State Board Forestry and Fire Protection

Review of Forest Practice Rules titled
"Protection and Restoration in Watersheds with Threatened or Impaired Values"

Group 1- Goal/Intent and Definition sections

(14 CCR 895.1, 898, 916, 916.1, 916.2, 916.9 (a) and (b), 916.12)

BOF Staff draft June 30, 2008

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I. Executive Summary Group 1 T/I Rule Review

Overview: The Board's Forest Practice Committee (FPC) initiated a review in April 2008 of the "Threatened or Impaired Watersheds (T/I)" rules related to the "Goal/Intent and Definition" sections, termed "Group 1 rules". The review involved input ,evaluation and alternative rule language proposals from stakeholders, agencies, and the Board's Technical Advisory Committee. This report summarizes the review of the Group 1 T/I rules.

As part of the review of the Group 1 rules, the FPC directed staff to:

- Compile alternative rule proposals brought by stakeholder;
- Summarize initial findings made by the FPC;
- Identify issues related to each proposed alternative;
- Identify areas of agreement and disagreement among the alternatives;

Initial FPC Findings: As part of the review of the Group 1 Goal/Intent sections, the FPC made several findings:

- The T/I Goal/Intent sections should focus on furthering ESA anadromous salmonid species requirements and 303(d) listed watercourse requirements. Potential rule amendments to better meet other agency's requirements are within the scope to the T/I review.
- The primary purpose of T/I review is ensure protection of TES listed anadromous species.
- In further meeting other agency requirements, opportunities for streamlining regulatory compliance should be developed.
- Goal is to complete a review, based on science, and amend rule with consensus among the regulated public and agencies. The FPC seeks consensus with agencies and avoid criticisms at end of review process.
- Based on input from Board counsel, it is within the authority of the Board to consider and include restoration activities as part of the T/I rules.
- Prescriptive standards should be extracted from Goal/Intent sections.

Areas of agreement: BOF staff identified areas of agreement that were common of to rule proposals brought forward by stakeholder as shown below:

- Separate goals and intent statements in 916.9 for protection of TES anadromous salmonids from those for 303(d). listed water bodies.
- Modify 916.9 for intent on protection of TES anadromous salmonids
- Consolidate into one section specific goals and intent related to for water board, policies and laws, particularly the 303D requirement and TMDL requirements. Consider consolidating into section 916.12

- Standardized terms for consistency with CEQA
- Term "measurable" (as it relates to impacts to limiting factors in 916.9) should be revised.
- Extract prescriptive requirements from goal sections in 895.1 definitions and 916.9 (a)(1)-(7) goal statements.
- Do not agree on a consolidated Group 1 alternative until other agency's input and literature review is completed.

General Issues: BOF staff compiled and summarized issues from stakeholder input that will likely need to be addressed by the FPC. Detailed description and analysis of the issues can be found following the list of General Issues below and in the analysis of the proposed rule alternatives.

- Clear articulation is needed of the Board's intent to meet other agencies, laws and policies. Agencies are gauging their level of participation based on the Board's interest in meeting agency laws and policies. (NOAA, SWRQB, DFG)
- Results from the Board's contracted scientific literature review will likely provide information for additional consideration on definitions, geographic, and other amendments. The FPC should revisit these rule sections following completion of scientific literature review. (TAC)
- The RWQCBs brought forward specific geographic scope and riparian buffer protection standards amendments. These issues will be further analyzed as part of the review of other T/I sections. (BOF staff)
- Standardization of terminology is needed for describing beneficial uses intended for protection: Example of multiple terms: riparian function, beneficial uses of water, waterbody beneficial uses, beneficial uses of water, beneficial uses of native aquatic and riparian species, beneficial functions of riparian zone, watercourses or lakes, native aquatic and riparian - associated species, quality and beneficial uses a water, riparian habitat that provides for the biological needs of native aquatic riparian associated species, beneficial uses, and watershed conditions. (BOF staff).
- Stakeholders brought forward amendments to section 916.1 (In Lieu Practices) although this was not a rule section modified under the T/I rules. (BOF staff)
- Extent to which Board amends T/I rules for consistency with water board laws, goals and policies. Specifically, amendments to actively contribute to restoring impaired watersheds and protecting existing values for watersheds that are not impaired.

II. Detailed Issues and analysis:

The following is a detailed list of issues, general consensus agreements, specific rule text changes, issues to be resolved by rule section compiled from Group 1 stakeholder input presented to the FPC. Stakeholders raising issue are in parentheses. Noted completed detailed analysis is completed only though for sections 895.1 to 916 (b) at this time. :

895.1

- Issue: Clarify scope of intent of T/I definitions to focus on TES andromous salmonids. (Ostrowski; P. Ribar)

  Agreement/ Specific rule changes:
  1. Modify the definition title, "Watersheds with threatened or impaired values" for consistency with revisions to title of 916.9 which focuses intent for protection of TES anadromous salmonids

- Issue: Modify "channel zone" to improve clarity (P. Ribar)

  Agreements:
  1. Results from the Board's contracted scientific literature review will likely provide information for additional consideration on definitions, geographic, and other amendments.
  2. Term is not a widely recognized scientific term.

- Issue: Separate characteristics of "saturated roads" and "stable operating surface" from description of resultant impacts (P. Ribar)

  Agreements:
  1. Prescriptive standards should be extracted from Goal/Intent sections.

  Specific rule changes
  1. Delete portion of definition referring to impacts created by saturated soil conditions and stable operating surface.

  Issues to resolve:
  1. Need for relocating deleted portions of definition into other rule sections.

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- Issue: Expand analysis of impacts for 303(d) waterbodies to both site specific and cumulative impacts (Ostrowski)

  Specific rule changes
  1. Add term "site-specific" to rule section

- Issue: Consolidate and eliminate redundant RWQCB requirements into section 916.12 (Ostrowski, P. Ribar, SWCB, BOF staff)

  Agreements:
  1.. Consolidate into one section specific goals and intent related to water board, policies and laws, particularly the 303(d) TMDL requirements .

  Specific rule changes
  1. Move portion of section into section 916.12.

  Issues to resolve:
  1. Deletion of any redundant sections once consolidated into 916.12.

916

- Issue: Improve intent specificity and consistency with CEQA terminology by deleting term "potentially significant" (Ostrowski)

  Agreements:
  1.. Rephrase for more compact text and better syntax.

  Specific rule changes
  1. Delete certain rule text and revise existing organization of text.

  Issues to resolve:
  1. Deletion of term "potentially significant".
  2. Consolidate into one section specific goals and intent related to water board, policies and laws, particularly the 303(d) TMDL requirements .

- Issue: Consistency with water board laws and policies (SWRQB)

  Issues to resolve:
  1. Extent to which FPC wishes to be consistent with water board laws and policies. Agree on appropriate terminology to address discharges that "could " affect the state's waters.

- Issue: Compliance with State and Federal antidegradation for waterbodies not impaired (SWRQB)

  Issues to resolve:
  1. Agree on appropriate terminology to address restoration requirements scaled to the condition of the beneficial use of water.
  2. Extent to which FPC wishes to be consistent with water board laws and policies.

- Issue: Simplify scope of intent by using term "riparian function" (CFA)

  Issues to resolve:
  1. Standardization of terminology is needed for describing beneficial uses intended for protection:
  2. Deleting terms "potential" and "cumulative" narrows protection of riparian zones.

- Issue: Limit scope of intent (CFA)

  Issues to resolve:
  1. Effects of deleting scope of intent that clarifies maintaining timberlands, while providing equal consideration for beneficial use of water.

- Issue: Remove descriptions and requirements on how to comply with intent language "measures taken" and "evaluations made" (CFA)

  Agreements:
  1.. Delete content on how protection measures are to be accomplished and delete outdated language..

  Specific rule changes
  1. Delete certain rule text related to "evaluations" and "measures taken."

  Issues to resolve:
  1. Limiting evaluations and prescribe protective measures to water bodies, which currently present listed species.

- Issue: Improve consistency with FPRs and CEQA terminology by adding terms "riparian associated" and "on the environment" (P. Ribar)

  Agreements: Consistency with CEQA is desirable.

  Specific rule changes:
  1.. Add terms "riparian associated" and "on the environment"

  Issues to resolve:
  1. Deletion of terms "site-specific and cumulative" eliminates descriptive language on the types of impact need consideration.

- Issue: Clarity of meaning of "adoption" (DFG)

  Agreements
  1.. Terminology should be clear that harvesting plans must comply with state objectives

  Specific rule changes:
  1. Add term "all harvesting plans" include""

916(a)

- Issue: Eliminate ambiguous language related to "restoration" (Ostrowski)

  Issues to resolve:
  1. Effects of diminishing the intent of restoration is part general forest practice rules.

- Issue: Clarity in meaning of "feasible" (SWRQB)

  Issues to resolve:
  1. To what extent does the forest practice committee want to further define the word "feasible" as a relates to restoration requirements.

- Issue: Remove redundant language (CFA)

  Issues to resolve:
  1. Does the section include language redundancy other sections on need for protection a beneficial uses.

- Issue: Limit scope of intent (CFA)

  Issues to resolve:
  1. Issue relates to deleting requirements for restoring impaired beneficial uses when feasible. FPC must decide on extent to which restoration are part of the FPRs.

- Issue: Eliminate ambiguous language related to "good," "threatened," and "impaired" due to lack of clarity (P. Ribar)

  Issues to resolve: Deletion of intent language intent language related restoration and maintain "good" condition appears to diminish protection intents and clarity standards for all watercourses

916(b)

- Issue: Consistency with water board laws and policies (SWRQB)

  Issues to resolve: To what extent does the board want to redefine the term "protection" for consistency with water quality control policy.

- Issue: Remove descriptions and requirements on how to comply with intent language (CFA)

  Issues to resolve: To what extent does the board want to eliminate/consolidate redundant language regarding consistency in with water board laws and policies

916(b) and (b) (1) and (b)(2)

Issue: Redundancy with 916.3 and 916.9 (Ostrowski, P. Ribar)

Issues to resolve:
To what extent does the board want to eliminate/consolidate redundant language regarding consistency in with water board laws and policies

- Issue: Remove descriptions and requirements on how to comply with intent language (CFA)

Agreements:
1. Prescriptive standards should be extracted from Goal/Intent sections.

Issues to resolve: To what extent should implementation measures the removed from intent sections and does deleted sections need to be relocated (into other sections).

