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**Board of Forestry and Fire Protection**

“Stocking and Silvicultural Standards Amendments, 2019”

 Title 14 California Code of Regulations

Division 1.5, Chapter 4

Subchapters 4, 5, 6 Articles 2, 3, 6

Subchapter 7 Article 5, 6

**Amend:**

**§912.7, 932.7, 952.7 Resource Conservation Standards for Minimum Stocking**

**§913.2, 933.2, 953.2 Regeneration Methods Used in Unevenaged Management**

**§ 913.3, 933.3, 953.3 Intermediate Treatments**

**§913.4, 933.4, 953.4 Special Prescriptions**

**§916.9, 936.9, 956.9 Protection and Restoration of the Beneficial Functions of the Riparian Zone in Watersheds with Listed Anadromous Salmonids.**

**§1080.1 Stocking Requirements for Substantially Damaged Timberlands**

**Adopt:**

**§912.7(e), 932.7(e), 952.7(e)**

# § 912.7. Resource Conservation Standards for Minimum Stocking.

The following resource conservation standards constitute minimum acceptable stocking in the Coast Forest District after ~~t~~Timber ~~o~~Operations have been completed.

(a) Rock outcroppings, meadows, wet areas, or other areas not normally bearing commercial species shall not be considered as requiring stocking and are exempt from such provisions.

(b) An area on which ~~t~~Timber ~~o~~Operations have taken place shall be classified as acceptably stocked if either of the standards set forth in (1) or (2) below are met within five (5) years after completion of ~~t~~Timber ~~o~~Operations unless otherwise specified in the ~~r~~Rules.

~~(1) An area contains an average point count of 300 per acre on Site I, II and III lands or 150 on Site IV and V lands to be computed as follows:~~

~~(A) Each countable tree [Ref. PRC § 4528(b)] which is not more than 4 inches d.b.h. counts 1 point.~~

~~(B) Each countable tree over 4 inches and not more than 12 inches d.b.h. counts 3 points.~~

~~(C) Each countable tree over 12 inches d.b.h. counts as 6 points.~~

~~(D) Root crown sprouts will be counted using the average stump diameter 12 inches above average ground level of the original stump from which the sprouts originate, counting one sprout for each foot of stump diameter to a maximum of 6 per stump.~~

(1)An area contains an average point count of two hundred (200) per acre on Site I and II lands, one hundred twenty-five (125) on Site III lands, or one hundred (100) on site IV and V lands. The point count to be computed as follows:

(A)Each countable tree *[Ref. PRC § 4528(b)]* which is not more than four (4) inches d.b.h. counts one (1) point.

(B) Each countable tree over four (4) inches and not more than twelve (12) inches d.b.h. counts two (2) points.

(C) Each countable tree over twelve (12) inches d.b.h. counts as four (4) points.

(D)Root crown sprouts will be counted using the average stump diameter twelve (12) inches above average ground level of the original stump from which the sprouts originate, counting one sprout for each foot of stump diameter to a maximum of six (6) per stump.

(2) The average residual basal area measured in stems one (1) inch or larger in diameter, is at least eighty-five (85) square ft. per acre on Site I lands, and fifty (50) square ft. per acre on lands of Site II classification or lower. Site classification shall be determined by the RPF who prepared the plan.

(3)To the extent basal area standards are specified in the rules in excess of 14 CCR § 912.7(b)(2), up to fifteen (15) square feet of basal area of those standards higher than the minimum may be met by counting snags, and decadent or deformed trees of value to wildlife in the following sizes:

(A)Thirty (30) inches or greater d.b.h. and fifty (50) feet or greater in height on ~~s~~Site I and II lands;

(B) Twenty-four (24) inches or greater d.b.h. and thirty (30) feet or greater in height on ~~s~~Site III lands; and

(C)Twenty (20) inches or greater d.b.h. and twenty (20) feet or greater in height on ~~s~~Site IV and V lands.

(c) The substitution provided for in 14 CCR § 912.7(b)(3) may only be done when the potential spread of insects and diseases will not have a significantly adverse impact on long term productivity or forest health.

