

ROAD RULES

Amend 14 CCR§ 895.1. Definitions.

"Channel zone" means that area that includes a watercourse's channel at bankfull stage and that portion of a watercourse's floodplain, if one is present, encompassing the area between the watercourse transition lines.

"Convergent slopes": Slopes with concave planform contours not occupied by watercourse channels (e.g. headwall swales). The topographic convergences force colluvial debris and soil to accumulate and cause shallow subsurface runoff to be concentrated during storms.

"Inner Gorge" means a geomorphic feature formed by coalescing scars originating from land sliding and Erosional processes caused by active ~~stream~~ watercourse erosion. The feature is identified as that area situated beginning immediately adjacent to the ~~stream~~ watercourse channel and extending up to below the first break in slope.

"Saturated soil conditions" (Option: "Unstable Operating Conditions") - means that site conditions are sufficiently wet that timber operations displace soils in yarding or mechanical site preparation areas or displace road and landing surface materials in amounts sufficient to cause a visible turbidity increase: 1 in drainage facilities that ~~discharge~~ are discharging into Class I, II, III, or IV waters; 2) in downstream Class I, II, III, or IV waters that is visible or would violate applicable regional water quality control plan requirements.

In yarding and site preparation areas, this condition may be evidenced by: a) reduced traction by equipment as indicated by spinning or churning of wheels or tracks in excess of normal performance; b) inadequate traction without blading wet soil; c) soil displacement in amounts that cause visible increase in turbidity of the downstream waters in a receiving Class I, II, III, or IV waters, or in amounts sufficient to cause a visible turbidity increase in drainage facilities that ~~discharge~~ are discharging into Class I, II, III, or IV; or d) creation of ruts greater than would be normal following a ~~light rain~~ normal road watering.

On logging roads and landing surfaces, this condition may be evidenced by: a) reduced traction by equipment as indicated by spinning or churning of wheels or tracks in excess of normal performance; b) inadequate traction without blading wet soil; c) soil displacement in amounts that cause visible increase in turbidity of the downstream waters in receiving Class I, II, III, or IV waters or in amounts sufficient to cause a visible turbidity increase in drainage facilities that ~~discharge~~ are discharging into Class I, II, III, or IV waters; d) pumping of road surface materials by traffic; or e) creation of ruts greater than would be created by traffic following normal road watering, which transports surface material to a drainage facility that discharges directly into a watercourse. Soils or road and landing surfaces that are hard frozen are excluded from this definition.

1 “Stable operating surface” means that throughout the period of use, the operating surface of a logging road
2 ~~or landing does not either (1) generate waterborne sediment in amounts sufficient to cause a turbidity increase in~~
3 ~~downstream Class I, II, III, or IV waters or, that is visible or would violate applicable water quality requirements~~
4 ~~displace soil in amounts that cause visible increase in turbidity of the downstream waters in a receiving Class I, II, III,~~
5 ~~or IV waters, or in amounts sufficient to cause a visible turbidity increase in drainage facilities that are discharging~~
6 ~~into Class I, II, III, or IV; or (2) channel concentrate water for more than 50 feet that is discharged into Class I, II, III,~~
7 ~~or IV waters; or (3) violate the applicable Regional Water Quality Control Board Plan.~~

7 “Watercourse or Lake Transition Line”

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

11 ~~(1) No soil development, and~~

12 ~~(2) Riparian vegetation dominated by riverine hardwoods and occasional conifers.~~

13 ~~If field identification is ambiguous, identification of the 20-year flood stage would delimit this portion of the~~
14 channel zone.

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

20 (c) For a lake, it is that line closest to the lake where riparian vegetation is permanently established.

21 “Watersheds with threatened or impaired values” means any planning watershed where populations of
22 anadromous salmonids that are listed as threatened, endangered, or candidate under the State or Federal
23 Endangered Species Acts with their implementing regulations, are currently present or can be restored.

24 Note: Authority cited: Sections 4551, 4551.5, 4553, 4561, 4561.5, 4561.6, 4562, 4562.5, 4562.7 and 4591.1, Public
25 Resources Code. Reference: Sections 4512, 4513, 4526, 4551, 4551.5, 4561, 4561.6, 4562, 4562.5, 4562.7,
26 4583.2, 4591.1, 21001(f), 21080.5, 21083.2 and 21084.1, Public Resources Code; CEQA Guidelines Appendix K
27 (printed following Section 15387 of Title 14 Cal. Code of Regulations), and *Laupheimer v. State* (1988) 200
28 Cal.App.3d 440; 246 Cal.Rptr. 82.

1 **Amend 14 CCR § 914.2, [934.2, 954.2] Tractor Operations.**

2 The following standards are applicable to tractor operations:

3 (a) Tractor operations shall be conducted in a manner which complies with 14 CCR 914 [934, 954].

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

5 (c) Tractor roads shall be limited in number and width to the minimum necessary for removal of logs. When less damage to the resources specified in 14 CCR 914 [934, 954] will result, existing tractor roads shall be used instead of constructing new tractor roads.

6 (d) Heavy equipment shall not operate on unstable areas. If such areas are unavoidable, the RPF shall develop specific measures to minimize the effect of operations on slope instability. These measures shall be explained and justified in the plan and must meet the requirements of 14 CCR 914 [934, 954].

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

8 (f) **[Coast only]** Tractor operations shall be subject to the following limitations:

9 (1) Heavy equipment shall be prohibited where any of the following conditions are present:

10 (i) Slopes steeper than ~~65%~~ 60%.

11 (ii) Slopes steeper than 50% where the erosion hazard rating is high or extreme.

12 (iii) Slopes over 50% which lead without flattening to sufficiently dissipate water flow and trap sediment before it reaches a watercourse or lake.

13 (2) On slopes between 50 percent and ~~65~~ 60 percent where the erosion hazard rating is moderate, and all slope percentages are for average slope steepness based on sample areas that are 20 acres, or less if proposed by the RPF or required by the Director, heavy equipment shall be limited to:

14 (i) Existing tractor roads that do not require reconstruction, or

15 (ii) New tractor roads at a location that has been shown on the ~~THP~~ plan map, flagged by an RPF or supervised designee prior to the pre-harvest inspection or, when a pre-harvest inspection is not required, prior to the start of timber operations, and approved by the Director.