916(c)

- Issue: Provide more specificity on which beneficial use shall be protected (P. Ribar)

  Agreements:
  1. Modify intent for focus on protection of TES anadromous salmonid.

  Issues to resolve: The specific language for protection of anadromous salmonids as a management objective.

- Issue: Consistency of beneficial use with other FPR sections (P. Ribar, Ostrowski)

  Issues to resolve: Which terminology shall be consistency used when staining intent for protection of "the beneficial functions or riparian zones".

- Issue: Recognition that "restoration" is a significant management objective for both TES and all anadromy (Ostrowski)
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  Issues to resolve: extent to which the "restoration" should be a management objectives and applicability of those objectives to all anadromy.

- Issue: Consistency with waterboard laws and policies (SWRQB)

  Issues to resolve: Extent to which board sees forest practice rules actively contributing to restoring impaired watersheds and protecting existing values for watersheds that are not impaired.

- Issue: Balance mandates for water quality and timber production (SWRQB)
- Issue: Remove redundant intent language (CFA)
- Issue: Limit scope of intent or balanced interpretation of timber production statutory intent. (CFA)

- Issue: Provide focused, unambiguous intent language (CFA)
- Issue: Additional consideration for protection measures needed for areas outside of riparian zones that may be adversely impact riparian zones (DFG)

916 (d)
- Issue: Remove redundant intent language (CFA)

916.1 (a)-
- Issue: Variable levels of justification for non-standard practices (SWRQB)
- Issue: In-lieu practices often do not achieve the full intent of the FPR to restore, enhance, and maintain aquatic and riparian habitat (DFG)

916.2 (a)(1) (2)
- Issue: Consistency of terminology (Ostrowski, P. Ribar)
- Issue: Consistency with water board laws and regulations (SWRQB)

916.2 (a)(3)
- Issue: Consistency of terminology (Ostrowski, P. Ribar)

916.2(a)(5)
- Issue: Create a new subsection specific to 303d listed waterbodies (Ostrowski)
- Issue: Create terminology consistent with CEQA (Ostrowski, P. Ribar)
- Issue: Clarity for term "restored" and "good condition" (Ostrowski, P. Ribar)

916. 2 (b) (c)
- Issue: Clarity of the term "appropriate minimum" (Ostrowski)
- Issue: Consistency of the application of T/I rules (Ostrowski, P. Ribar))
- Issue: Justification for non standard practices (SWRQB)

916.2 (5)
- Issue: Consistency with FPRs (P. Ribar)

916.9-
- Issue: Clarity of which beneficial uses are intended to be protected (Ostrowski, P. Ribar)

916.9 (a)
- Issue: Consistency with CEQA (Ostrowski)
- Issue: Clarity and specificity on which values are intended to be protected (Ostrowski)
- Issue: Remove descriptions and requirements on how to comply with intent language (CFA)
- Issue: Remove redundant intent language (CFA)
- Issue: Consistency with other FPR sections (P. Ribar)
- Issue: Specificity as to which values are to be protected (P. Ribar)
- Issue: Limiting factors approach may be an appropriate method of prioritizing restoration and recovery actions (DFG)
- Issue: Inconsistent with CEQA, which requires that all significant adverse impacts to the environment are avoided, minimized, and/or mitigated (DFG)

916.9(a) (1)
- Issue: Consistency of intent language (Ostrowski)
- Issue: Eliminate unnecessary/ redundant language (Ostrowski)
- Issue: Clarity of goals (Ostrowski, P. Ribar)
- Issue: Consistency in intent language (P. Ribar)
- Issue: Eliminate unnecessary/redundant or consolidate language (P. Ribar)
- Issue: Measurability of changes limiting factors (DFG)

916.9 (a) (2)

- Issue: Clarity of objectives (Ostrowski)
- Issue: Constancy with CEQA, measurability of changes to limiting factors (Ostrowski)
- Issue: Measurability of changes limiting factors (DFG)

916.9 (a) (3)-(5)

- Issue: Consistency with CEQA, measurability of changes to limiting factors (Ostrowski)
- Issue: Measurability of changes limiting factors (DFG)
- Issue: Expanded evaluation of "barriers" needed (DFG)
- Issue: Water drafting plan does not ensure adverse facts of flow reduction are avoided (DFG)
- Issue: Requirements for woody debris should not be limited to those stated in 916.9 l (DFG)
- Issue: Requirements for shade should not be limited to 916.9 g(DFG)

916.9 (a) (6)

- Issue: Eliminating redundant objectives (Ostrowski)
- Issue: Refine "shade" objectives (Ostrowski)
- Issue: Clarity of objectives (P. Ribar)
- Issue: Specificity on location where temperature objectives are met (P. Ribar)

916.9 (a) (7)

- Issue: Consistency with CEQA, clarity of term "substantial" for changes to limiting factors (Ostrowski)

916.9 (b)

- Issue: Consistency with CEQA, clarity of term "appropriate" (Ostrowski)
- Issue: Consistency with CEQA, measurability of changes to limiting factors

916.12

- Issue: Consolidation of 303b , water quality control board basin plan, and TMDL requirements (P. Ribar)

916.12 (a)

- Issue: Consistency with water board requirements (SWRQB)
- Issue: Clarity of FPR requirements for water board laws, policies, and plans (SWRQB)

916.12 (a) (b)

- Issue: Create watershed management plans for consistency with water board requirements (SWRQB)
- Issue: Proactively prevent 303d listings (SWRQB)

916.12 (b)

- Issue: Addressing cumulative impacts from existing stressors

Group 1 (Goal/Intent section) Prepared by SWRQB on May 14, 2008

BOF Staff analysis conducted on June 18, 2008

916, 936, 956 Intent of Watercourse and Lake Protection [All Districts]

The purpose of this article is to ensure that timber operations do not threaten to cause significant site-specific and cumulative impacts to the beneficial uses of water, native aquatic and riparian species, and the beneficial functions of riparian zones ~~are protected from potentially significant adverse site-specific and cumulative impacts associated with timber operations~~, or threaten to cause violation of any applicable legal requirements.

Staff analysis of changes to 916

Issue: Consistency with water board, laws and policies.

1. The only substantive change is at the end of the sentence.

2. Porter-Cologne subjects discharges that COULD affect the State's waters to Water Board regulation (CWC 13260(a)(1)).

3. It directs other State agencies to comply with State Water Board-approved water quality control plans (CWC 13247).

4. It also directs other State agencies to comply with State Water Board-adopted water quality control Policies (CWC 13146), including:
   1) *resolution no. 88-63: sources of drinking water policy and*
   2) resolution no. 68-16: policy with respect to maintaining high quality of waters in California.

5. The latter Policy must be applied in a manner consistent with the federal antidegradation policy (40 CFR 131.12).

6. The Water Board standards of review and environmental goals under the antidegradation policies and CWA 303(d) are more rigorous and less flexible than CEQA's "no significant avoidable impact" standard.

It is the intent of the Board to restore, enhance, and maintain the productivity of timberlands w while providing ~~equal~~ consideration for the beneficial uses of water that is appropriately scaled to their condition.

Staff analysis of changes to 916

Issue: Consistency with water board, laws and policies/

Issue: Compliance with the State and federal antidegradation policies for waterbodies not impaired

1. Amendment to this section support proposed amendments made to section 916 (c) below. The amendment provides context for requiring timberland management to be based on conditions of a watershed.

2. This intent section is not intended to deal only with waters that are not 303(d)-listed, but to provide broad statewide guidance for all situations (including those with impairment).

Further, it is the intent of the Board to clarify and assign responsibility for recognition of potential and existing impacts of timber operations on watercourses and lakes, native aquatic and riparian-associated species, and the beneficial functions of riparian zones and to ensure adoption of feasible measures to effectively achieve compliance with this article. Further, it is the intent of the Board that the evaluations that are made, and the measures that are taken or prescribed, be documented in a manner that clearly and accurately represents those existing conditions and those measures. "Evaluations made" pertain to the assessment of the conditions of the physical form, water quality, and biological characteristics of watercourses and lakes, including cumulative impacts affecting the beneficial uses of water on both the area of planned logging operations and in the Watershed Assessment Area (WAA). "Measures taken" pertain to the procedures used or prescribed for the restoration, enhancement, and maintenance of the beneficial uses of water.

All provisions of this article shall be applied in a manner, which complies with the following:

(a) During and following timber operations, the beneficial uses of water, native aquatic and riparian-associated species, and the beneficial functions of riparian zones shall be maintained where they are in good condition, protected where they are threatened, and insofar as <u>feasible</u>, restored where they are impaired.

Staff analysis of changes to 916 (a)

Issue: Clarity of meaning of "fesible".

1. Purpose of considered change is to somehow clarify that "feasible" should not be read per 895.1. It should be taken to mean "to the degree that timber operations alone can contribute". Timber operations should be accountable for actively contributing toward restoration, not to achieving it all by themselves (except where timber production is the only land use in a watershed). Change would clarify intent that feasible changes is limited to those actions which timber operations. Definition of feasible and stated in section 895.1 may need to be modified to effectuate this proposal.

(b) ~~Protection~~ Maintenance, protection, and restoration of the quality and beneficial uses of water during the planning, review, and conduct of timber operations shall comply with all applicable legal requirements including those set forth in any applicable water quality control plan or water quality control Policy adopted or approved by the State Water Resources Control Board. At a minimum, the LTO shall not do either of the following during timber operations:

Staff analysis of changes to 916 (b)

Issue: Consistency with water board, laws and policies.

1. Term added are consistent **with water board, laws and policies that require** State agencies to comply with State Water Board-adopted water quality control Policies (CWC 13146), including:

1) resolution no. 88-63: sources of drinking water policy and

2) resolution no. 68-16: policy with respect to maintaining high quality of waters in California.

(1) Place, discharge, or dispose of or deposit in such a manner as to permit to pass into the waters of the state, any substances or materials, including, but not limited to, soil, silt, bark, slash, sawdust, or petroleum, in quantities deleterious to fish, wildlife, beneficial functions of riparian zones, or the quality and beneficial uses of water;

(2) Remove water, trees or large woody debris from a watercourse or lake, the adjacent riparian area, or the adjacent flood plain in quantities deleterious to fish, wildlife, beneficial functions of riparian zones, or the quality and beneficial uses of water.

(c) Where ~~Protecting and restoring~~ native aquatic and riparian-associated species, the beneficial functions of riparian zones and the quality and beneficial uses of water are currently in good condition, maintaining that condition shall be given equal consideration as a management objective within any prescribed WLPZ and within any ELZ or EEZ designated for watercourse or lake protection. Where they are threatened or exceptionally valuable, protecting their current condition shall likewise be given equal or greater consideration as a management objective. Where they are currently impaired, active contribution toward their recovery shall be given greater consideration than timber production as a management objective.

