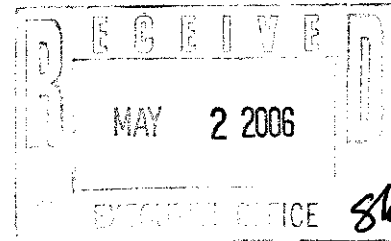




COAST ACTION GROUP  
P.O. Box 215  
Point Arena, CA 95468  
(707) 542-4408

April 26, 2006

Chair Tam Doduc and Members of the State Water Board  
c/o Selica Potter, Acting Clerk to the Board  
State Water Resources Control Board  
Executive Office  
1001 I Street, 24<sup>th</sup> Floor  
Sacramento, CA 95814



**Subject: Scott TMDL Action Plan for Sediment and Temperature - Additional Comments - Flows and Timelines**

Coast Action Group commends the Board for it's attention to this subject. The policy and resources issues related to the Scott TMDL Action Plan/Basin Plan Amendment are extremely important. Thank you!

These Additional Comments, as requested by Board Chair Tam Doduc, are aimed at dealing with issue of Flows and Timelines. However, there are some other issues that are connected to and inseparable from Flow and Timelines that will be mentioned - in a limited and concise way.

Coast Action Group believes that previous comments to the Board (in the file) included recommendations regarding issue of flows. These recommendations can be found under heading **ACTION THAT THE SWRCB CAN TAKE TO REMEDY ISSUE** (CAG April 6 Comments). These suggestions will not be repeated here, but can be referenced if needed.

First; CAG would like to remind the Board that only through enforceable language and timelines will progress be made towards attaining WQS. I hope the that Board Members made noted the effective progress presented in the Garica River - TMDL Success Story > Please reference observations made by NMFS biologist Charlotte Ambrose.

**Region Wide Basin Plan Amendment**

At the Scott Action Plan/Basin Plan Amendment workshop the Regional Board Executive Officer, Catherine Kuhlman, noted that, given limited staffing resources and the nature of the problems on the north coast rivers, it would be more effective to deal

with sediment and shade issues with a region-wide a Basin Plan Amendment (for sediment and temperature issues).

CAG had initiated this idea during the Garcia TMDL process. CAG supports this concept as being probably the most efficient and potentially successful approach to dealing with these problems which are endemic in the north coast watersheds. This concept will work only if issues and conditions in such Region Wide Basin Plan Amendment are dealt with by appropriate end point targets and enforceable language.

**It is suggested that the SWRCB support Region Wide Basin Plan Amendment to deal with Sediment and Temperature (effective shade - riparian desired conditions) issues.**

CAG, also, recognizes opportunity to nexus TMDL Actions Plans with Waste Discharge Reporting (and/or related Waivers).

**It is suggested that the SWRCB and Regional Board put some thought into the integration of these two processes. This should be inclusive of the State Non-point Source Policy.**

### **Flow Issues**

There are a number of actions that the Board can take that do not require water rights adjudication. The Board can, and has responsibility to, enforce conditions in water diversion and water rights licenses/permits. The Board has responsibility to limit wasteful use of water. Wasteful irrigation conditions have been shown to exist in the Scott River Valley. The Board can undertake and/or oversee a study to deal with ground water and diversion effect on instream flows.

For Small diversions, the Board can impose conditions as per the joint DFG/NMFS Guidelines for Maintaining Instream Flows to Protect Fisheries Resources Downstream of Water Diversions in Mid-California Coastal Streams (2002). Many small diversions of inappropriate design can result in a cumulative water use problem. These "Guidelines" contain elements that would limit or avoid impacts.

CAG's previous comments contained the language (in the Appendix) from the San Joaquin TMDL for DO. Flow-specific objectives were the result of this case State (See - Water Resources Control Bd. Cases, 136 Cal. App. 4th 674, 775-77 (2006)).

All instream diversions are subject to permitting under CDF Code 1600. Such permitting is subject to conditions to protect beneficial uses. Also, such permitting is subject environmental review under CEQA. These 1600 permits are time-limited to 5 years. Re-issuance of a 1600 permit opens the permit up for reconsideration for new conditions to protect beneficial uses and fishery resources. The SWRCB (Division of Water Rights) is both trustee and responsible agency on these issues. The SWRCB

can ask for environmental review and imposition of conditions to protect beneficial uses in regards to diversion related DFG 1600 permits.

### **Temperature - Flows vs. Shade (Response to issue Raised by Board Member Secundy)**

After the workshop, in discussion with Regional Board staff, I was criticized (in a friendly way and rightfully so) for placing too much emphasis on flows and not enough on the shade component (effective shade) in regards to the instream temperature issue.

While flows do play a significant role in establishing instream temperature, it is true that flows are not the only significant temperature controlling element. It also true that loss of effective shade from riparian incursion from agricultural activity and/or cattle or sheep-related causes of canopy loss is a large factor in dertermining instream temperature - a factor that takes many years to remedy (after the proper near stream desired conditions are set forth and descriptive actions for compliance are stated and met). Riparian recovery is a slow process.