16 (3) The RPF may propose exceptions to the limitations on tractor operations described above, if the proposed exception will comply with 14CCR 914 [934, 954], and if the ~~THP~~ plan both clearly explains the proposed exception and justifies why application of the standard rule is either not feasible, or would not comply with 14CCR 914 [934, 954]. The location of tractor roads to be used under such exceptions shall be flagged prior to the pre-harvest inspection or, when a pre-harvest inspection is not required, prior to the start of timber operations.

17 (f) **[Northern and Southern only]** Tractor operations shall be subject to the following limitations:

18 (1) Heavy equipment shall be prohibited where any of the following conditions are present:

19 (i) Slopes steeper than ~~65%~~ 60%.

20 (ii) Slopes steeper than 50% where the erosion hazard rating is high or extreme.

21 (iii) Slopes over 50% which lead without flattening to sufficiently dissipate water flow and trap sediment before it reaches a watercourse or lake.

1 (2) On slopes between 50 percent and ~~65~~ 60 percent where the erosion hazard rating is moderate, and all
2 slope percentages are for average slope steepness based on sample areas that are 20 acres, or less if proposed by
3 the RPF or required by the Director, heavy equipment s shall be limited to:

4 (i) Existing tractor roads that do not require reconstruction, or

5 (ii) New tractor roads that have been flagged by an RPF or supervised designee prior to use.

6 (3) The RPF may propose exceptions to the limitations on tractor operations described above, if the
7 proposed exception will comply with 14CCR 934 [954], and if the THP plan both clearly explains the proposed
8 exception and justifies why application of the standard rule is either not feasible, or would not comply with 14CCR
9 934 [954]. The location of tractor roads to be used under such exceptions shall be flagged prior to the pre-harvest
10 inspection or, when a pre-harvest inspection is not required, prior to the start of timber operations.

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

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

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

17 (j) **[Southern only]** Except where terracing will disturb less than 50 percent of the soil surface, mechanical site
18 preparation shall not be conducted on any of the following:

19 (1) Any slopes over 40%.

20 (2) Slopes over 30% which lead without flattening to a Class I or Class II watercourse or to a lake.

21 (3) Areas having average slopes over 30%, where the erosion hazard rating is high or extreme. The area
22 sampled for the average shall not exceed 20 acres.

23 (k) **[Southern only]** The Director may approve exceptions to (j)(1), (j)(2) and (j)(3) above when damage to soil
24 and water quality caused by the use of heavy equipment will not exceed that caused by other site preparation
25 methods if explained and justified in the THP plan.

Note: Authority cited: Sections 4551, 4551.5, 4553, 4561, 4561.5, 4561.6, 4562, 4562.5, 4562.7 and 4591.1, Public
Resources Code. Reference: Sections 4512, 4513, 4526, 4551, 4551.5, 4561, 4561.6, 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 following Section 15387 of Title 14 Cal.Code of Regulations), and *Laupheimer v. State* (1988) 200
Cal.App.3d 440; 246 Cal.Rptr. 82.

19 Amend 14 CCR § 914.6, 934.6, 954.6 WATERBREAKS

20 The following standards are applicable to the construction of waterbreaks:

21 (a) Except as otherwise provided for in the rules all tractor roads shall have drainage facilities installed as soon as
22 practical and prior to either:

23 (1) ~~All waterbreaks shall be installed no later than the beginning of the winter period of the current year of~~
24 ~~timber operations.~~ The start of any rain which causes overland flow across or along the disturbed surface within a
25 WLPZ or any ELZ or EEZ designated for water course or lake protection, or

(2) ~~Installation of drainage facilities and structures is required from October 15 to November 15 and from~~

~~April 1 to May 1 on all constructed skid trails and tractor roads prior to sunset if the National Weather Service forecast is a "chance" (30% or more) of rain within the next 24 hours. Any day with a National Weather Service forecast of a chance of rain of 30 percent or more, a flash flood warning, or a flash flood watch.~~

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

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

MAXIMUM DISTANCE BETWEEN WATERBREAKS

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

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

(d) Cable roads that are so deeply cut as to divert and carry water away from natural drainage patterns for more

1 than 100 feet shall have waterbreaks installed on them at 100 feet intervals, or other appropriate erosion control
measure may be applied if specified in the plan.

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

3 (f) Waterbreaks shall be located to allow water to be discharged into some form of vegetative cover, duff, slash,
rocks, or less erodible material wherever possible, and shall be constructed to provide for unrestricted discharge at
4 the lower end of the waterbreak so that water will be discharged and spread in such a manner that erosion shall be
minimized. Where waterbreaks cannot effectively disperse surface runoff, including where waterbreaks on roads and
5 skid trail cause surface run-off to be concentrated on downslopes, roads or skid trails, other erosion controls shall be
installed as needed to comply with Title 14 CCR 914 [934, 954].

6 (g) Waterbreaks shall be cut diagonally a minimum of 15.2 cm (6 inches) into the firm roadbed, cable road, skid
trail or firebreak surface and shall have a continuous firm embankment of at least 15.2 cm (6 in.) in height
immediately adjacent to the lower edge of the waterbreak cut.

7 **[Coast only]:** In the Southern Subdistrict of the Coast Forest District, on truck roads having firmly compacted
surfaces, waterbreaks installed by hand methods need not provide the additional 15.2 cm (6 in.) embankment
provided the waterbreak ditch is constructed so that it is at least 15.2 cm (6 in.) deep and 15.2 cm (6 in.) wide on the
8 bottom and provided there is ample evidence based on slope, material, amount of rainfall, and period of use that the
waterbreaks so constructed will be effective in diverting water flow from the road surface without the embankment.

