logging area, assess them to determine which sites pose

1 significant risks to the beneficial uses of water, assess them to  
2 determine whether feasible remedies exist, and address in the plan  
3 feasible remediation for all sites that pose significant risk to the  
4 beneficial uses of water.

5 (p) The erosion control maintenance period on permanent and  
6 seasonal roads and associated landings that are not abandoned in  
7 accordance with 14 CCR § 923.8 [943.8] shall be three years.

8 (q) Site preparation activities shall be designed to prevent soil  
9 disturbance within, and minimize soil movement into, the channels of  
10 watercourses. Prior to any broadcast burning, burning prescriptions  
11 shall be designed to prevent loss of large woody debris in  
12 watercourses, and vegetation and duff within a WLPZ, or within any ELZ  
13 or EEZ designated for watercourse or lake protection. No ignition is  
14 to occur within any WLPZ, or within any ELZ or EEZ designated for  
15 watercourse or lake protection. When burning prescriptions are  
16 proposed, the measures or burning restrictions which are intended to  
17 accomplish this goal shall be stated in the plan and included in any  
18 required burning permit. This information shall be provided in  
19 addition to the information required under 14 CCR § 915.4 [935.4].

20 (r) Water drafting for timber operations from within a channel  
21 zone of a natural watercourse or from a lake shall conform with the  
22 following standards:

23 (1) The RPF shall incorporate into the THP:

24 (A) a description and map of proposed water drafting  
25 locations,

1                   (B) the watercourse or lake classification, and  
2                   (C) the general drafting location use parameters  
3 (i.e., yearly timing, estimated total volume needed, estimated total  
4 uptake rate and filling time, and associated water drafting activities  
5  
6 from other THPs).

7                   (2) On Class I and Class II streams where the RPF has  
8 estimated that:

9                   (A) bypass flows are less than 2 cubic feet per  
10 second, or

11                   (B) pool volume at the water drafting site would be  
12 reduced by 10%, or

13                   (C) diversion rate exceeds 350 gallons per minute, or

14                   (D) diversion rate exceeds 10% of the above surface  
15 flow;

16 no water drafting shall occur unless the RPF prepares a water drafting  
17 plan to be reviewed and, if necessary a stream bed alteration  
18 agreement issued, by DFG and approved by the Director. The Director  
19 may accept the project description and conditions portion of an  
20 approved "Streambed Alteration Agreement" issued under the Fish and  
21 Game Code (F&GC 1600 et seq.) which is submitted instead of the water  
22 drafting plan described in 14 CCR § 916.9.1 [936.9.1] (r)(2)(D)(1-5).

23 The water drafting plan shall include, but not be limited to:

24                   1. disclosure of estimated percent streamflow  
25 reduction and duration of reduction,

1                   2. discussion of the effects of single pumping  
2                   operations, or multiple pumping operations at the same  
3                   location,

4                   3. proposed alternatives and discussion to prevent  
5                   adverse effects (e.g. reduction in hose diameter, reduction  
6                   in total intake at one location, described allowances for  
7                   recharge time, and alternative water drafting locations),

8                   4. conditions for operators to include an operations  
9                   log kept on the water truck containing the following  
10                   information: Date, Time, Pump Rate, Filling Time, Screen  
11                   Cleaned, Screen Conditions, and Bypass flow observations,

12                   5. a statement by the RPF for a pre-operations field  
13                   review with the operator to discuss the conditions in the  
14                   water drafting plan.

15                   (3) Intakes shall be screened in Class I and Class II  
16                   waters. Screens shall be designed to prevent the entrainment or  
17                   impingement of all life stages of fish or amphibians. Screen  
18                   specifications shall be included in the plan.

19                   (4) Approaches to drafting locations within a WLPZ shall be  
20                   surfaced with rock or other suitable material to avoid generation of  
21                   sediment.

22                   (s) No timber operations are allowed in a WLPZ, or within any ELZ  
23                   or EEZ designated for watercourse or lake protection, under exemption  
24                   notices except for:

25                   (1) hauling on existing roads,

1           (2) road maintenance,

2           (3) operations conducted for public safety,

3           (4) construction or reconstruction of approved watercourse  
4 crossings,

5           (5) temporary crossings of dry Class III watercourses which  
6 do not require a "Streambed Alteration Agreement" under the Fish and  
7 Game Code, or

8           (6) harvesting recommended in writing by DFG to address  
9 specifically identified forest conditions.

10          (t) No timber operations are allowed in a WLPZ, or within any ELZ  
11 or EEZ designated for watercourse or lake protection, under emergency  
12 notices except for:

13           (1) hauling on existing roads,

14           (2) road maintenance,

15           (3) operations conducted for public safety,

16           (4) construction or reconstruction of approved watercourse  
17 crossings,

18           (5) temporary crossings of dry Class III watercourses which  
19 do not require a "Streambed Alteration Agreement" under the Fish and  
20 Game Code,

21           (6) harvesting recommended in writing by DFG to address  
22 specifically identified forest conditions,

23           (7) the harvest of dead or dying conifer trees subject to  
24 the following conditions:

25           (A) Recruitment of large woody debris for aquatic

1 habitat in Class I coho salmon-bearing waters shall be ensured by  
2 retaining the ten largest dbh conifers (live or dead) per 330 feet of  
3 stream channel length that are the most conducive to recruitment to  
4 provide for the beneficial functions of riparian zones. The retained  
5 conifers shall be selected from within the area of operations that  
6 lies within 50 feet of the watercourse transition line. Where the area  
7 of operations is bounded by an ownership boundary that corresponds  
8 with a class I watercourse, and where the WLPZ on both sides of the  
9 watercourse currently meets the stocking standards listed under 14 CCR  
10 § 912.7 [932.7](b)(2), the five (5) largest dbh conifers (live or  
11 dead) per 330 feet of stream channel length that are the most  
12 conductive to recruitment to provide for the beneficial functions of  
13 riparian zones shall be retained within 50 feet of the watercourse  
14 transition line within the area of operations.

