Board of Forestry and Fire Protection

INITIAL STATEMENT OF REASONS

"Forest Resiliency Amendments, 2022"

Title 14 of the California Code of Regulations (14 CCR),
Division 1.5, Chapter 4:
Subchapters 4, 5, 6, Article 2
Subchapters 4, 5, 6, Article 3

Amend: § 912.7, 932.7, 952.7
§ 913.2, 933.2, 953.2
§ 913.11, 933.11, 953.11

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))

The Z'berg-Nejedly Forest Practice Act of 1973 (Act) describes many of the broad forest management goals and policies of the state, including Public Resources Code (PRC) § 4512(c), which states "The Legislature finds and declares that it is the policy of this state to encourage prudent and responsible forest resource management calculated to serve the public's need for timber and other forest products, while giving consideration to the public's need for watershed protection, fisheries and wildlife, sequestration of carbon dioxide, and recreational opportunities alike in this and future generations."

PRC § 4551 describes the mechanism through which forest policy is implemented through the authorization of the Board of Forestry and Fire Protection (Board) to "…adopt district forest practice rules and regulations for each district in accordance with the policies set forth in Article 1 (commencing with Section 4511) of this chapter and pursuant to Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code to ensure the continuous growing and harvesting of commercial forest tree species and to protect the soil, air, fish, wildlife, and water resources, including, but not limited to, streams, lakes, and estuaries." PRC § 4553 requires the Board to continuously review those rules in consultation with other interests and make appropriate revisions.

Additionally included in the Act is PRC § 4561, which sets forth "resource conservation standards", which are minimum standards intended to "…ensure that a cover of trees of commercial species, sufficient to utilize adequately the suitable and available growing space, is maintained or established after timber operations." The section goes on to outline various prescriptive standards for minimum tree occupancy required under described site-specific conditions.

The Board has implemented the Act as the Forest Practice Rules (Rules) (Chapter 4, Division 1.5, Title 14 California Code of Regulations), and the abovementioned standards of tree occupancy, or stocking, have been implemented by the Board primarily within regulations for silvicultural methods within Article 3 of Subchapters 4, 5, and 6 of the Act for the Coast, Northern, and Southern Forest Districts, respectively. One of the elements of stocking requirements in the Rules are regulations regarding unevenaged forest management (14 CCR §§ 913.2., 933.2, 953.2), which is intended to establish and maintain a forest which is composed of a multi-aged, balanced structure through the imposition of limitations on tree harvesting and requirements on tree retention and regeneration.

Since the initial creation of the regulatory stocking standards for unevenaged management five decades ago several factors have significantly influenced forest health and management practices throughout the state. When the regulations were initially adopted, management often focused on maximizing site occupancy of species. In the case of group selection, a form of unevenaged management, this meant limiting harvest to twenty percent or less of the stand per entry. These harvesting restrictions resulted in limited amounts of sunlight reaching the forest floor, where regeneration occurs, and generated stands that favored shade tolerant species (like *Abies concolor*) at the expense of shade intolerant species (like *Pinus ponderosa*). This resulted in many stands where density levels were high, especially in shade tolerant species, and these species tend to exacerbate water demand and create fuel and fire conditions that are not receptive to fire.

Additionally, since the initial adoption of these regulations, the socioecological goals of forest management have significantly expanded and have influenced forest stocking and planting procedures. Issues surrounding atmospheric carbon sequestration, the risk and threat of loss and damage from wildfires, growing forest pest conditions, ongoing and potentially long-term drought conditions, climate change, and forest heterogeneity and diversity all serve to influence forest management practices and will impact associated stocking and planting procedures.

As has been demonstrated over the last several years, stand replacing fire has become common, with 14 of the 20 largest wildfires in state history occurring within the last decade[1]. Historically, these stands tended to have much high ratios of shade intolerant species, which are more adapted to frequent fire.