9 (h) Waterbreaks or any other erosion controls on skid trails, cable roads, layouts, firebreaks, abandoned roads,
and site preparation areas shall be maintained during the prescribed maintenance period and during timber
operations as defined in PRC Sections 4527 and 4551.5 so that they continue to function in a manner which
10 minimizes soil erosion and slope instability and which prevents degradation of the quality and beneficial uses of
water. The method and timing of waterbreak repair and other erosion control maintenance shall be selected with due
consideration given to the protection of residual trees and reproduction and the intent of 14 CCR 914 [934, 954].

11 (i) The prescribed maintenance period for waterbreaks and any other erosion control facilities on skid trails,
cable roads, layouts, firebreaks, abandoned roads, and site preparation areas, shall be at least one year. The
Director may prescribe a maintenance period extending as much as three years after filing of the work completion
12 report in accordance with 14 CCR 1050.

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

16 Note: Authority cited: Sections 4551, 4551.5, 4553, 4561, 4561.5, 4561.6, 4562, 4562.5, 4562.7 and 4591.1, Public
Resources Code. Reference: Sections 4512, 4513, 4526, 4551, 4551.5, 4561, 4561.6, 4562, 4562.5, 4562.7,
17 4583.2, 4591.1, 21001(f), 21080.5, 21083.2 and 21084.1, Public Resources Code; CEQA Guidelines Appendix K
(printed following Section 15387 of Title 14 Cal.Code of Regulations), and *Laupheimer v. State* (1988) 200
18 Cal.App.3d 440; 246 Cal.Rptr. 82.

19
20 **Amend 14 CCR § 914.7, [934.7, 954.7] Timber Operations, Winter Period.**

21 During the winter period:

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

24 (b) The winter period operating plan shall include the specific measures to be taken in winter timber operations to
25 minimize damage due to erosion, soil movement into watercourses and soil compaction from felling, hauling, yarding,

1 loading, mechanical site preparation, and erosion control activities. A winter period operating plan shall address the
2 following subjects:

- 3 (1) Erosion hazard rating.
- 4 (2) Mechanical site preparation methods.
- 5 (3) Yarding system ~~(constructed skid trails)~~.
- 6 (4) Operating Period.
- 7 (5) Erosion control facilities timing.
- 8 (6) Consideration of form of precipitation-rain or snow.
- 9 (7) Ground conditions (soil moisture condition, frozen).
- 10 (8) Silvicultural system -ground cover.
- 11 (9) Operations within the WLPZ.
- 12 (10) Equipment use limitations.
- 13 (11) Known unstable areas.
- 14 (12) Road, landing, and skid trail construction and reconstruction
- 15 (13) Road surfacing

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

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

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

22 (3) Site specific mitigation measures needed to comply with 14 CCR 914 [934, 954] for operations within
23 the WLPZ and unstable areas during the winter period.

24 ~~(4) From October 15 to May 1, Unless the plan proposes operations during an extended period with low~~
25 ~~antecedent soil wetness, No tractor roads shall be constructed, reconstructed, or used on slopes that are over 40~~
percent and within 200 feet of a Class I, II, or III watercourse, as measured from the watercourse or lake transition
line, unless the plan proposes operations during an extended dry rainless period. The minimum length of the dry
rainless period shall be based on physical soil properties.

26 (5) Except for use by foot traffic, horses or flotation-tired all terrain vehicles under 2,000 pounds or with
27 less than 13 inch wheels, Use of logging roads, tractor roads, or landings shall not take place at any location where
28 saturated soil, unstable soil conditions exist, or, where a stable logging road or landing operating surface does a
29 stable operating surface does not exist, or when visibly turbid water from the road, landing, or skid trail surface or

1 inside ditch may reach a watercourse or lake. Grading to obtain a drier running surface more than one time before
2 reincorporation of any resulting berms back into the road surface is prohibited.

3 The provisions of subsection (c) do not apply to mechanical site preparation.

4 NOTE: Authority cited: Sections 4551, 4551.5 and 4553, Public Resources Code. Reference: Sections 4512,
4513, 4527, 4562, 4562.7 and 4582, Public Resources Code.

5 **Amend 14 CCR § 914.8, [934.8, and 954.8] Tractor Road Watercourse Crossing.**

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

8 (a) The number of crossings shall be kept to a minimum. Existing
9 Crossing locations shall be used wherever feasible unless an alternative location is feasible and reduces
10 potential impacts on resources at risk.

11 (b) A prepared watercourse crossing using a structure such as a bridge, culvert, or temporary log culvert
12 shall be used to protect the watercourse from siltation where tractor roads cross a watercourse in which water may be
13 present during the life of the crossing.

14 (c) Crossing facilities on watercourses that support fish vertebrate aquatic species shall allow for
15 unrestricted passage of all life stages of fish vertebrate aquatic species that may be present, and for unrestricted
16 passage of water at the time the crossing is in place unless otherwise approved as part of a Department of Fish and
17 Game 1601 or 1603 permit. Such crossing facilities shall be fully described in sufficient clarity and detail to allow
18 evaluation by the review team and the public, provide direction to the LTO for implementation, and provide
19 enforceable standards for the inspector.

20 (d) Watercourse crossing facilities not constructed to permanent crossing standards on tractor roads shall be
21 removed before the beginning of the winter period. If a watercourse crossing is to be removed, it shall be removed in
22 accordance with 14 CCR 923.3(d) [943.3(d), 963.3(d)].

23 (e) If the watercourse crossing involves a culvert, the minimum diameter shall be stated in the ~~THP~~ plan and
24 the culvert shall be of a sufficient length to extend beyond the fill material.

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

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

1 **Amend 14 CCR § 916.7, [936.7, 956.7] Reduction of Soil Loss.**

2 Within the watercourse and lake protection zone adjacent to Class I and Class II waters, areas where mineral soil
3 exceeding 800 continuous square feet in size, exposed by timber operations, shall be treated for reduction of soil
4 loss. Treatment shall be done prior to October 15th except that such bare areas created after October 15th shall be
5 so treated within 10 days, or as agreed to by the Director. Stabilization measures shall be included and explained
6 in the ~~THP~~ plan or other required notices. Stabilization measures shall be selected that will prevent significant
7 movement of soil into Class I and II waters and may include, but need not be limited to, mulching, rip-rapping, grass
8 seeding, or chemical soil stabilizers.