The scientific literature indicates that there is more to riparian management that limiting direct sunlight to the stream. The literature notes that stream temperature is directly affected by the ambient air temperature and humidity of the near stream climate zone. If you have ever walked from a very hot open area into a shaded near stream zone you would note the huge change in temperature. There can be a 30 degree difference. This indicates the need for more than very narrow margins in the near steam zone for riparian recruitment.

Of course, Ag and timber will tell you that you do not need significant riparian to get cool instream flows.

Mr. Crumb indicated, at the hearing, that 90% of the Scott River in the valley, has been fenced to exclude livestock. Mr. Crumb did not indicate what percentage of the small tributaries have been fenced and he did not indicate, on average, the width of the protected areas of the near stream zone. It is very difficult to get much effective shade out of a 5' (from the break and slope of the stream bank to the fencing) riparian management area.

Targets and timelines for achieving near stream desired conditions (including descriptions of methods for achieving these goal/targets) should be included in the TMDL Action Plan.

### **Forestry - Stream Protection Guidelines**

The Board of Forestry is actively considering elimination of the Threatened and Impaired Rules - stream protections (riparian, flow, and sediment control) appurtenant

to timber harvest on impaired waterbodies.. These rules were recently incorporated to be baseline protections for beneficial uses - and - must remain in place as such if stream recovery and attainment of WQS is to occur.

**Suggestion: Incorporate the Threatened and Impaired Rules into the Basin Plan.  
A copy of the rules is attached.**

### **Timelines and Targets**

A phased approach in developing desired conditions is reasonable. It cannot be expected that all the actions needed to attain WQS take place in a very short period of time.

An effective action plan should have very definite timelines linked to specific targeted actions.

There is no reason why landowners should not be expected to assess their property for sediment sources and provide an inventory of these sources within two years from the adoption of the TMDL Action Plan/Basin Plan Amendment. Within three years from the adoption of the TMDL Action Plan/Basin Plan Amendment landowners should provide a prioritized plan, with signed enforceable commitment, to remedy these sources over a period of 30 years. This schedule allows for remediation of the outstanding problems at a minimum rate of approximately 5% year. Yearly reporting of progress should be made to the Regional Board.

This same vision of timeline can be developed for effective shade issue.

Similar time frames should be applied to the larger entities:

Siskiyou County should develop a road assessment and maintenance plan within 3 years. The County can develop and approve a Grading Ordinance and Stormwater Plan within 3 years.

CalTrans and the U.S. Forest Service should be subject to similar conditions.

This discussion, with recommendations, is offered for your consideration in dealing with outstanding issues related to the Scott River TMDL and Action Plan.

Sincerely,



For Coast Action Group



**UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
NATIONAL MARINE FISHERIES SERVICE**

Southwest Region  
501 West Ocean Boulevard, Suite 4200  
Long Beach, California 90802-4213

MAR 31 2006

In response refer to:  
10015SWR2006SR00189:CAA

Mr. Stan Dixon  
Chair, California Board of Forestry and Fire Protection  
P. O. Box 944246  
Sacramento, California 94244-2460

Dear Chairman:

This National Marine Fisheries Service (NMFS) letter pertains to the Board of Forestry's (BOF) obligation to extend, permanently adopt, or allow the sunseting of, the Threatened and Impaired Rules (T&I Rules) by December 31, 2006. The BOF administrative record preceding the adoption of the T&I Rules, as well as the *Federal Register* Notice published by NMFS June 7, 2000 (65 FR 36074), provides unequivocal and substantive evidence to suggest that any action by the BOF other than to extend or permanently adopt the T&I Rules would be unfounded.

In California, there are 10 distinct populations of salmon and steelhead listed as either threatened or endangered pursuant to the Federal Endangered Species Act (ESA) of 1973, as amended. Nearly all populations in northern California co-occur with large tracts of forestlands managed under California Forest Practice Rules (FPR). During the listing process of these species, NMFS reviewed the FPR and in all cases concluded they do not adequately protect anadromous salmonids or provide for properly functioning habitat conditions (60 FR 38011; 60 FR 14253; 61 FR 56138; 61 FR 41541; 62 FR 62741; 62 FR 43937; 62 FR 43974 and others). In fact, many of these *Federal Register* Notices conclude that California's non-Federal forestry practices are significant factors contributing to salmon and steelhead population declines and the degradation, simplification and fragmentation of their habitats through the present or threatened destruction, modification or curtailment of habitat and range, and the inadequacy of existing regulatory mechanisms.

NMFS testimony to the BOF in 2000 (additionally communicated in the June 7, 2000, *Federal Register* Notice) outlines that the T&I Rules "constitute a good first step in addressing many concerns raised during the FPR review process; however, they are currently inadequate to protect anadromous salmonids, including steelhead, and their habitat."

Since the 2000 adoption of the T&I Rules there have been no major changes in our general understanding of watershed process and salmonid needs. Habitat conditions for salmonids continue to decline and, after a recent NMFS status review of all Pacific Northwest salmonids, the federal status of the Central California Coast coho salmon Evolutionarily Significant Unit (*Oncorhynchus*

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*kisutch*) was changed from threatened to endangered. The geographic range of Central California Coast coho salmon overlaps large tracts of private forestlands.