15 The RPF may provide alternatives to substitute smaller diameter trees,  
16 trees that are more than 50 feet from the watercourse transition line,  
17 or other alternatives on a site specific basis. The RPF must provide  
18 with the notice an explanation and justification why the alternative  
19 provided is more conducive to current and long-term Large Woody Debris  
20 recruitment, shading, bank stability, and the beneficial functions of  
21 riparian zones.

22 (B) Within any WLPZ, ELZ, or EEZ designated for Class  
23 II or III watercourse protection, a minimum of two dead, dying, or  
24 diseased conifer trees per acre at least 16 inches diameter breast  
25 high and 50 feet tall shall be retained within 50 feet of the

1 watercourse transition line.

2 (C) Trees to be harvested or retained shall be marked  
3 by, or under the supervision of, an RPF prior to timber operations  
4 within the WLPZ or ELZ/EEZ.

5 (D) Within the WLPZ or ELZ/EEZ, if the stocking  
6 standards of 14 CCR § 912 [932].7 are not met upon completion of  
7 timber operations, unless the area meets the definition of  
8 substantially damaged timberlands, at least ten trees shall be planted  
9 for each tree harvested but need not exceed an average point count of  
10 300 trees per acre.

11 (u) No salvage logging is allowed in a WLPZ without an approved  
12 HCP, a PTEIR, an SYP, or an approved plan that contains a section that  
13 sets forth objectives, goals, and measurable results for streamside  
14 salvage operations.

15 (1) This section does not apply to emergency operations under 14  
16 CCR § 1052.

17 (v) Nonstandard practices (i.e., waivers, exceptions, in-lieu  
18 practices, and alternative practices) shall comply with the goal set  
19 forth in subsection (a) above as well as with the other requirements  
20 set forth in the rules.

21 (w) The Director may approve alternatives that provide equal or  
22 better protection for coho salmon and achieve the goal of this  
23 section.

24 (1) Any alternative proposed under this subsection for  
25 timber operations in a watershed with coho salmon shall only be

1 included in a plan: i) after consultation and written concurrence from  
2 DFG prior to plan submittal, and ii) with a clear demonstration of  
3 compliance with the issuance criteria described under Fish and Game  
4 Code § 2081(b) as determined by DFG.

5 (2) The Director shall not accept for inclusion in a plan  
6 any alternative practice as described in this section where two or  
7 more agencies listed in 4582.6 of the PRC and 14 CCR § 1037.3 have  
8 submitted written comments which lead to the Director's conclusion  
9 that the proposed alternative will not meet the goal of this section  
10 and the agency(ies) participated in the review of the plan, including  
11 an on-the-ground inspection.

12 (x) Other measures that would effectively achieve the goal set  
13 forth in 14 CCR § 916.9.1(a) [936.9.1(a)] may be approved with written  
14 concurrence from DFG (i)in accordance with 14 CCR 916.6 [936.6], or  
15 (ii) pursuant to a coho salmon watershed evaluation for timber  
16 operations when the plan incorporates minimization and mitigation  
17 measures based on the watershed evaluation, and with written  
18 concurrence from DFG. The watershed evaluation must include the  
19 components set forth below and shall be included in addition to all  
20 other District Forest Practice Rules.

21 (1) The following are required components of a watershed  
22 evaluation:

23 (A) Description of assessment area

24 (B) Status of coho salmon within each planning  
25 watershed in the assessment area

1                    (C) Status of coho salmon habitat conditions and water  
2 quality within each planning watershed in the assessment area

3                    (D) Identification and prioritization of limiting  
4 factors. A reasoned analysis shall assign ratings of high, moderate  
5 and low to those factors which may individually or cumulatively limit  
6 coho salmon distribution and abundance in the watershed.

7                    (E) Proposed planning watershed specific management  
8 practices to prevent or control discharges and environmental impacts  
9 from timber operations that could contribute to the identified high  
10 and moderate risk limiting factors, and; corrective actions that would  
11 reduce or eliminate the high and moderate risk limiting factors on the  
12 landscape and mitigate the impacts of timber operations which cause or  
13 contribute to those limiting factors.

14                    (F) A plan and schedule for implementing proposed  
15 management practices.

16                    (G) A program for monitoring implementation and  
17 effectiveness of the management practices.

18                    (y) The operational provisions of 14 CCR §§ 916.9.1 [936.9.1] and  
19 916.9.2 [936.9.2] shall not apply to a plan under which the incidental  
20 take from timber operations of Coho Salmon within the planning  
21 watershed is already authorized pursuant to the following:

22                    (1) a valid incidental take permit issued by DFG pursuant  
23 to Section 2081(b) of the Fish and Game Code; or

24                    (2) a federal incidental take statement or incidental take  
25 permit, for which a consistency determination has been made pursuant

1 to Section 2080.1 of the Fish and Game Code; or

2 (3) Section 2835 of the Fish and Game Code under a valid  
3 natural community conservation plan approved by DFG.

