

Board of Forestry and Fire Protection

INITIAL STATEMENT OF REASONS

“Vegetation Treatment in the Watercourse & Lake Protection Zone”

**Board of Forestry and Fire Protection
Title 14 of the California Code of Regulations
Division 1.5, Chapter 4 Subchapter 4, 5, & 6, Article 6**

**Amend §§ 916.3, [936.3, 956.3], 916.4, [936.4, 956.4], 916.5, [936.5, 956.5], & 1052
Adopt §§ 916.13, [936.13, 956.13]**

**INTRODUCTION INCLUDING PUBLIC PROBLEM, ADMINISTRATIVE
REQUIREMENT, OR OTHER CONDITION OR CIRCUMSTANCE THE REGULATION
IS INTENDED TO ADDRESS (pursuant to GC § 11346.2(b)(1))...NECESSITY
(pursuant to GC § 11346.2(b)(1) and 11349(a))....BENEFITS (pursuant to GC §
11346.2(b)(1))**

Pursuant to the Z'berg-Nejedly Forest Practice Act of 1973, PRC § 4511, *et seq.* (Act) the State Board of Forestry and Fire Protection (Board) is authorized to construct a system of forest practice regulations applicable to timber management on state and private timberlands.

PRC § 4551 requires the Board to “...adopt district forest practice rules... to ensure the continuous growing and harvesting of commercial forest tree species and to protect the soil, air, fish, wildlife, and water resources...” and PRC § 4553 requires the Board to continuously review the rules in consultation with other interests and make appropriate revisions.

PRC § 4551.5 requires that the rules and regulations adopted by the Board apply to the conduct of Timber Operations, which is defined within PRC § 4527(a)(1) as “the cutting or removal, or both, of timber or other solid wood forest products, including Christmas trees, from Timberlands for commercial purposes, together with all the incidental work, including, but not limited to, construction and maintenance of roads, fuel breaks, firebreaks, stream crossings, landings, skid trails, and beds for the falling of trees, fire hazard abatement, and site preparation that involves disturbance of soil or burning of vegetation following timber harvesting activities, but excluding preparatory work such as tree marking, surveying, or road flagging.” The term “commercial purposes”, as used within PRC § 4527 is defined by reference to an illustrative, non-exhaustive list of activities within PRC § 4527(a)(2) that include “(A) the cutting or removal of trees that are processed into logs, lumber, or other wood products and offered for sale, barter, exchange, or trade, or (B) the cutting or removal of trees or other forest products during the conversion of timberlands to land uses other than the growing of timber that are subject to Section 4621, including, but not limited to, residential or commercial

developments, production of other agricultural crops, recreational developments, ski developments, water development projects, and transportation projects.”

Additionally, the Act defines “Timberland” within PRC § 4526 as “land, other than land owned by the federal government and land designated by the board as experimental forest land, which is available for, and capable of, growing a crop of trees of a commercial species used to produce lumber and other forest products, including Christmas trees.”

The Act recognizes that the “forest resources and timberlands of the state are among the most valuable of the natural resources of the state”, and that “it is the policy of this state to encourage prudent and responsible forest resource management...” (PRC § 4512).

Title 14 California Code of Regulations, Article 6, Intent of Watercourse and Lake Protection, 14 CCR §§ 916, [936, 956] states “The purpose of this article is to ensure that Timber Operations do not potentially cause significant adverse site-specific and cumulative Impacts to the beneficial uses of water, native aquatic and Riparian-associated species, and the beneficial functions of Riparian zones; or result in an unauthorized take of listed aquatic species; or threaten to cause violation of any applicable legal requirements.” It also states “It is the intent of the Board to restore, enhance, and maintain the productivity of Timberlands while providing appropriate levels of consideration for the quality and beneficial uses of water relative to that productivity. Further, it is the intent of the Board to clarify and assign responsibility for recognition of potential and existing Impacts of Timber Operations on Watercourses and lakes, native aquatic and Riparian-associated species, and the beneficial functions of Riparian zones and to ensure all plans, exemptions and emergency notices employ feasible measures to effectively achieve compliance with this article.”

