

of the Class II-L protections is that commercial timber management in proximity to Class II-L watercourses is significantly limited or completely excluded.

Included within the 2009 rules package were no less than six regulatory methods provided for determining the status of a Class-II watercourse (*i.e.*, Large or Standard). During the initial implementation phase of the Board's adopted regulations, members of the public expressed concern and raised issues of clarity regarding the Department's interpretation and enforcement of the Class II-L identification and minimum protection distance provisions. Specifically, it was contended that the Department's interpretation of the Class II-L regulations did not conform to the plain-English reading of the Rules.

In 2013, the Board adopted amendments, entitled "CLASS II-L IDENTIFICATION AND PROTECTION AMENDMENTS, 2013" to 14 CCR §§ 916.9, 936.9, and 956.9 to both clarify the methods used to make determinations of Class II watercourse types and to ensure that Class II-L protection measures were achieving the desired results of restoration. The revised regulations provided two methods for determining Class II watercourse classification, which are, generally: the measurement of a contributing drainage area of a certain size draining to a Class I watercourse, and an average active channel width of five feet or greater near the confluence of a Class I watercourse¹. The drainage area minimums developed in this rulemaking were "...estimates based upon two Board staff field visits and standards employed by timber companies operating under federal aquatic habitat conservation plans."² The channel width determination method regulations were "...developed through discussions between private sector and state agency hydrologists, biologists, and foresters. In addition, a Board Member, Board staff, and a number of private company and public agency representatives conducted two, one-day field visits to watercourses located in the Coast and Northern Forest Districts, respectively."³

During development of these regulations, the Board identified "... some question as to whether or not the proposal as written would be an improvement over the existing Class II-L regulations."⁴ In order to address these questions, these revised determination methods included a five-year evaluation period punctuated by sunset (January 1, 2019) of the regulations. To aid in determining efficacy, the amendments also included a requirement that the Department report to the Board at least annually on the use and effectiveness of the Class II-L protection measures. In 2018, the Board extended this sunset period to January 1, 2023, to allow for additional time to determine efficacy, and repealed the annual reporting requirement by the Department in acknowledgement of the efforts of the Effectiveness Monitoring Committee.

Effectiveness Monitoring Committee

In 2013 the Effectiveness Monitoring Committee (EMC) was established following the legislative approval of Assembly Bill 1492 (chapter 289, 2012). AB 1492, among other

¹ 14 CCR §§ 916.9(g)(1)(A), 936.9(g)(1)(A), 956.9(g)(1)(A)

² Board of Forestry and Fire Protection Rulemaking File 336, page 209.

³ Board of Forestry and Fire Protection Rulemaking File 336, page 210

⁴ Board of Forestry and Fire Protection Rulemaking File 336, page 211

items, established the need for evaluation of and reporting on the “ecological performance” of the state Forest Practice Rules, and the EMC was established with the intent of providing the Board of Forestry and Fire Protection and the Natural Resource Agencies with a science based committee whose charter was developed to better understand if specific requirements of the California Forest Practice Rules and other laws and regulations related to forest resources are effective in achieving resource objectives.

Since approval of AB 1492, the EMC has been promoting scientific research, facilitating monitoring practices, and recommending monitoring practices aimed at evaluating how well current practices restore, enhance, and maintain aquatic and terrestrial habitat on private and state forest land. Since, its creation, the EMC has received proposals, and recommended Board funding, for several studies designed to yield results which may aid in determining the efficacy of Class II-L protection measures. One of these studies, project EMC-2015-001, received initial funding in 2018 and was intended to aid in the evaluation of the efficacy of the Class II-L determination and protection measures, as required by 14 CCR 916.9(g)(1)(C), 936.9(g)(1)(C), and 956.9(g)(1)(C).

EMC-2015-001

The proposal EMC-2015-001 was intended to:

- a. Investigate the variability of the relationship between drainage area, active channel width, and perennial flow extent across the Anadromous Salmonid Protection (ASP) area
- b. Compare the relationships derived in (a) to the rule criteria for Class II-L identification in terms of both drainage area and average active channel width; determine if these criteria are effective in identifying perennial Class II-L watercourses in different lithologies, or if rule modifications are needed; and
- c. Conduct a pilot study to investigate the downstream propagation of water temperature from Class II-L systems in sites with contrasting lithology.