4 (z) The operational provisions of 14 CCR §§ 916.9.1 [936.9.1] and  
5 916.9.2 [936.9.2] shall not apply to a plan that specifies project  
6 revisions, guidelines, or take avoidance measures pursuant to a  
7 memorandum of understanding or a planning agreement entered into  
8 between the plan submitter and DFG, which DFG has determined will  
9 avoid take of coho salmon.

10 Note: Authority cited: Sections 4551, 4562.7 and 21000(g), Public  
11 Resources Code. Reference: Sections 751, 4512, 4513, 4551.5,  
12 21000(g), 21001(b) and 21002.1, Public Resources Code; Sections 100,  
1243, 13050(f) Water Code; and Sections 1600 and 5650(c), Fish and  
13 Game Code.

14 **Adopt New 14 CCR §§ 916.9.2 and 936.9.2 Measures to Facilitate**  
15 **Incidental Take Authorization in Watersheds with Coho Salmon**

16 (a) The measures to facilitate Incidental Take Authorization in  
17 watersheds with coho salmon are intended to facilitate the process of  
18 obtaining incidental take permits for state-listed coho salmon from  
19 DFG for timber operations under the California Endangered Species Act  
20 (Fish & G. Code, § 2050 et seq.).

21 (b) In addition to all other District Forest Practice Rules, in  
22 any watershed with coho salmon, subsections (c) through (f) shall  
23 apply to all timber operations where DFG determines that take will, or  
24 is likely to result from such proposed timber operations, unless  
25 incidental take of coho salmon is already authorized as specified

1 under 14 CCR § 916.9.1 [936.9.1](y) or 916.9.1 [936.9.1] (z).

2 **(c) Class I Watercourse and Lake Protection Measures - The**  
3 following shall apply to all Class I watercourses and lakes within  
4 watersheds with coho salmon.

5 **(1) Within a WLPZ for Class I watercourses and lakes,**  
6 sufficient trees shall be retained to maintain the preharvest level of  
7 direct shading to pools. The percentage of shade provided by Group A  
8 species shall not be reduced relative to other species.

9 **(2) Recruitment of large woody debris for aquatic habitat**  
10 in Class I coho salmon-bearing watercourses shall be ensured by  
11 retaining the ten (10) largest dbh conifers (live or dead) per 330  
12 feet of stream channel length on each side of the watercourse. The  
13 retained conifers shall be selected from within the plan area that  
14 lies within 100 feet of the watercourse transition line. Where the  
15 plan boundary is an ownership boundary, a class I watercourse, and the  
16 WLPZ on both sides of the watercourse currently meets the stocking  
17 standards listed under 14 CCR § 912.7 [932.7](b)(2); the ten (10)  
18 largest dbh conifers (live or dead) per 330 feet of stream channel  
19 length within the plan area shall be retained within 100 feet of the  
20 watercourse transition line.

21 **(d) Class II Watercourse and Lake Protection Measures -**

22 **(1) Any timber operation or silvicultural prescription**  
23 within 100 feet of any Class II watercourse or lake transition line  
24 shall have protection, maintenance, or restoration of the beneficial  
25 uses of water or the populations and habitat of coho salmon or listed

1 aquatic or riparian-associated species as significant objectives.

2 (2) Where an inner gorge extends beyond a Class II WLPZ and  
3 watercourse sideslopes are greater than 55 percent, a special  
4 management zone shall be established where the use of evenaged  
5 regeneration methods is prohibited. This zone shall extend upslope to  
6 the first major break-in-slope to less than 55 percent for a distance  
7 of 100 feet or more, or 200 feet as measured from the watercourse or  
8 lake transition line, which ever is less. All operations within the  
9 special management zone shall be reviewed by a Professional Geologist  
10 prior to plan approval and disclosed and incorporated in the plan as  
11 appropriate.

12 (3) The following shall apply to all Class II watercourses  
13 and lakes mapped on current 1:24,000 scale U.S. Geological Survey  
14 topographic map within watersheds with coho salmon except as provided  
15 under 14 CCR § 916.9.2 [936.9.2] (d)(3)(E):

16 (A) Inner Band: From 0-50 feet, retain a minimum of 85  
17 percent post-harvest overstory canopy. The overstory canopy must be  
18 composed of at least 25 percent overstory conifer canopy post-harvest.

19 (B) Outer Band with 0-30 percent watercourse  
20 sideslope: From 50-75 feet, retain a minimum of 65 percent post-  
21 harvest overstory canopy. The overstory canopy must be composed of at  
22  
23 least 25 percent overstory conifer canopy post-harvest.

24 (C) Outer Band with 31-50 percent watercourse  
25 sideslope: From 50-100 feet, retain a minimum of 65 percent post

1 harvest overstory canopy. The overstory canopy must be composed of at  
2 least 25 percent overstory conifer canopy post-harvest.

3 (D) Outer Band with >50 percent watercourse sideslope:  
4 From 50-125 feet, retain a minimum of 65 percent post-harvest  
5 overstory canopy. WLPZ width may be reduced to 100 feet for  
6 helicopter or cable yarding operations. The overstory canopy must be  
7 composed of at least 25 percent overstory conifer canopy post-harvest.

8 (E) 14 CCR § 916.9.2 [936.9.2] (b)(3)(B)(C) and (D) do  
9 not apply to plans in the Southern Subdistrict of the Coast Forest  
10 District or to NTMPs within watersheds with coho salmon.

11 (e) Class III Watercourse Protection Measures - The following  
12 shall apply to all Class III watercourses within watersheds with coho  
13 salmon in or adjacent to harvest units where evenaged management,  
14 rehabilitation of under-stocked stands, or variable retention  
15 prescriptions are proposed.