The term “Watercourse and Lake Protection Zone” (WLPZ) refers to a strip of land along both sides of a Watercourse or around the circumference of a lake or spring, where additional practices may be required for protection of the quality and beneficial uses of water, fish and Riparian wildlife habitat, the preservation of other forest resources and for controlling erosion. Section, §§ 916, [936, 956] et seq identifies prescriptive regulations addressing Timber Operations within the WLPZ. These protections address timber falling, use of ground-based equipment, vegetation remaining after timber operations, and other prescriptive watercourse and riparian protections for wildlife and the beneficial uses of water,

Beginning in January of 2023 the Board’s Forest Practice Committee began discussions with public and agency stakeholders to address reducing fire intensity within WLPZs. Current vegetation densities within these WLPZs continues to increase the probability of higher intensity fire within these zones. As a result of site conditions and current regulations, riparian buffer areas in forests are often carrying high fuel loads, which lead to greater fire intensity in riparian forests. High intensity wildfire results in an increase in erosion and resultant increase in the sediment loads in streams, with broader impacts to

water quality, bank and channel stability, wildlife habitat, and the survival of rare species. In fact, fire severity is a much stronger determinant for soil and watershed responses to fire than the presence of fire itself, and wildfire in these areas is more severe than it was historically. With the impacts of climate change resulting in additional changes in fire regimes and watershed function, work to protect riparian corridors from catastrophic wildfire is particularly relevant.

Decades of fire suppression have impacted forest conditions such that forest fuel loads are increasing, contributing to higher fire intensities. Timber harvesting and fuel reduction activities are increasingly becoming fundamental disturbances on the landscape and in sensitive areas such as riparian corridors to reduce fire intensity. The goal is not the complete suppression of fire across the landscape; rather the modification of fuel densities to help reduce the intensity of fire, so that it is a beneficial ecological element within the forested landscape. Environmental considerations are especially important to consider when evaluating fire impacts on the riparian area and watercourse. Several environmental concerns arise regarding soil and water quality, light and energy dynamics, and wildlife habitat and conservation. As a result, in sites with high risk for high severity fire which would severely impact watershed processes, the potential impacts from fuel reduction efforts may represent lower long-term impacts.

Harvest in watercourse and lake protection zones is possible under §§ 916.1, [936.1, 956.1] as an in lieu practice. However, this in lieu practice has had difficulties in implementation due to a lack of clear guidelines for review team staff. Rather than an established top-down regulatory program that represents a consistent interpretation of the scientific literature on this subject, the review team staff are responsible for independently reviewing the scientific literature and deciding on harvests in the WLPZ. In lieu practices to reduce WLPZ fuel loads have been used very rarely. There is a need for a scientifically supported regulatory framework for wider implementation of fuel reduction in the WLPZ.

The rule plead as presented adds an additional regulatory subsection (§§ 916.13, [936.13, 956.13] to Article 6. The Board has added this section to provide regulation to accomplish the goal of fuel reduction within the WLPZ. The intent of this rule plead is to adopt a standard rule to allow ground-based harvest operations within the WLPZ for the purpose of reducing overall fuel loads and the horizontal and vertical continuity of fuels which contribute to the spread of wildland fire within these zones and reduce the intensity of wildland fire, providing protection for the beneficial uses of water, riparian zones and riparian habitats.

The **problem**: Current Forest Practice Rules limit operations in the Watercourse Lake and Protection Zones (WLPZ). The use of heavy equipment for felling or yarding trees or for the modification of horizontal and vertical vegetative fuel loads is not permitted. Considering the change in forest stand conditions due to the suppression of wildland fire, associated riparian areas and the nearby watercourses have increased vegetative fuel loads, which increases the severity and intensity of wildland fire across the landscape. Efforts to reduce vegetative fuel loads has been occurring across the

landscape with the intent to reduce the effect wildland fire has on the forested landscape, however, efforts to reduce fuel loads within the riparian areas have not been commensurate; thus, fire intensity has been high or severe in these areas effecting waterways and wildlife functions of the riparian areas. Current regulations were developed at a time when equipment used for timber harvesting had limited capabilities and a higher level of concern for ground disturbance. Additionally, forest conditions and fuel loading was significantly less than they are today. Lastly, climatic conditions did not have as much of an influence on wildland fires as they do today due to climatic changes such as global warming. There is a need for a scientifically supported regulatory framework for wider implementation of fuel reduction in Watercourse and Lake Protection Zones.