These goals were addressed through a two-part approach which included a broad scale study on flow permanence and network connectivity⁵, and a focused field-based analysis of the thermal influence of Class II-L on Class I systems⁶.

These studies and analysis were completed and presented to the Board in 2021. In general, the proposal identified that drainage area was a much better predictor of certain watercourse values promoted by the Board’s Class II-Large designation than average active channel width. Additionally, the proposal revealed that average active channel width was, in fact, a poor predictor of certain watercourse values promoted by the Class II-L designation.

Specifically, findings from the broad scale study on flow permanence and network connectivity indicate that the drainage area criteria in 14 CCR § 916.9(g)(1)(a)(1), 936.9(g)(1)(a)(1), and 956.9(g)(1)(a)(1) is a better predictor of perennial and/or connected flow than the width criteria. Those findings also indicate that that the width

⁵ Pate *et al.*, 2020

⁶ Wissler *et al.*, 2022

criteria in 14 CCR § 916.9 [936.9, 956.9] (g)(1)(a)(2) does not adequately predict watercourses that are perennial and/or connected versus ones that are dry and/or disconnected.

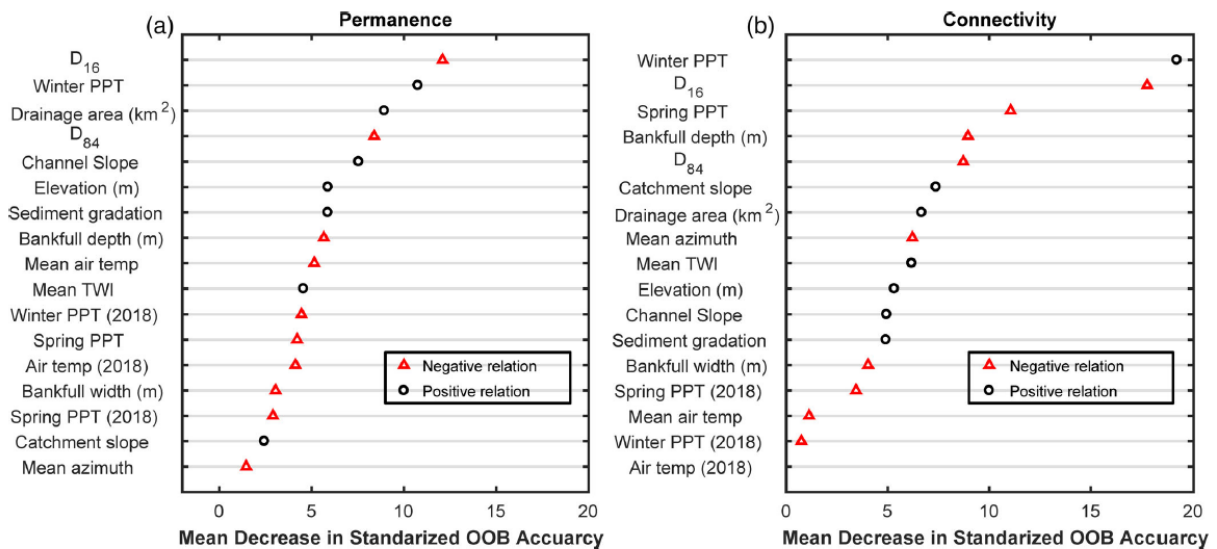


Figure 1. Relative importance of each variable as indicated by mean decrease in standardized out-of-bag (OOB) accuracy for (a) flow permanence and (b) network connectivity. Marker colors indicate if the relationship between a covariate and the likelihood of a site being perennial or connected was positive or negative as inferred from partial dependence plots. Figure modified from Pate et al. (2020).

Furthermore, findings from the broad scale study generally validated the regulatory drainage area values for determination of Class II-L watercourses. The geometric mean of drainage area for perennial watercourses in the Coast Forest District was 103 acres, as compared to the drainage area criteria of greater than equal to 100 acres. The geometric mean of drainage area for perennial watercourse in the Northern Forest District was 150 acres, as compared to drainage area criteria of greater than equal to 150 acres (Table 1). Similarly, the geometric means of connected watercourses were very similar to the drainage area criteria (Table 1) across both Forest Practice Districts. Altogether, this suggests that the drainage area criteria do a reasonable job of predicting desirable characteristics of Class II-L watercourses (flow permanence and watercourse connectivity).