16 (1) establish a minimum 25-foot-wide ELZ on each side of  
17 the watercourse for slopes less than or equal to 30% and a minimum 50-  
18 foot-wide ELZ on each side of the watercourse for slopes greater than  
19 30%

20 (2) retain all trees situated within the channel zone and  
21 trees that have boles that overlap the edge of the channel zone;

22 (3) within the ELZ, at least 50 percent of the understory  
23 vegetation shall be left post-harvest in an evenly distributed  
24 condition;

1           (4) within the ELZ; retain all snags, large woody debris,  
2 and countable trees 10 inches dbh or less, except where necessary to  
3 allow for cable yarding corridors, safety, or crossing construction;

4           (5) within the ELZ, prohibit initiation of any burning;

5           (6) allow cable yarding when necessary to transport logs  
6 through a Class III ELZ;

7           (7) tractor yarding is prohibited within the ELZ, except  
8 for the use of feller-bunchers and shovel yarding that minimize soil  
9 compaction and disturbance and;

10           (8) within the ELZ, retain at least 15 square feet basal  
11 area per acre of hardwoods where it exists before harvest, including  
12 the largest hardwoods available for this purpose. Retain all hardwoods  
13 when less than 15 square feet basal area per acre is present before  
14 harvest.

15           (f) Where harvesting is proposed on a connected headwall swale:

16           (1) only the selection regeneration method allowed under 14  
17 CCR § 913.2 [933.2] (a) (2) (A) or the commercial thinning  
18 intermediate treatment allowed under 14 CCR § 913.3 [933.3] (a) may be  
19 utilized in that area,

20           (2) Areas of ground based yarding shall be delineated on  
21 the ground as an equipment exclusion zone and marked prior to the  
22 preharvest inspection.

23           (3) All proposed road construction or reconstruction shall  
24 be reviewed by a Professional Geologist and disclosed and incorporated  
25 in the plan as appropriate prior to plan approval.

1 Note: Authority cited: Sections 4551, 4562.7 and 21000(g), Public  
2 Resources Code. Reference: Sections 751, 4512, 4513, 4551.5,  
3 21000(g), 21001(b) and 21002.1, Public Resources Code; Sections 100,  
4 1243, 13050(f) Water Code; and Sections 1600 and 5650(c), Fish and  
5 Game Code.

6 **Adopt New 14 CCR § 916.11.1 and 936.11.1 Monitoring for Adaptive  
7 Management in Watersheds with Coho Salmon**

8 (a) Goal: The Board will develop a monitoring and adaptive  
9 management program for timber harvesting operations in watersheds with  
10 coho salmon. The purpose of the program will be: (i) to determine  
11 whether or not the operational Forest Practice Rules and associated  
12 hillslope and instream mitigation measures afford a level of  
13 protection that is both appropriate and adequate to ensure protection  
14 of coho salmon and its habitat, (ii) to provide monitoring necessary  
15 to ensure the Forest Practice Rules are being implemented in a manner  
16 consistent with the California Endangered Species Act as required  
17 under 14 CCR § 896, and (iii) to provide a timely feedback process for  
18 the Board to assess rule effectiveness in meeting the stated goals  
19 under subsections (i) and (ii).

20 (1) The monitoring component of the program will provide  
21 the information necessary to evaluate the effectiveness of mitigation  
22 measures and identify when site-specific mitigation or operational  
23 rules should be revised to better accomplish the goals of the Board.

24 (A) Four types of monitoring will be addressed under  
25 the program including: (i) compliance, (ii) implementation, (iii)  
effectiveness, and (iv) validation.

1                   (B) Review Team agencies will continue to conduct  
2 mandated compliance and implementation monitoring as part of their  
3 regulatory responsibilities.

4                   (C) Effectiveness monitoring will be undertaken by the  
5 landowner; or be a cooperative effort between landowners and the  
6 Department, Review Team agencies, or a cooperative interdisciplinary  
7 team.

8                   (D) Long-term validation monitoring will be undertaken  
9 by the Department, or facilitated through cooperative agreements among  
10 stakeholders and Review Team agencies.

11                   (E) The Board or its designee may include any  
12 monitoring that meets the intent of this section, including any  
13 efforts that are already underway by the landowner, agencies or other  
14 cooperators.

15                   (2) The adaptive management component of the program will  
16 be a process of action-based planning, monitoring, evaluating and  
17 adjusting through use of the scientific method; with the objective of  
18 maintaining fully functioning habitat conditions and facilitating  
19 conservation of coho salmon populations.

20                   (A) Four elements of adaptive management will be  
21 addressed under the program including: (i) identification of  
22 substantial new information, (ii) collection of substantial new  
23 information, (iii) evaluation of substantial new information, and (iv)  
24 determination regarding the necessity or benefit of adjustments and  
25 improvements to mitigation and protective measures, including the

1 Forest Practice Rules, based upon the substantial new information.

2 (b) (1) In collaboration with the Department and other Review  
3 Team agencies, the Board shall appoint a scientific technical advisory  
4 committee to develop monitoring practices to evaluate the  
5 effectiveness of mitigation measures at the appropriate scale.

6 (A) In development of monitoring practices, the  
7 Board's appointed scientific technical advisory committee may also  
8 engage other experts in the field for assistance.

9 (B) The monitoring practices will be applied by the  
10 landowner; or be a cooperative effort between landowners and the  
11 Department, Review Team agencies, or a cooperative interdisciplinary  
12 team.

13 (2) Monitoring practices and strategies may be peer  
14 reviewed by a scientific technical advisory committee as directed by  
15 the Board.

