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Affiliate of Redwood Coast Watersheds Alliance

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Matt Dias, Executive Officer State Board of Forestry and Fire Protection P.O. Box 944246 Sacrament, CA 94244-2460

Subject: Comments – Working Forest Management Plan (Rule Making - SB 901)

Dear Mr. Dias and Board Members:

Senate Bill 901 presented new language and direction for rule promulgation for the Working Forest Management Plan. Realizing, as stated in the Forest Practice Act, the Forest Practice Rules are the minimum standards to be applied to the process of administering timber harvest applications, with the additional caveat that such administration (inclusive of rule promulgation) must be consistent with all applicable State statute – there are still challenges and requirements to be addressed in the rule writing process for the Working Forest Management Plan.

It is (still) the case that the concept of allowing deference to relief from future rule application (in this case no future Timber Harvest Plans - THPs and analysis under California Environmental Quality Act - CEQA). That such relief would be applied with the objective for the Working Forest Management Plan is intended to allow for, and encourage, management at a higher level of resource protections and timber productivity (than the base minimums set in the current Forest Practice Rules). This is clearly noted in the language of SB 901 (see excerpts – below).

In these comments we argue for the incorporation of effective erosion control planning – consistent with the intent of SB 904 and other California Code – Porter-Cologne/Cal Water Code, the Forest Practice Act and Rules (FPA, FPRs), CEQA, and other State Policy and mandates (Issues noted by highlighted subject headings). The argument and discussion indicates that: 1) there is no necessity to approve new rules for the Working Forest Management Plan under Emergency Regulations, 2) that if new rules are approved under Emergency Regulations, there are specific requirements (as per SB 901, AB 904, and other California Code), 3) That SB 901 calls for, at a minimum, erosion analysis under Section 923 of the FPRs, but does not limit the use of erosion planning – in the form of a stand alone Erosion Control Plan (ECP), 4) State statue and policy support such a stand alone ECP and other resource protections.

Please note that this new language presented in SB 901 is similar to – and – replaces some of the language in AB 904 with new requirements. However, some of the language and intent of AB 904 still remains intact. Thus, the application of new rule writing must consider the new and previous language and intent of, both, SB 901 and AB 904.

With the new language – in SB 901 – the major departure, or changes, from the previous iteration are:

- 1) Confining the multiple ownerships to a Hydrologic Area. We believe this change (to the problem of managing numerous ownerships over large areas and land types) limits some of the noted management issues under the previous language (rules). However there still are issues related to the development and disclosure of existing conditions, overall project cumulative effects conditions, differences in planning watershed conditions, and Cal Water Code, Basin Plan, and TMDL compliance. Explanation on how these issues are to be addressed in the new rule language is required.
- 2) The language in SB 901 requires disclosure and assessment of erosion and sediment delivery conditions, with discussion on treatments, under the requirements of section 923 of the FPRs (which confines disclosure assessment, and discussion of remedy to the area of timber operations). The Statute also says that all rule promulgation must be consistent with California Statute (which includes but is not limited to: CEQA. Forest Practice Act, Fish and Game Code, Cal Water Code (including the Basin Plan and Total Maximum Daily Loads TMDLs). The Statute does not limit rule writing that would include and overarching sediment control plan for the area of the project. Explanation of how legal and intent consistency is attained is required.

We argue here; to be compliant with (consistent with) all California State Code, any new rule writing must require a front loaded plan for disclosing and considering remedy for erosion issues considered in Section 923 of the Forest Practice Rules and any other sites in the noted plan area that may be contributing sediment (or have potential to deliver significant sediment inputs) to surface waters of the State; that said document be maintained as a working document, as part of the plan, to accomplish the work needed to remedy these sediment issues – over time (with a time schedule for implementation of actions necessary to limit introduction of sediment into surface waters). We believe that the intent of SB 901 which includes the language "maintenance of ecosystem processes" as well as compliance with State Code requires such a plan/document to be included as part of the project. You can call the planning document whatever you want (Erosion Control Plan, Erosion Control Implementation Plan, Sediment Control Plan, etc.). However, it must be there.

3) There are other issues (which are discussed - below – i.e. definitions, accounting for carbon and growth and yield – where these issues need to be addressed in the rule writing process.

PERTINENT SECTIONS OF THE STATUTE - SB 901

SEC. 19. Section 4597.1 of the Public Resources Code is amended to read:

(j) "Working forest management plan" means a management plan for working forest timberlands, with objectives of maintaining, restoring, or creating uneven aged managed timber stand conditions, achieving sustained yield, and promoting forestland stewardship that protects watersheds, fisheries and wildlife habitats, and other important values. A working forest management plan may include multiple working forest landowners, but shall cover no more than 10,000 acres of timberland. The harvest area, as defined in Section 895.1 of Title 14 of the California Code of Regulations, of a working forest management plan must be contained within a single hydrologic area as defined by State Water Resources Control Board's CalWater 2.2.

4597. (a) The Legislature finds and declares all of the following:

- (1) The nonindustrial timber management plan established pursuant to Article 7.5 (commencing with Section 4593) has been successful in meeting the intent of this chapter by encouraging prudent and responsible forest management and discouraging accelerated timberland conversion by private nonindustrial forest landowners.
- (2) There have been more than 850 nonindustrial timber management plans approved by the department covering a combined area of more than 360,000 acres.
- (3) Building upon the model provided by the nonindustrial timber management plan, it is the policy of the state to encourage long-term planning, increased productivity of timberland, and the conservation of open space on a greater number of nonindustrial working forest ownerships and acreages.
- (4) It is the policy of the state to encourage prudent and responsible forest resource management of nonindustrial timberlands by approving working forest management plans in advance and authorizing working forest timber harvest notices to be filed ministerially.
- (5) To ensure long-term benefits such as added carbon sequestration, local and regional employment and economic activity, sustainable production of timber and other forest products, aesthetics, and the maintenance of ecosystem processes and services, the working forest management plan shall comply with rigorous timber inventory standards that are subject to periodic review and verification.
- (b) This article shall be implemented in a manner that complies with the applicable provisions of this chapter and other laws, including, but not limited to, the Timberland Productivity Act of 1982 (Chapter 6.7 (commencing with Section 51100) of Division 1 of Title 5 of the Government Code), the California Environmental Quality Act (Division 13 (commencing with Section 21000) of the Public Resources Code), the Porter Cologne Water Quality Control Act (Division 7 (commencing with Section 13000) of the Water Code), and the California Endangered Species Act (Chapter 1.5

(commencing with Section 2050) of the Fish and Game Code). Working forest landowners, as defined in Section 4597.1, shall comply with all applicable regulatory requirements of the State Water Resources Control Board and the appropriate regional water quality control board.

The above paragraph (and sections of the Forest Practice Rules) indicate that the rule making process for the Working Forest Management Plan must establish language that is consistent with all California Statute.

Note: "Building upon the model provided by the non-industrial timber plan" Currently the NTMP document includes a stand alone Erosion Control Plan – with noted erosion and potential erosion sites and requirements to remedy those sites over time.

POTENTIAL IMPACTS - CEQA COMPLIANCE

CEQA applies to discretionary projects of State and local government agencies. A discretionary project requires the exercise of judgment and deliberation a public agency decides to approve or disapprove a particular activity. This rule making process is subject to CEQA. The Statute, SB 901 provided parameters for issues that were not solved in the previous rule making (under AB 904 language), the requirement for legal consistency leaves numerous issues that still need to be addressed.

Noncorporate forest landowners control approximately 3.2 million acres of the state's nearly 8 million acres of private timberlands. Of these, there are approximately 87,000 parcels of timberland that are 100 acres or less.