9 **(a)** This section does not apply to the traveled surface of roads. Erosion control measures on road surfaces are
10 specified in 14 CCR 923 [943, 963].

11 **(1b)** Where mineral soil has been exposed by timber operations on approaches to watercourse crossings
12 of Class I or II waters, or Class III waters if an ELZ or WLPZ is required, the disturbed area shall be
13 stabilized to the extent necessary to prevent the discharge of soil into watercourses or lakes in amounts
14 deleterious to the quality and beneficial uses of water.

15 **(2c)** Where necessary to protect beneficial uses of water from timber operations, protection measures,
16 such as seeding, mulching, or replanting, shall be specified to retain and improve the natural ability of the
17 ground cover within the standard width of the WLPZ to filter sediment, minimize soil erosion, and stabilize
18 banks of watercourses and lakes.

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

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

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

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

(C) For areas disturbed from October 15 to May 16 through April 30, treatment shall be completed prior to
any day for which a chance of rain of 30 percent or greater is forecast by the National Weather Service or within 10
days, whichever is earlier.

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

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

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

15 (e) As part of the plan, the RPF shall identify active erosion sites associated with roads, landings, skidtrails,
16 or watercourses in the logging area, assess them to determine which sites pose significant risks to the beneficial uses
17 of water, assess them to determine whether feasible remedies exist, and address in the plan feasible remediation for
18 all sites that pose significant risk to the beneficial uses of water.

19 Note: Authority cited: Section 4551, 4562.7 and 21000(g), Public Resources Code. Reference: Sections 751, 4512,
20 4513, 21000(g), 2199(b) and 21002.1, Public Resources Code; Sections 100, 1243, 13050(f) Water Code; and
21 Sections 1600 and 5650(c), Fish and Game Code.

22 **Amend 14 CCR § 916.14, [936.14, and 956.14] Effectiveness and Implementation Monitoring.**

23 (a) Where roads, landings, or skid trails exist within a Class I WLPZ; are constructed or reconstructed
24 within a class II WLPZ; or cross any watercourse the Director may require a post-harvest evaluation of the
25 effectiveness and implementation of the mitigations and practices designed to protect the watercourse(s) or lake(s)
as a condition of plan approval. The Director shall require such an evaluation if its necessity is supported by
substantial evidence in the record. This evidence may include, but is not limited to, potential land failures,
accelerated rate of road construction or harvesting within a watershed, concentration or intensity of harvesting activity
near watercourses, and potential for accelerated windthrow. The design and implementation of the evaluation shall
be done in consultation with the Director, the RWQCB, CGS, or DFG, and plan submitter, and the sufficiency of the

1 information requested by the Director shall be judged in light of reasonableness and practicality. The evaluation may
2 include, but is not limited, to:

3 (1) Procedures for effectiveness and implementation monitoring, or

4 (2) Existing landowner monitoring programs.

5 Note: Authority cited: Sections 4551, 4562.7 and 21000(g), Public Resources Code. Reference: Sections 751, 4512,
6 4513, 4551.5, 21000(g), 21001(b) and 21002.1, Public Resources Code; Sections 100, 1243, 13050(f) Water Code;
7 and Sections 1600 and 5650(c), Fish and Game Code.

8 **Article 12 Logging Roads and Landings [Article 11. Northern]**

9 **Amend 14 CCR § 923, [943, 963] Logging Roads and Landings [All Districts]**

10 All logging roads and landings in the logging area shall be planned, located, constructed, reconstructed, used, and
11 maintained in a manner which: is consistent with long-term enhancement and maintenance of the forest resource;
12 best accommodates appropriate yarding systems, and economic feasibility; minimizes damage to soil resources
13 and fish and wildlife habitat; and prevents degradation of the quality and beneficial uses of water. A primary goal of
14 this article is to hydrologically disconnect roads and landings from the watercourse systems. Water drafting for road
15 construction, reconstruction, or road maintenance from within a channel zone of a natural watercourse or from a
16 lake shall conform to the goals of this Article and site specific practices for water drafting shall be included in the
17 plan where necessary to protect the beneficial uses of water. The provisions of this article shall be applied in a
18 manner which complies with this standard.

19 Nonstandard practices (i.e., waivers, exceptions, in-lieu practices, and alternative practices) shall comply with the
20 goal set forth in subsection (a) above intent of 14 CCR § 923 [943, 963] as well as with the other requirements set
21 forth in the rules.

22 Factors that shall be considered when selecting feasible alternatives (see 14 CCR §§ 897 and 898) shall include,
23 but are not limited to, the following:

24 (a) Use of existing roads ~~whenever feasible.~~ where appropriate.

25 (b) Use of systematic road layout patterns to minimize total mileage.

(c) Roads planned to fit topography to minimize disturbance to the natural features of the site.

(d) Avoidance of routes near the bottoms of steep and narrow canyons, through marshes and wet meadows, on
unstable areas, and near watercourses or near existing nesting sites of threatened or endangered bird species.

(e) Minimization of the number of watercourse crossings.

1 (f) Location of roads on natural benches, flatter slopes and areas of stable soils to minimize effects on
2 watercourses.

3 (g) Use of logging systems which will reduce excavation or placement of fills on unstable areas.

4 The provisions of this Article shall not apply to a plan that includes by reference a road plan approved by the Director
5 as part of a SYP, NTMP, HCP, or other management plan.

6 NOTE: Authority cited: Sections 4551, 4551.5, 4553, and 4562.5, Public Resources Code. Reference: Sections
7 4512, 4551.5, 4562.5, and 4562.7, Public Resources Code; California Case Law: *Natural Resources Defense*
8 *Council, Inc. v. Arcate Natl. Corp.* (1972) 59 Cal. App. 3d 959, 131 Cal. Rptr. 172.

9 **Amend 14 CCR § 923.1, [943.1, 963.1] Planning for Roads and Landings.**

10 The following standards for logging roads and landings shall be adhered to:

11 (a) All logging roads shall be located and classified on the ~~THP~~ plan map as permanent, seasonal, or temporary.