> "Uneven-aged silviculture also offers opportunities for management strategies that incorporate a more natural distribution of temporal-spatial disturbance patterns. However, this does not include the traditional form of single-tree selection silviculture that relied on very minor disturbances and used negative exponential

[1] CAL FIRE, "Top 20 Largest California Wildfires. https://www.fire.ca.gov/media/4jandlhh/top20_acres.pdf, accessed July 2, 2022.

diameter distributions to guide the selection of target structures. Instead, the creation of simpler two- or three-aged stand structures is recommended, as these require less frequent entries, provide sufficient light resources for regeneration of shade-intolerant species, and more closely represent the effects of natural disturbance processes (O'Hara 1998)"[2]

The regulatory and forest management mechanism which most closely mimics natural patterns of small-scale temporal-spatial disturbance is Group Selection (14 CCR §§ 913.2(a)(2)(B), 933.2(a)(2)(B), and 953.2(a)(2)(B)), which allows for the harvesting of trees in small group clearings, not to exceed two and a half acres in size, and not to exceed twenty percent of the THP area in aggregate.

In 2019 and 2020, the Board engaged in rulemaking actions which addressed the regeneration requirements in stocking regulations in order to address improve forest resilience to drought, fire, forest pests and disease, and increase carbon sequestration rates statewide (OAL Rulemaking Matters No. 2019-1003-01S and 2020-0420-04S). These regulations modernized and improved the flexibility of forest management activities related to stocking by decreased minimum regeneration stocking requirements, which were based on forest data roughly seventy years out of date, in order to allow for lower forest densities which lower competition, mortality, water use, and, ultimately, large scale wildfires which have the potential to destroy forest resources on the landscape level.

The problem is that current regulations related to stocking following certain selection silvicultural actions do not address these changing conditions and do not provide for optimal stocking conditions in light of those conditions. Currently, group selection harvesting regulations limit the portion of a THP area which may be harvested through the creation of group openings in a pattern which encourages, at a minimum, 5 distinct age classes, which is unlikely to achieve the level of resilience that is provided by optimal, or even historic, forest conditions. Furthermore, the existing regulations contain rigid prescriptive requirements for stocking conditions which are often outdated, or even inappropriate, in their application, or simply do not provide adequate flexibility to achieve the level of forest resiliency which is necessary to address the changing climatic conditions of the state. The proposed action was developed in response to these changing ecological conditions and the exclusion of shade intolerant (and fire adapted) species and is intended to continue the work on establishing resilient, healthy forests that the Board began in 2019 by addressing structural stocking components, rather than simply the prescriptive quantitative stocking minimums.

This proposal will allow for improved overall flexibility in the management of forests through increased opportunities for the use of group selection to promote heterogeneity in stands, encourage shade tolerant reproduction, better fuel profiles, and greater retention of forests into the future.
The amendments were developed, in part, help to address certain specific forest health and ecological goals identified by the Board and clarify how those goals may achieve

[2] USDA Forest Service Gen. Tech. Rep. PSW-GTR-193. 2004

suitable resource conservation. These goals include:

- Increased carbon sequestration
- Reduction in fire risk, fuels loading
- Increased resilience to forest pests
- Increased resilience to drought / increased water yield
- Appropriate stocking for resilient forests in a changing climate
- Avoidance of large-scale disturbances which promote homogeneity in forests
- Promote retention of feature favorable to wildlife

The **purpose** of the proposed action is to provide a modification to the Group Selection Method, allowing for more openings and therefore encourage shade intolerant species regeneration and allow for the generation of fewer, more resilient age-classes, clarify retention standards, and provide more flexibility in the management of uneven aged forests through the elimination or simplification of prescriptive standards which may not be suitable for the establishment of resilient forests.

The **effect** of the proposed action is a regulatory scheme related to selection silviculture which provides more opportunities for the management of forests in a manner that can address the changing forest and climatic conditions throughout the state.