The **purpose**: This rule plead provides a regulatory process by identifying the regulatory guidance to RPFs and review teams. RPFs will have regulatory guidelines needed to facilitate fuel reduction and timber operations within the WLPZ while providing for the beneficial uses of water and wildlife values within the riparian zone. Both the RPF preparing a timber harvesting document, and the reviewing agencies will have a better understanding of the protective measures to be utilized in the development of and use of heavy equipment use within the WLPZ for the purpose of fuels reduction and timber harvesting while protecting the beneficial uses of water and wildlife species. The goal of this rule section is to facilitate the reduction of fuel loads contributing to wildland fire while maintaining the protection of the resources of California. Additionally, these prescriptive regulations will help reduce discussion during the review of THPs since review agencies and departments have assisted with the development of the rule language.

The **effect** of the proposed action is to: 1) provide clarity to RPFs and reviewing agencies on prescriptive processes allowable for the use of heavy equipment within the WLPZ for the reduction of fire fuels and timber harvesting within the WLPZ, while maintaining riparian functionality; 2) provide the option for landowners to modify fuel loading within the WLPZ, potentially reducing fire intensity in the WLPZ; 3) provide prescriptive and enforceable guidelines to be implemented by providing clear language for timber harvesting preparation and multiagency review; 4) provide enforceable standards for the protection of the beneficial uses of water and wildlife habitats.

The **benefit** of the proposed action is the potential reduction of the vertical and horizontal continuity of fuel loads which contribute to the intensity and spread of wildfire within riparian zones while maintaining for the protection of the beneficial uses of water and wildlife habitats associated with riparian zones. These regulations as written provide a comprehensive regulatory scheme which allows for the clear and consistent application and enforcement of the Forest Practice Rules related to heavy equipment use within the WLPZ.

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 §§ 916.3, [936.3, 956.3], 916.4, [936.4, 956.4], 916.5, [936.5, 956.5], & 1052. Adopt 916.13, [936.13, 956.13]

Adopt §§ 916.3 [936.3, 956.3] (c)(4)

Current language prohibits the construction or use of tractor roads in the Watercourse Lake and Protection Zone (WLPZ) except at certain designated locations. The proposed action adds language allowing the use of tractor roads in the WLPZ as provided in section 916.13 [§§ 936.13, 956.13] The problem is that operations under § 916.3 [936.3, 956.3] (c)(1 – 3) would not permit the modification through heavy equipment use of the vertical and horizontal continuity of fuel and timber harvesting for the purpose of reducing wildfire intensity in the WLPZ. The purpose of the proposed text is to provide clarity that the proposed action does not require an RPF to explain and justify these operations because 14 CCR §916.13 provides the prescriptive regulations necessary.

Amend §§ 916.3 [936.3, 956.3] (e)

The proposed language clarifies when trees are cut within the WLPZ with the use of felling equipment that the regulation of falling trees away from the watercourse to protect the residual vegetation in the WLPZ shall be achieved. The existing language only allows for the pulling of trees to maintain control of them away from a watercourse and does not allow for equipment to operate within the WLPZ to physically control trees that are felled. The purpose of the amended language is to provide clarity that heavy equipment used for tree felling shall maintain control of the trees for the protection of watercourses and residual vegetation. This language is necessary to provide clarity that equipment may be utilized per 916.13 [936.13, 956.13] and provide enforceable language requiring the equipment to control any vegetative material being felled so that it does not fall toward a watercourse.