This language (from SB 901) indicates (as noted in CAG's previous comments on the initial AB 904 rules writing) that there is a significant land base that can be incorporated in to either NTMP or WFMP land based planning and rules. This, when considered in light of the fact that these plans are approved with management conditions that will exist in perpetuity indicates that a very high level of scrutiny, or high level review and analysis (with careful discussion of the full range of project alternatives – including specific areas of resource protection noted in this paper) must take place.

Note: Though this rule making process by the Board of Forestry (given that SB 901 authorizes said rules) as a Certified Regulatory Program - there is no exemption from being consistent with CEQA mandates (a full description of activity being contemplated – with alternatives to that activity – and mitigation measures to minimize any significant effect on the environment by this activity – and – be available for a reasonable period of time for review) – which includes consistency with all California Code. Thus, substantive criteria and the specific aspects of environmental effects (including compliance with all State Code) must be evaluated before project approval.

Issues that remain open, or require some resolution to be contemplated in the rules making are discussed – below:

The Planning Watershed will be identified and noticed on the plan information page – and – on the first page of the notice of operations (Working Forest Harvest Notice/WFHN) – so as to identify the area of operations, assessment and assessment updates, and any changes in the plan that may effect environmental outcomes.

Additionally, the Hydrologic Area will be identified and noticed on the plan information page — and — on the first page of the notice of operations (Working Forest Harvest Notice/WFHN) — so as to identify the area of operations, assessment and assessment updates, and any changes in the plan that may effect environmental outcomes. (to comply with CEQA disclosure requirements).

These two identification numbers will help Review Team and the public have an identifiable basis for accessing pertinent information in the review of actions related to the plan. There is no logical reason to not include this information in the appropriate location in the plan.

The FPRs include sections that require disclosure and assessment of issues at the planning watershed level. With the use of Hyrdrologic Areas the determined area of confinement for multiple ownerships under one WFMP, it is unclear how disclosure and analysis for determining effects and/or environmental review, and future compliance reviews are to be managed – in terms of the planning watershed unit vs. hydrologic area. Will a WFMP (which we assume will be mapped) area be inclusive of an ownership (as in NTMPs – based on the model of same)? How will assessment and reporting be presented in terms of ownerships and planning watersheds? Is it possible for a WFMP to fall into two Regional Board or Calfire review regions?

For disclosure and planning purposes there will be a complete Erosion Control Plan – with a schedule for remedy of existing and potential erosion sources – as part of the plan and plan review as part of the plan approval process – where the entire area of the WFMP would be assessed for active erosion sites and potential erosion sites to satisfy CEQA and other California Code. Erosion Control assessment must not be limited to section 923 of the FPRs (which limits such assessment to roads, landings and watercourse crossings – in the area of timber operations). Any such limitation to section 923 would subvert CEQA by not disclosing all attributes of a proposed plan necessary for the informed decision making process – and would not be consistent with California Code.

This will be discussed further under EROSION CONTROL – via presentation and discussion of the FPRs and other California Code (below – and in attachments)

HYDROLOGIC AREA

The Statute addressed the outstanding issue of multiple ownerships under on WFMP by limiting an ownership to a Hydrologic Area (Calwater 2.2). It is assumed that the entire area of a WFMP must be contained in a single HA. Is this the case?

It also is assumed that certain levels of analysis in the Forest Practice Rules that are based on the Planning Watershed scale will continue on as per language in the FPRs.[See Appendix – EXCERPTS FORM THE FOREST PRACTICE RULES - Planning Watersheds.].

\The issue arises on the question of how to deal with the analysis based on the Planning Watershed level when assessing the whole plan area (which may be in several planning watersheds) and, if in the case of multiple owners under one WFMP – how are the these multiple areas of assessment presented for overall review of the plan? Under CEQA there must be provided to the Review Team and the public a rational overview – with detailed description and level of analysis from which the Review Team or the public can interpret the findings ("orderly evaluation") and make rational assumptions, findings, and recommendations? Or – how will planning watersheds in a HA, and multiple ownerships, within a HA be treated in terms of requiring information, analysis, and reporting – over time and at the time of submission?

This issue is left open in SB 901 – where, under the FPRs (sections 895, 897, 913.1, 916.2, 916.9, 916.12, 916.19) and other California Code – it is the duty of the Board to make sure in its regulations that all requirements for information, analysis, and monitoring/reporting are presented in a timely, accessible, and rational way.

There is an open issue on how other appurtenant permits will be addressed and assessed as part of a plan (which may have multiple ownerships). How and where will CDFW 1600 permits be noticed and displayed in the overall analysis and review of the plan?

CARBON

SB 901 is clear on the protection of forest values related to carbon issues—calls for carbon accounting—and, indicates that actions should promote the protection of carbon stores and increase the potential of carbon stores. How will new WFMP language attain this stated goal?

In the first iteration of the Working Forest Management Plan, as in this iteration of the Working Forest Management Plan - under, both, the plain language in AB 904 and in SB 901 - the statute language indicates the co-benefit of increased carbon sequestration as a result of the management practices noted in the statute and rule writing. ("To ensure long-term benefits such as added carbon sequestration"). Presumably the increased carbon would be a benefit derived from increased inventories of merchantable timber inherent in the strict inventory reporting standards – though stocking standards are the same as the FPRs). However, when the issue of previous existing WFMP rule language failing to support the co-benefit of additional sequestered carbon was raised by CAG and EPIC (the WFMP rules do not assure increased carbon sequestration); the response by the Board of Forestry in the Final Statement of Reasons (FSOR) indicated that there need not be an objective of increased inventories and/or increased carbon sequestration. Failure to put a regulation in place that supports increased carbon sequestration (where carbon effects can be quantified and verified) is not consistent with SB 901 and/or AB 904.

Additionally, (now) SB 901 indicates carbon assessment and metrics be addressed in the administration of the application of these new rules. This raises issues of accountability in the long-term assessment of growth and yield outcomes. Carbon sequestration effects are closely related to growth and yield outcomes, forest timber inventories, fuel reduction (carbon effects – that is why SB 901 mandates assessment and reporting of carbon effects.), and even ground disturbance and soil loss (which have measurable carbon effects).

The 5 year reporting and review of the project there are questions on how the reporting will be organized. It is not clear if a project will report for the outcomes and results for the whole project - or – in the case of multiple ownershps under one plan – for each owner separately. This issue must be clarified in the rule language – so as to produce reports that are comprehensive – with an accurate review of results on a specific property or planning unit that can be distinguished and that outcomes can be accurately determined.

There is an issue with accurately determining outcomes (growth and yield – inventory changes over time). It has been reported by the Department that a large percentage (approx. 90%) of the reporting on these factors related to NTMPs (and SYPs) – where the RPFs reporting on growth and yield outcomes fail to comply with the Regulations and professional standards (Professional Foresters Law 752(b) – Sustained Yield Analysis). Therefore; it is impossible for the Department to make accurate assessment of the outcomes.

Growth and yield outcomes, and inventory levels have long term effects on sediment production and fish and wildlife values.

SEE ATTACHEMENT – CHRIS MARANTO

In part, the issue lies in the facility and training of RPFs (skill and acuity in modeling and use of modeling tools), and the lack of a basic metric that can stand in the process over time. [Note: if the modeling or metrics keep changing – the standard of measurement is lost. Thus, overtime = accurate assessment is also lost].

To produce reporting that will provide relevant assessment over time (with reporting schedules in the WFMP rules) there must be provided a standard of measurement (in modeling and metrics) that will provide sustainable an accurate basis of information leading to determination(s) by the Department and Review Team. Accurate assessment of growth and yield, inventory changes and assessment of carbon outcomes depend on this. Currently, there is no language in the rules to support this outcome.

USE OF EMERGENCY REGS

We see no rational argument for approving the WFMP rules as an Emergency Regulation. The Working Forest Management Plan, and related rules, are not subject to the current fire management emergency situation.