The **benefit** of the proposed action are forest stands that will be more receptive to the inevitable fires that will occur, and incentivize these landowners into proactive management.

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 §§ 912.7 (932.7, 952.7), 913.2 (933.2, 953.2), 913.11 (933.11, 953.11)

Amend § 912.7 (932.7, 952.7)(b)(3)

The proposed action removes site and size specific standards for snag retention which may count toward a portion of certain basal area requirements and instead simply implements a minimum size requirement to count towards those basal area requirements. The purpose of this provision is to simplify and improve flexibility in existing forest management regulations to allow snags, which provide a wide variety of ecosystem functions[3], to be counted toward towards minimum stocking requirements. This amendment is necessary in order to clarify the revised minimum standard to allow for appropriate implementation and enforcement of the revised regulations.

Amend § 913.2 (933.2, 953.2)(a)(2)(A)4. & 913.2(933.2, 953.2)(a)(2)(B)4.
The proposed action deletes the requirement in certain Selection and Group Selection silvicultural methods to use certain tree retention characteristics "Seed Tree" method, and instead specifies that the characteristics for determination of tree retention for these silvicultural systems be based solely on the best phenotypic quality available. The purpose of this amendment is to eliminate prescriptive standards which are not suitable nor intended for implementation in selection silviculture, with a simplified and flexible requirement for retention which also recognizes the inherent variability of forests throughout the state and provides for the retention of the most valuable resources and tree characteristics based upon local conditions. Such a requirement for the retention of trees exists within 913.1 [933.1, 953.1](c)(1)(A)2., (c)(1)(F), (d)(1)(A)2., (d)(2)(A)2., (d)(2)(F), and is appropriate and suitable for implementation here. This amendment is necessary in order to clarify the revised standard in order to provide for implementation and enforcement of revised tree characteristic requirements for retention in these systems.

Amend § 913.2 (933.2, 953.2)(a)(2)(B)
The proposed action increases the maximum allowable standard of group openings in the Group Selection silvicultural method from twenty percent (one fifth) to one third (roughly thirty three percent). The purpose of this amendment is to allow for a larger number of small group openings, which mimic small-scale patterns of natural forest disruption, in order to reduce overall forest density. Though the maximum size of each opening remains limited to 2.5 acres, the increase in the total volume of openings is likely to offset the edge-effects of disruption and shade which can reduce the intended resiliency benefits through the exclusion of shade intolerant, and fire adapted, tree species. The benefits of reduction in forest density through harvest may also continue through the implementation of reduced point-count, or regeneration, stocking requirements which have recently been implemented by Board and are again intended to result in more resilient forest and stand conditions following implementation. The purpose of this amendment is to clarify the revised standard in order to promote implementation and enforcement of the regulations.

The action additionally modifies the number of stocking plots which may be offset to allow for the increase in the maximum allowable standard of group selection. Previously, eight per forty (twenty percent) stocking plots were allowed to be offset to account for the twenty percent of the THP area which was harvested with group clearings. Provided that the allowable limit to group clearings has increased to roughly thirty three percent, so has the maximum number of plots which may be offset to account for this modification. This amendment is necessary to clarify the revised standard in order to appropriately measure

[3] Neitro, William & Mannan, R. & Taylor, Douglas & Binkley, Virgil & Marcot, Bruce & Wagner, Frank & Steve, Cline. (1985). Snags (Wildlife Trees).

and enforce stocking standards by the regulated public and the Department.