Amend §§ 916.4 [936.4, 956.4] (b)(6)

Existing language requires 75% of the surface cover and undisturbed area within the WLPZ to be retained undisturbed to act as a filter strip for raindrop energy dissipation and wildlife habitat. The regulation allows for this percentage to be adjusted by a Registered Professional Forester (RPF), in instances where Broadcast Burning is conducted. The problem is the current language sets a prescriptive regulatory standard for retention of undisturbed areas that would not allow mechanical activity sufficient to meet the intent of 916.13 to treat understory and ladder fuels to reduce fire intensity in the WLPZ. The rule plead 14 CCR § 916.13 [936.13, 956.13] adds prescriptive language providing for the protection of water quality and riparian functions. The purpose of the change is to clarify when removing horizontal and vertical vegetative fuel

the undisturbed area may be reduced below the 75% threshold. The amended language provides clarity allowing the undisturbed areas of the WLPZ to be reduced below the 75% requirement when operating under the prescriptive regulations of 14 CCR § 916.13 [936.13, 956.13], while retaining the standard of a minimum 75% retention of surface cover. This is necessary because it provides a site-specific reason the RPF may use to reduce the undisturbed area below 75%. This will eliminate confusion during the review process providing clarity that this is only allowed when removing the intermediate and understory ladder fuels that help diffuse raindrop energy.

Adopt §§ 916.4 [936.4, 956.4] (f)(5)

Subsection (f) of § 916.4 identifies the specific locations heavy equipment may be used for the purpose of timber falling, Yarding, and site preparation within the Watercourse and Lake Protection Zone (WLPZ) without the need for an explanation or justification provided in a Timber Harvest Plan (THP). 14 CCR § 916.4(f) is amended to include subsection (5) which references the rule plead developed for the removal of horizontal and vertical vegetative fuel loads which contribute to the spread of wildfire. The problem is the current language does not have a prescriptive regulatory standard specified for the use of heavy equipment within the WLPZ for the purpose of timber falling and Yarding and requires an explanation and justification to be prepared by an RPF and approved by the reviewing agencies. This creates uncertainty during the review process because there are no prescriptive regulatory standards to rely on, which increases review timelines. This is necessary to provide clarity for the RPF and the reviewing agencies by allowing the work to be completed based on prescriptive regulations developed in 14 CCR § 916.13 [936.13, 956.13]. Additionally, this will reduce the need for the RPF to write an explanation and justification which will reduce review agency discussions and improve review timelines.

Amend §§ 916.5 [936.5, 956.5] (e) “G”, “H”, “I”

The alphabetical letter designations G, H, and I indicate standard protective measures to be applied to the watercourse classifications as identified in the “Protection Measures and Widths” column in Table I. The letters provide prescriptive regulatory standards for the protection of water temperature, filter strip properties, upslope stability, and fish and wildlife values as specific to overstory and understory retention standards. These have been amended to clarify the standards when operating under added section 14 CCR § 916.13, [936.13, 956.13].

- “G” currently requires 50% of the overstory and 50% of the understory canopy covering the ground be retained. 14 CCR § 916.13, [936.13, 956.13] would allow for the removal of the horizontal and vertical vegetative fuel loads, which may be greater than 50% of the understory canopy, to reduce the intensity and spread of wildfire. Language has been amended in “G” to clarify when operating per 14 CCR § 916.13, [936.13, 956.13] that the understory canopy may be reduced below 50%. In the adopted rule plead, 14 CCR § 916.13, [936.13, 956.13] (a)(4) the RPF is required to provide a description of post-harvest variations from the canopy retention standard identified in “G”, “H”, “I”. This description will provide

the reviewing agencies the opportunity to evaluate the site-specific nature of the canopy reduction and will provide the regulatory standard for enforcement.