SB 901 does not direct the Board to adopt any regulations, and thus the provision in Section 46 which refers to adoption of emergency regulations is not applicable. SB 901 does not require the Board to adopt regulations for the WFMP. In fact, SB 901 eliminates the requirement to adopt regulations. *See* SB 901, Sec. 22, eliminating PRC § 4597.20, at p. 38. If the Board adopts new regulations for the WFMP, proceeding on any new regulations should be accomplished under the Board's general authority to adopt regulations, PRC § 4551. New rules for the administration of

the WFMP are not an emergency issue (or health and safety issue). Findings for health and safety in SB 901 generally apply to emergency issues related to pressing fire related issues.

Amendments to the FPA, concerning wildfire, and not WFMP provisions, are located in Sections 11-16. These amend FPA provisions in PRC §§ 4527, 4584, 4584.1, 4584.2 and 4589. See SB 901, at pp.17-32. These provisions speak expressly to the adoption of regulations. See e.g. PRC §§ 4584 (g)(2), (i)(5), 4584.1, 4584.2.

The only mention of regulations for WFMP is in Sec. 20, <u>PRC § 4597.2 (*l*)</u>, where SB 901 includes the existing (AB 904) text of this entire section and does not amend or change this sub-section. It provides that WFMP contents include "Any other information the board requires by regulation to meet its rules and standards of this chapter." *See* SB 901, <u>PRC § 4597.2 (*l*)</u>, at p. 37.

New WFMP rule making should occur under regularly noticed rule making procedures.

If the Board claims that this language authorizes emergency regulations, and explanation must be provided indicating how the language refers to regulations to be adopted pursuant to SB 901. Where is the language requiring or considering regulations "pursuant to this act."? Whatever regulations the Board may want to adopt are pursuant to the Forest Practice Act.

As noted above, though the statute indicates that action from WFMP management practices are to provide benefits of additional sequestered carbon. The previous iteration of the WFMP rules indicated in, the FSOR, that additional carbon may not be a required outcome from the WFMP. A careful reading of SB 901 states – and reiterates – that if approving rules under Emergency Rule writing - with the condition that there will be reporting on carbon effects related to such new rules and related activity to develop resilient forests. And, it is very clear that the statute (SB 901) is concerned about the loss of carbon, and created language in the statute that is intended to limit loss of carbon and promote gains in carbon sequestration. The current proposed rule making language for the WFNP makes no assurance of attainment of the co-benefit of additional sequestered carbon and provides no method for accounting of same. There is no language supporting and ensuring the long-term benefit of added carbon sequestration. (i.e. if it is argued that the WFMP rule raking must occur under the Emergency Rule Making process, then an assessment of carbon effects must occur relative to such rules – and – language in the WFMP must address the need to ensure such long-term benefits.)

EROSION CONTROL

Almost all of the major drainage systems (HAs), and minor systems (Planning Watersheds) are hydrologic systems noted to be impaired – and are included on California's List of Water Quality Limited Segments. These impairments – where Water Quality Standards are not being met - where loss of beneficial use or not meeting Water Quality Objectives are related to impairment by the pollutant sediment. A very large percentage of the causal factor for the delivery of sediment (in an accelerated rate – above background levels) to surface waters is the Land Use – timber harvest or silviculture. [See – CZARA, Dunne Report, Independent Scientific Review Panel, etc] These

impaired conditions manifest the necessity of Total Maximum Daily Loads (TMDLs), and State and Regional Non-Point Source Policy –contained in regional basin plans [See; CZARA, FPRs (noted compliance with approved TMDLs), and State Listing and TMDL policy]. All existing sediment sources (where sediment can reach surface waters and cause degradation) are actually a (ongoing) violation of any regional basin plan. Such existing sources of sediment, and potential sources (as defined in Cal Water Code and the FPRs – and not limited to just roads, landings and watercourses in the area of operations), must be disclosed and addressed (scheduled for remedy) in the assessment and approval process any project (THP, NTMP, WFMP, Conversion, etc.). It is logical, and it must occur in the rule writing for the WFMP, that a plan be maintained with an inventory of, and remedy for erosion, and significant erosion prone sites – with a schedule for remedy of those sites to occur over time (to be a working part of the plan – WFMP).

Excerpts from SB 901 (says including 923 – but not limited to 923)

4597.1

(j) "Working forest management plan" means a management plan for working forest timberlands, with objectives of maintaining, restoring, or creating uneven aged managed timber stand conditions, achieving sustained yield, and promoting forestland stewardship that protects watersheds, fisheries and wildlife habitats, and other important values. A working forest management plan may include multiple working forest landowners, but shall cover no more than 10,000 acres of timberland. The harvest area, as defined in Section 895.1 of Title 14 of the California Code of Regulations, of a working forest management plan must be contained within a single hydrologic area as defined by State Water Resources Control Board's CalWater 2.2.

The paragraph from SB 901 indicates superior planning and implementation – where protections of fishery resources are considered. Sediment impairment is a major threat to fishery resources. A plan for reducing sediment is a necessary attribute to the outcome noted above

4597.2

(d) All necessary information shall demonstrate compliance with Article 12 (commencing with Section 923) of Subchapter 4 of, Article 11 (commencing with Section 943) of Subchapter 5 of, and Article 12 (commencing with Section 963) of Subchapter 6 of, Division 1.5 of Title 14 of the California Code of Regulations

The above section of SB 901 indicates compliance with section 923 – at a minimum (the Road Rules – Which confine assessment to roads, landings, and water courses – in areas of timber operations). It does not indicate that an Erosion Control Plan and/or a Road Maintenances Plan can not be, or should not be, part of the plan (WFMP) and related assessment – or – inhibit compliance from CEQA and other Water Code that requires full disclosure and potential effects of operations and/or existing erosion sites, or seek to inhibit compliance with approved TMDLs.

(i) <u>Addresses candidate</u>, threatened, endangered, and sensitive species, and other fish and wildlife species that timber operations could adversely impact by potential changes to habitat.

- (iv) <u>Discusses and includes feasible measures planned to avoid or mitigate potentially significant adverse impacts on fish or wildlife</u>, which can include, but is not limited to, recruitment or retention of large down logs greater than 16 inches in diameter and 20 feet in length, retention of trees with structural features such as basal hollows, cavities, large limbs, or broken tops, retention of hardwoods, and retention or recruitment of snags greater than 24 inches in diameter and 16 feet in height.
- (i) (1) A description of the following for each management unit:
- (l) Any other information the board requires by regulation to meet its rules and the standards of this chapter

These sections of language from SB 901 not only call for compliance with all State Code - including TMDLs and Regional Basin Plans – they call for (require) the implementation of a format to address these issues (in this case loss of the beneficial use – cold water fishery) by the completion of a plan that identifies sediment sources, and potential sources of sediment, that can be feasibly controlled to be disclosed and maintained in an manageable form. The language indicates intent to mitigate and that, via a schedule, indicates that the mitigation will occur in a specific time frame, or has occurred. WFMPs are large projects, including many thousands of acres – inclusive of whole watersheds - adjacent to Waters of the State where impairment is established and beneficial uses (cold water fishery) are in a compromised state.

EROSION CONTROL - CALIFORNIA STATUTE, FPRs

As noted above – SB 901 mandates compliance with related California Codes – including: Porter-Cologne, Fish and Game Code, CEQA, and the Forest Practice Act and Forest Practice Rules.

CEQA Requires a full description and discussion of on-site conditions and proposed actions that may effect environmental outcomes (not just limited to roads, landings, and watercourse crossings - in the area of future operations) – with a discussion of the full range of feasible alternatives and actions necessary to remedy potential impacts. This would include disclosure and discussion of existing impairments (and or threats to exacerbation of impairments or creation of impairments) and programs that may exist that address such an issue (in the case of sediment and erosion – notice of listing of affected waterbody(s) on the States List of Water Quality Limited Segments, approved TMDLs (EPA and State TMDLs), Implementing Programs (WDRs and Waivers for Timber Operations on Non-Federal Lands), and any other known studies, directives, technical analysis that might apply to the analysis and mitigation of the potential effects of the proposed activity. And – that such project description (inclusive of all information necessary for the informed decision making process) shall be included in the initial project review (not at some future date – at the time of the Working Forest Harvest Notice).