16 (3) The design and implementation of monitoring shall be  
17 done in consultation with the Department and other Review Team  
18 agencies, and the sufficiency of information shall be judged in light  
19 of its scientific merit and what is reasonable and practical.

20 (A) Monitoring data shall be derived from agency  
21 monitoring programs, landowner monitoring programs, or cooperative  
22 projects.

23 (4) As a condition of plan approval, based upon substantial  
24 evidence in the record, the Director may require monitoring:

25 (A) Anytime after plan approval,

1                   (B) Concurrent with timber operations, and  
2                   (C) After completion of operations during the  
3 remainder of the prescribed maintenance period.

4                   (5) Monitoring data collected pursuant to (b)(4) or  
5 (b)(6) shall be provided to the Board annually.

6                   (6) The plan shall incorporate monitoring requirements in  
7 conformance with the requirements of a valid incidental take permit  
8 for coho salmon within the planning watershed that has been authorized  
9 pursuant to the following:

10                   (A) a valid incidental take permit issued by DFG  
11 pursuant to Section 2081(b) of the Fish and Game Code; or

12                   (B) a federal incidental take statement or incidental  
13 take permit, for which a consistency determination has been made  
14 pursuant to Section 2080.1 of the Fish and Game Code; or

15                   (C) Section 2835 of the Fish and Game Code under a  
16 valid natural community conservation plan approved by DFG; or

17                   (c) The Department shall prepare an annual report in conjunction  
18 with a Board appointed technical subcommittee summarizing progress and  
19 significant findings from monitoring activities collected throughout  
20 the year in accordance with subsection (b)(4) above. The report shall  
21 be (i) provided to the Board during the first quarter of each calendar  
22 year, (ii) made available to the public upon request, and (iii) placed  
23 on the Board's website for at least 180 days.

24                   (d) Based upon the findings presented in the annual monitoring  
25 report(s), the Director, in conjunction with the Board appointed

1 technical subcommittee, may recommend additions, deletions or  
2 modifications to the Forest Practice Rules if the necessity for such a  
3 change is supported by substantial evidence in the reports. A  
4 specific recommendation based upon the findings that a rule  
5 requirement is no longer necessary shall also be supported by  
6 substantial evidence.

7 Note: Authority cited: Sections 4551, 4562.7 and 21000(g), Public  
8 Resources Code. Reference: Sections 751, 4512, 4513, 4551.5,  
9 21000(g), 21001(b) and 21002.1, Public Resources Code; Sections 100,  
10 1243, 13050(f) Water Code; and Sections 1600 and 5650(c), Fish and  
11 Game Code.

12 **Amend 14 CCR §§ 923.9, 943.9, 963.9 Roads and Landings in Watersheds**  
13 **with Threatened or Impaired Values [All Districts]**

14 In addition to all other district Forest Practice Rules, the following  
15 requirements shall apply in any planning watershed with threatened or  
16 impaired values, except in watersheds with coho salmon. In watersheds  
17 with coho salmon, the standards listed under 916.9.1 and 916.9.2 shall

18 apply: \*\*\*\*

19 \*\*\*\*\* (g) This section shall expire on December 31, 2008.

20 Note: Authority cited: Sections 4551, 4551.5, 4553, 4562.7 and  
21 21000(g), Public Resources Code. Reference: Sections 751, 4512, 4513,  
22 4551, 4551.5, 4562.5, 4562.7, 21000(g), 21001(b) and 21002.1, Public  
23 Resources Code; Sections 100, 1243, 13050(f) Water Code; Sections 1600  
24 and 5650(c), Fish and Game Code; and *Natural Resources Defense*  
25 *Council, Inc. v. Arcata Natl. Corp.* (1976) 59 Cal.App. 3d 959, 131  
Cal.Rptr. 172.

1 **Adopt 14 CCR §§ 923.9.1 and 943.9.1 Measures for Roads and Landings in**  
2 **Watersheds with Coho Salmon**

3 In addition to all other district Forest Practice Rules, the  
4 following requirements shall apply in any planning watersheds with  
5 coho salmon:

6 (a) Where logging road or landing construction or reconstruction  
7 is proposed, the plan shall state the locations of and specifications  
8 for road or landing abandonment or other mitigation measures to  
9 minimize the adverse effects of long-term site occupancy of the  
10 transportation system within the watershed.

11 (b) Unless prohibited by existing contracts with the U.S.D.A.  
12 Forest Service or other federal agency, new and reconstructed logging  
13 roads shall be no wider than a single-lane compatible with the largest  
14 type of equipment specified for use on the road, with adequate  
15 turnouts provided as required for safety. The maximum width of these  
16 roads shall be specified in the plan. These roads shall be outsloped  
17 where feasible and drained with water breaks or rolling dips (where  
18 the road grade is inclined at 7 percent or less), in conformance with  
19 other applicable Forest Practice Rules.

20 (c) Logging Road Watercourse Crossing Drainage structures on  
21 watercourses that support fish shall allow for unrestricted passage of  
22 all life stages of fish that may be present, and shall be fully  
23 described in the plan in sufficient clarity and detail to allow  
24 evaluation by the review team and the public, provide direction to the  
25 LTO for implementation, and provide enforceable standards for the  
inspector.

1           (d) Any new permanent culverts installed within class I  
2 watercourses shall allow upstream and downstream passage of fish or  
3 listed aquatic species during any life stage and for the natural  
4 movement of bedload to form a continuous bed through the culvert and  
5 shall require an analysis and specifications demonstrating conformance  
6 with the intent of this section and subsection.