- “H” currently requires 50% of the understory vegetation present before Timber Operations to be left living and well distributed within the WLPZ and allows for adjustments based on on-site conditions. The amended language adds the use of 14 CCR § 916.13, [936.13, 956.13] for the reduction of the horizontal and vertical vegetative fuel loads, by which the existing understory canopy component may be reduced below 50%. The adopted rule plead allows for a reduction below 50% when addressing fuel reduction. In the adopted rule plead, 14 CCR § 916.13, [936.13, 956.13] (a)(4) the RPF is required to provide a description of post-harvest variations from the canopy retention standards identified in “G”, “H”, “I”. This description will provide the reviewing agencies the opportunity to evaluate the site-specific nature of the canopy reduction and will provide the regulatory standard for enforcement.
- “I” currently requires 50% of the total canopy covering the ground shall be left in a well distributed multi-storied stand configuration composed of a diversity of species. Operations conducted per 14 CCR § 916.13 allow for the removal of understory vegetative fuels which would otherwise have contributed to the maintenance of a multi-storied stand. The amended language clarifies that a multi-storied stand configuration is not necessary to be maintained when operations are conducted per 14 CCR § 916.13. In the adopted rule plead, 14 CCR § 916.13, [936.13, 956.13] (a)(4) the RPF is required to provide a description of post-harvest variations from the canopy retention standards identified in “G”, “H”, “I”. This description will provide the reviewing agencies the opportunity to evaluate the site-specific nature of the canopy reduction and will provide the regulatory standard for enforcement.

The standard protection measures for all other operations within the WLPZ do not change; the only changes identified to the above subsections are specific to operations conducted under 14 CCR § 916.13. In summary the problem with “G”, “H”, and “I” is that they do not take into consideration that a post-treatment understory canopy below the existing standards in these subsections may be necessary to achieve the objective of reducing vegetative fuel loads and fire intensity within riparian areas associated with the WLPZ. These current regulatory guidelines focus on overstory, understory, total canopy and understory vegetation retention requirements. The current regulations were developed in an era before overly dense forests and climate change were recognized as factors contributing to severe, landscape level wildfire. Existing regulation requiring an in lieu practice to allow heavy equipment to use or to reduce the understory vegetation in the WLPZ may have contributed to the increased vegetative fuel loading within the WLPZ. Current regulation allows the RPF to develop alternate retention standards for overstory, understory, total canopy and understory vegetation, but there are not established regulatory guidelines. Consequently, when an RPF develops a proposal to reduce canopy and ground cover percentages below existing regulatory limits, THP review times are increased, because there are not clearly established

parameters for the RPF or the reviewing agencies. This creates uncertainty during the review process. The purpose of the adopted regulation, §§ 916.13, [936.13, 956.13] and the adoption of the language in “G”, “H”, and “I” is to provide enforceable regulatory standards guiding the development of THPs for the RPF and the reviewing agencies. In “G”, “H”, and “I” language has been added to clarify that if an RPF is proposing to conduct fuel treatment that the canopy and understory vegetation standards may be reduced. This is necessary to provide guidelines for RPFs and reviewing agencies when preparing and reviewing these proposals and it is necessary to provide enforceable operational standards for the protection of the beneficial uses of water and riparian functions.

Adopt §§ 916.13, [936.13, 956.13]

The proposed addition of this section allows for the horizontal and vertical removal of vegetative fuel loads and the use of heavy equipment within the WLPZ. The proposed action allows for the reduction of vegetative fuel loads which can contribute to the intensity and spread of wildland fire. Current regulatory language allows for this type of operation to occur if an RPF provides an in lieu practice during the submission of the THP. The problem is that in lieu prescriptive and enforceable standards can vary significantly, creating uncertainty during the review process and the potential for delay in the review process. The purpose of this section is to eliminate the need for the RPF to prepare an in lieu practice to complete these operations by providing prescriptive standards that shall be followed and will provide clarity for the RPF, reviewing agencies, the public, and enforceable standards. This adoption is necessary to ensure appropriate implementation and enforcement.