District	Flow Condition	Drainage Area (acres)			
		FPR Criteria	Median	Mean	Geometric Mean
Coast	Perennial	≥100	131	122	103
Coast	Non-perennial	<100	82	91	79
Northern	Perennial	≥150	158	200	150
Northern	Non-perennial	<150	143	143	112
Coast	Connected	≥100	98	112	97
Coast	Disconnected	<100	59	56	53
Northern	Connected	≥150	156	188	148
Northern	Disconnected	<150	120	140	102

Table 1. Summary statistics of drainage area for flow permanence and network connectivity by Forest Practice District.

Finally, larger drainage areas will have a higher likelihood of transporting sediment, nutrients, and large woody debris due to the increase in transport capacity and are therefore more suitable in achieving the goals of this section, identified in 14 CCR §§ 916.9(a), 936.9(a), and 956.9(a), than watercourses which merely satisfy the current active channel width requirements.

The **problem** is that the current regulatory methods for determining Class II-L watercourse status will expire on January 23, 2023, resulting in significant issues of clarity and consistency within the Rules. This expiration date was put in place to allow further evaluation of the efficacy of Class II WLPZ widths and operational requirements in relationship to Watercourse characteristics and achievement of the goals specified in 14 CCR §§ 916.9, 936.9, and 956.9 subsection (a).

The **purpose** of the proposed action is to eliminate the regulatory method of Class II-L determination based on average active channel width, as evaluation of the provision indicates that that it is not particularly effective in identifying watercourse characteristics intended to promote the goals specified in 14 CCR §§ 916.9, 936.9, and 956.9 subsection (a). Furthermore, the proposed action will eliminate the regulatory sunset period for methods to determine Class II watercourse type in order to avoid future issues of regulatory clarity or inconsistency. It should be noted here that the proposed action does not, in any way, affect the Board's or the EMC's ability to continue evaluating this, or other related, regulatory schemes in order to determine efficacy, nor does the proposed action limit the Board's future authority in amending these regulations in order to better interpret, implement, or effectuate the Act.

The **effect** of the proposed action is to eliminate a Class II-Large determination method which is not effective at achieving the intended goals of the regulations, while maintain one which does, and eliminate a regulatorily imposed sunset date on those and related provisions.

The **benefit** of the proposed action is a more efficient and effective regulatory scheme for the determination of Class II-L watercourses. The reliance upon drainage area metrics provides a more objective and repeatable criteria than field measurements of active channel width, and the utilization of this method will improve and streamline both the implementation and enforcement of the regulations by reducing the time and

resources needed to determine watercourse type. The resources necessary to calculate drainage area (*i.e.*, geospatial tools, analog maps) are readily available to field practitioners. Finally, the proposed action provides improved regulatory certainty to the public through the elimination of the sunset provisions.

SPECIFIC PURPOSE OF EACH ADOPTION, AMENDMENT OR REPEAL (pursuant to GOV § 11346.2(b)(1)) AND THE RATIONALE FOR THE AGENCY'S DETERMINATION THAT EACH ADOPTION, AMENDMENT OR REPEAL IS REASONABLY NECESSARY TO CARRY OUT THE PURPOSE(S) OF THE STATUTE(S) OR OTHER PROVISIONS OF LAW THAT THE ACTION IS IMPLEMENTING, INTERPRETING OR MAKING SPECIFIC AND TO ADDRESS THE PROBLEM FOR WHICH IT IS PROPOSED (pursuant to GOV §§ 11346.2(b)(1) and 11349(a) and 1 CCR § 10(b)). *Note: For each adoption, amendment, or repeal provide the problem, purpose, and necessity.*

The Board is proposing action to amend 14 CCR §§ 916.9, 936.9, and 956.9.

Amend §§ 916.9(g)(1)(A), 936.9(g)(1)(A), 956.9(g)(1)(A)

The proposed action eliminates language which defines a Class II-L by the application of either of two determination methods. The purpose of this amendment is to support the elimination of the active channel width regulatory method (14 CCR §§ 916.9(g)(1)(A)2., 936.9(g)(1)(A)2., 956.9(g)(1)(A)2.) and is necessary to clarify the structure of the requirements for the determination of Class II watercourse type.