(d) The resource conservation standards of the rules may be met with Group A and/or B commercial species. The percentage of the stocking requirements met with Group A species shall be no less than the percentage of the stand basal area they comprised before harvesting. The site occupancy provided by Group A species shall not be reduced relative to Group B species. When considering site occupancy, the Director shall consider the potential long term effects of relative site occupancy of Group A species versus Group B species as a result of harvest. If Group A species will likely recapture the site after harvest, Group B species do not need to be reduced. The time frames for recapturing the site shall be consistent with achieving MSP. The Director may prohibit the use of Group A and/or B commercial species which are non-indigenous or are not physiologically suited to the area involved. Exceptions may be approved by the Director if the THP provides the following information and those exceptions are agreed to by the timberland owner:

(1) Explain and justify with clear and convincing evidence how using Group A nonindigenous, or Group B species to meet the resource conservation standards will meet the intent of the Forest Practice Act as described in PRC § 4513. The discussion shall include at least:

(A) the management objectives of the post-harvest stand;

(B) a description of the current stand, including species composition and current stocking levels within the area of Group B species. The percentage can be measured by using point-count, basal area, stocked plot, or other method agreed to by the Director.

(C) the percentage of the post-harvest stocking to be met with Group B species. Post harvest percentages will be determined on the basis of stocked plots. Only the methods provided by 14 CCR §§ 1070-1075 shall be used in determining if the standards of PRC § 4561 have been met.

(D) a description of what will constitute a countable tree, as defined by PRC § 4528 for a Group B species and how such a tree will meet the management objectives of the post-harvest stand.

The Director, after an initial inspection pursuant to PRC § 4604, shall approve use of Group B species, as exceptions to the pre-harvest basal area percentage standard, if in his judgement the intent of the Act will be met, and there will not be an immediate significant and long-term harm to the natural resources of the state.

(e) An RPF may propose an alternative stocking standard for any proposed regeneration method, intermediate treatment or special prescription.

(1) The proposed alternative shall not fall below resource conservation standards for minimum stocking described above. The proposed alternative stocking shall contribute to one (1) or more of the following forest health and ecological goals:

(A) Improved fire resilience; or

(B) Increased drought tolerance; or

(C) Improved forest pest and disease resistance; or

(D) Increased carbon sequestration rates and climate benefits related to forests and durable wood products; or

(E) Appropriate stocking for resilient forests in a changing climate; or

(F) Avoidance of large-scale disturbances which promote homogeneity in forests.

(2) The RPF shall describe the management objective for the stand, state the alternative stocking standard for the proposed regeneration method, intermediate treatment or special prescription and explain and justify the proposed alternative stocking standard by providing the following information:

(A) Site specific characteristics including site class, aspect, soil type, elevation, slope, understory shrub composition, and a general discussion of available water in the soil.

(B) Economic factors supporting the proposed alternative and associated risks if the alternative stocking is not implemented.

(C) A description of the current Harvest Area, including species composition and current Stocking measured using the applicable basal area method.

(D) A discussion of the projected post-harvest species composition and Stocking using the same measure of Stocking used for the description of the current stand.

(E) A discussion of how the proposed alternative stocking will contribute to the Board’s forest health and ecological goals of 14 CCR § 912.7 (e)(1)(A) through (F).

(F) A description of stand maintenance and vegetation treatments that will be applied where necessary to ensure suitable resource conservation and site occupancy post-harvest.

(3) The proposed alternative stocking area shall be inspected on site by the Director. A sample Mark may be required based upon the type of harvest. The Director will verify on-site conditions and certify that the proposed alternative Stocking will contribute to one or more of the forest health and ecological goals identified in 14 CCR § 912.7 (e)(1)(A)-(F). The Director may approve the proposed alternative if the intent of the Act and the Rules will be met, and there will not be immediate or long-term significant harm to the natural resources of the state.

Note: Authority cited: Sections 4551, 4553, ~~and~~ 4561.1, and 4561.2, Public Resources Code. Reference: Sections 4561, ~~and~~ 4561.1, and 4561.2, Public Resources Code.

# § 932.7. Resource Conservation Standards for Minimum Stocking.

The following resource conservation standards constitute minimum acceptable stocking in the Northern Forest District after ~~t~~Timber ~~o~~Operations have been completed.

(a) Rock outcroppings, meadows, wet areas, or other areas not normally bearing commercial species shall not be considered as requiring stocking and are exempt from such provisions.

(b) An area on which ~~t~~Timber ~~o~~Operations have taken place shall be classified as acceptably stocked if either of the standards set forth in (1) or (2) below are met within five (5) years after completion of ~~t~~Timber ~~o~~Operations unless otherwise specified in the ~~r~~Rules.

(1) An area contains an average point count of one hundred twenty-five (125)~~300~~ per acre on Site I, II and III lands or one hundred (100)~~150~~ on Site IV and V lands, to be computed as follows:

(A) Each countable tree [Ref. PRC § 4528(b)] which is not more than four (4) inches d.b.h. counts one (1) point.