Currently the rule language for the Working Forest Plan is not inclusive of the attributes necessary for review – as required by CEQA. In fact, leaving completion of sediment and erosion analysis to some future date, and not having a comprehensive plan for controlling active and potential sources of sediment subverts CEQA, other Code and the FPRs – and – allows for continuing introduction

of pollutants to Waters of the State (most of these waters being on a list and noted as being impaired by the pollutant - sediment - from the land use - timber harvest/silviculture).

Further language in California Statute that supports erosion control planning is included – below:

FOREST PRACTICE RULES SUPPORT EROSION CONTROL PLANNING

I this document, with argument and discussion presented, the case is made that the Forest Practice Rules support Erosion Control Planning (which would include an assessment of the area of the WFMP, and inventory of sites that are problematic (significant sediment discharge – see Appendix for FPR definition), and schedule for remediation of issues – noting dates of task completion as the monitoring component. Review of the FPRs supports this conclusion – where it is incomprehensible (on such large and long term projects) that compliance with the Rules can be attained without such a plan.

Conformance to existing law requires the disclosure of existing legacy erosion sites – or any site that has the potential - as defined in the FPRs – as well as roads, landings, and watercourse crossings as per section 923. It is well documented that road related issues are the more (or major) significant factor in sediment production related to timber harvest issues. However, the FPRs (and other California Code) recognize the need for addressing other no-road related issues that are controllable sources of sediment.

Of issue: under section 923, the omission skid trails, and/or tractor roads – as known areas where significant water concentration and sources of erosion issues – leaves these areas out of consideration in the plan assessment (where significant sources of sediment are to be considered in the plan assessment and mitigation process). Section 923 does not clearly speak to skid trails or tractor roads – however other sections in the rules indicate such assessment and planning is necessary. In any planning watershed subject to timber operations, or any timber harvest management unit, skid trials and tractor roads cover more ground, create more soils surface disruption and water channel interference, and contribute as much or more erosion and sediment potential than roads landings, and watercourse crossings (related to roads). It is argued here that these sources, related to skid trails and tractor roads be included in the Erosion Control Planning. The issue of 923 failing to consider all relevant sediment sources is a major impediment to meeting the legal standards of the FPRs and other California Statute.

These sections of 923 apply to planning – but are limited to roads, landings, and watercourse crossings – in areas of timber operations –only. Apply Section 923 (soley) for erosion assessment potential omits the need to disclose, assess, and consider (having a plan to remedy) other readily known sources of sediment – including skid trails, tractor roads, and legacy sources that are feasibly controllable.

<u>FPR 923 (b)</u> requires planning, etc. "to avoid or substantially lessen significant adverse impacts to, among other things, . . .water quality and the beneficial uses of water [and] soil resources.

FPR 923.5 identifies "erosion control standards" which "shall apply." These include adequate

drainage for road and landing surfaces (923.5(a)), and drainage facilities and structures "shall be installed along all logging roads and all landings that rare used for timber operations in sufficient number to minimize soil erosion and sediment transport and to prevent significant sediment discharge," (FPR 923.5(b)).

<u>FPR 923.5(i)</u> requires that where "logging road and landing surfaces, road approaches, inside ditches and drainage structures cannot be hydrologically disconnected, and where there is existing or the potential for significant sediment discharge, necessary and feasible treatments to prevent discharge shall be described in the plan" (emphasis added). This language embraces the intent, if not the letter, of the law in AB 904.

Note: Under 923 - the issue of hydrologic disconnection from existing or to be constructed skid trails and tractor roads (an issue that leads to concentration of runoff during rain events – leading to conditions where erosion issues are created or exacerbated) is not considered in the assessment and planning process. This is a major omission in the assessment and planning process under 923 – which is also noted in comments supplied by the Regional Board).

<u>FPR 923.6</u> prohibits the use of logging roads and landings during any time of the year when operations may result in significant sediment discharge to watercourses

<u>FPR 923.7</u> requires monitoring and maintenance to "minimize soil erosion and sediment transport, and to prevent significant sediment discharge."

<u>FPR 923.9</u> requires the planning and use of logging road watercourse crossings "shall include the evaluation and documentation of significant existing and potential erosion sites consistent with [FPR] 923.1(e).

<u>FPR 923.1(e)</u> outlines conditions which must be considered, including hillslope grade of road crossing, erodibility of hillslope material exposed by the road, and site-specific information regarding the condition of and location of all existing or potential sediment sources including, but not limited to: watercourse crossings, road approaches, ditch relief culverts, road surfaces, road cuts, road fills, inboard ditches, through-cuts, and landings.

Note: These sections of section 923 indicate the need for a planning device to track and monitor these issues – albeit, restricted to roads and landings (in areas of timber operations – where these limitations are not consistent with the FPRs and other California Code.

Forest Practice Rules Section 916 supports erosion control planning (see: included text from excerpts of the FPRs – in the appendix and discussion below)

FPR 916.4 requires that "As part of this field examination, the RPF or supervised designee shall evaluate areas near, and areas with the potential to directly impact, watercourses and lakes for sensitive conditions including, but not limited to, existing and proposed roads, skid trails and landings, unstable and erodible watercourse banks, unstable upslope areas, debris jam potential, inadequate flow capacity, migrating channels, overflow channels, flood prone areas, and riparian

zones wherein the values set forth in 14 CCR § 916.4 [936.4, 956.4], subsection (b) are impaired...The plan shall identify such conditions, including where they may interact with proposed timber operations, that individually or cumulatively significantly and adversely affect the beneficial uses of water, and shall describe measures to protect and restore to the extent feasible, the beneficial uses of water. In proposing, reviewing, and approving such measures, preference shall be given to measures that are on-site, or to offsite measures where sites are located to maximize the benefits to the impacted portion of a watercourse or lake."

Note: Indicates on-site, and off-site (outside of harvest area) assessment and planning required to restore (or protect and restore – as feasible) - which is also a Porter-Cologne, Basin Plan and TMDL compliance requirement. This indicates an Erosion Control Plan is necessary to attain these objectives.

<u>FPR 916.7 (b)</u> "Where mineral soil has been exposed by timber operations on approaches to watercourse crossings of Class I or II waters, or Class III waters if an ELZ or WLPZ is required, the disturbed area shall be stabilized to the extent necessary to prevent the discharge of soil into watercourses or lakes in amounts deleterious to the quality and beneficial uses of water."

FPR 916.9, outlining standards for watersheds with listed anadromous salmonids:

<u>FPR 916.9(a)</u>: Goal - Every timber operation shall be planned and conducted to protect, maintain, and contribute to restoration of properly functioning salmonid habitat and listed salmonid species. To achieve this goal, every timber operation shall be planned and conducted to:

- (1) Comply with the terms of a Total Maximum Daily Load (TMDL).
- (2) Prevent significant sediment load increase to a watercourse system or lake.

Note: It is indicated, in the rules, that all approved TMDLs must be complied with – and – actions must be taken to prevent sediment loads increase – from all sources (not just roads and landings as per 923). This requires assessment and planning over the landscape of a WFMP – with monitoring for compliance effectiveness. Disclosure of these issues must be initially disclosed in the WFMP approval process. A format for such disclosure must be created in the rule writing for the WFMP

<u>FPR 916.9(b)</u>: "Pre-plan adverse cumulative watershed effects - 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. When the proposed timber operations, in combination with any identified pre-plan watershed effects, will add to significant adverse existing cumulative watershed effects, the plan shall set forth measures to effectively reduce such effects."