Amend §§ 916.9(g)(1)(A)2., 936.9(g)(1)(A)2., 956.9(g)(1)(A)2.

The proposed action eliminates the regulatory method for the determination of Class II-L watercourses which is reliant upon an average active channel width of five feet or greater. The purpose of this amendment is to eliminate this provision which is not particularly effective in characterizing those watercourses which promote the values and functions of Class II-L watercourses specified in the regulatory goals of the section (14 CCR §§ 916.9(a), 936.9(a), and 956.9(a)). The proposed action retains the method for determining Class II watercourse type based on measurement of drainage area Drainage area as it is a more effective, objective, and repeatable criteria than width. This amendment is necessary to clarify the elimination of this regulatory standard for the determination of Class II-L watercourses and to maintain a regulatory scheme which most appropriately achieves the purposes and goals of the Act and Rules.

Repeal §§ 916.9(g)(1)(C), 936.9(g)(1)(C), 956.9(g)(1)(C)

The proposed action removes the regulatory expiration date of the Class II-L Watercourse determination methods, including the description of the purpose for expiration. The purpose of this amendment is to ensure regulatory consistency of a method for class II-L watercourse determination method beyond January 1, 2023 and is necessary to clarify this continuity of regulations intended to promote the goals of the Act through the protection, maintenance, and restoration of properly functioning salmonid habitat and listed salmonid species. It should be noted that the Board, through

the Act⁷, maintains the discretionary authority to amend, adopt, or repeal any of these regulations in the future in order to implement, interpret, or otherwise effectuate the purposes of the Act.

ECONOMIC IMPACT ANALYSIS (pursuant to GOV § 11346.3(b)(1)(A) -(D) and provided pursuant to 11346.3(a)(3)

The **effect** of the proposed action is to remove eliminate an ineffective method of determining Class II-L watercourses as well as the elimination of a regulatorily imposed sunset date on the determination method provisions.

The proposed action represents a continuation of existing rules related to meadows and wet areas as defined under the Forest Practice Rules. There is no economic impact associated with the proposed action.

Creation or Elimination of Jobs within the State of California

The proposed action does not mandate any action on behalf of the regulated public and represents a continuation of existing forest practice regulations. It is anticipated that any firms or jobs which exist to engage in this work will not be affected. No creation or elimination of jobs will occur.

Creation of New or Elimination of Businesses within the State of California

The regulatory amendments as proposed represent a continuation of existing forest practice regulations and are intended to clarify in their application. Given that the businesses which would be affected by these regulations are already extant, it is expected that proposed regulation will neither create new businesses nor eliminate existing businesses in the State of California.

Expansion of Businesses Currently Doing Business within the State of California

The regulatory amendments as proposed represent a continuation of existing forest practice regulations and are intended to clarify their application. The proposed regulation will not result in the expansion of businesses currently doing business within the State.

Benefits of the Regulations to the Health and Welfare of California Residents, Worker Safety, and the State's Environment

The action will result in increased clarify and efficacy of the Forest Practice Rules.

Business Reporting Requirement (pursuant to GOV § 11346.5(a)(11) and GOV § 11346.3(d))

The proposed regulation does not require a business reporting requirement.

⁷ PRC 4551 and 4553

STATEMENTS OF THE RESULTS OF THE ECONOMIC IMPACT ASSESSMENT (EIA)

The results of the economic impact assessment are provided below pursuant to **GOV § 11346.5(a)(10)** and prepared pursuant to **GOV § 11346.3(b)(1)(A)-(D)**. The proposed action:

- Will not create jobs within California (GOV § 11346.3(b)(1)(A)).
- Will not eliminate jobs within California (GOV § 11346.3(b)(1)(A)).
- Will not create new businesses (GOV § 11346.3(b)(1)(B)).
- Will not eliminate existing businesses within California (GOV § 11346.3(b)(1)(B)).
- Will not affect the expansion or contraction of businesses currently doing business within California (GOV § 11346.3(b)(1)(C)).
- Will yield nonmonetary benefits (GOV § 11346.3(b)(1)(D)). The proposed action would result in increased clarity and efficacy in the Forest Practice Rules, and as a result, promote more efficient implementation and enforcement of the regulations. The proposed action will not affect the health and welfare of California residents or worker safety.