(B) Each countable tree over four (4) inches and not more than twelve (12) inches d.b.h. counts two (2)~~3~~ points.

(C) Each countable tree over twelve (12) inches d.b.h. counts three (3)~~6~~ points.

 (D) Sprouts over one (1) foot in height will be counted, counting one (1) sprout for each six (6) inches or part thereof of stump diameter to a maximum of four (4) per stump.

(2) The average residual basal area measured in stems one (1) inch or larger in diameter, is at least eighty-five (85) square ft. per acre on Site I lands, and fifty (50) square ft. per acre on lands of Site II classification or lower. Site classification shall be determined by the RPF who prepared the plan.

(3)To the extent basal area standards are specified in the rules in excess of 14 CCR § 932.7(b)(2), up to fifteen (15) square feet of basal area of those standards higher than the minimum may be met by counting snags, and decadent or deformed trees of value to wildlife in the following sizes:

(A)Thirty (30) inches or greater d.b.h. and fifty (50) feet or greater in height on ~~s~~Site I and II lands;

(B) Twenty-four (24) inches or greater d.b.h. and thirty (30) feet or greater in height on ~~s~~Site III lands; and

(C)Twenty (20) inches or greater d.b.h. and twenty (20) feet or greater in height on ~~s~~Site IV and V lands.

(c) The substitution provided for in 14 CCR § 932.7(b)(3) may only be done when the potential spread of insects and diseases will not have a significantly adverse impact on long term productivity or forest health.

(d) The resource conservation standards of the rules may be met with Group A and/or B commercial species. The percentage of the stocking requirements met with Group A species shall be no less than the percentage of the stand basal area they comprised before harvesting. The site occupancy provided by Group A species shall not be reduced relative to Group B species. When considering site occupancy, the Director shall consider the potential long term effects of relative site occupancy of Group A species versus Group B species as a result of harvest. If Group A species will likely recapture the site after harvest, Group B species do not need to be reduced. The time frames for recapturing the site shall be consistent with achieving MSP. The Director may prohibit the use of Group A and/or B commercial species which are non-indigenous or are not physiologically suited to the area involved. Exceptions may be approved by the Director if the THP provides the following information and those exceptions are agreed to by the timberland owner:

(1) Explain and justify with clear and convincing evidence how using Group A nonindigenous, or Group B species to meet the resource conservation standards will meet the intent of the Forest Practice Act as described in PRC § 4513. The discussion shall include:

(A) the management objectives of the post-harvest stand;

(B) a description of the current stand, including species composition and current stocking levels within the area of Group B species. The percentage can be measured by using point-count, basal area, stocked plot, or other method agreed to by the Director.

(C) the percentage of the post-harvest stocking to be met with Group B species. Post harvest percentages will be determined on the basis of stocked plots. Only the methods provided by 14 CCR §§ 1070-1075 shall be used in determining if the standards of PRC § 4561 have been met.

(D) a description of what will constitute a countable tree, as defined by PRC § 4528 for a Group B species and how such a tree will meet the management objectives of the post-harvest stand.

The Director, after an initial inspection pursuant to PRC § 4604, shall approve use of Group B species, as exceptions to the pre-harvest basal area percentage standard, if in his judgement the intent of the Act will be met, and there will not be an immediate significant and long-term harm to the natural resources of the state.

(e) An RPF may propose an alternative stocking standard for any proposed regeneration method, intermediate treatment or special prescription.

(1) The proposed alternative shall not fall below resource conservation standards for minimum stocking described above. The proposed alternative stocking shall contribute to one (1) or more of the following forest health and ecological goals:

(A) Improved fire resilience; or

(B) Increased drought tolerance; or

(C) Improved forest pest and disease resistance; or

(D) Increased carbon sequestration rates and climate benefits related to forests and durable wood products; or

(E) Appropriate stocking for resilient forests in a changing climate; or

(F) Avoidance of large-scale disturbances which promote homogeneity in forests.

(2) The RPF shall describe the management objective for the stand, state the alternative stocking standard for the proposed regeneration method, intermediate treatment or special prescription and explain and justify the proposed alternative stocking standard by providing the following information:

(A) Site specific characteristics including site class, aspect, soil type, elevation, slope, understory shrub composition, and a general discussion of available water in the soil.

(B) Economic factors supporting the proposed alternative and associated risks if the alternative stocking is not implemented.

(C) A description of the current Harvest Area, including species composition and current Stocking measured using the applicable basal area method.

(D) A discussion of the projected post-harvest species composition and Stocking using the same measure of Stocking used for the description of the current stand.