(a)(1)-(5): provides direction to the RPF preparing the plan to describe the site-specific vegetative conditions that may contribute to the spread of wildfire and the treatments to be used to reduce fuels and how the operations will occur. The RPF is required to describe the strategy for modifying the horizontal and vertical continuity of fuels and if there will be commercial harvesting occurring, the type of equipment to be used, the timing of the treatment of slash, and a description of the post-harvest understory and canopy variations from the standards in 14 CCR 916.5, [936.5, 956.5] “G”, “H”, “I”. The purpose of this is to direct the RPF to provide sufficient information for reviewing agencies to evaluate and review the proposal.

(b): This subsection requires the area of operations to be mapped, allowing for inspection and enforceability.

(c): This subsection specifies that the only equipment to be used shall be operating on tracks and not be wheel-based. If the RPF chooses to use wheeled equipment the RPF must explain and justify its use in the THP so that it may be reviewed by the reviewing agencies.

(d): This subsection provides clarity to the RPF that tractor roads, if needed, shall be flagged prior to reviewing agency on-site visit and provides the clarity for review that

these planned tractor roads shall be planned to minimize soil disturbance. This provides a standard to be evaluated during the review process.

(e): This subsection clarifies that no equipment may be used on soil when conditions are saturated. This is necessary to prevent damage to the soil resource and the movement of soil to watercourses.

(f): This subsection provides direction and enforceability that no equipment may be used in unstable areas or within waterways and areas where waterways may flood or are poorly drained. This provides clarity to the location of operations and enforceability for these operations.

(g): This subsection clarifies and provides enforceability that where slopes are over 40% these operations are not permitted unless they are conducted with the use of tethered equipment.

(h)(1)-(3): This subsection provides specific enforceable standards, prevents the use of heavy equipment within 25 feet of a watercourse transition line, except where slopes are less than 30%, the equipment may encroach up to 10 feet into the 25-foot zone. This allows for an undisturbed area to act as a filter strip to potential sediment.

(i): This subsection provides an enforceable standard to the timing of slash treatment to assure that the fire risk associated with untreated slash is abated in a timely manner. It requires consideration for the protection of riparian function and avoidance of accumulations detrimental to retained habitat elements be made by the RPF when conducting slash treatment.

(j): This subsection allows the Board to request that the Department report on the frequency of the use of this adopted section and indicate if there are violations or other environmental issues that have occurred due to these operations.

The problem is that watercourses in forested landscapes are experiencing outsized wildfire impacts due to often higher fuel loads than in adjacent forests, and the presence of forest structures that can spread wildfire through the canopy. The purpose of these amendments is to allow mechanized fuels treatment in the Watercourse and Lake Protection Zone, the area adjacent to watercourses which has additional environmental protections to limit impacts from timber operations on the beneficial uses of water, native aquatic and Riparian-associated species, and the beneficial functions of the riparian zone. These changes are necessary to address and mitigate the increased wildfire hazard and potential impacts to watercourses.

Amend §1052(c)

In lieu practices within the WLPZ are not allowed when conducting timber operations pursuant to 14 CCR 1052. The amended language added to 14 CCR § 1052(c) provides additional clarification that adopted language pursuant to 14 CCR 916.13 [936.13, 956.13] is not permitted under a Notice of Emergency Timber Operations. The

problem is 14 CCR 1052 allows for emergency operations on landscapes which have been damaged by natural events, such as fire. In those situations, the landscape surrounding the WLPZ and the WLPZ itself may have been damaged and unable to naturally provide the protection necessary for the beneficial uses of water, thus allowing equipment operations within these areas as described by §§ 916.13, [936.13, 956.13] to further exacerbate the conditions. The purpose of the language added to 14 CCR 1052 clarifies that these operations under 14 CCR 916.13 will not be permitted in WLPZs areas under when a Notice of Emergency is in effect.

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 allows the use of heavy equipment within the WLPZ for vertical and horizontal fuel reduction and timber harvesting. These regulations will provide a comprehensive regulatory scheme which allows for the clear and consistent application and enforcement of the Forest Practice Rules related to heavy equipment use within the WLPZ for this purpose. The addition of the proposed regulation does not impose additional regulatory burdens on individuals or businesses which choose to engage in the discretionary timber harvesting permitting process provided by the proposed regulations. There are no potential economic impacts associated with this proposed action.