TECHNICAL, THEORETICAL, AND/OR EMPIRICAL STUDY, REPORT, OR SIMILAR DOCUMENT RELIED UPON (pursuant to GOV SECTION 11346.2(b)(3))

The Board of Forestry and Fire Protection relied on the following list of technical, theoretical, and/or empirical studies, reports, or similar documents to develop the proposed action:

1. Pate, A. A., Segura, C., Bladon, K. D. *Streamflow permanence in headwater streams across four geomorphic provinces in Northern California*. Hydrologic Processes. 2020;34:4487–4504. DOI: 10.1002/hyp.13889
2. Wissler, A. D., Segura, C., Bladon, K. D., *Comparing headwater stream thermal sensitivity across two distinct regions in Northern California*. Accepted for publication, Hydrologic Processes. DOI: 10.1002/hyp.14517.
3. Coe, Drew; House, Matthew. Effectiveness Monitoring Committee, Completed Research Assessment for EMC-2015-001. September 2021.
4. Coe, Drew. Discussions on EMC-2015-001. Presentation to the Board of Forestry and Fire Protection. December 2021.

REASONABLE ALTERNATIVES TO THE PROPOSED ACTION CONSIDERED BY THE BOARD, IF ANY, INCLUDING THE FOLLOWING AND THE BOARD'S REASONS FOR REJECTING THOSE ALTERNATIVES (pursuant to GOV § 11346.2(b)(4)(A) and (B)):

- **ALTERNATIVES THAT WOULD LESSEN ANY ADVERSE IMPACTS ON SMALL BUSINESS AND/OR**
- **ALTERNATIVES THAT ARE LESS BURDENSOME AND EQUALLY EFFECTIVE IN ACHIEVING THE PURPOSES OF THE REGULATION IN A MANNER THAT ENSURES FULL COMPLIANCE WITH THE AUTHORIZING**

STATUTE OR OTHER LAW BEING IMPLEMENTED OR MADE SPECIFIC BY THE PROPOSED REGULATION

Pursuant to **GOV § 11346.2(b)(4)**, the Board must determine that no reasonable alternative it considers, or that has otherwise been identified and brought to the attention of the Board, would be more effective in carrying out the purpose for which the action is proposed, would be as effective and less burdensome to affected private persons than the proposed action, or would be more cost-effective to affected private persons and equally effective in implementing the statutory policy or other provision of law.

Alternative 1: No Action Alternative

The Board considered taking no action, but this alternative was rejected because it would not address the problem.

Alternative #2: Make regulation less prescriptive

This action would replace the prescriptive standards Class II-Large determination methods with performance-based regulations. This alternative may reduce clarity and consistency with other portions of the rules which rely upon the existence of the current operational limitations in order to ensure that forest resources are preserved.

Alternative #3: Proposed Action

Alternatives 1 and 2 would not be more effective or equally effective while being less burdensome or impact fewer small businesses than the proposed action. Specifically, alternatives 1 and 2 would not be less burdensome and equally effective in achieving the purposes of the regulation in a manner that ensures full compliance with the authorizing statute or other law being implemented or made specific by the proposed regulation.

Additionally, alternatives 1 and 2 would not be more effective in carrying out the purpose for which the action is proposed and would not be as effective and less burdensome to affected private persons than the proposed action or would not be more cost-effective to affected private persons and equally effective in implementing the statutory policy or other provision of law than the proposed action. Further, none of the alternatives would have any adverse impact on small businesses.

Prescriptive Standards versus Performance Based Standards (pursuant to GOV §§11340.1(a), 11346.2(b)(1) and 11346.2(b)(4)(A)):

Pursuant to **GOV §11340.1(a)**, agencies shall actively seek to reduce the unnecessary regulatory burden on private individuals and entities by substituting performance standards for prescriptive standards wherever performance standards can be reasonably expected to be as effective and less burdensome, and that this substitution shall be considered during the agency rulemaking process.