NMFS recommends the BOF re-visit the *Federal Register* Notice from June 7, 2000 (enclosed) and the administrative record preceding T&I Rule adoption, and that these Rules be considered in their entirety for permanent adoption or extension. NMFS looks forward to continued communication that builds from this history of dialog and recognizes collaborative opportunities such as the current work to develop a foundation for science-based decision-making and the ultimate development of the California Department of Fish and Game 2112 Incidental Take Guidelines.

Thank you for your consideration. If you have any questions or would like to meet with staff regarding comments in this letter please contact Charlotte Ambrose at (707) 575-6068 or via email at [charlotte.a.ambrose@noaa.gov](mailto:charlotte.a.ambrose@noaa.gov).

Sincerely,

Original Signature on File

Rodney R. McInnis  
Regional Administrator

cc: Russ Strach, NMFS Sacramento  
L. Ryan Broddrick, DFG Sacramento  
Dick Butler, NMFS Santa Rosa  
Irma Lagomarsino, NMFS Arcata

Enclosure

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**Federal Register Notices Cited or Provided for Reference**

60FR38011. 1995. Proposed Threatened Status for Three Contiguous ESUs of Coho Salmon Ranging From Oregon Through Central California. Federal Register 60:38011-38030.

60FR14253. 1995. Proposed Threatened Status for Southern Oregon and Northern California Steelhead. Federal Register 60:14253-14261.

61FR56138. 1996. Threatened Status for Central California Coast Coho Salmon Evolutionarily Significant Unit (ESU). Federal Register 61:56138-56149.

61FR41541. 1996. Proposed Endangered Status for Five ESUs of Steelhead and Proposed Threatened Status for Five ESUs of Steelhead in Washington, Oregon, Idaho, and California 61:41541-41561.

62FR62741. 1997. Central California Coast and Southern Oregon Northern California Coast Coho Salmon. Federal Register 62:62741-62751

62FR43937. 1997. Listing of Several Evolutionary Significant Units (ESUs) of West Coast Steelhead. Federal Register 62:43937-43954.

62FR43974. 1997. Notice of Partial 6-Month Extension on the Final Listing Determination for Several Evolutionarily Significant Units (ESUs) of West Coast Steelhead. Federal Register 62:43974-43976.

62FR38479. 1997. Interim Rule Governing Take of the Threatened Southern Oregon/Northern California Coast Evolutionarily Significant Unit (ESU) of Coho Salmon. Federal Register 62:38479-38485.

62FR33038. 1997. Threatened Status for the Southern Oregon/Northern California Coast Evolutionarily Significant Unit of Coho Salmon

63FR11482. 1998. Proposed Endangered Status for Two Chinook Salmon ESUs and Proposed Threatened Status for Five Chinook Salmon ESUs; Proposed Redefinition, Threatened Status, and Revision of Critical Habitat for One Chinook Salmon ESU; Proposed Designation of Chinook Salmon Critical Habitat in California, Oregon, Washington, Idaho. Federal Register 63:11482-11482-520.

63FR13347. 1998. Threatened Status for Two ESUs of Steelhead in Washington, Oregon, and California. Federal Register 63:13347-13371.

63FR24148. 1998. Definition of Harm. Federal Register 63:24148-24150.

64FR73479. 1999. Proposed Rule Governing Take of Threatened Snake River, Central California Coast, South/Central California Coast, Lower Columbia River, Central Valley California, Middle

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Columbia River, and Upper Willamette River Evolutionarily Significant Units (ESUs) of West Coast Steelhead. Federal Register 64:73479-73506.

64FR60727. 1999. Definition of Harm. Federal Register 64:60727-60731.

65FR36074. 2000. Endangered and Threatened Species: Threatened Status for One Steelhead Evolutionarily Significant Unit (ESU) in California. Federal Register 65:36074-36094.

65FR42422. 2000. Final Rule Governing Take of 14 Threatened Salmon and Steelhead ESUs. Federal Register 65:42422-42481.

65FR6960. 2000. Threatened Status for One Evolutionarily Significant Unit of Steelhead in California. Federal Register 65:6960-6975.

67FR1116. 2002. Final Rule Governing Take of 4 Threatened ESUs of West Coast Salmonids. Federal Register 67:1116-1133.

69FR33102. 2004. Endangered and Threatened Species: Proposed Listing Determinations for 27 ESUs of West Coast salmonids. Federal Register 69: 33102.

70FR37160. 2005. Endangered and threatened species: final listing determinations for 16 ESUs of West Coast Salmon, and final 4(d) protective regulations for threatened salmonid ESUs. Federal Register 70: 37160.