Staff analysis of changes to 916 (c)

Issue: Consistency with water board, laws and policies.

Issue: Balancing mandates for water quality and timber production.

1. The first sentence addresses compliance with the State and federal antidegradation policies.

2. The second sentence sets forth a policy reflecting the "first protect the best" (or most critical) habitat (e.g., thermal refugia) as well as USEPA-designated Outstanding National Resource Waters.

3. The third sentence addresses compliance with CWA 303(d) restoration objectives.

(d) The measures set forth in this Section are meant to enforce the public's historical and legal interest in protection for wildlife, fish, and water quality and are to be used to guide timberland owners in meeting their legal responsibilities to protect public trust resources.

916.1, 936.1, 956.1 In Lieu Practices [All Districts]

In rule sections where provision is made for site specific practices to be proposed by the RPF, approved by the Director and included in the THP in lieu of a stated rule, the RPF shall reference the standard rule, shall explain and describe each proposed practice, how it differs from the standard practice, and the specific locations where it shall be applied; and shall explain and justify how the protection provided by the proposed practice is at least equal to the protection provided by standard rule.

(a) The in lieu practice(s) must provide for the maintenance, protection and restoration of the beneficial uses of water in accordance with 14 CCR 916(c) above, or to the standards of 14 CCR 916.3 [936.3, 956.3] and 916.4(b) [936.4(b), 956.4(b)], whichever is greater.

(b) In lieu practices stated in an approved THP shall have the same enforceability and legal authority as those practices required by the standard rules.

(c) Any in lieu practices which propose less than standard rule WLPZ widths for Class I watercourses shall include 14 CCR 916.5.(e) [936.5(e), 956.5(e)] "A" & "D" protection measures.

Staff analysis of changes to 916.1 (a)

Issue: justification for nonstandard practices:

Consider amendments for two different levels of explanation and justification for nonstandard practices:

1. A minimal level for those nonstandard practices which will actually provide better protection (or better comply with applicable legal requirements) than the standard practice.

2. A more rigorous level for those that are less protective or arguably could cause violation of applicable legal requirements.

Revisions to 916.1 for these two differing levels of justification is consistent with water board Law and policy and would provide common sense timber harvest plan preparation requirements, relieving plan preparers of unnecessary justifications when better than minimum standards are achieved by the alternative.

916.2, 936.2, 956.2 Protection of the Beneficial Uses of Water and Riparian Functions [All Districts]

(a) The measures used to protect each watercourse and lake in a logging area shall be determined by the presence and condition of the following values:

(1) The existing and restorable quality and beneficial uses of water as specified by the applicable water quality control plan and as further identified and refined during preparation and review of the plan.

(2) The restorable uses of water for fisheries as identified by the DFG or as further identified and refined during preparation and review of the plan.

(3) Riparian habitat that provides for the biological needs of native aquatic and riparian-associated species as specified in 14 CCR 916.4(b) [936.4(b), 956.4(b)].

(4) Sensitive conditions near watercourses and lakes as specified in 14 CCR 916.4(a) [936.4(a), 956.4(a)].

~~These~~ The maintenance, protection, and restoration of these values shall be ~~protected from potentially significant adverse impacts from timber operations and restored to good condition, where needed,~~achieved through a combination of the rules and plan-specific mitigation. The RPF shall propose and the Director may require, adequate protection of overflow and changeable channels which are not contained within the channel zone.

Staff analysis of changes to 916.2 (a)

Issue: Consistency with water board, laws and policies.

1. **May be affected by changes in "channel zone" definition:**
2. The **term** maintenance, protection, and restoration is added as he Water Board standards of review and environmental goals under the antidegradation policies and CWA 303(d) are more rigorous and less flexible than CEQA's "no significant avoidable impact" standard.

(b) The State's waters are grouped into four classes based on key beneficial uses. These

classifications shall be used to determine the appropriate minimum protection measures to be applied during the conduct of timber operations. The basis for classification (characteristics and key beneficial uses) are set forth in 14 CCR 916.5 [936.5, 956.5], Table 1 and the range of minimum protective measures applicable to each class are contained in 14 CCR 916.3 [936.3, 956.3], 916.4 [936.4, 956.4], and 916.5 [936.5, 956.5].

(c) When the protective measures contained in 14 CCR 916.5 [936.5, 956.5] are not adequate to provide for maintenance, protection, or restoration ~~to~~ of beneficial uses, feasible protective measures shall be developed by the RPF or proposed by the Director under the provisions of 14 CCR 916.6 [936.6, 956.6], Alternative Watercourse and Lake Protection, and incorporated in the plan when approved by the Director.

Staff analysis of changes to 916.2 (c)

Issue: justification for nonstandard practices:

Consider amendments for level of explanation and justification for nonstandard practices:

1. A more rigorous level for those that are less protective or arguably could cause violation of applicable legal requirements. Here the highest level of explanation and justification is required for practices intended to provide greater protection than do the standard practices

Revisions to 916.2 (c) for alternative to FPR standard practices in areas of highest degradation or sensitivity would be would be at a high level of explanation. Therefore, such explanation would induce increased burdens to timber harvest plan preparers.

916. 1x, 936.1x, 956.1x Restoration in Watersheds with Impaired Beneficial Uses of Water [All Districts]

In addition to all other district Forest Practice Rules, the following goals and objectives shall apply in any planning watershed in which timber operations can generate discharges that can exacerbate the effect of stressors or pollutants on downstream beneficial uses of water that are already impaired:

Staff analysis of additions to 916.1x

Issue Consistency with water board requirements.

Issue: Clarity of FPR requirements for water bard laws, policies and plans.

1. Entire section is to be merged into 916.12 section or a new section on compliance with water board and laws including basin plan, 303 (b) list requirements, TMDLs, or other water board requirements.

2. The terms 303(d) and TMDL occur ONLY in 898, 916.9(a), 916.9.1(a), and 916.12, so putting them into one section is not difficult.

(a) GOAL - Every timber operation shall be planned and conducted to actively contribute toward recovery of beneficial uses of water that are already impaired by stressors or pollutants whose deleterious effects could be exacerbated by discharges from timber operations. To achieve this goal, every timber operation shall be planned and conducted to:

Staff analysis of addition of 916.1x (a)

Issue: Consistency with water board requirements.

Issue: Clarity of FPR requirements for water bard laws, policies and plans.

1. Avoiding use of the "limiting factors" approach which belongs more to fisheries biologists and using the TMDLs and 303(d)standards relies on terms such as "stressors" or "pollutants". Use of the term "stressors" expands the possible list of stressors contributed to from timber operations (e.g., increased discharge of mercury-laden sediment).

(1) Comply with a management plan for one or more planning watersheds that has been collaboratively developed by the board, department, and the responsible regional water quality control board and which is either:

a. Designed, pursuant to 916.x1, to proactively prevent further impairment of beneficial uses of water in a water body (or segment thereof) which has not yet been listed pursuant to Section 303(d) of the federal Clean Water Act, but in which beneficial uses of water are declining toward the need for such a listing.

b. Designed, pursuant to 916.x2, to proactively contribute to recovery of impaired beneficial uses of water in a water body (or segment thereof) which has been listed pursuant to Section 303(d) of the federal Clean Water Act, but for which a Total Maximum Daily Load (TMDL) implementation plan has not yet been adopted.

Staff analysis of addition of 916.1x (a) and (b)

Issue: Create watershed management plans for consistency with water board requirements.

Issue: Proactively prevent 303(d) listings

1. The two parts of item (1) provide a way for BOF and the timber industry to "get ahead of the curve" of actions that a Regional Water Board may otherwise need to take, and to thereby retain more control over their own destiny. With adequate implementation of a collaborative watershed management plan, a Regional Water Board may find, in the first case, that 303(d) listing is not needed. This is consistent with the BOF intent to "enhance" beneficial uses of water (916). In the second case, the Regional Water Board may find that the plan fully satisfies the forest element of a TMDL implementation plan per State Water Board Resolution No. 2004-0063, Policy For Developing California's Clean Water Act Section 303(d) List. (Although not in this Policy, the USEPA Integrated Reporting Guidance "Category 4B" option allows an approved alternative restoration plan to preclude the need to develop a TMDL for 303(d)-listed waters. BOF could explore this option with the State Water Board.)

In either case, the proactive plan's prescriptions are likely to be less onerous than those that would be subsequently imposed by a Regional Water Board, and they would be more appropriately tailored at a watershed scale rather than a regional "one-size-fits-all" scale. If these proactive approaches are not taken, then Regional Water Boards will be compelled to specify what must be done in TMDL implementation plans

(2) Comply with the terms of a TMDL implementation plan that has been adopted by the responsible regional water quality control board to address factors that may be affected by timber operations.

(3) Give the goal of restoring impaired beneficial uses of water and degraded beneficial functions of riparian zones higher consideration than the goal of maximizing timber production, especially in any WLPZ or in any EEZ or ELZ designated for protection of the quality and beneficial uses of water.

Staff analysis of addition of 916.1x (a)(2)and (3)

Issue: Balancing mandates for water quality in timber production

1. This policy is one way of balancing the resource management mandates of Water Boards and BOF. The reasoning is that those resources which are officially known to be suffering or are most critical (e.g., fire hazard reduction) deserve more consideration than those that are not.

(b) When assessing cumulative impacts of a proposed project pursuant to (a) (1) or (a) (2) above, the RPF shall assess the degree to which the proposed operations would result in impacts that may interact with existing stressors (including those from past natural events) to further impair a waterbody's beneficial uses. The RPF shall provide measures to actively contribute both to recovery of the beneficial uses of water and to attainment of water quality standards in the listed portion of the waterbody.

The Director's evaluation of such impacts and restoration measures will be done in consultation with the appropriate RWQCB.

Staff analysis of addition of 916.1x (b)

Issue: addressing cumulative impacts from existing stressors (past natural events)

1. This has been adapted from 898, with the major change being the requirement to explicitly include effects of past natural events in the cumulative impacts analysis, not just effects of past projects per CEQA.

end

BOF Staff analysis ofFPC/Ostrowski Alternative
Group 1 Goal and Intent sections

895.1. Definitions

Watersheds with threatened or ~~impaired values~~ endangered anadromous salmonids 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.