12 Road failures on existing roads which will be reconstructed shall also be located on the ~~THP~~ plan map. In addition to
13 the requirements of 14 CCR § 1034(x), the probable location of those landings which require substantial excavation
14 or which exceed one quarter acre in size, shall be shown on the ~~THP~~ plan map.

15 (b) New logging roads shall be planned in accordance with their classification and maintenance requirements.

16 (c) Logging roads and landings shall be planned and located, when feasible, to avoid unstable areas. The Director
17 shall approve an exception if those areas are unavoidable, and site-specific measures to minimize slope instability
18 due to construction are described and justified in the ~~THP~~ plan.

19 (d) Where roads and landings will be located across 100 feet or more of lineal distance on any slopes over 65% or
20 on slopes over 50% which are within 100 ft. of the boundary of a WLPZ, measures to minimize movement of soil and
21 the discharge of concentrated surface runoff shall be incorporated in the ~~THP~~ plan. The Director may waive inclusion
22 of such measures where the RPF can show that slope depressions, drainage ways, and other natural retention and
23 detention features are sufficient to control overland transport of eroded material. The Director may require end-
24 hauling of material from areas within 100 ft. of the boundary of a WLPZ to a stable location if end hauling is feasible
25 and is necessary to protect water quality. The Director shall require maintenance provisions in the ~~THP~~ plan for
drainage structures and facilities provided that such maintenance is feasible and necessary to keep roadbeds and fills
stable.

(e) New logging roads shall not exceed a grade of 15% except that pitches of up to 20% shall be allowed not to
exceed 500 continuous feet (152.4 m). These percentages and distances may be exceeded only where it can be
explained and justified in the ~~THP~~ plan that there is no other feasible access for harvesting of timber or where in the
Northern or Southern Districts use of a gradient in excess of 20% will serve to reduce soil disturbance.

(f) Roads and landings shall be planned so that an adequate number of drainage facilities and structures are
installed to minimize erosion on roadbeds, landing surfaces, sidecast and fills.

1 (g) Unless exceptions are explained and justified in the THP plan, general planning requirements for roads shall
2 include:

3 (1) Logging roads shall be planned to a single-lane width compatible with the largest type of equipment
used in the harvesting operation with turnouts at reasonable intervals.

4 (2) Roads shall be planned to achieve as close a balance between cut volume and fill volume as is feasible.

5 (3) When roads must be planned so that they are insloped and ditched on the uphill side, drainage shall be
provided by use of an adequate number of ditch drains.

6 (h) Road construction shall be planned to stay out of Watercourse and Lake Protection Zones. When it is a better
alternative for protection of water quality or other forest resources, or when such roads are the only feasible access to
7 timber, exceptions may be explained and justified in the THP plan and shall be agreed to by the Director if they meet
the requirements of this subsection.

8 (i) **[Coast]** The location of all logging roads to be constructed shall be flagged or otherwise identified on the
9 ground before submission of a THP plan or major amendment. Exceptions may be explained and justified in the THP
plan and agreed to by the Director if flagging is unnecessary as a substantial aid to examining: (1) compatibility
10 between road location and yarding and silvicultural systems, or (2) possible significant adverse effects of road
11 location on water quality, soil productivity, wildlife habitat, or other special features of the area.

12 (i) **[Northern, Southern]** All logging roads to be constructed shall be flagged or otherwise identified on the
13 ground before submission of a THP plan or, substantial deviation, except for temporary roads less than 600 ft. in
14 length that would meet the requirements for a minor deviation (see 14 CCR 1036, 1039, 1040) if they were submitted
15 as such. Exceptions may be explained and justified in the THP plan and agreed to by the Director if flagging or other
16 identification is unnecessary as a substantial aid to examining: (1) compatibility between road location and yarding
17 and silvicultural systems or (2) possible significant adverse effects of road location on water quality, soil productivity,
wildlife habitat, or other special features of the area.

18 (j) If logging roads will be used from the period of October 15 to May 1, hauling shall not occur when saturated
soil conditions exist on the road.

19 (k) In addition to the provisions listed under 14 CCR 923.1(e) [943.1(e), 963.1(e)], all permanent or seasonal
20 logging roads with a grade of 15% or greater that extends 500 continuous feet or more shall have specific
21 erosion control measures stated in the plan.

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

23 (1) A description of all existing permanent crossings of Class I waters by logging roads and clear
24 specification standards regarding how these crossings are to be modified, used, and treated to minimize
25 risks, giving special attention to allowing vertebrate aquatic species to pass both upstream and downstream
during all life stages.

1 (2) Clear and enforceable specifications standards for construction and operation of any new crossing
2 of Class waters to prevent direct harm, habitat degradation, water velocity increase change, hindrance
3 of fish vertebrate aquatic species passage, or other potential impairment of beneficial uses of water
4 during the time the crossing is in place unless otherwise approved as part of a Department of Fish and
5 Game 1601 or 1603 Permit.

6 NOTE: Authority cited: Sections 4551, 4551.5, 4553, and 4562.5, Public Resources Code. Reference: Sections
7 4512, 4551.5, 4562.5, and 4562.7, Public Resources Code; California Case Law: *Natural Resources Defense*
8 *Council, Inc. v. Arcata Natl. Corp.* (1972) 59 Cal. App. 3d 959, 131 Cal. Rptr. 172.

9 **Amend 14 CCR § 923.2, [943.2, 963.2] Road Construction.**

10 Logging roads shall be constructed or reconstructed in accordance with the following requirements or as proposed by
11 the RPF, justified in the ~~THP~~ plan, and found by the Director to be in conformance with the requirements of this
12 Article.

13 (a) Logging roads shall be constructed in accordance with the approved ~~THP~~ plan. If a change in designation of
14 road classification is subsequently made, the change shall be reported in accordance with 14 CCR 1039 or 1040,
15 as appropriate.

16 (b) Where a road section which is greater than 100 feet in length crosses slopes greater than 65%, placement of fill
17 is prohibited and placement of sidecast shall be minimized to the degree feasible. The Director may approve an
18 exception where site specific measures to minimize slope instability, soil erosion, and discharge of concentrated
19 surface runoff are described and justified in the ~~THP~~ plan.