<u>FPR 916.9(d)</u> requires: "(1) The plan shall fully describe: (A) the type and location of each measure needed to fully offset sediment loading, thermal loading, and potential significant adverse watershed effects from the proposed timber operations, and (B) the person(s) responsible for the implementation of each measure, if other than the timber operator. "(2) In proposing, reviewing, and approving such measures, preference shall be given to the following: (A) measures that are both onsite (i.e., on or near the plan area) and in-kind (i.e., erosion control measures where sediment is the problem), and (B) sites that are located to maximize the benefits to the impacted portion of a watercourse or lake. Out-of- kind measures (i.e., improving shade where

sediment is the problem) shall not be approved as meeting the requirements of this subsection." (emphasis added).

FPR 916.9 (v) identifies the sit-specific information that is required.

The Technical Rule addendum #2 – supports erosion control planning:

Appendix Technical Rule Addendum # 2

In evaluating cumulative impacts, the RPF shall consider the factors set forth herein

1. Impacts to watershed resources within the Watershed Assessment Area (WAA) shall be evaluated based on significant on-site and off-site cumulative effects on beneficial uses of water, as defined and listed in applicable Water Quality Control Plans.

Note: Cumulative on-site and off-site sediment effects evaluation, from all sources, must be disclosed as part of the plan in an ECP (for CEQA and FPR compliance) See: full text – including "Sediment Effects" in Appendix.

See: Excerpts from the Forest Practice Rules – included in the Appendix

Note: Again; the FPRs clearly indicate the level, scope, and legal standards requiring a planning device (ECP or plan by another name), to be disclosed (at the time of plan approval), and evaluated for actions needed to conform to the standards set in the rules and a method for tracking implementation of actions necessary to maintain those standards.

CALIFONIA WATER CODE AND REGIONAL BASIN PLANS SUPPORT EROSION CONTROL PLANNING

The Forest Practice Act rules require compliance with applicable water control plan (regional Basin Plan (which includes Non-point Source Policy, Sediment Policy, and Prohibitions) – and – compliance with approved TMDLs.

AB 904 requires, and is not changed by SB 901, that the WFMP program shall be implemented in a manner that complies with State Codes, and not just CEQA as noted above:

This article shall be implemented in a manner that complies with the applicable provisions of this chapter and other laws, including, but not limited to, the Timberland Productivity Act of 1982 (Chapter 6.7 (commencing with Section 51100) of Division 1 of Title 5 of the Government Code), the California Environmental Quality Act (Division 13 (commencing with Section 21000) of the Public Resources Code), the Porter Cologne Water Quality Control Act (Division 7 (commencing with Section 13000) of the Water Code), and the California Endangered Species Act (Chapter 1.5 (commencing with Section 2050) of the Fish and Game Code).

SB 901 adds a specific obligation to comply with Water Board regulatory requirements:

"Working forest landowners, as defined by Section 4597.1, shall comply with all appli-

cable regulatory requirements of the State Water Resources Control Board and the appropriate regional water quality control board. See Sec. 18, amending <u>PRC § 4597(b)</u>, at p. 33.

This requires more than the AB 904 provision requiring implementation to comply with other laws [that provision remains]; SB 901 adds an affirmative duty that all WFMP landowners shall comply with regulatory requirements.

While a General Waste Discharge Requirements for WFMP have not yet been adopted, it is more than reasonable to prepare for similar requirements for the WFMP as for the NTMP. Additionally, failure to require such a ECP, fails to meet, both, FPR mandates and Regional Board Requirements (including previous comments on what is necessary to be consistent with Regional Board Requirements – including Basin Plan and TMDL compliance) would clarify the fact that landowners must comply with regulatory requirements of the SWRCB and appropriate regional board would make clear (to the landowner that a requirement for an Erosion Control Plan must be met – as part of the WFMP approval process

The Board has authority to require the information, particularly to ensure CEQA is satisfied in the review of the WFMP – to require the disclosure of site conditions. The amended 4597(b) does not limit the Board's authority to include this information.

Note: Please be aware that any significant changes to the erosion control analysis that occurs incidental to the WMFP approval process, or at the time of the time of the WFMP Harvest Notice (at this juncture it would be a Major Amendment to the plan) is subject to Review Team assessment and must be noticed for public review - and - where findings must be appurtenant to any approval process (as a CEQA compliant action).

The directive in the statute – SB 901 – to comply with the regulatory requirements of the State Water Resources Control Board (and other State Code) is inclusive of Board of Forestry responsibility to be consistent with appurtenant and related codes, policy, and agreements (which includes – but is not limited to: Non-point Source policy, Sediment Policy (and other Basin Plan issues – including prohibitions, water quality objectives, maintenance of beneficial uses, and TMDLs), MOUs, MAA, and other State interagency agreements for resource management (which includes FAP, and compliance with CZARA – re-authorization of the Coastal Zone Management Act - State Agreement to clean up errant forestry management under current rules to limit pollutant inputs for timber harvest operations.). In this case the State and Regional Board have ultimate authority and responsibility for point and non-point source pollutant control. However, managing lead agencies must co-operate in the application of regulation and policy that supports and harmonizes these pollutant control issues. In this case the Board of Forestry is responsible to provide the necessary regulatory framework that is necessary for the appropriate pollutant source control outcome – an ECP – in the permitting process. [See – FAP and CZARA documentation attached]

Additional supporting language is included - Summary - below [See Attachment – Water Code , attachment Attorney General Opinion]:

Cal Water Code – Sections:

13142.

State policy for water quality control shall consist of all or any of the following:

- (a) Water quality principles and guidelines for long-range resource planning, including ground water and surface water management programs and control and use of recycled water.
- (b) Water quality objectives at key locations for planning and operation of water resource development projects and for water quality control activities.
- (c) Other principles and guidelines deemed essential by the state board for water quality control.

The principles, guidelines, and objectives shall be consistent with the state goal of providing a decent home and suitable living environment for every Californian.

(Amended by Stats. 1995, Ch. 28, Sec. 18. Effective January 1, 1996.)

13146.

State offices, departments and boards, in carrying out activities which affect water quality, shall comply with state policy for water quality control unless otherwise directed or authorized by statute, in which case they shall indicate to the state board in writing their authority for not complying with such policy.

(Added by Stats. 1969, Ch. 482.)

13242.

The program of implementation for achieving water quality objectives shall include, but not be limited to:

- (a) A description of the nature of actions which are necessary to achieve the objectives, including recommendations for appropriate action by any entity, public or private.
- (b) A time schedule for the actions to be taken.
- (c) A description of surveillance to be undertaken to determine compliance with objectives.

(Added by Stats. 1969, Ch. 482.)

13247.

State offices, departments, and boards, in carrying out activities which may affect water quality, shall comply with water quality control plans approved or adopted by the state board unless

otherwise directed or authorized by statute, in which case they shall indicate to the regional boards in writing their authority for not complying with such plans.

(Amended by Stats. 1971, Ch. 1288.)

It is discussed and noted (and supported in attached documentation) that the State and Regional Boards have the ultimate, and final, authority to employ tools to attain Water Quality Standards. However, the Board of Forestry – under their own rules and other State Code and policy – has responsibility to assess and provide regulations that support (in this case) non-point source of pollutant controls on timber operations – not limited to roads, landings and watercourse crossings as per section 923 of the FPRs. Further more, SB 901 enacts such controls under section 923 as the minimum necessary standard of application and supplements that standard with a mandate to comply with all other California Code – which requires erosion control planning (as an active document) as part of the WFMP planning, review, and approval process.