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UNIT, F.G. WQ  
4-21-06  
UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
NATIONAL MARINE FISHERIES SERVICE  
Southwest Region  
777 Sonoma Ave., Room 325  
Santa Rosa, CA 95404-6528

April 18, 2006

In response refer to:  
150502WR2006SR00218:CAA

Leslie A. Markham  
Division Chief, Forest Practice  
California Department of Forestry and Fire Protection  
135 Ridgway Avenue  
Santa Rosa, California 95401

1-06-024 MEN

1-00-362 MEN

Dear Ms. Markham:

NOAA's National Marine Fisheries Service (NMFS) is the Federal agency responsible for regulatory jurisdiction over salmon and steelhead populations in California listed as threatened or endangered under the Federal Endangered Species Act (ESA) of 1973, as amended. As you know, absent an ESA section 4(d) limitation on the prohibitions and forestry activities in California, or an ESA section 10(a)(1)(B) permit (Habitat Conservation Plan), incidental take of listed salmonids is not authorized. The California Department of Forestry (CDF), the plan submitter, and the timberland owner bear full responsibility of ensuring timber harvest activities do not result in "take" of listed salmonids, and that Timber Harvest Plans (THPs) approved and implemented are in compliance with the ESA and other applicable laws. This letter is being submitted to CDF for two reasons: 1) to notify CDF of a change in the letter NMFS submits from the Santa Rosa office for proposed THPs; and 2) inform CDF of the recent upgrade in the Federal status of Central California Coast (CCC) coho salmon from threatened to endangered.

NMFS has interacted with the Board of Forestry (BOF), the regulatory body responsible for promulgating California's Forest Practice Rules (see enclosed letter recently submitted to BOF); and the State's THP review process for THPs found to pose a high risk of harming anadromous salmonids if implemented as proposed. It has come to our attention that new THPs are being submitted to the California Department of Forestry (CDF) that may overlap with THP areas where NMFS has previously conducted field reviews and submitted recommendations to avoid harm to salmonids (e.g., THP 1-06-024 MEN and 1-00-362 MEN). Watershed processes support spawning, rearing and migrating habitats for salmonids and little has changed regarding our understanding of this relationship and the effects of timber operations on these processes.

A recent status review of all Pacific Northwest salmonids determined CCC coho salmon were at high risk of extinction and were Federally re-listed from threatened to endangered (70 FR 37160 effective August 2005). The range of CCC coho salmon overlaps large tracts of forestlands operating under California's Forest Practice Rules. We encourage CDF to review THPs within the

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range of CCC coho salmon (map enclosed) more critically relative to potential impacts to this species. Furthermore, NMFS is revising the letter submitted to CDF for harvest plans received by our office. It is our position that where NMFS has conducted field reviews and provided no take recommendations for specific streams within the CCC coho salmon range; those recommendations are still applicable for new THP submissions and additional reviews by NMFS are unwarranted.

If you have any questions or would like to meet with staff regarding comments in this letter, please contact Charlotte Ambrose at (707) 575-6068 or via email at [Charlotte.A.Ambrose@noaa.gov](mailto:Charlotte.A.Ambrose@noaa.gov).

Sincerely,

**Original Signature on File**

Dick Butler  
Santa Rosa Area Office Supervisor  
Protected Resources Division

**Enclosures**

cc: Stan Dixon, Chair Board of Forestry  
Russ Strach, NMFS Sacramento  
Irma Lagomarsino, NMFS Arcata  
Rick Macedo, CDFG  
Christine Wright Shacklett, Water Quality  
Stephen P. Levesque, Campbell Timberland Management, LLC.

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ENCLOSURE

XXXXXXXXXX

Leslie A. Markham  
Division Chief, Forest Practice  
California Department of Forestry and Fire Protection  
135 Ridgway Avenue  
Santa Rosa, CA 95401

Dear Ms. Markham:

The National Marine Fisheries Service (NMFS) has received Timber Harvest Plan (THP) XXXXXXXXXX. This THP was submitted to the California Department of Forestry and Fire Protection (CDF) by XXXXXXXXXX. The proposed THP area may be within the ranges of species which have been listed as threatened or endangered under the Federal Endangered Species Act (ESA) of 1973, as amended: Central California Coast steelhead, Northern California steelhead, Central California Coast coho salmon, and California Coastal Chinook.

Thank you for the opportunity to review this THP. Unfortunately, NMFS will not be reviewing or commenting at this time. We remind you, however, that CDF, the plan submitter, and the timberland owner bear full responsibility of ensuring activities do not result in "take" of listed salmonids, and that this THP is approved and implemented in compliance with the ESA and other applicable laws. Absent an ESA section 4(d) limitation on the prohibitions and forestry activities in California, or an ESA section 10(a)(1)(B) permit (Habitat Conservation Plan), incidental take of listed salmonids is not authorized.

Please do not assume that because NMFS has not selected this THP for a thorough review that NMFS is not concerned with potential impacts of this THP if implemented. Timber harvest activities have been identified in NMFS *Federal Register* Notices as actions that may, and often do, result in incidental take of ESA listed species. Please notify me if you feel this THP warrants special attention, or to request assistance obtaining incidental take authorization. Furthermore, should areas in Mendocino or Sonoma counties be proposed for harvesting, where NMFS has previously conducted a field review and provided recommendations; these recommendations still apply. The status of Central California Coast coho salmon was recently relisted from threatened to endangered and is at high risk of extinction throughout its range; a range where forestry is a predominant land use.