7           (e) The following shall apply on slopes greater than 50%:

8                   (1) Specific provisions of construction shall be identified  
9 and described for all new roads.

10                   (2) Where cutbank stability is not an issue, roads may be  
11 constructed as a full-benched cut (no fill). Spoils not utilized in  
12 road construction shall be disposed of in stable areas with less than  
13 30 percent slope and outside of any WLPZ, EEZ, or ELZ.

14                   (3) Alternatively, roads may be constructed with balanced  
15 cuts and fills if properly engineered, or fills may be removed with  
16 the slopes recontoured prior to the winter period.

17           (f) In addition to the provisions listed under 14 CCR 923.1(e)  
18 [943.1(e)], all permanent or seasonal logging roads with a grade of  
19 15% or greater that extends 500 continuous feet or more shall have  
20 specific erosion control measures stated in the plan.

21           (g) Where situations exist that elevate risks to the values set  
22 forth in 14 CCR 916.2(a), [936.2(a)] (e.g., road networks are remote,  
23 the landscape is unstable, water conveyance features historically have  
24 a high failure rate, culvert fills are large) drainage structures and  
25 erosion control features shall be oversized, low maintenance, or

1 reinforced, or they shall be removed before the completion of the  
2 timber operation. The method of analysis and the design for crossing  
3 protection shall be included in the plan.

4 (h) Tractor Road Crossing facilities on watercourses that support  
5 fish shall allow for unrestricted passage of all life stages of fish  
6 that may be present, and for unrestricted passage of water. Such  
7 crossing facilities shall be fully described in sufficient clarity and  
8 detail to allow evaluation by the review team and the public, provide  
9 direction to the LTO for implementation, and provide enforceable  
10 standards for the inspector.

11 (i) The operational provisions of 14 CCR §§ 923.9.1 [943.9.1] and  
12 923.9.2 [943.9.2] shall not apply to a plan under which the incidental  
13 take from timber operations of coho salmon is already authorized  
14 pursuant to the following:

15 (1) a valid incidental take permit issued by DFG pursuant  
16 to Section 2081(b) of the Fish and Game Code; or

17 (2) a federal incidental take statement or incidental take  
18 permit, for which a consistency determination has been made pursuant  
19 to Section 2080.1 of the Fish and Game Code; or

20 (3) Section 2835 of the Fish and Game Code under a valid  
21 natural community conservation plan approved by DFG.

22 (j) The operational provisions of 14 CCR §§ 923.9.1 [943.9.1] and  
23 923.9.2 [943.9.2] shall not apply to a plan that specifies project  
24 revisions, guidelines, or take avoidance measures pursuant to a  
25 memorandum of understanding or a planning agreement entered into

1 between the plan submitter and DFG, which DFG has determined will  
2 avoid take of Coho Salmon.

3  
4 Note: Authority cited: Sections 4551, 4551.5, 4553, 4562.7 and  
5 21000(g), Public Resources Code. Reference: Sections 751, 4512, 4513,  
6 4551, 4551.5, 4562.5, 4562.7, 21000(g), 21001(b) and 21002.1, Public  
7 Resources Code; Sections 100, 1243, 13050(f) Water Code; Sections 1600  
8 and 5650(c), Fish and Game Code; and *Natural Resources Defense*  
9 *Council, Inc. v. Arcata Natl. Corp.* (1976) 59 Cal.App. 3d 959, 131  
10 Cal.Rptr. 172.

11  
12 **Adopt New 14 CCR §§ 923.9.2 and 943.9.2 Measures to Facilitate**  
13 **Incidental Take Authorization in Watersheds with Coho Salmon**

14 (a) The measures to facilitate incidental take authorization for  
15 roads and landings in watersheds with coho salmon are intended to  
16 streamline and facilitate the process of obtaining incidental take  
17 permits for state-listed coho salmon from DFG for timber operations  
18 under the California Endangered Species Act (Fish & G. Code, § 2050 et  
19 seq.).

20 (b) The scope of application of the minimization and mitigation  
21 measures for roads and landings in watersheds with coho salmon is as  
22 follows:

23 (1) In addition to all other District Forest Practice  
24 Rules, in any watershed with coho salmon, subsections (c) through (q)  
25 shall apply to all timber operations where DFG determines that take  
will, or is likely to result from such proposed timber operations,  
unless an incidental take of coho salmon is already authorized as  
specified under 14 CCR § 923.9.1 [943.9.1](h) or (i).

1        (c) An assessment of road surface and drainage conditions for all  
2 road segments within the plan area and appurtenant to proposed  
3 operations shall be included in the plan.

4            (1) The assessment shall contain a list of site-specific,  
5 field inventory information including proposed treatment of existing  
6 or potential sediment sources for all crossings, ditch relief  
7 culverts, road surfaces, road cuts, road fills, landings, turnouts and  
8 inboard ditches.

9            (A) Field inventory information shall be obtained by  
10 an RPF or supervised designee while traversing the road segments.

11           (2) The assessment shall be subject to approval by the  
12 Director, with written concurrence by DFG. Additional field  
13 inventory, work sites, and/or alternative treatments may be required.

14           (3) The results of the road assessment shall be used to,  
15 construct, reconstruct, or decommission road segments prior to filing  
16 a work completion report. Maintenance needs identified during and  
17 after the road assessment shall be addressed as soon as is feasible.

18           (d) Within WLPZs, any new road or landing construction,  
19 reconstruction, new watercourse crossings, use of Class I fords or  
20 opening of old roads (except for the purpose of decommissioning) will  
21 be subject to approval by the Director, with written concurrence by  
22 DFG. The Director will only approve such practices where protection  
23 for aquatic habitat provided by proposed practices is at least equal  
24 to the protection provided by the use of alternate routes or locations  
25 outside of the WLPZ.