Finally, it is the responsibility, and within the authority, of the Board of Forestry to consider actions necessary, in the rule promulgation for the Working Forest Management Plan, to be consistent with the statute, other State Code, as well as actions necessary to mitigate potential water quality outcomes from forest management. Use of an Erosion Control Plan is fully rational and feasible as a way of meeting such requirements.

These comments, discussion, code excerpts, appendix, and attachments are assembled and delivered to the Board of Forestry by Alan Levine – for Coast Action Group, Affiliate of Redwood Coast Watersheds Alliance.

ATTACHMENTS

Dunne Report

Chris Maranto Paper on forestry accounting accountability

CZARA Agreement and Findings – two documents

FAP – Interagency co-operation and responsibility.

Regional Board Letters on erosion responsibility

Attorney General Finding on Board of Forestry authority APPENDIX

CEQA APPLICABILE

Project review under CEQA requires a full description of a proposed plan - including site conditions - and identify issues, including sediment production, and how they are to be treated. This

information is needed for *informed decision making*, *See Sierra Club v. State Board of Forestry* (1994) 7 Cal.4th 1215, 1230 (The WFMP must "include a description of the proposed activity, its alternatives, and mitigation measures to minimize any significant adverse environmental impact, . ."; citing PRC § 210805.(d)(3).)

The FPRs, certified as functional equivalent of CEQA EIR, requires that "Individual [WFMPs] shall be considered in the context of the larger forest and planning watershed in which they are located, so that biological diversity and watershed integrity are maintained within larger planning units and adverse cumulative impacts, including impacts on the quality and beneficial uses of water are reduced. FPR 897(b)(2).

A WFMP must be denied if its implementation "as proposed would cause a violation of any requirement of an applicable water quality control plan adopted or approved by the State Water Resources Control Board." FPR 898.2(h).

The WFMP must comply with CEQA. See PRC § 4597(b) ("This article shall be implemented in a manner that complies with the applicable provisions of this chapter and other laws, including, . . . California Environmental Quality Act (Division 13 (commencing with Section 21000) of the Public Resources Code) . . .")

PRC 4597(d) as amended by SB 901, simply says the WFMP must provide necessary information to demonstrate compliance with 923. In this way, it sets the minimum required; it does not limit the Board from requiring more information. It does not say, for example, the WFMP shall "only" include the 923 information.

EXCERPTS OF FOREST PRACTICE RULES

Significant Sediment Discharge means soil erosion that is currently, or, as determined based upon visible physical conditions, may be in the future, discharged to watercourses or lakes in quantities that violate Water Quality Requirements or result in significant individual or cumulative adverse impacts to the beneficial uses of water. One indicator of a Significant Sediment Discharge is a visible increase in turbidity to receiving Class I, II, III, or IV waters.

916.9, 936.9, 956.9 Protection and Restoration of the Beneficial Functions of the Riparian Zone in Watersheds with Listed Anadromous Salmonids. [All Districts]

In addition to all other district Forest Practice Rules, the following requirements shall apply in any watershed with listed anadromous salmonids. Requirements of 14 CCR §§ 916.9, 936.9, 956.9 precede other sections of the FPRs.

Geographic scope - Requirements for watersheds with listed anadromous salmonids differ depending on the geographic location of the watershed and geomorphic characteristics of the watercourse. Unique requirements for watersheds with listed anadromous salmonids are set forth for 1) watercourses in the coastal anadromy zone with confined channels, 2) watercourses with flood prone areas or channel migration zones, and 3) watercourses with confined channels located outside the coastal anadromy zone.

Watersheds which do not meet the definition of "watersheds with listed anadromous salmonids" are not subject to this section except as follows: The provisions of 14 CCR §§ 916.9 [936.9, 956.9], subsections

- (k)-(q) also apply to planning watersheds immediately upstream of, and contiguous to, any watershed with listed anadromous salmonids for purposes of reducing significant adverse impacts from transported fine sediment. Projects in other watersheds further upstream that flow into watersheds with listed anadromous salmonids, not otherwise designated above, may be subject to these provisions based on an assessment consistent with cumulative impacts assessment requirements in 14 CCR §§ 898 and 912.9 [932.9, 952.9] and Technical Rule Addendum No. 2, Cumulative Impacts Assessment. These requirements do not apply to upstream watersheds where permanent dams attenuate the transport of fine sediment to downstream watercourses with listed anadromous salmonids.
- (a) Goal Every timber operation shall be planned and conducted to protect, maintain, and contribute to restoration of properly functioning salmonid habitat and listed salmonid species. To achieve this goal, every timber operation shall be planned and conducted to:
- (1) Comply with the terms of a Total Maximum Daily Load (TMDL).
- (2) Prevent significant sediment load increase to a watercourse system or lake.
- (3) Prevent significant instability of a watercourse channel or of a watercourse or lake bank.
- (4) Prevent significant blockage of any aquatic migratory routes for any life stage of anadromous salmonids or listed species.
- (5) Prevent significant adverse effects to streamflow.
- (6) Consistent with the requirements of 14 CCR § 916.9 [936.9, 956.9], subsections (f), (g), (h) and (v), 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.
- (7) Consistent with the requirements of 14 CCR § 916.9 [936.9, 956.9], subsections (f), (g), (h) and (v), 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; and (B) provide a deciduous vegetation component to the riparian zone for aquatic nutrient inputs.
- (8) Prevent significant increases in peak flows or large flood frequency.
- **(b) Pre-plan adverse cumulative watershed effects -** 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. When the proposed timber operations, in combination with any identified pre-plan watershed effects, will add to significant adverse existing cumulative watershed effects, the plan shall set forth measures to effectively reduce such effects.
- (c) Objectives for timber operations or silvicultural prescriptions in WLPZs Any timber operation or silvicultural prescription within any watercourse or lake protection zone shall have protection, maintenance, or restoration of the beneficial uses of water, and properly functioning salmonid habitat and listed aquatic or riparian-associated species as significant objectives. Specific objectives are described below.

(d) Measures to Offset Adverse Watershed Effects –

- (1) The plan shall fully describe: (A) the type and location of each measure needed to fully offset sediment loading, thermal loading, and potential significant adverse watershed effects from the proposed timber operations, and (B) the person(s) responsible for the implementation of each measure, if other than the timber operator.
- (2) In proposing, reviewing, and approving such measures, preference shall be given to the following: (A) measures that are both onsite (i.e., on or near the plan area) and in-kind (i.e., erosion control measures where sediment is the problem), and (B) sites that are located to maximize the benefits to the impacted portion of a watercourse or lake. Out-of-kind measures (i.e., improving shade where sediment is the problem) shall not be approved as meeting the requirements of this subsection.

The, above, needs to be front loaded in the plan - ECP

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

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

- (a) The 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 existing and restorable uses of water for fisheries as identified by the CDFW or as further identified and refined during preparation and review of the plan.
- (3) 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 [936.4, 956.4] subsection (b) and 14 CCR § 916.9, 936.9, 956.9, when the plan is in a planning watershed with listed anadromous salmonids.
- (4) Sensitive conditions near watercourses and lakes as specified in 14 CCR §§ 916.4, 936.4, 956.4, subsection (a).

The maintenance, protection, and contribution towards restoration of these values shall be 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.

- (b) The State's waters are grouped into four classes based on key beneficial uses. These classifications shall be used to determine the appropriate 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 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, [936.9, 956.9] when the plan is in a planning watershed with listed anadromous salmonids.
- (c) When the protective measures contained in 14 CCR §§ 916.5, 936.5, 956.5, and 916.9, 936.9, 956.9 when the plan is in a planning watershed with listed anadromous salmonids, are not adequate to provide for maintenance, protection or to contribute towards restoration of beneficial uses of water set forth in 14 CCR § 916.5, 936.5, 956.5 Table 1, additional measures to achieve these goals 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.