In summary, NMFS will have no further comments specific to THP XXXXXXXXXX at this time. If the THP is approved by CDF, incidental take of Federally listed species pursuant to the ESA (16 USC 1531 *et. seq.*) is not authorized. If you have questions or comments about this letter, please contact me at 707/575-6058.

Sincerely,

Dick Butler  
Santa Rosa Area Office Supervisor  
Protected Resources Division

cc: XXXXXXXXXXXXXXXXXXXX

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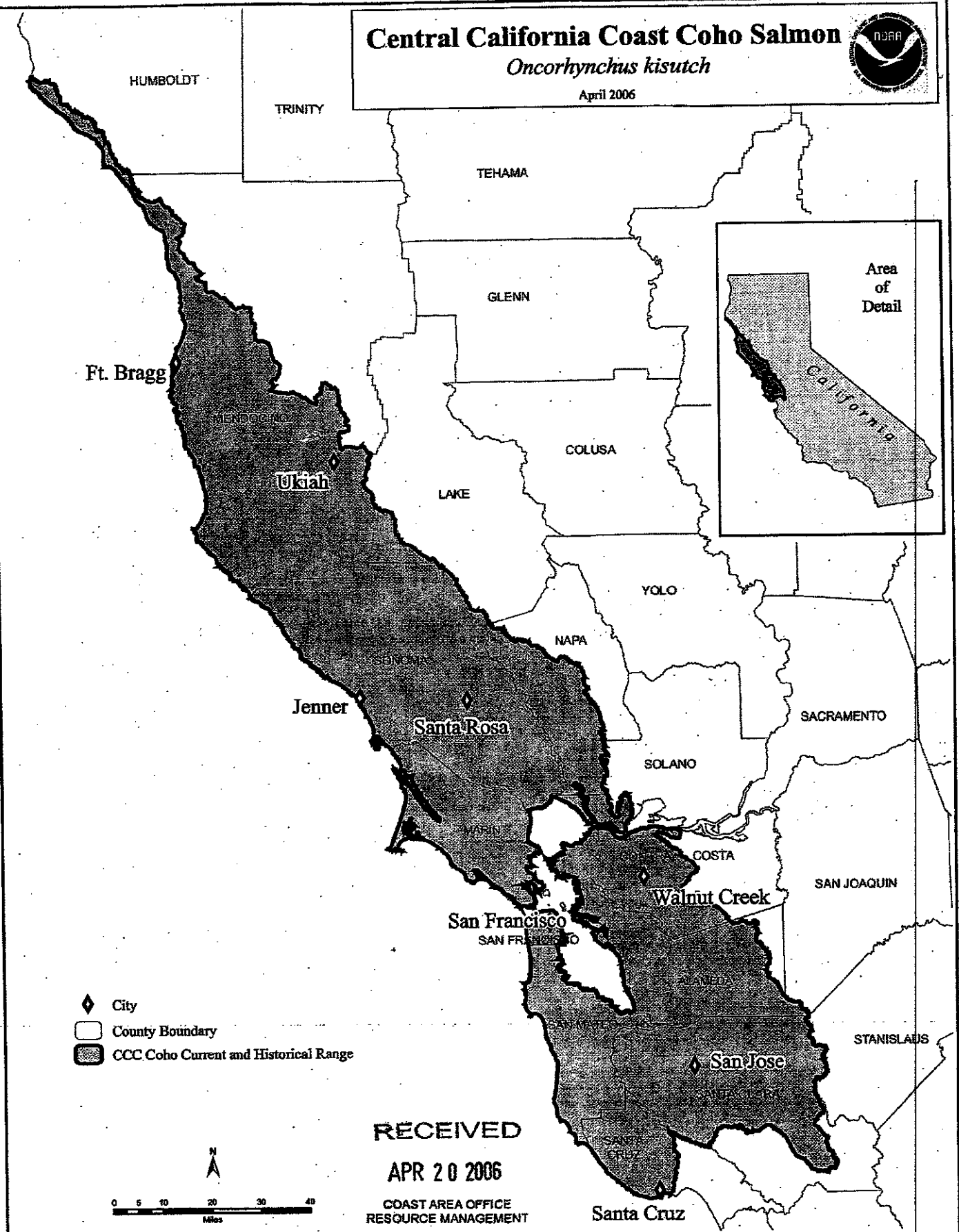
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## Central California Coast Coho Salmon

*Oncorhynchus kisutch*

April 2006



**CALIFORNIA FOREST PRACTICE RULES  
"THREATENED or IMPAIRED" RULES SECTIONS  
(SCHEDULED TO "SUNSET" ON 31 DECEMBER 2006)**

**916.9, 936.9, 956.9 Protection and Restoration in Watersheds with  
Threatened or Impaired Values [All Districts]**

In addition to all other district Forest Practice Rules, the following requirements shall apply in any planning watershed with threatened or impaired values:

**(a) GOAL** - Every timber operation shall be planned and conducted to prevent deleterious interference with the watershed conditions that primarily limit the values set forth in 14 CCR 916.2 [936.2, 956.2](a) (e.g., sediment load increase where sediment is a primary limiting factor; thermal load increase where water temperature is a primary limiting factor; loss of instream large woody debris or recruitment potential where lack of this value is a primary limiting factor; substantial increase in peak flows or large flood frequency where peak flows or large flood frequency are primary limiting factors). To achieve this goal, every timber

operation shall be planned and conducted to meet the following objectives where they affect a primary limiting factor:

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

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

**(3)** Not result in any measurable blockage of any aquatic migratory routes for anadromous salmonids or listed species.