Staff analysis of changes to 895.1

Issue: Clarifies scope of intent.

1. This change is more in line with the actual application of the T/I rules. Threatened and Impaired is not descriptive of the intent of the regulations as application of the rules do not meet completely meet 303d "impaired" waterbody legal requirements.

898 Feasibility Alternatives

After considering the rules of the Board and any mitigation measures proposed in the plan, the RPF shall indicate whether the operation would have any significant adverse impact on the environment. On TPZ lands, the harvesting per se of trees shall not be presumed to have a significant adverse impact on the environment. If the RPF indicates that significant adverse impacts will occur, the RPF shall explain in the plan why any alternatives or additional mitigation measures that would significantly reduce the impact are not feasible.
Cumulative impacts shall be assessed based upon the methodology described in Board Technical Rule Addendum Number 2, Forest Practice Cumulative Impacts Assessment Process and shall be guided by standards of practicality and reasonableness. The RPF's and plan submitter's duties under this section shall be limited to closely related past, present and reasonably foreseeable probable future projects within the same ownership and to matters of public record. The Director shall supplement the information provided by the RPF and the plan submitter when necessary to insure that all relevant information is considered.

When assessing site specific or cumulative impacts of a proposed project on any portion of a waterbody that is located within or downstream of the proposed timber operation and that is listed as water quality limited under Section 303(d) of the Federal Clean Water Act, the RPF shall assess the degree to which the proposed operations would result in impacts that may combine with existing listed stressors to impair a waterbody's beneficial uses, thereby causing a significant adverse effect on the environment. The plan preparer shall provide feasible mitigation measures to reduce any such impacts from the plan to a level of insignificance, and may provide measures, insofar as feasible, to help attain water quality standards in the listed portion of the waterbody.

~~The Director's evaluation of such impacts and mitigation measures will be done in consultation with the appropriate RWQCB.~~

(a) The amendments to 14 CCR § 898 that became effective July 1, 2000 shall expire on December 31, 2006.

Staff analysis of changes to 898

Issue: Expand analysis of impacts for 303d waterbodies.

Issue: Eliminate or consolidate redundant RWQCB consultation requirements.

1. Assessment of impacts for a 303d listed waterbodies should consider both site specific and cumulative impacts.

2. A portion of the section related to requirements for 303d water bodies is duplicative to those in 916(b), 916.2 (a) (1), 916.9 (a)(2) and 916.12, and should be deleted Consider consolidating entire RWQCB requirements by to moving this section to 916.12

916, 936, 956 Intent of Watercourse and Lake Protection [All Districts]

The purpose of this article is to ensure that the quality and beneficial uses of water, native aquatic and riparian associated species, and the beneficial functions of riparian zones are protected from ~~potentially significant adverse site-specific and cumulative impacts associated with timber operations~~ significant adverse impacts on the environment associated with timber operations that may be site specific or cumulative. This article also provides protection measures for application in watersheds with threatened and endangered anadromous salmonids and an evaluation framework for application in watersheds listed as water quality limited under Section 303(d) of the Federal Clean Water Act.

Staff analysis of changes to 916

Issue: Improve intent specificity and consistency with CEQA terminology.

1. Proposed language is more consistent with CEQA and is more compact than the original text.

2. Provides specific intent to address protection measures for TES anadromous species and 303d listed water bodies. Other sections that address compliance with 303d requirements should be modified to avoid redundant statements in this subsection.

It is the intent of the Board to restore, enhance, and maintain the productivity of timberlands while providing equal consideration for the beneficial uses of water. Further, it is the intent of the Board to clarify and assign responsibility for recognition of potential and existing impacts of timber operations on watercourses and lakes, native aquatic and riparian-associated species, and the beneficial functions of riparian zones and to ensure adoption of feasible measures to effectively achieve compliance with this article. Further, it is the intent of the Board that the evaluations that are made, and the measures that are taken or prescribed, be documented in a manner that clearly and accurately represents those existing conditions and those measures. "Evaluations made" pertain to the assessment of the conditions of the physical form, water quality, and biological characteristics of watercourses and lakes, including cumulative impacts affecting the beneficial uses of water on both the area of planned logging operations and in the Watershed Assessment Area (WAA). "Measures taken" pertain to the procedures used or prescribed for the restoration, enhancement, and maintenance of the beneficial uses of water. All provisions of this article shall be applied in a manner, which complies with the following:

~~(a)During and following timber operations, the beneficial uses of water, native aquatic and riparian-associated species, and the beneficial functions of riparian zones shall be maintained where they are in good condition, protected where they are threatened, and insofar as feasible, restored where they are impaired.~~

Staff analysis of changes to 916 (a)

Issue: Eliminate ambiguous language related to "restoration"

1. The requirement to "restore where impaired" is a very general requirement and does not define impaired. Amendments diminish explicit intent for restoration and rely on restoration as defined in a water quality control plan, but proposed amendment to 916 (c) addresses consideration of restoration.

~~(b)~~(a) Protection of the quality and beneficial uses of water during the planning, review, and conduct of timber operations shall comply with all applicable legal requirements including those set forth in any applicable water quality control plan adopted or approved by the State Water Resources Control Board. ~~At a minimum, the LTO shall not do either of the following during timber operations:~~

~~(1) Place, discharge, or dispose of or deposit in such a manner as to permit to pass into the waters of the state, any substances or materials, including, but not limited to, soil, silt, bark, slash, sawdust, or petroleum, in quantities deleterious to fish, wildlife, beneficial functions of riparian zones, or the quality and beneficial uses of water;~~

~~(2) Remove water, trees or large woody debris from a watercourse or lake, the adjacent riparian area, or the adjacent flood plain in quantities deleterious to fish, wildlife, beneficial functions of riparian zones, or the quality and beneficial uses of water~~

Staff analysis of changes to 916 (b)and (b) (1) and (2)

Issue: Section is redundant to other sections addressing consistency with water board control plans.

Issue: Redundancy with 916.3 and 916.9

1. Existing subsection (b) related to requirements for water quality control plan is duplicative to those in 916(b), 916.2 (a) (1), 916.9 (a) (2) and 916.12 and could be deleted in its entirety.

2. Existing subsection 916 (b) (1) is redundant with 916.3 and should be deleted. Section 916 (b) (2) is redundant to requirements in 916.9 (a)

~~(c)~~(b) ~~Protecting and restoring native aquatic and riparian-associated species,t~~ The beneficial functions of riparian zones and the quality and beneficial uses of water shall be given equal consideration as a management objective within any prescribed WLPZ and within any ELZ or EEZ designated for watercourse or lake protection.

Staff analysis of changes to 916 (c)

Issue: consistency of terminology throughout the FPRs.

1. Term "beneficial functions of riparian zones" is defined in the FPRs adequately addresses undefined terms such as "native aquatic" and "riparian associate species".

(c) Maintaining, or restoring where feasible and specified by these rules, the riparian habitat of anadromous salmonids or listed aquatic and riparian-associated species shall be given significant consideration as a management objective within any prescribed WLPZ.

Staff analysis of addition to 916 (c)

Issue: Recognition that "restoration" is a significant management objective

Issue: Recognition is given that restoration is a significant objective for all anadromny.

1. Includes intent of restoration as a management objective to be given significant consideration.

2. Add specificity that restoration considerations should apply to any anadromous salmonids species.

(d)The measures set forth in this Section are meant to enforce the public's historical and legal interest in protection for wildlife, fish, and water quality and are to be used to guide timberland owners in meeting their legal responsibilities to protect public trust resources.
(e) The amendments to 14 CCR §§ 916 [936, 956] that became effective July 1, 2000 shall expire on December 31, 2006.

916.2, 936.2, 956.2 Protection of the Beneficial Uses of Water and Riparian Functions [All Districts]

(a) The measures used to protect each watercourse and lake in a logging area shall be determined by the presence and condition of the following values:

(1) The existing and ~~restorable~~ potential quality and beneficial uses of water as specified by the applicable water quality control plan and as further identified and refined during preparation and review of the plan.

(2) The existing and restorable uses of water for fisheries as identified by the DFG or as further identified and refined during preparation and review of the plan.

Staff analysis of change to 916.2 (1) and (2)

Issue: Consistency of terminology

1. Term "existing and restorable" (or potential) are used for consistency and to ensure all existing or potential uses, such as future suitable habitat for listed anadromous species, be protected.

2. Proposed language introduces inconsistency. Terminology should use "restorable" as this is a more consistently used term by other agencies and is more definable than the term "potential.

(3) ~~Riparian habitat~~ The beneficial functions of the riparian zone that provides for the biological needs of native aquatic and riparian-associated species as specified in 14 CCR 916.4(b) [936.4(b), 956.4(b)] and 14CCR 916.9 [936.9, 956.9] when the plan is in a planning watershed with threatened or endangered anadromous salmonids.

Staff analysis of change to 916.2 (3)

Issue: Consistency of terminology

1. Term "beneficial functions of riparian zones" is defined in the FPRs repalces undefined terms such as "riparian habitat". Term "beneficial functions of riparian zones" being amended into other sections for same consistency purpose.

2. If the values of the beneficial functions of riparian zone are different between T/I and non-T/I areas and adding reference to 916.9 provides additional specificity for which beneficial functions need to be protected. However staff questions whether there's any difference in the beneficial functions of a riparian zone (as stated in 916.4 (b)) in a T/I watershed or a non-T/I watershed.

(4) Sensitive conditions near watercourses and lakes as specified in 14 CCR 916.4(a) [936.4(a), 956.4(a)].

(5) Waterbodies listed as water quality limited under Section 303(d) of the Clean Water Act. These values shall be protected from ~~potentially~~significant adverse impacts on the environment from timber operations and where specified in these rules, restored to ~~good~~ a functional condition, when feasible ~~where needed,~~ through a combination of the rules and plan-specific mitigation.

Staff analysis of change to 916.2

Issue: create a new subsection specific to 303d listed waterbodies

Issue: create terminology consistent with CEQA.

Issue: Clarity of term "restored" and "good condtion"

1. No rationale is provided for adding a value related to 303 (d) listed water bodies. Protection of 303(d) listed water bodies are provided elsewhere and appears to be a redundant addition.

2. By creating a new subsection (5), existing regulations no longer apply to all items under 916.2 (1)- (4) and only apply to item (5). This change limits the application of the "restoration" for values in (1)-(4).

3. Term "potentially" is deleted to conform with traditional CEQA context.

.4. By qualifying the term "restored", this allows site specific designation by the rules for where each value or element of each value will be restored and to what standard it will be restored to.