20 (c) On slopes greater than 50%, where the length of road section is greater than 100 ft., and the road is more than
21 15 ft. wide (as measured from the base of the cut slope to the outside of the berm or shoulder of the road) and the fill
22 is more than 4 ft. in vertical height at the road shoulder for the entire 100 feet the road shall be constructed on a
23 bench that is excavated at the proposed toe of the compacted fill and the fill shall be compacted. The Director may
24 approve exception to this requirement where on a site-specific basis if the RPF has described and justified an
25 alternative practice that will provide equal protection to water quality and prevention of soil erosion.

(d) [Coast] Fills, including through fills across watercourses shall be constructed in a manner to minimize erosion
of fill slopes using techniques such as insloping through-fill approaches, waterbars, berms, rock armoring of fill
slopes, or other suitable methods.

(d) [Northern, Southern] Roads shall be constructed so no break in grade, other than that needed to drain the
fill, shall occur on through fill; breaks in grade shall be above or below the through fill, as appropriate. Where
conditions do not allow the grade to break as required, through fills must be adequately protected by additional
drainage structures or facilities.

(e) Through fills shall be constructed in approximately one foot lifts.

(f) On slopes greater than 35 percent, the organic layer of the soil shall be substantially disturbed or removed prior
to fill placement. The RPF may propose an exception in the ~~THP~~ plan and the Director may approve the exception
where it is justified that the fill will be stabilized.

(g) Excess material from road construction and reconstruction shall be deposited and stabilized in a manner or in
areas where downstream beneficial uses of water will not be adversely affected.

(h) Drainage structures and facilities shall be of sufficient size, number and location to carry runoff water off of
roadbeds, landings and fill slopes. Drainage structures or facilities shall be installed so as to minimize erosion, to
ensure proper functioning, and to maintain or restore the natural drainage pattern. Permanent watercourse crossings
and associated fills and approaches shall be constructed where feasible to prevent diversion of stream overflow down
the road and to minimize fill erosion should the drainage structure become plugged.

(i) Where there is evidence that soil and other debris is likely to significantly reduce culvert capacity below design

1 flow, oversized culverts, trash racks, or similar devices shall be installed in a manner that minimizes culvert blockage.

2 (j) Waste organic material, such as uprooted stumps, cull logs, accumulations of limbs and branches, and
unmerchantable trees, shall not be buried in road fills. Wood debris or cull logs and chunks may be placed and
3 stabilized at the toe of fills to restrain excavated soil from moving downslope.

4 (k) Logging roads shall be constructed without overhanging banks.

(l) Any tree over 12 inches (30.5 cm) d.b.h. with more than 25% of the root surface exposed by road construction,
shall be felled concurrently with the timber operations.

5 (m) Sidecast or fill material extending more than 20 ft. (6.1 m) in slope distance from the outside edge of the
roadbed which has access to a watercourse or lake which is protected by a WLPZ shall be seeded, planted, mulched,
6 removed, or treated as specified in the ~~THP~~ plan, to adequately reduce soil erosion.

7 (n) All culverts at watercourse crossings in which water is flowing at the time of installation shall be installed with
their necessary protective structures concurrently with the fill, construction and reconstruction of logging roads. Other
8 permanent drainage structures shall be installed no later than October 15. For construction and reconstruction of
roads after October 15, drainage structures shall be installed concurrently with the activity.

9 (o) Drainage structures and drainage facilities on logging roads shall not discharge on erodible fill or other erodible
material unless suitable energy dissipaters are used. Energy dissipaters suitable for use with waterbreaks are
described in 14 CCR 914.6(f) [934.6(f), 954.6(f)].

10 (p) Where roads do not have permanent and adequate drainage, the specifications of Section 914.6 [934.6, 954.6]
shall be followed.

11 (q) Drainage facilities shall be in place and functional by October 15. An exception is that waterbreaks do not
need to be constructed on roads in use after October 15 provided that all such waterbreaks are installed prior to the
start of rain that generates overland flow.

12 (r) No road construction shall occur under saturated soil conditions, except that construction may occur on isolated
wet spots arising from localized ground water such as springs, provided measures are taken to prevent material from
significantly damaging water quality.

13 (s) Completed road construction shall be drained by out-sloping, waterbreaks and/or cross-draining before October
15. If road construction takes place from October 15 to May 1, roads shall be adequately drained concurrent with
construction operations.

14 (t) Roads to be used for log hauling during the winter period shall be, where necessary, surfaced with rock in
depth and quantity sufficient to maintain a stable road surface throughout the period of use. Exceptions may be
15 proposed by the RPF, justified in the ~~THP~~ plan, and found by the Director to be in conformance with the requirements
16 of this subsection.

17 (u) Slash and other debris from road construction shall not be bunched against residual trees which are required
for silvicultural or wildlife purposes, nor shall it be placed in locations where it could be discharged into Class I or II
watercourses.

18 (v) Road construction activities in the WLPZ, except for ~~stream~~ watercourse crossings or as specified in the
19 ~~THP~~ plan, shall be prohibited.

20 (w) The maximum width of roads shall be specified in the plan and unless explained and justified in the plan,
21 reconstructed roads shall be no wider than the existing width, and new roads shall be single lane compatible
22 with the largest type of equipment specified for use on the road. The roads shall be out-sloped where
23 feasible and drained with water breaks or rolling dips (where the road grade is inclined at 7 percent or less),
in conformance with other applicable Forest Practice Rules

24 (x) The following shall apply on slopes greater than 50% where excavated materials have the potential to enter
25 a watercourse:

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

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

4 (3) Alternatively, roads may be constructed with balanced cuts and fills if properly engineered, or fills may
5 be removed with the slopes re-contoured prior to the winter period.

6 (y) Where situations exist that elevate risks to the values set forth in 14 CCR § 916.2 [936.2, 956.2] (e.g. road
7 networks are remote, the landscape is unstable, water conveyance features historically have a high failure
8 rate, culvert fills are large) drainage structures and erosion control features shall be oversized, low
9 maintenance, or reinforced, or they shall be removed before the completion of the timber operation. The
10 method of analysis and the design for crossing protection shall be included in the plan.