The revision specifying that trees which may meet the minimum resource conservation standards using point-count stocking standards (within 14 CCR §§ 912.7(b)(1), 937.2(b)(1), 952.7(b)(1)) must be at least seventeen years old, rather than ten years old, is intended to achieve the same minimum average stand age of 50 years, but has been modified to account for the allowance that one third of the THP area may be harvested in groups. The standard limits the use of regeneration for stocking with trees past a certain age (previously ten years, now seventeen years) and requires that all other areas must meet the minimum stocking of non-group selection silviculture using existing basal area metrics, thus requiring that areas be fully stocked with mature trees prior to harvesting within a group. The previous minimum age of ten years across twenty percent of the stand results in a minimum stocking age of fifty years across five entries, or 100 percent of the area ultimately harvested in groups, whereas the revised standard of seventeen years across thirty-three percent of the stand results in a minimum stocking age of 51 years across three entries, or 100 percent of the area ultimately harvested in groups. This amendment does not alter the outcome of this age-based provision, it is merely adjusted to account for the increase in the percentage of a stand that may be harvested under the group selection method. This amendment is necessary to clarify this requirement and retain the same functional conditions on the age of stocked forests within the Rules.

Amend § 913.11 (933.11, 953.11)(c)(2)

The proposed action eliminates the requirement that unevenaged forest management use the prescriptive tree retention standards of the evenaged "Seed Tree" in order to demonstrate Maximum Sustained Production, and instead relies on the minimum stocking standards of specific or selected silvicultural systems, which includes the best phenotypic quality standard as described above. This purpose of this amendment is to removes an outdated standard that applies to a different silvicultural system and replaces it with extant (or amended as described above) standards which are specific to certain silvicultural systems which have been developed, through decades of revision and clarification, to achieve the greatest level of conformance with the purposes and goals of the Act, including the achievement of the maximum sustained production of high quality forest products, as required within PRC § 4513(b). This amendment is necessary to clarify this revision to standards of demonstration of MSP in order to promote the clear and consistent implementation and enforcement of the regulations.

The proposed action also eliminates a requirement that only group A species, as defined within 14 CCR § 895.1, may be used to achieve minimum stocking and basal area standards for selected silvicultural methods in order to demonstrate MSP using unevenaged management. The purpose of the amendment is to allow for both improved flexibility in the management of unevenaged forests, as well as relying upon the extant (or amended as described above) standards which are specific to certain silvicultural systems, and which allow for certain utilization of group B species, which have been developed, through decades of revision and clarification, to achieve the greatest level of conformance with the purposes and goals of the Act, including the achievement of the maximum sustained production of high quality forest products, as required within PRC §

4513(b). This amendment is necessary to clarify this revision to standards of demonstration of MSP in order to promote the clear and consistent implementation and enforcement of the regulations.

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 a regulatory scheme related to selection silviculture which provides more opportunities for the management of forests in a manner that can address the changing forest and climatic conditions throughout the state.

The proposed action represents a continuation and modification of existing silvicultural and stocking regulations within the 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 modification of existing forest management methods and are intended to promote better ecological results. 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 modification of existing forest management methods and are intended to promote better ecological results. 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 a wider usage of silvicultural methods that promote heterogeneity and fire resilient structure. The action will also allow timberland landowners to have more flexibility to manage their stands for these important benefits.

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.

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 creating more fire resilient forest stands, and as a result, promote more efficient utilization of firefighting capacity. 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:

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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 in the Unevenaged Group Selection regulations, as well as those in the snag retention regulations 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 both Group Selection, MSP, and Snag Retention are more restrictive that the proposal, which greatly broadens the latitude of the plan preparer in implementing the regulations. 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 proposed regulation adds flexibility and more latitude to landowners to achieve desired outcomes than is currently extant within the rules. Landowners may use a broader set of silvicultural prescriptions under this proposal, creating the opportunity to make a more economically viable project. 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 was developed in response to changing ecological conditions and the exclusion of shade intolerant (and fire adapted) species, and is intended to continue the work on establishing resilient, healthy forests that the Board began in 2019 by addressing structural stocking components, rather than simply the prescriptive quantitative stocking minimums. This proposal will allow for improved overall flexibility in the management of forests through increased opportunities for the use of group selection to promote heterogeneity in stands, encourage shade tolerant reproduction, better fuel profiles, and greater retention of forests into the future.

The proposed action is an element of 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 (14 CCR § 896).

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)).