916.3, 936.3, 956.3 General Limitations Near Watercourses, Lakes, Marshes, Meadows

Appendix Technical Rule Addendum # 2

In evaluating cumulative impacts, the RPF shall consider the factors set forth herein.

A. Watershed Resources

Cumulative Watershed Effects (CWEs) occur within and near bodies of water or significant wet areas, where individual impacts are combined to produce an effect that is greater than any of the individual impacts acting alone. Factors to consider in the evaluation of cumulative watershed impacts are listed below.

1. Impacts to watershed resources within the Watershed Assessment Area (WAA) shall be evaluated based on significant on-site and off-site cumulative effects on beneficial uses of water, as defined and listed in applicable Water Quality Control Plans.

<u>Cumulative on-site and off-site sediment effects evaluation, from all sources, must be disclosed as part of the plan in an ECP (CEQA and FPR compliance)</u>

- **2.** Watershed effects produced by timber harvest and other activities may include one or more of the following:
- Sediment
- Water temperature
- Organic debris
- Chemical contamination
- Peak flow

The following general guidelines shall be used when evaluating watershed impacts. The factors described are general and may not be appropriate for all situations. Actual measurements may be required if needed to evaluate significant environmental effects. The plan must comply with the quantitative or narrative water-quality objectives set forth in an applicable Water Quality Control Plan.

- **a. Sediment Effects**. Sediment-induced CWEs occur when earth materials transported by surface or mass wasting erosion enter a stream or stream system at separate locations and are then combined at a downstream location to produce a change in water quality or channel condition. The eroded materials can originate from the same or different projects. Potentially adverse changes are most likely to occur in the following locations and situations:
- Downstream areas of reduced stream gradient where sediment from a new source may be deposited in addition to sediment derived from existing or other new sources.
- Immediately downstream from where sediment from a new source is combined with sediment from other new or existing sources and the combined amount of sediment exceeds the transport capacity of the stream.
- Any location where sediment from new sources in combination with suspended sediment from existing or other new sources significantly reduces the survival of fish or other aquatic organisms or reduces the quality of waters used for domestic, agricultural, or other beneficial uses.
- Channels with relatively steep gradients which contain accumulated sediment and debris that can be mobilized by sudden new sediment inputs, such as debris flows, resulting in debris torrents and severe channel scouring.

Potentially significant adverse impacts of cumulative sediment inputs may include:

- Increased treatment needs or reduced suitability for domestic, municipal, industrial, or agricultural water use.
- Direct mortality of fish and other aquatic species.
- Reduced viability of aquatic organisms or disruption of aquatic habitats and loss of stream productivity caused by filling of pools and plugging or burying streambed gravel.
- Accelerated channel filling (aggradation) resulting in loss of streamside vegetation and stream migration that can cause accelerated bank erosion
- Accelerated filling of downstream reservoirs, navigable channels, water diversion and transport facilities, estuaries, and harbors.
- Channel scouring by debris flows and torrents.
- Nuisance to or reduction in water related recreational activities.

Situations where sediment production potential is greatest include:

- Sites with high or extreme erosion hazard ratings.
- Sites which are tractor logged on steep slopes.
- Unstable areas
- **e. Peak Flow Effects**. CWEs caused by management induced peak flow increases in streams during storm events are difficult to anticipate. Peak flow increases may result from management activities that reduce vegetative water use or produce openings where snow can accumulate (such as clear-cutting and site preparation) or that change the timing of flows by producing more efficient runoff routing (such as insloped roads). These increases, however, are likely to be small relative to natural peak flows from medium and

large storms. Research to date on the effects of management activities on channel conditions indicates that channel changes during storm events are primarily the result of large sediment inputs.

916.7, 936.7, 956.7 Reduction of Soil Loss [All Districts]

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

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

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

- (a) The Department shall, in collaboration with the appropriate RWQCB and SWRCB, prioritize watersheds in which the following will be done: 1) conduct or participate in any further assessment or analysis of the watershed that may be needed, 2) participate in the development of Total Maximum Daily Load (TMDL) problem assessment, source assessment, or load allocations related to timber operations, and 3) if existing rules are deemed not to be sufficient, develop recommendations for watershed-specific silvicultural implementation, enforcement and monitoring practices to be applied by the Department.
- (b) The Department shall prepare a report setting forth the Department's findings and recommendations from the activities identified pursuant to (a) above. The report shall be submitted to the Board and the appropriate RWQCB. The report shall be made available to the public upon request and placed on the Boards' website for a 90-day period.
- (c) Where the Department has recommended that the adoption of watershed specific rules is needed, the Board shall consider that recommendation as a proposal for rulemaking under the Administrative Procedures Act (Section 11340 et. seq. Gov. Code) and shall begin that process within 180 days following receipt of that report.
- (d) These watershed specific rules shall be developed in collaboration with the appropriate RWQCB, the landowner(s) or designee with land in the planning watershed, and other persons or groups within the watershed, and may also be incorporated into a TMDL implementation plan.
- (e) The watershed specific rules shall remain in effect until the water body has been removed from the 303(d) list, or that the Board finds, after consulting with the appropriate RWQCB, that timber operations are no longer a significant source of the pollutant or stressor that limits water quality in the listed water body.

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

This is Calwater 2.2 scale management

Road Management Plan means a document submitted as part of a plan that describes the long-term management of a road system in one or more planning watersheds on timberlands. A RMP identifies,

evaluates, and proposes approaches to avoid or mitigate significant environmental effects that could result from the construction, reconstruction, use, maintenance, abandonment, and management of roads related to forest resource management activities on timberlands

Scattered Parcel means a timberland ownership within a planning watershed is less than 10% of the area of the watershed and does not adjoin a planning watershed where the timberland ownership is greater than 20% of the watershed

Watersheds in the Coastal Anadromy Zone means any planning watershed(s) in the Central California Coast coho salmon Evolutionary Significant Units (ESUs), South Central Steelhead Distinct Population Segment (DPS), Central California Coast steelhead DPS, Northern California steelhead DPS, California Coastal Chinook salmon ESU, and Southern Oregon/Northern California Coast coho salmon ESU, as defined in 70 Federal Register 37160, dated June 28, 2005, where salmonids listed as threatened, endangered, or candidate under the State or Federal Endangered Species Acts are currently present or can be restored. Official maps of ESUs and DPSs are found at http://swr.nmfs.noaa.gov/recovery/Salm_Steel.htm. as published on January 1, 2010.

Watersheds with Listed 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 are currently present or can be restored. This definition does not apply to those portions of watersheds that are upstream of barriers, including large dams (where removal and/or fishway construction has been determined by NMFS and California Department of Fish and Wildlife to not be feasible) and natural barriers, such as long term bedrock falls or large static ancient slides with high-gradient or high-velocity barriers, that NMFS and California Department of Fish and Wildlife have determined are permanent and preclude anadromous fish passage

897 Implementation of Act Intent

- **(B)** Maintain functional wildlife habitat in sufficient condition for continued use by the existing wildlife community within the planning watershed.
- (2) Individual THPs shall be considered in the context of the larger forest and planning watershed in which they are located, so that biological diversity and watershed integrity are maintained within larger planning units and adverse cumulative impacts, including impacts on the quality and beneficial uses of water are reduced

Past and Future Activities

- **2.** Boundary of the planning watershed(s) within which the plan area is located along with the CALWATER 2.2 identification number.
- **3.** Location and boundaries of past, present and reasonably foreseeable probable future timber harvesting projects on land owned or controlled by the timberland owner of the proposed timber harvest within the planning watershed(s) depicted in section (2) above. For purposes of this section, past projects shall be limited to those projects submitted within ten years prior to submission of the THP.
- **6.** Source(s) of geographical information.

The map scale shall be large enough to clearly represent one planning watershed per page or of a scale not less than 1:63,360. Planning watersheds with densely situated or overlapping harvest units, or those which

are large or irregular in size, may require multiple maps to achieve clarity. Map(s) shall be reproducible on black & white copiers, and submitted on an $8\frac{1}{2} \times 11$ page(s).