5. Term "good" is deleted as term is to qualitative. Term "functional" is used as there is a definition of functional in relation to wildlife habitat.

6. Term "where needed" is replaced with term "where feasible" as this is more consistent with CEQA, and in minimizes arguments defining "whre needed" If the rules specify restoration, then it will be done if feasible. The specific rule could allow for standards of necessity.

(b) The State's waters are grouped into four classes based on key beneficial uses. These classifications shall be used to determine the appropriate ~~minimum~~protection measures to be applied during the conduct of timber operations. The basis for classification (characteristics and key beneficial uses) are set forth in 14 CCR 916.5 [936.5, 956.5], Table 1 and the range of ~~minimum~~ appropriate protective measures applicable to each class are contained in 14 CCR 916.3 [936.3, 956.3], 916.4 [936.4, 956.4], and 916.5 [936.5, 956.5].and 916.9 when the plan is in a planning watershed with threatened or endangered anadromous salmonids.

(c) When the protective measures contained in 14 CCR 916.5 [936.5, 956.5] and 916.9 when the plan is in a planning watershed with threatened or endangered anadromous salmonids or pursuant to 14CCR 916.12(a), are not adequate to provide protection to beneficial uses, feasible protective measures shall be developed by the RPF or proposed by the Director under the provisions of 14 CCR 916.6 [936.6, 956.6], Alternative Watercourse and Lake Protection, and incorporated in the plan when approved by the Director.

Staff analysis of change to 916.2 (b) and (c)

Issue: Clarity of term "appropriate minimum".

Issue: Consistency of application of T/I rules.

1. Use of the term "appropriate minimum" is a confusing double descriptor. "Appropriate" is all that is needed to allow review of the proposed mitigations. By eliminating term "minimum", standards are only defined as appropriate, and can be more or less in the standards stated FPRs.

2. Reference to 916.9 adds the T&E fish rules to the list of appropriate protection measures.

916.9, 936.9, 956.9 Protection and Restoration of the Beneficial Functions of the Riparian Zone in Planning Watersheds with Threatened or ~~Impaired Values~~ Endangered Anadromous Salmonids[All Districts]

In addition to all other district Forest Practice Rules, the following requirements shall apply in any ~~p~~Planning ~~w~~Watershed with ~~t~~ Threatened or ~~impaired values~~Endangered Anadromous Salmonids:

Staff analysis of changes to 916.9

Issue: Clarity of which beneficial uses are intended to be protected.

1. New title and preamble clarifies that the focus of this section are goals and regulations for watersheds with threatened or endangered anadromous salmonids, disconnecting section from rules and regulations to meet requirements for 303D listed impaired watersheds.

2. Term "beneficial function of riparian zone" is added as this is a defined term in the FPRs and provides uniformity for board's intention on which beneficial uses are to be protected

(a) GOAL - Every timber operation shall be planned and conducted to prevent ~~deleterious interference~~significant impacts to w~~ith the watershed conditions that primiliarly limit the values set forth in 14 CCR 916.2 [936.2, 956.2](a)~~ the primary limiting factor that affect threatened or endangered anadromous salmonid species in the planning watershed-(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:

Staff analysis of changes to 916.9 (a)

Issue: Consistence with CEQA.

Issue: Clarity and specificity on which values are intended to be protected

1. For consistence with CEQA, the term "deleterious interference" is a deleted.

2. For clarity with the language used in the other goals in this section, the reference to values in 916.2 is deleted. The values in 916.2 are not necessarily related to fisheries. This section should be clear about the strategy for protecting listed fish.

3 A definition for "primary limiting factor" will be needed with the additional of the term being proposed.

(1) Comply with the terms of a Total Maximum Daily Load (TMDL) that has been adopted to address primary limiting 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 or lake.~~

Staff analysis of changes to 916.9 (a)(1)

Issue: Consistency of intent language.

Issue: Eliminate unnecessary/redundant language.

Issue: Clarity of goals

1.This maintains the consistency of using "limiting factors" as the focus of enhanced fisheries protections. It also implies a restoration goal.

2. The first goal should be split since not all TMDLs address sediment

(2) Not result in any significant sediment load increase to a watercourse system or lake.

Staff analysis of changes to 916.9 (a)(2)

Issue: Clarity of objectives

Issue: Consistence with CEQA; measurability of changes to limiting factors

1. A separate objective is created from objective number one above since not all TMDLs address sediment.

2. For consistency with CEQA standards, term "measurable" is deleted because with today's instrumentation measurable sediment increases is not realistic.

~~(2)~~(3) Not result in any ~~measurable~~ significant decrease in the stability of a watercourse channel or of a watercourse or lake bank.

~~(3)~~(4) Not result in any ~~measurable~~ significant blockage of any aquatic migratory routes for anadromous salmonids or listed species.

~~(4)~~(5) Not result in any ~~measurable~~ significant streamflow 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)~~(6) 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.

Staff analysis of changes to 916.9 (a)(3)-(5)

Issue: Consistence with CEQA; measurability of changes to limiting factors

1. For consistency with CEQA standards, term "measurable" is deleted because with today's instrumentation measurable bank stability, migratory route blockage, and streamlfow reduction is not realistic.

~~(6)~~(7) 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 to maintain daily and seasonal water temperatures within the preferred range for anadromous salmonids or listed species where they are present or could be restored,, (B) ~~minimize daily and seasonal temperature fluctuations~~provide a deciduous vegetation component to the riparian zone for aquatic nutrient inputs (~~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.~~

Staff analysis of changes to 916.9 (a)(6)

Issue: Eliminate redundant objectives

Issues: Refine "shade" objectives

Refine "nutrient" objects based on TAC science findings.

1.This addition of temperature controls specific to anadromous salmonids sets a very specific standard for protection or restoration of the vegetative canopy. This only applies to class I per the reference to 916.9(g)

2.The purpose of providing shade in the goal is made specific for supporting anadromous salmonid. This modification is consistent with previous amended goal statement in 916.9 for focusing the T/I rule on listed anadromous species. By combining the proposed language item 6 (B) and (C) be becomes redundant and are deleted.

3.Existing at language for item 6 (C) is a narrow description of vegetative canopy goals This goal should be discussed in the context of the primer section on nutrients and his proposed in this change to broaden the goal of providing shade.

~~(7)~~(8) Result in no significant increases in peak flows or large flood frequency.

Staff analysis of changes to 916.9 (a)(7)

Issue: Consistence with CEQA; Clarity of term "substantial" for changes to limiting factors

1. For consistency with CEQA standards, term "substantial" is deleted.

(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~~When the proposed timber operations will significantly effect existing cumulative watershed effects, the plan shall set forth measures to effectively reduce such effects.

Staff analysis of changes to 916.9 (b)

Issue: Consistence with CEQA; Clarity of term "Clarity of term "appropriate"

1. For consistency with CEQA standards, term "substantial" is deleted.

End

BOF Staff summary of CALIFORNIA FORESTRY ASSOCIATION Alternative for Group 1 Goal and Intent rules

916 Intent of Riparian Zone Protections ~~Watercourse and Lake Protection~~

The purpose of this article is to ensure that the beneficial uses of water, native aquatic and riparian species, and the ~~beneficial~~ functions of riparian zones are protected from ~~potentially~~ significant adverse site-specific ~~and cumulative~~ impacts on the environment associated with timber operations.

Staff analysis of changes to 916:

Issue: Limiting scope of intent

1. Deletion of the term "potential" requires only actual impact to beneficial use being considered, not potential.

2. Deletion of the term "cumulative" results in only site-specific impact would be considered.

3. Title of section revised to more precisely focused intention of protections on riparian zone functions, a broader term than "Watercourse and Lake protection".

4. No rationale for deletion of term "beneficial".

~~It is the intent of the Board to restore, enhance, and maintain the productivity of timberlands while providing equal consideration for the beneficial uses of water. Further, it is the intent of the Board to clarify and assign responsibility for recognition of potential and existing impacts of timber operations on watercourses and lakes, native aquatic and riparian-associated species, and the beneficial functions of riparian zones and to ensure adoption of feasible measures to effectively achieve compliance with this article~~.

Staff analysis of changes to 916

Issue: Limiting scope of intent.

1. Deletes the intent related to "restore" and "enhance" productivity of timberlands while providing equal consideration for …water".

2. Deletes intent to assign responsibility for recognition of protective measures

Further, it is the intent of the Board that the evaluations that are made, and the measures that are taken or prescribed, be documented in a ~~manner and clearly and accurately represents those existing conditions and those measures. "Evaluations made" pertain to the assessment of the conditions of the physical form, water quality, and biological characteristics of watercourses and lakes, including cumulative impacts affecting the beneficial uses of water on both the area of planned logging operations and in the Watershed Assessment Area (WAA). "Measures taken" pertain to the procedures used or prescribed for the restoration, enhancement, and maintenance of the beneficial uses of water.~~ clear and consistent manner and apply only to water bodies where: (1) listed species are currently present; or (2) are listed as temperature or sediment impaired pursuant to section 303(d) of the Clean Water Act (TMDL) and does not have an approved TMDL implementation plan.

Staff analysis of changes to 916

Issue: Remove descriptions and requirements on how to comply with intent language.

Limiting scope of intent.

1. Deletes content of how of evaluations and measures for protection are made.

2. Provides clear connection that evaluation and measures for protection shall be consistent with current listed species and temperature or sediment impaired 303(d) listed water bodies, with no TMDLs implementation plan. Limiting evaluation and protective measure to waterbodies with "currently present listed species" and 303(d) water bodies without an implementation plan is a narrower set of goal standards compared to existing rules.

~~All provisions of this article shall be applied in a manner, which complies with the following:~~

~~(a) During and following timber operations, the beneficial uses of water, native aquatic and riparian-associated species, and the beneficial functions of riparian zones shall be maintained where they are in good condition, protected where they are threatened, and insofar as feasible, restored where they are impaired.~~

Staff analysis of changes to 916 (a)

Issue: Remove descriptions and requirements on how to comply with intent language.

Remove redundant language

Limiting scope of intent

1. Deletes content of how compliance for protection is met.

2. Deletes redundant statement on need for protection of beneficial uses. Deletes clear reference to provide for "restoration insofar is possible".

~~(b) Protection of the quality and beneficial uses of water during the planning, review, and conduct of timber operations shall comply with all applicable legal requirements including those set forth in any applicable water quality control plan adopted or approved by the State Water Resources Control Board. At a minimum, the LTO shall not do either of the following during timber operations:~~

Staff analysis of changes to 916 (b)

Issue: Remove descriptions and requirements on how to comply with intent language.