Creation or Elimination of Jobs within the State of California

The proposed action does not mandate any action; rather, it creates a discretionary timber harvesting process. The proposed action does not impose additional regulatory burden on individuals or businesses which choose to engage in the discretionary timber harvesting permitting process provided by the proposed regulations. There is no creation or elimination of jobs within the State of California expected as a result of the proposed action.

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

The proposed action is the addition of regulatory language to allow for the use of heavy equipment within the WLPZ allowing for vertical and horizontal fuel reduction and timber harvesting within that zone. These regulations as written will provide a comprehensive regulatory scheme which allows for the clear and consistent application and enforcement of the Forest Practice Rules related to heavy equipment use within the WLPZ. The proposed action creates a discretionary timber harvesting permitting process which does not impose additional requirements on individuals and businesses that do not chose to use it. There is no creation or elimination of businesses within the State of California expected as a result of the proposed action.

Expansion of Businesses Currently Doing Business within the State of California

The proposed action represents a continuation of existing forest practice regulations. The proposed action does not impose additional regulatory burden on individuals or businesses which choose to engage in the discretionary timber harvesting permitting process provided by the proposed regulations. There is no expansion or contraction of

businesses within the State of California expected as a result of the proposed action.

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

The **benefit** of the proposed action is the potential reduction of the vertical and horizontal continuity of fuel loads contributing to the intensity and spread of wildfire within riparian zones while maintaining the protection of the beneficial uses of water and wildlife habitats associated with riparian zones. 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 affect the health and welfare of California residents by providing additional options for fuel treatment adjacent to watercourses; creating forests that are more resilient to wildfire and provide protection to the water resources of the state of California. Greater forest resilience across the landscape and within the buffers to watercourses will reduce fire intensity in the buffers slowing the spread of fire through these corridors and into other watersheds. By reducing the fire intensity in these zones, it will provide for firefighter safety and protection to communities, improving worker and public safety.

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

The proposed action does not impose any reporting requirement.

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 affect the health and welfare of California residents by providing additional options for fuel treatment; creating forest more resilient to wildfire and provide protection to the water resources of the state of California. Greater forest resilience across the landscape and within the buffers to watercourses will reduce fire intensity in the buffers slowing the spread of fire through these corridors and into other watersheds. By reducing the fire intensity in these zones, it will provide for firefighter safety and protection to communities, improving worker and public safety. This adoption will provide clarity and enforceability, resulting in improved environmental outcomes, yielding non-monetary benefits in accordance with GOV § 11346.3(b)(1)(D).

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

Add technical documents cited above here.

Davis, K. T., Peeler, J., Fargione, J., Haugo, R. D., Metlen, K. L., Robles, M. D., & Woolley, T. (2024). Tamm review: A meta-analysis of thinning, prescribed fire, and wildfire effects on subsequent wildfire severity in conifer dominated forests of the Western US. *Forest Ecology and Management*, 561, 121885.

Miralha, L., Segura, C., & Bladon, K. D. (2024). Stream temperature responses to forest harvesting with different riparian buffer prescriptions in northern California, USA. *Forest Ecology and Management*, 552, 121581.

Neary, D. G., Ryan, K. C., & DeBano, L. F. (2005). Wildland fire in ecosystems: effects of fire on soils and water. Gen. Tech. Rep. RMRS-GTR-42-vol. 4. Ogden, UT: US Department of Agriculture, Forest Service, Rocky Mountain Research Station. 250 p., 42.

Pettit, N. E., & Naiman, R. J. (2007). Fire in the riparian zone: characteristics and ecological consequences. *Ecosystems*, 10, 673-687.