913.1, 933.1, 953.1 Regeneration Methods Used in Evenaged Management [All Districts; Note variation by District in (a)(4)(A) and (d)(3) Shelterwood Removal Step]

(E) provide feasible off-site mitigation measures that can be incorporated in the plan to restore or enhance previously impacted resource areas or other environmental enhancements that will result in demonstrable net environmental benefits within the planning watershed. These measures may include, but are not limited to, watercourse restoration, soil stabilization, road surface stabilization, road outsloping, road abandonment, road reconstruction, enhancement of wildlife habitats and vegetation management. To qualify for an exemption the plan submitter is not required to demonstrate that other feasible options are not available.

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

- (3) 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 [936.4, 956.4] subsection (b) and 14 CCR § 916.9, 936.9, 956.9, when the plan is in a planning watershed with listed anadromous salmonids
- (b) The State's waters are grouped into four classes based on key beneficial uses. These classifications shall be used to determine the appropriate 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 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, [936.9, 956.9] when the plan is in a planning watershed with listed anadromous salmonids.

 (c) When the protective measures contained in 14 CCR §§ 916.5, 936.5, 956.5, and 916.9, 936.9, 956.9 when the plan is in a planning watershed with listed anadromous salmonids, are not adequate to provide for maintenance, protection or to contribute towards restoration of beneficial uses of water set forth in 14 CCR § 916.5, 936.5, 956.5 Table 1, additional measures to achieve these goals 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.

916.8, 936.8, 956.8 Sensitive Watersheds [All Districts]

The Board, at a public hearing, shall determine whether nominated planning watersheds are "sensitive" to further timber operations. Classification of a watershed as "sensitive" shall be supported by substantial evidence that a condition, or conditions, exist(s) where further timber operations within the planning watershed will create a reasonable potential to cause, or contribute to ongoing, significant adverse cumulative effect(s) on the resources identified in 14 CCR §§ 916.8(a)(3), 936.8(a)(3), 956.8(a)(3), and as set forth in Technical Rule Addendum No. 2 (14 CCR §§ 912.9, 932.9, 952.9) and that mitigation of such significant cumulative effects requires the application of protection measures not required by the Forest Practice Rules. For all planning watersheds classified as "sensitive", the Board shall identify the specific resources which are sensitive to further timber operations and specific mitigation measures that will provide the necessary protection of the sensitive resource(s). A Board finding that a planning watershed is no longer sensitive shall be supported by substantial evidence that such conditions no longer exist. Unless and until a planning watershed(s) is classified as sensitive and any necessary rulemaking completed, the existing rules shall apply:

- **4.** Natural or management-induced conditions present in the watershed which pose a significant threat to the resources identified in 14 CCR §§ 916.8(a)(3), 936.8(a)(3), 956.8(a)(3), above, including, as appropriate, but not limited to:
- **A.** Steep slopes and easily destabilized soils;

- **B.** Continuing landslide or soil erosion problems related to past or ongoing land-use activities;
- **C.** Extensive ground disturbance, particularly associated with roads, skid trails, landings, and watercourse crossings;
- **D.** Accelerated aggradation, streambank erosion, and channel scouring;
- **E.** Changes in the habitat or condition of wildlife species identified in 14 CCR §§ 916.8(a)(3), 936.8(a)(3), 956.8(a)(3), above.
- **F.** Accelerated rates of proposed road construction or timber harvesting within a watershed or near streams or springs.

916.11.1 and 936.11.1 Monitoring for Adaptive Management in Watersheds with Coho Salmon

- (a) Goal: The Board will develop a monitoring and adaptive management program for timber harvesting operations in watersheds with coho salmon. The purpose of the program will be: (i) to determine whether or not the operational Forest Practice Rules and associated hillslope and instream mitigation measures afford a level of protection that is both appropriate and adequate to ensure protection of coho salmon and its habitat, (ii) to provide monitoring necessary to ensure the Forest Practice Rules are being implemented in a manner consistent with the California Endangered Species Act as required under 14 CCR § 896, and (iii) to provide a timely feedback process for the Board to assess rule effectiveness in meeting the stated goals under subsections (i) and (ii).
- (6) The plan shall incorporate monitoring requirements in conformance with the requirements of a valid incidental take permit for coho salmon within the planning watershed that has been authorized pursuant to the following:

919.16, 939.16, 959.16 Late Succession Forest Stands [All Districts]

919.16, 939.16, 959.16 Late Succession Forest Stands [All Districts]

- (a) When late succession forest stands are proposed for harvesting and such harvest will significantly reduce the amount and distribution of late succession forest stands or their functional wildlife habitat value so that it constitutes a significant adverse impact on the environment as defined in Section 895.1, the RPF shall provide habitat structure information for such stands. A statement of objectives over time shall be included for late succession forest stands on the ownership. The THP, SYP, or NTMP shall include a discussion of how the proposed harvesting will affect the existing functional wildlife habitat for species primarily associated with late succession forest stands in the plan or the planning watershed, as appropriate, including impacts on vegetation structure, connectivity, and fragmentation. The information needed to address this subsection shall include, but is not limited to:
- (1) A map(s) showing: A) late succession forest stands within the planning watershed and any other stands that provide functional wildlife habitat for species primarily associated with late succession forest stands that are on the ownership, B) those stands which are currently proposed to be harvested, and C) known stands on other ownerships.
- (2) A list of fish, wildlife and listed species known to be primarily associated with the late succession forest stands in the planning watershed(s) compiled by the RPF or supervised designee using the "California Wildlife Habitat Relationships System" (WHR), the California Natural Diversity Database, and local knowledge of the planning watershed.
- (3) Description of functional wildlife habitat elements that are important for fish, wildlife and listed species primarily associated with late succession forest stands within the planning watershed(s).
- (4) A description of the structural characteristics for each late succession forest stand and any other stands that provide functional wildlife habitat for species primarily associated with late succession forest stands within the planning watershed including a discussion of important functional wildlife habitat elements identified in (3). Methods used to develop the description, which may be an ocular estimate, shall also be described.

- (b) Where timber operations will result in long-term significant adverse effects on fish, wildlife, and listed species known to be primarily associated with late succession forests in a THP, SYP, NTMP or planning watershed, feasible mitigation measures to mitigate or avoid such long-term significant adverse effects shall be described and incorporated in the THP, SYP or NTMP. Where long-term significant adverse effects cannot be avoided or mitigated, the THP, SYP, or NTMP shall identify the measures that will be taken to reduce those remaining effects and provide reasons for overriding concerns pursuant to 14 CCR Section 898.1 (g), including a discussion of the alternatives and mitigation considered.
- (c) A THP, SYP, or NTMP submitter may request that the Director waive subsection (a) above. The Director, after conferring with review team agencies with jurisdiction, may waive subsection (a) above when substantial evidence is presented that would support a determination that post-harvest late succession forest stands or functional wildlife habitat will continually provide adequate structure and connectivity to avoid or mitigate long-term significant adverse effects on fish, wildlife, and listed plant species known to be primarily associated with late succession forest stands within the planning watersheds.

1034 Contents of Plan

(4) CALWATER 2.2 planning watershed number(s),

Planning Watershed references - Calwater 2.2 (10,000 acres - limitation) continue - on and on. This is the planning area for timber harvest review

See CZARA (Attachement) – Chapter 3: The document discusses pollution potential from logging operations – with a serious focus on road management, with additional focus on upslope management where sources and potential sources need to be identified and methodically remedied. The State has signed on to completing these actions as part and parcel of the State Non-Point Source Program/Policy – with related implementation and monitoring. This all speaks for identification of issues and related resolution (as remedy) in a managed plan = ECP.