The proposed action is as prescriptive as necessary to address the problem and contains a mix of performance-based and prescriptive requirements. Current forest practice rules surrounding watercourse protection from timber operations are based in a

mix of performance based, and prescriptive minimum, requirements for the protection of the state's forest resources, which are necessary in order to accommodate for the various levels of individual project review which occurs for various permitting vehicles for timber operations. The regulations proposed in this action do not impose any new prescriptive regulations than already exist.

Pursuant to **GOV § 11346.2(b)(1)**, the proposed action does not mandate the use of specific technologies or equipment.

Pursuant to **GOV § 11346.2(b)(4)(A)**, the abovementioned alternatives were considered and ultimately rejected by the Board in favor of the proposed action. The proposed action does not mandate the use of specific technologies or equipment, but does prescribe specific actions.

FACTS, EVIDENCE, DOCUMENTS, TESTIMONY, OR OTHER EVIDENCE RELIED UPON TO SUPPORT INITIAL DETERMINATION IN THE NOTICE THAT THE PROPOSED ACTION WILL NOT HAVE A SIGNIFICANT ADVERSE ECONOMIC IMPACT ON BUSINESS (pursuant to GOV § 11346.2(b)(5))

The fiscal and economic impact analysis for these amendments relies upon contemplation, by the Board, of the economic impact of the provisions of the proposed action through the lens of the decades of experience practicing forestry in California that the Board brings to bear on regulatory development.

The regulatory method for determining Class II watercourse classification based upon drainage area is currently extant within the rules. Determination, and enforcement of that determination, by this method requires significantly less resources than the determination method based upon watercourse width, which requires multiple, often difficult to capture, physical measurements and which is proposed for deletion within the proposed action. Elimination of this option represents the elimination of a more costly method of watercourse classification determination. There is no economic impact associated with the proposed action.

The proposed action will not have a statewide adverse economic impact directly affecting businesses as it does not impose any requirements on businesses.

DESCRIPTION OF EFFORTS TO AVOID UNNECESSARY DUPLICATION OR CONFLICT WITH THE CODE OF FEDERAL REGULATION (pursuant to GOV § 11346.2(b)(6))

The Code of Federal Regulations has been reviewed and based on this review, the Board found that the proposed action neither conflicts with, nor duplicates Federal regulations. There are no comparable Federal regulations related to conducting Timber Operations on private, state, or municipal forest lands.

POSSIBLE SIGNIFICANT ADVERSE ENVIRONMENTAL EFFECTS AND MITIGATIONS CEQA

CEQA requires review, evaluation, and environmental documentation of potential significant environmental impacts from a qualified Project. Pursuant to case law, the review and processing of Plans has been found to be a Project under CEQA.

Additionally, the Board's rulemaking process is a certified regulatory program having been certified by the Secretary of Resources as meeting the requirements of PRC § 21080.5.

While certified regulatory programs are excused from certain procedural requirements of CEQA, they must nevertheless follow CEQA's substantive requirements, including PRC § 21081. Under PRC § 21081, a decision-making agency is prohibited from approving a Project for which significant environmental effects have been identified unless it makes specific findings about alternatives and mitigation measures

Further, pursuant to PRC § 21080.5(d)(2)(B), guidelines for the orderly evaluation of proposed activities and the preparation of the Plan or other written documentation in a manner consistent with the environmental protection purposes of the regulatory program are required by the proposed action and existing rules.

The proposed action is an element to the state's existing comprehensive Forest Practice Program under which all commercial timber harvest activities are regulated. The Rules which have been developed to address potential impacts to forest resources, including both individual and cumulative impacts, project specific mitigations along with the Department oversight (of rule compliance) function expressly to prevent the potential for significant adverse environmental effects. The proposed action does not represent any change to the levels of environmental protection provided by the Rules, it merely improves the efficacy of methods for determining classification of certain watercourses in order to accurately identify those watercourses which provide the values and functions of Class II-Large watercourses consistent with the goals and purposes of the Act and Rules.

In summary, the proposed action amends or supplements standards to an existing regulatory scheme and is not a mitigation as defined by CEQA. The Board concludes that the proposed action will not result in any significant or potentially significant adverse environmental effects and therefore no alternative or mitigation measures are proposed to avoid or reduce any significant effects on the environment (14 CCR § 15252(a)(2)(B)).