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: Continue use of In lieu Practices

This action would require Registered Professional Foresters (RPFs) to continue using in lieu practices pursuant to 14 CCR §§ 916.1, [936.1, 956.1]. This action will continue to create uncertainty among the RPFs preparing a Timber Harvest Plan and the agencies responsible for review of these proposed projects. This uncertainty in application of operations will 1) prevent proposals for fuel reduction work within WLPZs. 2) extend review process while agencies and stakeholders discuss potential options. Given this the alternative reduces clarity, consistency, and enforceability, this alternative lacks operational limits which can ensure watercourses and riparian zones will be protected while reducing vertical and horizontal fuel loading.

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 the protection of riparian and wildlife values.

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 course of the agency rulemaking process.

The proposed action is as prescriptive as necessary to address the problem and contain a mix of performance-based and prescriptive requirements. Current Forest Practice Rules surrounding Watercourse Lake and Protection Zone timber operations are based on no use of heavy equipment within these zones for the protection of the beneficial uses of water and riparian functions. The prescriptive regulations proposed in this regulation provide regulatory framework to allow for the protection of the beneficial uses of water and riparian habitats while identifying enforceable regulatory standards for heavy equipment use in the WLPZ to reduce the vertical and horizontal fuel loads within the WLPZ. The prescriptive regulations proposed in this action are necessary in order to provide adequate clarity within the regulations and provide for effective and enforceable operational standards allowing for fuels reduction while providing clear regulatory guidelines for the protection of the beneficial uses of water and riparian functionality.

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 effect of the proposed action is a clarification and extension of existing state forest practice law. The clarifications and timing extensions provided by the proposed action do not impose additional regulatory burden on individuals or businesses which choose to engage in the timber harvesting permitting process by the proposed regulations. There are no potential economic impacts 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 represents clarification of the state's existing comprehensive Forest Practice Program, under which all commercial timber harvest activities are regulated, through the adoption of additional established environmental protection measures. 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 utilizes largely extant requirements for timber operations to clarify the operational requirements for heavy equipment use in the WLPZ for the purpose of vertical and horizontal fuel reduction and timber harvesting.

Article 6 of Subchapters 4, 5 and 6 of the Forest Practice Rules imposes a combination of performance and prescriptive requirements on timber operations around watercourses and lakes for the protection of the beneficial uses of water and riparian area functionality. The proposed action does not remove any extant environmental protection regulations, but it does provide additional clarity and prescriptive regulations for environmental protection near watercourses and lakes for the purpose of fuel reduction and timber harvesting operations within the watercourse and lake protection zones.

Please see discussion of individual provisions within "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))" for additional information related to these protection measures.

The permitted operations within the proposed action do not change any existing operational rules or regulations within the WLPZ beyond the use of heavy equipment for fuels treatment. The proposed action provides clarity and prescriptive regulations for the use of heavy equipment within the WLPZ for the purpose of managing the vertical and horizontal continuity of forest fuels. This action currently is permitted through the preparation of in lieu practices; however, in lieu practices lack the prescriptive operational regulations needed for timely review and the protection of the beneficial uses of water and riparian zone functions. This proposed action provides clarity, enforcement and prescriptive regulations needed for the protection of environmental resources.

Plans, and other regulatory mechanisms which permit timber operations, contain a mix of project relevant avoidance and mitigation measures to reduce the risk for potential significant adverse effects. This proposed action adds specific regulatory guidance allowing for the use of heavy equipment in the protection zones of watercourses and lakes for the purpose of managing the horizontal and vertical continuity of forest fuels and for timber harvesting.

Pursuant to 14 CCR § 896(a), it is the Board's intent that no Plan shall be approved which fails to adopt feasible mitigation measures or alternatives from the range of measures set out or provided for in the Rules which would substantially lessen or avoid significant adverse impacts which the activity may have on the environment.

Once Plans are approved, state representatives continue with compliance inspections of approved Plans until the conclusion of the Plan's lifespan. Where the Rules or approved Plan provisions have been violated, specified corrective and/or punitive enforcement measures, including but not limited to financial penalties, are imposed upon the identified offender(s).

In summary, the proposed action does not have the potential to result in 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)).