Issue: Remove redundant descriptions and requirements for compliance with water quality control plan already stated in 14 CCR 916.

1. Deletes statement regarding need to comply with a water quality control plan. As stated previously in this alternative, plans only have to comply with temperature or sediment 303(d) TMDL requirements.

2. Deletes statements specifying what an LTO is prohibited from doing. The deletion is consistent the concept of removing prescriptive standards from intent sections.

~~(1) Place, discharge, or dispose of or deposit in such a manner as to permit to pass into the waters of the state, any substances or materials, including, but not limited to, soil, silt, bark, slash, sawdust, or petroleum, in quantities deleterious to fish, wildlife, beneficial functions of riparian zones, or the quality and beneficial uses of water;~~

~~(2) Remove water, trees or large woody debris from a watercourse or lake, the adjacent riparian area, or the adjacent flood plain in quantities deleterious to fish, wildlife, beneficial functions of riparian zones, or the quality and beneficial uses of water.~~

Staff analysis of changes to 916 (b)(1)and (2)

Issue: Remove descriptions and requirements on how to comply with intent language.

1. Deletes statements specifying what an LTO is prohibited from doing. The deletion is consistent the concept of removing prescriptive standards from intent sections.

~~(c) Protecting and restoring native aquatic and riparian-associated species, the beneficial functions of riparian zones and the quality and beneficial uses of water shall be given equal consideration as a management objective within any prescribed WLPZ and within any ELZ or EEZ designated for watercourse or lake protection.~~

Staff analysis of changes to 916 (c)

Issue: Removes redundant intent language.

Issue: Limit scope of intent.

1. Deletes statements specifying what an LTO is prohibited from doing. The deletion is consistent the concept of removing prescriptive standards from: intent sections.

2. Eliminates clear intent prioritization related to protecting beneficiaries of water.

~~(d) The measures set forth in this Section are meant to enforce the public's historical and legal interest in protection for wildlife, fish, and water quality and are to be used to guide timberland owners in meeting their legal responsibilities to protect public trust resources.~~

Staff analysis of changes to 916 (d)

Issue: Remove redundant intent language.

1. Removes redundant intent language already stated in opening two paragraphs.

916.9 Protections for <u>Riparian Zones</u> ~~and restoration in watersheds would threatened or impaired values~~

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

Staff analysis of changes to 916 (c)

Issue: Provide focused, unambiguous intent language.

1. Change in title focuses on protection of riparian zone, instead of watersheds would threaten or impaired values.

2. Deletes any reference to term "watersheds with impaired values" essentially eliminating specific rules for the geographic scope defined by this term.

(a) Goal – Every timber operation is planned and conducted to prevent deleterious impacts to riparian functions and watershed conditions set forth in 14 CCR 916.2(a) existing at the time of plan submittal. ~~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.~~

Staff analysis of changes to 916.9 (a) and (a)(1)though (7)

Issue: Remove descriptions and requirements on how to comply with intent language.

Issue: Remove redundant intent language.

1. Deletes all statements specifying how an operation shall be planned and conducted to meet intent section goals.

2. Deletion of section 916. a (1) eliminates redundancy in terms of complying with TMDLs which is suggested to be revised as a goal under 916.

BOF Staff Analysis of

P.Ribar Regulatory Alternative for

T/I Group 1 Goal and Intent sections

§ 895.1. Definitions.

"Channel zone" means that area ~~that includes a watercourse's channel at bankfull stage and a watercourse's floodplain, encompassing the area~~ located between the watercourse transition lines.

Staff analysis of changes to 895.1

Issue: Modified to improve clarity.

"Saturated soil 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 turbidity increase in drainage facilities that discharge into Class I, II, III, or IV waters, or in downstream Class I, II, III, or IV waters that is visible or would violate applicable water quality 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 turbidity increase in drainage facilities that discharge into Class I, II, III, or IV waters, or d) creation of ruts greater than would be normal following a light rainfall.~~

~~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 turbidity increase in drainage facilities that discharge 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. The Soils or road and landing surfaces that are hard frozen are excluded from this definition.~~ so wet that soil aggregates break down and the surface layer of soil becomes a slurry (may include the pumping of fine from poorly or inadequately rocked roads) as a result of ground based yarding/loading, site preparation, hauling or road maintenance. Such conditions are often evidenced by: reduced traction by equipment as indicated by spinning or churning of wheels or tracks or inadequate traction without blading wet soil or material. Soils or road and landing surfaces that are hard frozen, throughout the period of heavy equipment use, are excluded from this definition.

Staff analysis of changes to 895.1

Issue: Separates characteristics of saturated roads from description of resultant impacts.

1. Modification made to clarify when the road itself is in an unacceptable condition. Deletes reference to ancillary undesirable impacts to water quality; these should be inserted into the specific rule requirements.

"Stable operating surface" means ~~that throughout the period of use, the operating surface of a logging road or landing does not either (1) generate waterborne sediment in amounts sufficient to cause a turbidity increase in downstream Class I, II, III, or IV waters, or in amounts sufficient to cause a turbidity increase in drainage facilities that discharge into Class I, II, III, or IV waters or, that is visible or would violate applicable water quality requirements; or (2) channel water for more than 50 feet that is discharged into Class I, II, III, or IV waters.~~a road or landing surface with a structurally sound road base appropriate for the type, intensity and timing of intended use.

Staff analysis of changes to 895.1

Issue: Separates characteristics of Stable operating surface from description of resultant impacts.

1. Modification made to clarify when the road itself is in an unacceptable condition. Deletes reference to ancillary undesirable impacts to water quality; these should be inserted into the specific rule requirements.

"Watersheds with threatened or ~~impaired values"~~ endangered anadromous salmonids" 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.

Staff analysis of changes to 895.1

Issue: Clarifies scope of intent.

1. This change is more in line with the actual application of the T/I rules. Threatened and Impaired is not descriptive of the intent of the regulations as application of the rules do not meet completely meet 303d "impaired" waterbody legal requirements.

§ 898 Feasibility Alternatives

After considering the rules of the Board and any mitigation measures proposed in the plan, the RPF shall indicate whether the operation would have any significant adverse impact on the environment. On TPZ lands, the harvesting per se of trees shall not be presumed to have a significant adverse impact on the environment. If the RPF indicates that significant adverse impacts will occur, the RPF shall explain in the plan why any alternatives or additional mitigation measures that would significantly reduce the impact are not feasible.

Cumulative impacts shall be assessed based upon the methodology described in Board Technical Rule Addendum Number 2, Forest Practice Cumulative Impacts Assessment Process and shall be guided by standards of practicality and reasonableness. The RPF's and plan submitter's duties under this section shall be limited to closely related past, present and reasonably foreseeable probable future projects within the same ownership and to matters of public record. The Director shall supplement the information provided by the RPF and the plan submitter when necessary to insure that all relevant information is considered.

~~When assessing cumulative impacts of a proposed project on any portion of a waterbody that is located within or downstream of the proposed timber operation and that is listed as water quality limited under Section 303(d) of the Federal Clean Water Act, the RPF shall assess the degree to which the proposed operations would result in impacts that may combine with existing listed stressors to impair a waterbody's beneficial uses, thereby causing a significant adverse effect on the environment. The plan preparer shall provide feasible mitigation measures to reduce any such impacts from the plan to a level of insignificance, and may provide measures, insofar as feasible, to help attain water quality standards in the listed portion of the waterbody.~~

~~The Director's evaluation of such impacts and mitigation measures will be done in consultation with the appropriate RWQCB.~~

Staff analysis of changes to 898

Issue: Eliminate or consolidate redundant RWQCB consultation requirements.

1. Move to 916.12 as the new subsection(a). This paragraph fits better under the 303(d) Listed Watersheds section. This paragraph is a new subsection(a) in 916.12 because it clarifies what is expected of RPFs when developing THPs in applicable watersheds.

§ 916, 936, and 956 Intent of Watercourse and Lake Protection.

The purpose of this article is to ensure that the quality and beneficial uses of water, native aquatic and riparian-associated species, and the beneficial functions of riparian zones are protected from ~~potentially~~ significant adverse ~~site-specific and cumulative~~ impacts on the environment-associated with timber operations.

Staff analysis of changes to 916

Issue: Improve consistency with FPRs CEQA terminology.

1. Adding term "associated" is consistent with terms used in 916(c) below.

2. Adding term "on the environment" is Consistent with 895.1 definition derived from CEQA.

3. Deletion of terms"site specific and cumulative" eliminates descriptive language that on the types of impacts needing consideration. However, assessment of cumulative impacts is a standard FRP requirement. And phrase may be redundant.

It is the intent of the Board to restore, enhance, and maintain the productivity of timberlands while providing equal consideration for the beneficial uses of water. Further, it is the intent of the Board to clarify and assign responsibility for recognition of potential and existing impacts of timber operations on watercourses and lakes, native aquatic and riparian-associated species, and the beneficial functions of riparian zones and to ensure adoption of feasible measures to effectively achieve compliance with this article. Further, it is the intent of the Board that the evaluations that are made, and the measures that are taken or prescribed, be documented in a manner that clearly and accurately represents those existing conditions and those measures. "Evaluations made" pertain to the assessment of the conditions of the physical form, water quality, and biological characteristics of watercourses and lakes, including cumulative impacts affecting the beneficial uses of water on both the area of planned logging operations and in the Watershed Assessment Area (WAA). "Measures taken" pertain to the procedures used or prescribed for the restoration, enhancement, and maintenance of the beneficial uses of water.

All provisions of this article shall be applied in a manner, which complies with the following:

~~(a)During and following timber operations, the beneficial uses of water, native aquatic and riparian-associated species, and the beneficial functions of riparian zones shall be maintained where they are in good condition, protected where they are threatened, and insofar as feasible, restored where they are impaired~~

Staff analysis of changes to 916 (a)

Issue: Eliminate ambiguous language related to ""good", "threatened" and "impaired" due to lack of clarity.

1. While ambiguous language is eliminated in this change, significant intent language related restoration and maintain "good" condition is deleted. This appears to diminish protection intents and clarity standards for all watercourses.