**(4)** Not result in any measurable stream flow reductions during critical low water periods except as part of an approved water drafting plan pursuant to 14 CCR 916.9(r) [936.9(r), 956.9(r)].

**(5)** Consistent with the requirements of 14 CCR § 916.9(i), 14 CCR § 936.9(i), or 14 CCR § 956.9(i); protect, maintain, and restore trees (especially conifers), snags, or downed large woody debris that currently, or may in the foreseeable future, provide large woody debris recruitment needed for instream habitat structure and fluvial geomorphic functions.

**(6)** Consistent with the requirements of 14 CCR § 916.9(g), 14 CCR § 936.9(g), or 14 CCR § 956.9(g); protect, maintain, and restore the quality and quantity of vegetative canopy needed to: (A) provide shade to the watercourse or lake, (B) minimize daily and seasonal temperature fluctuations, (C) maintain daily and seasonal water temperatures within the preferred range for anadromous salmonids or listed species where they are present or could be restored, and (D) provide hiding cover and a food base where needed.

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

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

(c) Any timber operation or silvicultural prescription within 150 feet of any Class I watercourse or lake transition line or 100 feet of any Class II watercourse or lake transition line shall have protection, maintenance, or restoration of the beneficial uses of water or the populations and habitat of anadromous salmonids or listed aquatic or riparian-associated species as significant objectives.

Additionally, for even-aged regeneration methods and rehabilitation with the same effects as a clearcut that are adjacent to a WLPZ, a special operating zone shall retain understory and mid-canopy conifers and hardwoods. These trees shall be protected during falling, yarding and site preparation to the extent feasible.

If trees that are retained within this zone are knocked down during operations, that portion of the trees that is greater than 6" in diameter shall remain within the zone as Large Woody Debris. The zone shall be 25 feet above Class I WLPZs with slopes 0-30% and 50 feet above Class I WLPZs with slopes > 30%.

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

(2) In proposing, reviewing, and approving such measures, preference shall be given to the following: (A) measures that are both onsite (i.e., on or near the plan area) and in-kind (i.e., erosion control measures where sediment is the problem), and (B) sites that are located to maximize the benefits to the impacted portion of a watercourse or lake. Out-of-kind measures (i.e., improving shade where sediment is the problem) shall not be approved as meeting the requirements of this subsection.

(e) Channel zone requirements

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

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

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

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

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

(E) Class III watercourses where exclusion of timber operations is not needed for protection of listed salmonids.

(2) In all instances where trees are proposed to be felled within the

channel zone, a base mark shall be placed below the cut line of the harvest trees within the zone. Such marking shall be completed by the RPF that prepared the plan prior to the preharvest inspection.

(f) The minimum WLPZ width for Class I waters shall be 150 feet from the watercourse or lake transition line. Where a proposed THP is located within the Sacramento or San Joaquin river drainages, and the Director and DFG concur; the RPF may explain and justify other WLPZ widths on areas where even aged regeneration methods, seed tree removal, shelterwood removal, alternative prescriptions, or rehabilitation will not be utilized adjacent to watercourse and lake protection zones and where slopes are less than 30%.

(g) Within a WLPZ for Class I waters, at least 85 percent overstory canopy shall be retained within 75 feet of the watercourse or lake transition line, and at least 65 percent overstory canopy within the remainder of the WLPZ. The overstory canopy must be composed of at least 25% overstory conifer canopy post-harvest. Where a proposed THP is located within the Sacramento or San Joaquin river drainages, and the Director and DFG concur; the RPF may explain and justify other canopy retention standards on areas where even aged regeneration methods, seed tree removal, shelterwood removal, alternative prescriptions, or rehabilitation will not be utilized adjacent to watercourse and lake protection zones and where slopes are less than 30%.

Harvesting of hardwoods shall only occur for the purpose of enabling conifer regeneration.

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

(1) A clear and enforceable specification of how any disturbance or log or tree cutting and removal within the Class I WLPZ shall be carried out to conform with 14 CCR 916.2 [936.2, 956.2](a) and 916.9 [936.9, 956.9](a).

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

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

(i) Recruitment of large woody debris for aquatic habitat in Class I anadromous fish-bearing or restorable waters shall be ensured by retaining the ten largest dbh conifers (live or dead) per 330 feet of stream channel length that are the most conducive to recruitment to provide for the beneficial functions of riparian zones.