(E) A discussion of how the proposed alternative stocking will contribute to the Board’s forest health and ecological goals of 14 CCR § 932.7 (e)(1)(A) through (F).

(F) A description of stand maintenance and vegetation treatments that will be applied where necessary to ensure suitable resource conservation and site occupancy post-harvest.

(3) The proposed alternative stocking area shall be inspected on site by the Director. A sample Mark may be required based upon the type of harvest. The Director will verify on-site conditions and certify that the proposed alternative Stocking will contribute to one or more of the forest health and ecological goals identified in 14 CCR § 932.7(e)(1)(A)-(F). The Director may approve the proposed alternative if the intent of the Act and the Rules will be met, and there will not be immediate or long-term significant harm to the natural resources of the state.

Note: Authority cited: Sections 4551, 4553, ~~and~~ 4561.1, and 4561.2, Public Resources Code. Reference: Sections 4561, ~~and~~ 4561.1, and 4561.2, Public Resources Code.

# § 952.7. Resource Conservation Standards for Minimum Stocking.

The following resource conservation standards constitute minimum acceptable stocking in the Southern Forest District after ~~t~~Timber ~~o~~Operations have been completed.

(a) Rock outcroppings, meadows, wet areas, or other areas not normally bearing commercial species shall not be considered as requiring stocking and are exempt from such provisions.

(b) An area on which ~~t~~Timber ~~o~~Operations have taken place shall be classified as acceptably stocked if either of the standards set forth in (1) or (2) below are met within five (5) years after completion of ~~t~~Timber ~~o~~Operations unless otherwise specified in the ~~r~~Rules.

(1) An area contains an average point count of one hundred twenty-five (125)~~300~~ per acre on Site I, II and III lands or one hundred (100)~~150~~ on Site IV and V lands to be computed as follows:

(A) Each countable tree [Ref. PRC § 4528(b)] which is not more four (4) inches d.b.h. counts one (1) point.

(B) Each countable tree over four (4) inches and not more than twelve (12) inches d.b.h. counts two (2)~~3~~ points.

(C) Each countable tree over twelve (12) inches d.b.h. counts three (3)~~6~~ points.

(D) Root crown sprouts over one (1) foot in height will be counted, using the average stump diameter at one (1) foot above the average ground level of the original stump, counting one (1) sprout for each foot of stump diameter to a maximum of six (6) per stump.

(2) The average residual basal area measured in stems one (1) inch or larger in diameter, is at least eighty-five (85) square ft. per acre on Site I lands, and fifty (50) square ft. per acre on lands of Site II classification or lower. Site classification shall be determined by the RPF who prepared the plan.

(3) To the extent basal area standards are specified in the rules in excess of 14 CCR § 952.7(b)(2), up to fifteen (15) square feet of basal area of those standards higher than the minimum may be met by counting snags, and decadent or deformed trees of value to wildlife in the following sizes:

(A)Thirty (30) inches or greater d.b.h. and fifty (50) feet or greater in height on ~~s~~Site I and II lands;

(B) Twenty-four (24) inches or greater d.b.h. and thirty (30) feet or greater in height on ~~s~~Site III lands; and

(C)Twenty (20) inches or greater d.b.h. and twenty (20) feet or greater in height on ~~s~~Site IV and V lands.

(c) The substitution provided for in 14 CCR § 952.7(b)(3) may only be done when the potential spread of insects and diseases will not have a significantly adverse impact on long term productivity or forest health.

(d) The resource conservation standards of the rules may be met with Group A and/or B commercial species. The percentage of the stocking requirements met with Group A species shall be no less than the percentage of the stand basal area they comprised before harvesting. The site occupancy provided by Group A species shall not be reduced relative to Group B species. When considering site occupancy, the Director shall consider the potential long term effects of relative site occupancy of Group A species versus Group B species as a result of harvest. if Group A species will likely recapture the site after harvest, Group B species do not need to be reduced. The time frames for recapturing the site shall be consistent with achieving MSP. The Director may prohibit the use of Group A and/or B commercial species which are non-indigenous or are not physiologically suited to the area involved. Exceptions may be approved by the Director if the THP provides the following information and those exceptions are agreed to by the timberland owner:

(1) Explain and justify with clear and convincing evidence how using Group A nonindigenous, or Group B species to meet the resource conservation standards will meet the intent of the Forest Practice Act as described in PRC § 4513. The discussion shall include:

(A) the management objectives of the post-harvest stand;

(B) a description of the current stand, including species composition and current stocking levels within the area of Group B species. The percentage can be measured by using point-count, basal area, stocked plot, or other method agreed to by the Director.