(a)~~(b)~~ Protection of the quality and beneficial uses of water during the planning, review, and conduct of timber operations shall comply with all applicable legal requirements including those set forth in any applicable water quality control plan adopted or approved by the State Water Resources Control Board. ~~At a minimum, the LTO shall not do either of the following during timber operations:~~

~~(1) Place, discharge, or dispose of or deposit in such a manner as to permit to pass into the waters of the state, any substances or materials, including, but not limited to, soil, silt, bark, slash, sawdust, or petroleum, in quantities deleterious to fish, wildlife, beneficial functions of riparian zones, or the quality and beneficial uses of water;~~

~~(2) Remove water, trees or large woody debris from a watercourse or lake, the adjacent riparian area, or the adjacent flood plain in quantities deleterious to fish, wildlife, beneficial functions of riparian zones, or the quality and beneficial uses of water~~

Staff analysis of changes to 916 (b)and (b) (1) and (2)

Issue: Section is redundant to other sections addressing consistency with water board control plans.

Issue: Redundancy with 916.3 and 916.9

1. Existing subsection (b) related to requirements for water quality control plan is duplicative to those in 916.2 (a) (1), 916.9 (a) (2) and 916.12 and could be deleted in its entirety.

2. Existing subsection 916 (b) (1) is redundant with 916.3 and should be deleted. Section 916 (b) (2) is redundant to requirements in 916.9 (a)

(b)~~(c)Protecting and restoring native aquatic and riparian-associated species, the beneficial functions of riparian zones and the quality and~~ The beneficial uses of water shall be given equal consideration as a management objective within any prescribed WLPZ and within any ELZ or EEZ designated for watercourse or lake protection.

(c) Populations and habitat of anadromous salmonids or listed aquatic and riparian-associated species shall be given significant consideration as a management objective within any prescribed WLPZ, where required by these rules.

(d)The beneficial functions of riparian zones shall be given equal consideration as a management objective within any prescribed WLPZ.

(e)~~(d)~~The measures set forth in this Section are meant to enforce the public's historical and legal interest in protection for wildlife, fish, and water quality and are to be used to guide timberland owners in meeting their legal responsibilities to protect public trust resources.

Staff analysis of addition to 916 (b), (c), and (d)

Issue: Provide more specificity on which beneficial shall be protected.

Issue: consistency of protection of beneficial with other FPR sections.

1. Three values added in subsections 916 (b), (c) and (d) provide more general intent language and is consistent with other rule requirements: see 916, paragraph 2; 916.9(c); 916.4(b).

§ 916.2, 936.2, and 956.2 Protection of the Beneficial Uses of Water and Riparian Functions.

(a) The measures used to protect each watercourse and lake in a logging area shall be determined by the presence and condition of the following values:

(1) The existing and ~~restorable~~ potential quality and beneficial uses of water as specified by the applicable water quality control plan and as further identified and refined during preparation and review of the plan.

(2) The existing and restorable uses of water for fisheries as identified by the DFG or as further identified and refined during preparation and review of the plan.

Staff analysis of change to 916.2 (1) and (2)

Issue: Consistency of terminology

1. The beneficial uses described in the Water Quality Control Plan for the North Coast Region discusses "existing and potential" uses, not "restorable" uses

2. Proposed language introduces inconsistency. Terminology should use "restorable" as this is a more consistently used term by other agencies and is more definable than the term "potential.

(3) The ~~Riparian habitat~~ beneficial functions of the riparian zone that provide for the biological needs of native aquatic and riparian-associated species as specified in 14 CCR §916.4(b) [936.4(b), 956.4(b)] and 14 CCR § 916.9 [936.9, 956.9] when the plan is located within watersheds with threatened or endangered anadromous salmonids.

(4) Sensitive conditions near watercourses and lakes as specified in 14 CCR § 916.4(a) [936.4(a), 956.4(a)].

Staff analysis of change to 916.2 (a)(3)

Issue: Consistency of terminology

1. Term "beneficial functions of riparian zones" is defined in the FPRs replaces undefined terms such as "riparian habitat". Term "beneficial functions of riparian zones" being amended into other sections for same consistency purpose. This term can be more clearly tied to the specified subsections of the rules.

2. If the values of the "beneficial functions of riparian zone" are different between T/I and non-T/I areas, then adding reference to 916.9 provides additional specificity for which beneficial functions need to be protected. However staff questions whether there's any difference in the beneficial functions of a riparian zone (as stated in 916.4 (b)) in a T/I watershed or a non-T/I watershed.

(5) Waterbodies listed as water quality limited under section 303(d) of the Clean Water Act as specified in 14 CCR § 916.12(a) and (b) [936.12(a)and (b), 956.12(a) and (b)].

Staff analysis of change to 916.2 (a)(5)

Issue: Consistency of FPRS

1. This provides some linkage to the section (916.12) specially addressing considerations in 303(d) watersheds

These values shall be protected from ~~potentially~~ significant adverse impacts on the environment from timber operations and where specified in these rules, restored to a ~~good~~ functional condition, where ~~needed~~feasible, through a combination of the rules and plan-specific mitigation. The RPF shall propose and the Director may require, adequate protection of overflow and changeable channels which are not contained within the channel zone.

Staff analysis of change to 916.2

Issue: create terminology consistent with CEQA.

Issue: Clarity of term "where needed" and "good condition"

. Term "potentially" is deleted to conform with traditional CEQA context. Term "on the environment" is added it is defined term in 895.1 derived from CEQA.

.5. Term "good" is deleted as term is to qualitative. Term "functional" is used as there is a definition of functional in relation to wildlife habitat.

6. Term "where needed" is replaced with term "where feasible" as this is more consistent with CEQA, and in minimizes arguments defining "where needed" If the rules specify restoration, then it will be done if feasible. The specific rule could allow for standards of necessity. Puts some sideboards on the level of restoration required.

(b) The State's waters are grouped into four classes based on key beneficial uses. These classifications shall be used to determine the appropriate minimum protection measures to be applied during the conduct of timber operations. The basis for classification (characteristics and key beneficial uses) are set forth in 14 CCR 916.5 [936.5, 956.5], Table 1 and the range of minimum protective measures applicable to each class are contained in 14 CCR 916.3 [936.3, 956.3], 916.4 [936.4, 956.4], and 916.5 [936.5, 956.5].

(c) When the protective measures contained in 14 CCR 916.5 [936.5, 956.5] and 14 CCR § 916.9 [936.9, 956.9] when the plan is located within watersheds with threatened or endangered anadromous salmonids or pursuant to 14 CCR § 916.12(a) and (b) [936.12(a) and (b), 956.12(a) and (b)] are not adequate to provide protection to beneficial uses, feasible protective measures shall be developed by the RPF or proposed by the Director under the provisions of 14 CCR § 916.6 [936.6, 956.6], Alternative Watercourse and Lake Protection, and incorporated in the plan when approved by the Director.

Staff analysis of change to 916.2 (c)

Issue: Consistency of application of T/I rules.

1. Attempt to provide consistency and linkage with other applicable rule sections. Reference to 916.9 adds the T&E fish rules to the list of appropriate protection measures.

§ 916.9, 936.9, and 956.9 Protection and Restoration in Watersheds with Threatened or Endangered Anadromous Salmonids~~Impaired Values.~~

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

Staff analysis of changes to 916.9

Issue: Clarity of which beneficial uses are intended to be protected.

1. New title and preamble clarifies that the focus of this section are goals and regulations for watersheds with threatened or endangered anadromous salmonids, disconnecting section from rules and regulations to meet requirements for 303(d) listed impaired watersheds.

2. Term "planning" is deleted from term watershed. No rational is provided, and such a change would have to be coordinated with definition in 895.1 on T/I watersheds.

(a) GOAL - Every timber operation shall be planned and conducted to prevent significant adverse impacts ~~deleterious interference~~ with the watershed conditions that primarily limit the ~~values~~the beneficial uses of water and the primary limiting factors that affect populations and habitat of anadromous salmonids~~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:

Staff analysis of changes to 916.9 (a)

Issue: Consistence with other FPR sections .

Issue: Specificity on which values are intended to be protected

1. For consistence with CEQA, the term "deleterious interference" is a deleted.

2. For clarity with the language used in the other goals in this section, the reference to values in 916.2 is deleted. The values in 916.2 are not necessarily related to fisheries. This section should be clear about the strategy for protecting listed fish.

~~(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 signficant sediment load increase to a watercourse system or lake.~~

Staff analysis of changes to 916.9 (a)(1)

Issue: Consistency of intent language.

Issue: Eliminate unnecessary/redundant or consolidate language.

Issue: Clarity of goals

1. This section can be moved as a new 916.12(b). Keeps TMDL, 303(d) linked considerations together in one place.

2. Once moved to 916/.12, the section should be modified to maintain use of the CEQA standard ("significant" added and "measurable" deleted)

~~(2)~~(1) Not result in any ~~measurable~~ significant decrease in the stability of a watercourse channel or of a watercourse or lake bank.

~~(3)~~(2) Not r~~R~~esult in any ~~measurable~~ significant blockage of any aquatic migratory routes for anadromous salmonids or listed species.

~~(4)~~(3) Not result in any ~~measurable~~significant 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)~~(4) 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.

Staff analysis of changes to 916.9 (a)(3)-(5)

Issue: Consistence with CEQA; measurability of changes to limiting factors

1. For consistency with CEQA standards, term "measurable" is deleted because with today's instrumentation measurable bank stability, migratory route blockage, and streamlfow reduction is not realistic.

~~(6)~~(5) 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~~ moderate daily and seasonal temperature fluctuations, (C) maintain daily and seasonal water temperatures within the preferred range for anadromous salmonids where they are present or could be restored or listed, and for aquatic and riparian-associated species ~~where they are present or could be restored~~, and (D) provide ~~hiding cover~~ riparian litter and nutrients ~~a food base where needed.~~

Staff analysis of changes to 916.9 (a)(6)

Issue: Clarity of objectives

Issues: Specificity on location where temperature objectives are met

Refine "nutrient" objects based on TAC science findings.

1. Replacing "minimize "with "moderate" provides more clear and descriptive term for what is trying to be achieved. Change could be interpreted as relaxing goal.

2. The purpose of temperature moderation is made specific for supporting anadromous salmonid aquatic and riparian-associated and widens temperature goals for other riparian species.

3. Instream cover or shelter is addressed under subsection (5) above. If this section is intended to describe very near-stream vegetation then: "provide hiding cover immediately above or in contact with the water surface" is more descriptive of what the vegetation provides than food base which could include aquatic invertebrates.

~~(7)~~(6) Result in no ~~substantial~~ significant increases in peak flows or large flood frequency.