1           (e) The guidelines and performance standards for road  
2 decommissioning methods described in the California Salmonid Stream  
3 Habitat Restoration Manual, 1998, 3<sup>rd</sup> edition; pages X-53 through X-59  
4 (published by State of California, Resources Agency, California  
5 Department of Fish and Game) shall be followed.

6           (f) The following design features shall be included in the  
7 maintenance, construction, reconstruction, or decommissioning of  
8 roads, except where site-specific alternatives are explained,  
9 justified, and approved by the Director, with written concurrence by  
10 DFG. The Director may only approve alternatives where the  
11 consequences for aquatic habitat are no greater than would result from  
12 the standard measures. Except for maintenance needs that arise from  
13 October 15 to June 1, all work described below shall be completed  
14 before October 15 in the year that work begins.

15           (1) Road surfaces shall be outsloped with rolling dips,  
16 wherever feasible.

17           (2) All road segments shall be hydrologically disconnected,  
18 to the extent feasible, from watercourses and lakes by site specific  
19 application of the following: outsloping, rocking, installation of  
20 rolling dips, cross drains, and/or waterbars, except where site-  
21 specific alternatives are explained and justified in the plan, and  
22 approved by the Director, with written concurrence by DFG. All of  
23 these features shall drain to stable sediment filter strips.

24           (3) Crossings and associated fills shall be removed or  
25 reconstructed where there is evidence of failure potential or sediment

1 delivery to Class I, II, or III watercourses and lakes.

2 (4) Culverts shall be replaced or removed if they are  
3 crushed, perforated, piping, separated, not adequate to carry water  
4 from the fifty-year flood level, located in unstable fill, or causing  
5 erosion that may be expected to deliver sediment to Class I, II, or  
6 III watercourses and lakes. Replaced culverts shall be installed at  
7 or as close to the original stream grade and slope as feasible.

8 (5) Each road approach to a watercourse crossing shall be  
9 treated to create and maintain a stable operating surface, and to  
10 avoid the generation of fines during use, in accordance with  
11 subsection (A) through (F) below. The road approach encompasses  
12 either of the following areas, whichever is less:

13 (i) the area from the watercourse channel to the  
14 nearest drainage facility, but not less than 50 feet; or

15 (ii) the area from the watercourse channel to the  
16 first high point on the road where road drainage flows away from the  
17 watercourse.

18 (A) Road surfaces on the following shall consist  
19 of high-quality, durable, compacted rock or paving:

20 (i) permanent roads

21 (ii) seasonal roads crossing Class I  
22 watercourses

23 (iii) roads used for hauling (logs, rock,  
24 heavy equipment) from October 15 to June 1.

25

1 (B) Road surfaces on the following shall be treated with either: rock,  
2 slash, seed and straw mulch, seed and stabilized straw, or seed and  
3 slash:

4 (i) all seasonal roads used for hauling in  
5 the current year

6 (ii) all seasonal roads used from October  
7 15 to June 1 for purposes other than hauling

8 (C) Approaches to temporary crossings shall be  
9 rocked as needed after crossing removal to avoid rutting or pumping  
10  
11 finer during use.

12 (D) Ditches exhibiting downcutting along the  
13 following shall be lined with high-quality, durable rock:

14 (i) permanent roads

15 (ii) seasonal roads crossing Class I  
16 watercourses

17 (iii) roads used for hauling from October  
18 15 to June 1.

19 (E) Ditches along the following shall be treated  
20 to prevent scour:

21 (i) seasonal roads used for hauling in the  
22 current year

23 (ii) seasonal roads used from October 15 to  
24 June 1 for purposes other than hauling.

25 (F) Bare soil on associated fill slopes,

1 shoulders and cuts shall be treated to minimize erosion.

2 (6) Sediment discharge from unstable or eroding cutbanks,  
3 fillslopes and landing fills will be prevented by pulling,  
4 buttressing, or other means and by installing and maintaining  
5 effective erosion control materials.

6 (7) Bridges (including associated fill, rip rap, and  
7 abutments) and bridge approaches showing evidence of failure potential  
8 or sediment delivery to Class I, II, or III watercourses and lakes  
9 shall be repaired, replaced, or removed.

10 (g) Erosion control materials shall be applied in sufficient  
11 quantity prior to the onset of measurable precipitation with re-  
12 application as needed to avoid any visible increase in surface erosion  
13 or turbidity in Class I, II or III receiving watercourses and lakes.

14 (h) All roads in Class I WLPZs shall exhibit a rocked or paved  
15 stable operating surface. The surface shall consist of high quality,  
16 durable, compacted rock, or paving. The road surface and base shall  
17 be maintained to avoid generation of fines during use.

18 (i) (1) No road or landing construction, reconstruction, or  
19 decommissioning shall be undertaken from October 15th to May 15th, or  
20 at any time outside this period when saturated soil conditions exist,  
21 except as provided in subsection (2) or (3).

22 (2) No road or landing construction, reconstruction, or  
23 decommissioning shall be undertaken from October 15th to June 1st, or  
24 at any time outside this period when saturated soil conditions exist  
25 within (i) all planning watersheds that drain into the Mattole

1 watershed, **(ii)** all planning watersheds wholly or partially contained  
 2 within Del Norte County, and **(iii)** the following specified planning  
 3 watersheds in Humboldt County; where average May rainfall exceeds  
 4 three inches.