The retained conifers shall be selected from within the THP area that lies within 50 feet of the watercourse transition line. Where the THP boundary is an ownership boundary, a class I watercourse, and the WLPZ on both sides of the watercourse currently meets the stocking standards listed under 14 CCR 912.7 [932.7, 952.7](b)(2)); the five (5) largest dbh conifers (live or dead) per 330 feet of stream channel

length that are the most conducive to recruitment to provide for the beneficial

functions of riparian zones within the THP area shall be retained within 50 feet of the watercourse transition line.

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

**(j)** Where an inner gorge extends beyond a Class I WLPZ and slopes are greater than 55%, a special management zone shall be established where the use of evenaged regeneration methods is prohibited. This zone shall extend upslope to the first major break-in-slope to less than 55% for a distance of 100 feet or more, or 300 feet as measured from the watercourse or lake transition line, whichever is less. All operations on slopes exceeding 65% within an inner gorge of a Class I or II watercourse shall be reviewed by a Registered Geologist prior to plan approval, regardless of whether they are proposed within a WLPZ or outside of a WLPZ.

**(k)** From October 15 to May 1, the following shall apply: (1) no timber operations shall take place unless the approved plan incorporates a complete winter period operating plan pursuant to 14 CCR 914.7(a) [934.7(a), 954.7(a)], (2) unless the winter period operating plan proposes operations during an extended period with low 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, and (3) operation of trucks and heavy equipment on roads and landings shall be limited to those with a stable operating surface.

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

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

**(n)** Within the WLPZ, and within any ELZ or EEZ designated for watercourse or lake protection, treatments to stabilize soils, minimize soil erosion, and



prevent the discharge of sediment into waters in amounts deleterious to aquatic species or the quality and beneficial uses of water, or that threaten to violate applicable water quality requirements, shall be applied in accordance with the following standards:

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

(A) They shall be described in the plan.

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

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

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

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

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

(o) As part of the plan, the RPF shall identify active erosion sites in the logging area, assess them to determine which sites pose significant risks to the beneficial uses of water, assess them to determine whether feasible remedies exist, and address in the plan feasible remediation for all sites that pose significant risk to the beneficial uses of water.

(p) The erosion control maintenance period on permanent and seasonal roads and associated landings that are not abandoned in accordance with 14 CCR 923.8 [943.8, 963.8] shall be three years.

(q) Site preparation activities shall be designed to prevent soil disturbance within, and minimize soil movement into, the channels of watercourses. Prior to any broadcast burning, burning prescriptions shall be designed to prevent loss of large woody debris in watercourses, and vegetation and duff within a WLPZ, or within any ELZ or EEZ designated for watercourse or lake protection. No ignition is to occur within any WLPZ, or within any ELZ or EEZ designated for

watercourse or lake protection. When burning prescriptions are proposed, the measures or burning restrictions which are intended to accomplish this goal shall be stated in the plan and included in any required burning permit. This information shall be provided in addition to the information required under 14 CCR 915.4 [935.4, 955.4].

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

(1) The RPF shall incorporate into the THP:

- (A) a description and map of proposed water drafting locations,
- (B) the watercourse or lake classification, and
- (C) the general drafting location use parameters (i.e., yearly timing, estimated total volume needed, estimated total uptake rate and filling time, and associated water drafting activities from other THPs).

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

- (A) bypass flows are less than 2 cubic feet per second, or
- (B) pool volume at the water drafting site would be reduced by 10%, or

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

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

no water drafting shall occur unless the RPF prepares a water drafting plan to be reviewed and, if necessary a stream bed alteration agreement issued, by DFG and approved by the Director. The Director may accept the project description and conditions portion of an approved "Streambed Alteration Agreement" issued under

the Fish and Game Code (F&GC 1600 et seq.) which is submitted instead of the water drafting plan described in 14 CCR § 916.9 [936.9, 956.9] (r)(2)(D)(1-5).

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

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

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

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

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

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

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

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

(s) No timber operations are allowed in a WLPZ, or within any ELZ or EEZ designated for watercourse or lake protection, under emergency notices or

exemption notices except for hauling on existing roads, road maintenance, and operations conducted for public safety, construction or reconstruction of approved

watercourse crossings, temporary crossings of dry Class III watercourses which do not require a "Streambed Alteration Agreement" under the Fish and Game Code or forest conditions requiring harvesting that is approved by a letter of concurrence from DFG.

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

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

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

(w) Other measures that would effectively achieve the goal set forth in 14 CCR 916.9(a) [936.9(a), 956.9(a)] may be approved in accordance with 14 CCR 916.6 [936.6, 956.6].

(x) The provisions of 14 CCR 916.9 [936.9, 956.9] shall not apply to a plan that is subject to an incidental take permit based upon an approved Habitat Conservation Plan that addresses anadromous salmonid protection.

(y) This section shall expire on December 31, 2006.