Staff analysis of changes to 916.9 (a)(7)

Issue: Consistence with CEQA; Clarity of term "substantial" for changes to limiting factors

1. For consistency with CEQA standards, term "substantial" is deleted.

(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.

§ 916.12, 936.12, and 956.12 Section 303(d) Listed Watersheds

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) When assessing cumulative impacts of a proposed project on any portion of a waterbody that is located within or downstream of the proposed timber operation and that is listed as water quality limited under Section 303(d) of the Federal Clean Water Act, the RPF shall assess the degree to which the proposed operations would result in impacts that may combine with existing listed stressors to impair a waterbody's beneficial uses, thereby causing a significant adverse effect on the environment. The plan preparer shall provide feasible mitigation measures to reduce any such impacts from the plan to a level of insignificance, and may provide measures, insofar as feasible, to help attain water quality standards in the listed portion of the waterbody.

The Director's evaluation of such impacts and mitigation measures will be done in consultation with the appropriate RWQCB.

(b) Consistent with subsection (a) above, comply with the terms of an adopted Total Maximum Daily Load (TMDL) to address pollutants or stressors that may be affected by timber operations.

Staff analysis of changes to 916.12 (a)(b)

Issue: Consolidation of 303 (b), water quality control board basin plan, and TMDL requirements.

1. Change bins all water board requirements in to one intent section. This change would promote clarifying goal and intend objectives for water board requirement and differentiate needs from endangered species legal requirements.

~~(a)~~(c) 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)~~(d)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)~~(e) 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)~~(f) 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)~~(g) 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.

End

BOF Staff summary of DFG Proposed Alternative

Group 1 (Goal/Intent section) of T/I Rules Prepared May 1, 2008

BOF Staff summary conducted on June 18, 2008

916, 936, 956 Intent of Watercourse and Lake Protection [All Districts]

…. Further, it is the intent of the Board to clarify and assign responsibility for recognition of potential and existing impacts of timber operations on watercourses and lakes, native aquatic and riparian-associated species, and the beneficial functions of riparian zones and to ensure ~~adoption of~~ all harvesting plans include feasible measures to effectively achieve compliance with this article. Further, it is the intent of the Board that the evaluations that are made, and the measures that are taken or prescribed, be documented in a manner that clearly and accurately represents those existing conditions and those measures. "Evaluations made" pertain to the assessment of the conditions of the physical form, water quality, and biological characteristics of watercourses and lakes, including cumulative impacts affecting the beneficial uses of water on both the area of planned logging operations and in the Watershed Assessment Area (WAA). "Measures taken" pertain to the procedures used or prescribed for the restoration, enhancement, and maintenance of the beneficial uses of water.

Staff summary of changes to 916

Issue: Clarity of meaning of "adoption"

Issue: Consistency with the purposes of the CESA.

1. The phrase "adoption of" is unclear regarding the means by which the Board intends to achieve the objectives described. The proposed change clarifies that harvesting plans must comply with the stated objectives.

2. With respect to species listed under the California Endangered Species Act, we refer the Board to Fish and Game Code section 2055 and recommend that the T&I rules provide consistency with the purposes of the CESA.

All provisions of this article shall be applied in a manner, which complies with the following:

(a) During and following timber operations, the beneficial uses of water, native aquatic and riparian-associated species, and the beneficial functions of riparian zones shall be maintained where they are in good condition, protected where they are threatened, and insofar as feasible, restored where they are impaired.

(b) Protection of the quality and beneficial uses of water during the planning, review, and conduct of timber operations shall comply with all applicable legal requirements including those set forth in any applicable water quality control plan adopted or approved by the State Water Resources Control Board. At a minimum, the LTO shall not do either of the following during timber operations:

(1) Place, discharge, or dispose of or deposit in such a manner as to permit to pass into the waters of the state, any substances or materials, including, but not limited to, soil, silt, bark, slash, sawdust, or petroleum, in quantities deleterious to fish, wildlife, beneficial functions of riparian zones, or the quality and beneficial uses of water;

(2) Remove water, trees or large woody debris from a watercourse or lake, the adjacent riparian area, or the adjacent flood plain in quantities deleterious to fish, wildlife, beneficial functions of riparian zones, or the quality and beneficial uses of water.

(c) Protecting and restoring native aquatic and riparian-associated species, the beneficial functions of riparian zones and the quality and beneficial uses of water shall be given equal consideration as a management objective within any prescribed WLPZ, ~~and~~ within any ELZ or EEZ designated for watercourse or lake protection., and any other location where operations may affect riparian zones or the quality and beneficial uses of water.

Staff summary of changes to 916 (c)

Issue: Additional consideration for protection measures needed for areas outside of riparian zones that may adversely impact riparian zones.

1. Operations on areas outside of WLPZ, ELZ, or EEZ may have substantial effects on aquatic and riparian habitat, such as through contribution to slope failures. Plans should give equal consideration to aquatic and riparian habitats regardless of the location of operations.

(d) The measures set forth in this Section are meant to enforce the public's historical and legal interest in protection for wildlife, fish, and water quality and are to be used to guide timberland owners in meeting their legal responsibilities to protect public trust resources.

916.1, 936.1, 956.1 In Lieu Practices [All Districts]

In rule sections where provision is made for site specific practices to be proposed by the RPF, approved by the Director and included in the THP in lieu of a stated rule, the RPF shall reference the standard rule, shall explain and describe each proposed practice, how it differs from the standard practice, and the specific locations where it shall be applied; and shall explain and justify how the protection provided by the proposed practice is at least equal to the protection provided by standard rule.

(a) The in lieu practice(s) must provide for the protection of the beneficial uses of water to the standards of 14 CCR 916.3 [936.3, 956.3] and 916.4(b) [936.4(b), 956.4(b)],

(b) In lieu practices stated in an approved THP shall have the same enforceability and legal authority as those practices required by the standard rules.

(c) Any in lieu practices which propose less than standard rule WLPZ widths for Class I watercourses shall include 14 CCR 916.5.(e) [936.5(e), 956.5(e)] "A" & "D" protection measures.

Staff summary of changes to 916.1

Issue: In-lieu practices often do not achieve the full intent of the FPR to restore, enhance, and maintain aquatic and riparian habitat.

1. While not identified as a component of the Group #1 rules, the language of this section strongly affects the implementation of the regulations. In practice, proposed in-lieu practices often do not achieve the full intent of the FPR to restore, enhance, and maintain aquatic and riparian habitat. The requirement to provide protection at least equal to the standard rule is often only considered with respect to pre-identified erosion control effects.

2. We recommend that this section be modified to explicitly require protection of all aquatic and riparian habitat functions and to require adherence to the standard rule when one or more reviewing agency recommends against the proposed in-lieu practice.

§ 916.9, 936.9, and 956.9 Protection and Restoration in Watersheds with Threatened or Impaired Values.

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~~adversely affect 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~~:

Staff summary of changes to 916.9 (a)

Issue: limiting factors approach may be an appropriate method of prioritizing restoration and recovery actions,

Issue: inconsistent with CEQA, which requires that all significant adverse impacts to the environment are avoided, minimized, and/or mitigated

1. While a limiting factors approach may be an appropriate method of prioritizing restoration and recovery actions, it is not an appropriate standard for protecting public trust resources from adverse effects. Which particular factors "primarily limiting" may be difficult to determine and may vary through time and space. In addition, a plan may have substantial adverse effects on a habitat factor which was not "primarily limiting" prior to the operations of the plan. This places an unreasonable burden on reviewing agencies to demonstrate that any particular habitat function is a "primary limiting factor." As currently written, this section is inconsistent with CEQA, which requires that all significant adverse impacts to the environment are avoided, minimized, and/or mitigated.

(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.

Staff summary of changes to 916.9 (a)(1)

Issue: Measurability of changes to limiting factors

1. The quantity of sediment load increase which may result from the operations of a plan is unlikely to be readily measurable during either plan review or implementation. It should be a goal of the rules to prevent adverse effects even if they cannot be readily measured.

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

Staff summary of changes to 916.9 (a)(2)

Issue: Measurability of changes to limiting factors

1. We are not aware of accepted methods for measuring watercourse channel or bank stability. It should be a goal of the rules to prevent adverse effects even if they cannot be readily measured.

(3) Not result in any ~~measurable blockage of any aquatic migratory routes~~ passage barriers for all life stages of anadromous salmonids or listed species.

Staff summary of changes to 916.9 (a)(3)

Issue: Measurability of changes to limiting factors

Issue: Expanded evaluation of "barriers" needed

1. While methods exist to quantify the extent to which a feature may act as a passage barrier for salmonids through changes in flow for different life stages of salmonid species, these measurements are unlikely to be applied during plan review or implementation

2. As currently written, the rule may be limited to upstream migration by spawning adults. Barriers to the movement of other life stages may also have effects. Barriers to juveniles during low flows may inhibit their ability to select preferable habitats. DFG recommends that this rule clearly extend to partial barriers that may inhibit passage of any life stage of covered species

(4) Not result in any ~~measurable~~ adverse effects to aquatic species through 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)]~~.

Staff summary of changes to 916.9 (a)(4)

Issue: Measurability of changes to limiting factors
Issue : water drafting plans do not ensure adverse facts of flow reduction are avoided u

1. The goal of the rule should be to avoid adverse effects resulting from stream flow reductions regardless of whether they are measured or conducted under a water drafting plan. It should be recognized that as currently written, 916.9(r) does not ensure that adverse effects are avoided. RPF determinations regarding the applicability of the provisions of 916.9(r) are often made without appropriate supporting measurements

(5) ~~Consistent with the requirements of 14 CCR § 916.9(i), 14 CCR § 936.9(i), or 14 CCR § 956.9(i); p~~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, and riparian habitat within the WLPZ.

Staff summary of changes to 916.9 (a)(5)

Issue: requirements for woody debris should not be limited to those stated in 916.9 (i)

1. The goal of the rule should not be limited to the application of 916.9(i), etc. Where appropriate, plans should also identify measures to meet this goal with measures beyond those specified in 916.9(i). Woody debris within the WLPZ also provides habitat features for riparian-associated species and for aquatic species during high-flow events

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~~(6) Consistent with the requirements of 14 CCR § 916.9(g), 14 CCR § 936.9(g), or 14 CCR § 956.9(g); p~~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.

Staff summary of changes to 916.9 (a)(5)

Issue: Requirements for shade should not be limited to 916.9 (g)

1. The goal of the rule should not be limited to the application of 916.9(g), etc. In some cases alternative measures may be appropriate to achieve the objectives identified.

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