11 (z) There shall be no construction or reconstruction or use of roads within the channel zone with the following
12 exceptions:

13 (1) Operations necessary for the construction, reconstruction, or use of watercourse crossings as approved
14 by the Director, or as permitted by Fish and Game Code Section 1601 and 1603, or

15 (2) Operations necessary for the protection of public health and safety.

16 NOTE: Authority cited: Sections 4551, 4551.5, 4553, and 4562.5, Public Resources Code. Reference: Sections
17 4512, 4551.5, 4562.5, and 4562.7, Public Resources Code; California Case Law: *Natural Resources Defense*
18 *Council, Inc. v. Arcate Natl. Corp.* (1972) 59 Cal. App. 3d 959, 131 Cal. Rptr. 172.

19 **Amend 14 CCR § 923.3, [943.3, and 963.3] Watercourse Crossings**

20 Watercourse crossing drainage structures on logging roads shall be planned, constructed, reconstructed,
21 and maintained or removed, according to the following standards. Exceptions may be provided through application of
22 Fish and Game Code Sections 1601 and 1603 and shall be included in the plan THP.

23 (a) The location of all new permanent watercourse crossing drainage structures and temporary crossings
24 located within the WLPZ shall be shown on the THP plan map. If the structure is a culvert intended for permanent
25 use, the minimum diameter of the culvert shall be specified in the plan. Extra culverts beyond those shown in the
THP plan map may be installed as necessary.

(b) The number of crossings shall be kept to a feasible minimum.

(c) Drainage structures on watercourses that support fish vertebrate aquatic species shall allow for
unrestricted passage of all life stages of fish vertebrate aquatic species that may be present at during the time the
drainage structure is in use, and shall be fully described in the plan in sufficient clarity and detail to allow evaluation
by the review team and the public, provide direction to the LTO for implementation, and provide enforceable

standards for the inspector. Any new permanent culvert installed within class I watercourses shall allow for the natural movement of bedload to form a continuous bed through the culvert.

(d) When watercourse crossings, other drainage structures, and associated fills are removed the following standards shall apply:

(1) Fills shall be excavated to form a channel that is as close as feasible to the natural watercourse grade and orientation, and that is wider than the natural channel.

(2) The excavated material and any resulting cut bank shall be sloped back from the channel and stabilized to prevent slumping and to minimize soil erosion. Where needed, this material shall be stabilized by seeding, mulching, rock armoring, or other suitable treatment.

(e) All permanent watercourse crossings that are constructed or reconstructed shall accommodate the estimated 100-year flood flow, including debris and sediment loads.

(f) Permanent watercourse crossings and associated fills and approaches shall be constructed or ~~maintained~~ reconstructed to prevent diversion of ~~stream~~ watercourse overflow down the road and to minimize fill erosion should the drainage structure become obstructed. The RPF may propose an exception where explained in the THP plan and shown on the THP plan map and justified how the protection provided by the proposed practice is at least equal to the protection provided by the standard rule.

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

~~(h) The amendments to 14 CCR §§ 923.3 [943.3,963.3] that became effective July 1, 2000 shall expire on December 31, 2003.~~

Note: Authority cited: Sections 4551, 4551.5, and 21004, Public Resources Code. Reference: Sections 4512, 4513, 4551, 4551.5, 4562.5 and 4562.7, Public Resources Code; 40 CFR 130.2(q); and California Case Law: *Natural Resources Defense Council, Inc. v. Arcata Natl. Corp.* (1972) 59 Cal. App. #d 959, 131 Cal Rptr. 172.

Amend 14 CCR § 923.5, [943.5, 963.5] Landing Construction and Reconstruction

Landings shall be constructed according to the following standards:

(a) On slopes greater than 65%, no fill shall be placed and sidecast shall be minimized to the degree feasible. The Director may approve an exception if, site specific measures to minimize slope instability, soil erosion, and discharge of concentrated surface runoff are described and justified in the THP plan.

(b) On slopes greater than 50%, fills greater than 4 ft. in vertical height at the outside shoulder of the landing shall be: 1) constructed on a bench that is excavated at the proposed toe of the fill and is wide enough to compact the first

1 lift, and 2) compacted in approximately 1 ft. lift from the toe to the finished grade. The RPF or supervised designee
2 shall flag the location of this bench or the RPF shall provide a description of the bench location (narrative or drawing)
3 in the THP plan for fills meeting the above criteria, where the length of landing section is greater than 100 feet. The
4 RPF may propose an exception in the THP plan and the Director may approve the exception where it is justified that
5 the landing will be stabilized.

6 **(c)** Waste organic material, such as uprooted stumps cull logs, accumulations of limbs and branches, or
7 unmerchantable trees, shall not be buried in landing fills. Wood debris or cull logs and chunks may be placed and
8 stabilized at the toe of landing fills to restrain excavated soil from moving downslope.

9 **(d)** Constructed landings shall be the minimum in width, size, and number consistent with the yarding and loading
10 system to be used. Landings shall be no larger than one-half acre (.202 ha) unless explained and justified in the THP
11 plan.

12 **(e)** No landing construction shall occur under saturated soil condition.

13 **(f)** The following specifications shall be met upon completion of timber operations for the year or prior to October
14 15, whichever occurs first:

15 **(1)** Overhanging or unstable concentrations of slash, woody debris and soil along the downslope edge or
16 face of the landings shall be removed or stabilized when they are located on slopes over 65% or on slopes over 50%
17 within 100 ft. of a WLPZ.

18 **(2)** Any obstructed ditches and culverts shall be cleaned.

19 **(3)** Landings shall be sloped or ditched to prevent water from accumulating on the landings. Discharge
20 points shall be located and designed to reduce erosion.

21 **(4)** Sidecast or fill material extending more than 20 feet in slope distance from the outside edge of the
22 landing and which has access to a watercourse or lake shall be seeded, planted, mulched, removed or treated as
23 specified in the THP plan to adequately reduce soil erosion.

24 **(5)** Sidecast or fill material extending across a watercourse shall be removed in accordance with standards
25 for watercourse crossing removal set forth in 14 CCR 923.3 (d).