<b>CALWATER 2.2 Planning Watershed</b>	<b>ID Number</b>	<b>Coho Status</b>	<b>Acres</b>
McGarvey Creek	1105.110806	Present	13442.2
May Creek	1107.100201	Present	11242.8
Lost Man Creek	1107.100104	Present	12704.5
Skunk Cabbage Creek	1107.100203	Present	4855.1
McArthur Creek	1107.100103	Present	6814.1
McDonald Creek	1108.100002	Present	23879.8
Bond Creek	1107.100102	Present	8200.5
Tarup Creek	1105.110703	Present	12429.2
Pitcher Creek	1108.100001	Present	13179.4
Maple Creek	1108.100003	Present	16841.5
Ah Pah Creek	1105.110702	Present	10771.8
Bridge Creek	1107.100101	Present	15055.9

23 **(3)** The RPF may propose site-specific exceptions that are  
 24 explained and justified in the plan, and approved by the Director,  
 25 with written concurrence by DFG. The Director will only approve

1 exceptions where the protection provided for aquatic habitat by the  
2 proposed practices is at least equal to the protection provided by the  
3 above time period or conditions. Access without specific approval by  
4 the Director is allowed to correct emergency, road-related problems  
5 demanding immediate action.

6 (j) Use of unpaved roads shall cease when precipitation is  
7 sufficient to generate overland flow off the road surface, use of any  
8 portion of the road results in rutting of the road surface, or a  
9 stable operating surface can not be maintained.

10 (k) (1) Resumption of road use shall only occur when there is a  
11 stable operating surface.

12 (2) Resumption of road or landing construction or  
13 reconstruction, shall not occur until the soil conditions allow a  
14 stable operating surface to be developed.

15 (1) (1) All roads within the plan area and appurtenant to  
16 proposed operations shall be inspected

17 (A) by the LTO at least twice annually - once between  
18 June 1st and October 15th and at least once after October 15th  
19 following the first storm event producing bankfull stage- prior to  
20 completion of operations;

21 (B) by the timberland owner during the same time  
22 period for the remainder of the prescribed maintenance period.

23 (2) The inspection shall be started as soon as conditions  
24 permit access (in accordance with 14 CCR § 923.9.2 [943.9.2](k)) to  
25 ensure that drainage structures and facilities are functioning to

1 hydrologically disconnect the road prism from waters.

2 (3) Inspection results and follow up corrective measures  
3 shall be documented and shall be provided to CDF and DFG.

4 (m) Decommissioned roads shall be inspected following the first  
5 storm event producing bankfull stage after decommissioning and again  
6 prior to filing the completion report. The purpose of the inspection  
7 will be to verify the effectiveness of treatments in preventing  
8 sediment discharges to waters and to ensure treatments are functioning  
9 to restore natural drainage and hillslope stability. If treatments  
10 are found to be ineffective prior to the end of the prescribed  
11 maintenance period, further treatments shall be applied if the volume  
12 of sediment prevented from entering a channel by additional treatments  
13 is greater than that incurred by re-entering the site.

14 (n) During road inspection and maintenance, measures shall be  
15 employed to ensure the following: waterbars fully capture run-off  
16 from road surfaces and discharge it without gully formation or  
17 sediment delivery to waters; culverts (including crossdrains) are not  
18 occluded by debris; inboard ditches are not downcutting or scouring;  
19 cutbank erosion is minimized, and the fine sediment present on road  
20 surfaces is prevented from delivery to Class I, II, or III  
21 watercourses and lakes.

22 (o) Routine corrective work that prevents diversion of water from  
23 a watercourse or ditch or helps maintain a stable operating surface  
24 (e.g., repairing inboard ditches, cross drains, water bars, road  
25 surface and fill, unblocking of culverts) shall be performed as soon

1 as possible, regardless of the time of year. Vehicle access for  
2 routine corrective work shall only be permitted in accordance with 14  
3 CCR § 923.9.2 [943.9.2](k). Other maintenance needs of lower priority  
4 shall be undertaken between June 1st and October 15th.

5 (p) Forest floor discharge sites below the outlets of drainage  
6 facilities on all roads within the plan area and appurtenant to  
7 proposed operations shall be inspected by the LTO for evidence of  
8 sediment delivery to Class I, II, or III watercourses and lakes at  
9 least twice annually; once between June 1 and October 15, and at least  
10 once after October 15 following the first storm event producing  
11 bankfull stage discharges prior to filing the notice of completion  
12 report. If evidence of sediment delivery is present, additional cross  
13 drains, waterbars, or rolling dips shall be installed to reduce the  
14 discharge volume to the site.

15 (q) Grading of road surfaces shall occur only when necessary to  
16 achieve a uniform, stable, and well-drained operating surface.  
17 Inboard ditches shall be graded only when they are blocked or lack  
18 adequate inside ditch hydraulic capacity, or driver safety is a  
19 concern. Where feasible, blading the segment of ditch between the  
20 watercourse and first drainage facility shall be avoided.

21 Note: Authority cited: Sections 4551, 4551.5, 4553, 4562.7 and  
22 21000(g), Public Resources Code. Reference: Sections 751, 4512, 4513,  
23 4551, 4551.5, 4562.5, 4562.7, 21000(g), 21001(b) and 21002.1, Public  
24 Resources Code; Sections 100, 1243, 13050(f) Water Code; Sections 1600  
25 and 5650(c), Fish and Game Code; and *Natural Resources Defense*  
*Council, Inc. v. Arcata Natl. Corp.* (1976) 59 Cal.App. 3d 959, 131  
Cal.Rptr. 172.

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