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#### **916.11, 936.11, 956.11 Effectiveness and Implementation Monitoring [All Districts]**

(a) Where timber operations will be conducted within a WLPZ, the Director may require a post-harvest evaluation of the effectiveness 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 the necessity for the evaluation 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 or DFG, and THP submitter, and the sufficiency of the information requested by the Director shall be judged in light of reasonableness and practicality. The evaluation may utilize procedures including, but not limited, to:

- (1) Procedures for effectiveness and implementation monitoring,
  - (2) Existing landowner monitoring programs, or
  - (3) Photographic monitoring
- (b) This section shall expire on December 31, 2006.

**916.12, 936.12, 956.12 Section 303(d) Listed Watersheds [All Districts]**

For any planning watershed in which timber operations could contribute to the pollutants or stressors which have been identified as limiting water quality in a water body listed pursuant to 303(d) Federal Clean Water Act, the following shall apply:

(a) The Department shall, in collaboration with the appropriate RWQCB and SWRCB, prioritize watersheds in which the following will be done: 1) conduct or participate in any further assessment or analysis of the watershed that may be needed, 2) participate in the development of Total Maximum Daily Load (TMDL) problem assessment, source assessment, or load allocations related to timber operations, and 3) if existing rules are deemed not to be sufficient, develop recommendations for watershed-specific silvicultural implementation, enforcement and monitoring practices to be applied by the Department.

(b) The Department shall prepare a report setting forth the Department's findings and recommendations from the activities identified pursuant to (a) above. The report shall be submitted to the Board and the appropriate RWQCB. The report shall be made available to the public upon request and placed on the Boards' website for a 90-day period.

(c) Where the Department has recommended that the adoption of watershed specific rules is needed, the Board shall consider that recommendation as a proposal for rulemaking under the Administrative Procedures Act (Section 11340 et. seq. Gov Code) and shall begin that process within 180 days following receipt of that report.

(d) These watershed specific rules shall be developed in collaboration with the appropriate RWQCB, the landowner(s) or designee with land in the planning watershed, and other persons or groups within the watershed, and may also be incorporated into a TMDL implementation plan.

(e) The watershed specific rules shall remain in effect until the water body has been removed from the 303(d) list, or that the Board finds, after consulting with the appropriate RWQCB, that timber operations are no longer a significant source of the pollutant or stressor that limits water quality in the listed water body.

(f) This section shall expire on December 31, 2006.

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**OTHER SECTIONS:**

**895.1 Definitions**

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**Planning Watershed** means the contiguous land base and associated

watershed system that forms a fourth order or other watershed typically 10,000 acres or less in size. Planning watersheds are used in planning forest management and assessing impacts. The Director has prepared and distributed maps identifying planning watersheds plan submitters must use. Where a watershed exceeds 10,000 acres, the Director may approve subdividing it. Plan submitters may propose and use different planning watersheds, with the Director's approval. Examples include but are not limited to the following: when 10,000 acres or less is not a logical planning unit, such as on the Eastside Sierra Pine type, as long as the size in excess of 10,000 acres is the smallest that is practical. Third order basins flowing directly into the ocean shall also be considered an appropriate planning watershed.

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**Watersheds with threatened or impaired values** means any planning watershed where populations of anadromous salmonids that are listed as threatened, endangered, or candidate under the State or Federal Endangered Species Acts with their implementing regulations are currently present or can be restored. *[rgNote: These definitions are not set for expiration on December 31, 2006]*

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#### **914.8, 934.8, 954.8 Tractor Road Watercourse Crossing [All Districts]**

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

(a) The number of crossings shall be kept to a minimum. Existing crossing locations shall be used wherever feasible.

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

(c) Crossing facilities on watercourses that support fish shall allow for unrestricted passage of all life stages of fish that may be present, and for unrestricted passage of water. Such crossing facilities shall be fully described 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.

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

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

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

(g) The amendments to 14 CCR § 914.8 [934.8, 954.8] that became effective

July 1, 2000 shall expire on December 31, 2006.

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**923.3, 943.3, 963.3 Watercourse Crossings [All Districts]**

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

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

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

(c) Drainage structures on watercourses that support fish shall allow for unrestricted passage of all life stages of fish that may be present, 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.

(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 to prevent diversion of stream overflow down the road and to minimize fill erosion should the drainage structure become obstructed. The RPF may propose an exception where explained in the THP and shown on the THP map and justified how the protection provided by the proposed practice is at least equal to the protection provided by the standard rule.

(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, 2006.

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**923.9, 943.9, 963.9 Roads and Landings in Watersheds with Threatened or Impaired Values [All Districts]**

In addition to all other district Forest Practice Rules, the following requirements shall apply in any planning watershed with threatened or impaired values:

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

(b) Unless prohibited by existing contracts with the U.S.D.A. Forest Service or other federal agency, new and reconstructed logging roads shall be no wider than a single-lane compatible with the largest type of equipment specified for use on the road, with adequate turnouts provided as required for safety. The maximum width of these roads shall be specified in the plan. These roads shall be outsloped where 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.

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

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

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

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

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

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

(f) The provisions of 14 CCR 923.9 [943.9, 963.9] shall not apply to a plan that is subject to an incidental take permit based upon an approved Habitat Conservation Plan that addresses anadromous salmonid protection.

(g) This section shall expire on December 31, 2006.