(g) On slopes greater than 35%, the organic layer of the soil shall substantially removed prior to fill placement.

(h) When landings are constructed after October 15 they shall be adequately drained concurrent with construction
operations and shall meet the requirements of (f)(1) through (f)(4) of this subsection upon completion of operations at
that landing.

(i) There shall be no construction or reconstruction, or use of landings within the channel zone with the following
exceptions:

(1) Operations necessary for the construction, reconstruction, or use of landings as approved by the
Director, or as permitted by Fish and Game Code Section 1601 and 1603, or

(2) Operations necessary for the protection of public health and safety.

(ij) The RPF may propose and the Director may approve waiver of requirements in (f)(1) through (f)(4) of this
subsection if the Director finds they are not necessary to minimize erosion or prevent damage to downstream
beneficial uses. The Director may also approve an exception to the October 15th date for treatment of slash and
debris, including the practice of burning.

Note: Authority cited: Sections 4551, 4551.5, and 21004, Public Resources Code. Reference: Sections 4512, 4513,
4551, 4551.5, 4562.5 and 4562.7, Public Resources Code; 40 CFR 130.2(q); and California Case Law: *Natural
Resources Defense Council, Inc. v. Arcata Natl. Corp.* (1972) 59 Cal. App. #d 959, 131 Cal Rptr. 172.

1
2 **Amend 14 CCR § 923.8, [943.8, 963.8] Planned Abandonment of Roads, Watercourse Crossings, and Landings.**

3 Abandonment of roads, watercourse crossings and landings shall be planned and conducted in a manner which
4 provides for permanent maintenance-free drainage, minimizes concentration of runoff, soil erosion and slope
instability, prevents unnecessary damage to soil resources, promotes regeneration, and protects the quality and
beneficial uses of water. General abandonment procedures shall be applied in a manner which satisfies this
standard and include the following:

5 (a) Blockage of roads so that standard production four wheel-drive highway vehicles cannot pass the point of
closure at the time of abandonment.

6 (b) Stabilization of exposed soil on cuts, fills, or sidecast where deleterious quantities of eroded surface soils may
be transported in a watercourse.

7 (c) Grading or shaping of road and landing surfaces to provide dispersal of water flow.

8 (d) Pulling or shaping of fills or sidecast where necessary to prevent discharge of materials into watercourses due
to failure of cuts, fills, or sidecast.

9 (e) Removal of watercourse crossings, other drainage structures, and associated fills in accordance with 14 CCR
923.3(d). Where it is not feasible to remove drainage structures and associated fills, the fill shall be excavated to
provide an overflow channel which will minimize erosion of fill and prevent diversion of overflow along the road should
the drainage structure become plugged.

10 The Director may approve an exception to a requirement set forth in (b) through (e) above when such exceptions
are explained and justified in the THP plan and the exception would provide for the protection of the beneficial uses of
11 water or control erosion to a standard at least equal to that which would result from the application of the standard
12 rule.

13 (f) The plan shall state the locations of and specifications for road or landing abandonment or other mitigation
14 measures to minimize the adverse effects of long-term site occupancy of the transportation system within the
15 plan area.

16 NOTE: Authority cited: Sections 4551, 4551.5, 4553, and 4562.5, Public Resources Code. Reference: Sections
4512, 4551.5, 4562.5, and 4562.7, Public Resources Code; California Case Law: *Natural Resources Defense*
Council, Inc. v. Arcate Natl. Corp. (1972) 59 Cal. App. 3d 959, 131 Cal. Rptr. 172.

17 **Amend 14 CCR §1050 Erosion Control Maintenance**

18 (a) Where necessary to minimize soil erosion or slope instability or to prevent degradation of the quality and
beneficial uses of water, the department may require that erosion controls be maintained prior to the beginning of a
19 winter period and prior to filing of a work completion report.

20 (b) The Director may deem completion report as described in PRC 4585 to have been filed upon the date of
receipt if the Department finds that all erosion controls have been constructed and maintained in compliance with the
Forest Practice Rules upon the first inspection after receipt of the completion report. Otherwise, the Director shall
21 accept a work completion report for filing only after the Department finds that all erosion controls have been
constructed in compliance with the Forest Practice Rules.

22 (c) The LTO is responsible for proper construction, inspection and maintenance of erosion control during the
prescribed maintenance period until the work completion report as described in PRC 4585 is approved by the
Director. The landowner is responsible for inspection and any needed repair and maintenance of erosion controls
23 during the remainder of the prescribed maintenance period. Responsibility for erosion control maintenance may be
assumed at an earlier date by the landowner or can be delegated to a third party, provided that the assuming party
acknowledges such responsibility in writing to the Director.

24 ~~(d) Upon approving a work completion report, the Director may prescribe a maintenance period which extends for~~
25 ~~as much as three years after filing the work completion report based on physical evidence (such as location of~~
~~erosion controls in disturbed areas with high or extreme erosion hazard, on steep or unstable slopes, or within or~~

1 adjacent to the standard width of a water course or lake protection zone) that erosion controls need to be maintained
2 for the extended maintenance period in order to minimize soil erosion or slope instability or to prevent degradation of
3 the quality and beneficial uses of water.

4 ~~(e) After approving the work completion report, the Director may extend the prescribed maintenance period for as
5 much as three years after filing of the work completion report if subsequent inspections by the department during the
6 prescribed maintenance period show that erosion controls have failed or are likely to fail to minimize soil erosion or
7 slope instability or to prevent degradation of the quality and beneficial uses of water.~~

8 (d) The erosion control maintenance period on permanent and seasonal roads and associated landings that
9 are not abandoned in accordance with 14 CCR 923.8 [943.8, 963.8] shall be three years unless otherwise agreed to
10 by the Director.

11 Note: Authority cited: Sections 4551, 4551.5, 4562.9, 4584, and 4585, Public Resources Code. Reference: Sections
12 4512, 4513, 4551.5 4562.7, 4562.9, 4584, and 4585, Public Resources Code.

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14 JLM: 7/15/02

15 File: Road Rules -Revised 7-15-02