(C) the percentage of the post-harvest stocking to be met with Group B species. Post harvest percentages will be determined on the basis of stocked plots. Only the methods provided by 14 CCR §§ 1070-1075 shall be used in determining if the standards of PRC § 4561 have been met.

(D) a description of what will constitute a countable tree, as defined by PRC § 4528 for a Group B species and how such a tree will meet the management objectives of the post-harvest stand.

The Director, after an initial inspection pursuant to PRC § 4604 shall approve use of Group B species, as exceptions to the pre-harvest basal area percentage standard, if in his judgement the intent of the Act will be met, and there will not be an immediate significant and long-term harm to the natural resources of the state.

(e) An RPF may propose an alternative stocking standard for any proposed regeneration method, intermediate treatment or special prescription.

(1) The proposed alternative shall not fall below resource conservation standards for minimum stocking described above. The proposed alternative stocking shall contribute to one (1) or more of the following forest health and ecological goals:

(A) Improved fire resilience; or

(B) Increased drought tolerance; or

(C) Improved forest pest and disease resistance; or

(D) Increased carbon sequestration rates and climate benefits related to forests and durable wood products; or

(E) Appropriate stocking for resilient forests in a changing climate; or

(F) Avoidance of large-scale disturbances which promote homogeneity in forests.

(2) The RPF shall describe the management objective for the stand, state the alternative stocking standard for the proposed regeneration method, intermediate treatment or special prescription and explain and justify the proposed alternative stocking standard by providing the following information:

(A) Site specific characteristics including site class, aspect, soil type, elevation, slope, understory shrub composition, and a general discussion of available water in the soil.

(B) Economic factors supporting the proposed alternative and associated risks if the alternative stocking is not implemented.

(C) A description of the current Harvest Area, including species composition and current Stocking measured using the applicable basal area method.

(D) A discussion of the projected post-harvest species composition and Stocking using the same measure of Stocking used for the description of the current stand.

(E) A discussion of how the proposed alternative stocking will contribute to the Board’s forest health and ecological goals of 14 CCR § 952.7 (e)(1)(A) through (F).

(F) A description of stand maintenance and vegetation treatments that will be applied where necessary to ensure suitable resource conservation and site occupancy post-harvest.

(3) The proposed alternative stocking area shall be inspected on site by the Director. A sample Mark may be required based upon the type of harvest. The Director will verify on-site conditions and certify that the proposed alternative Stocking will contribute to one or more of the forest health and ecological goals identified in 14 CCR § 952.7(e)(1)(A)-(F). The Director may approve the proposed alternative if the intent of the Act and the Rules will be met, and there will not be immediate or long-term significant harm to the natural resources of the state.

Note: Authority cited: Sections 4551, 4553, ~~and~~ 4561.1, and 4561.2, Public Resources Code. Reference: Sections 4561, ~~and~~ 4561.1, and 4561.2, Public Resources Code.

# § 913.2. Regeneration Methods Used in Unevenaged Management.

Unevenaged Management is utilized to establish and maintain an unevenaged stand structure. Unevenaged Management attributes include the establishment and/or maintenance of a multi-aged, balanced stand structure, promotion of growth on leave trees throughout a broad range of Diameter classes, and encouragement of natural ~~r~~Reproduction.

(a) Selection. Under the selection Regeneration Method, the trees are removed individually or in Small Groups sized from one-quarter (0.25) acres to two and one-half (2.5) acres.

(1) Trees to be harvested or trees to be retained shall be ~~m~~Marked by or under the supervision of the RPF prior to felling operations. When openings greater than one-quarter (0.25) acres will be created, the boundaries of the small group(s) may be designated in lieu of Marking individual trees within the small group areas. A sample area must be ~~m~~Marked prior to a preharvest inspection for evaluation. The sample area shall include at least ten(10~~%~~) percent of the harvest area up to a maximum of twenty (20) acres per stand type which is representative of the range of conditions present in the area.

(2) Post harvest stand Stocking levels shall be stated in the THP. The level of residual Stocking shall be consistent with maximum sustained production of high quality timber products. In no case shall Stocking be reduced below the following standards:

(A) Selection System.

1. On Site I lands at least one hundred twenty-five (125) square feet per acre of basal area shall be retained.

2. On Site II and III lands at least seventy-five (75) square feet per acre of basal area shall be retained.

3. On Site IV and V lands at least fifty (50) square feet per acre of basal area shall be retained.

4. Unless the Plan submitter demonstrates how the proposed harvest will achieve MSP pursuant to 14 CCR § 913.11(a) or (b), the residual stand shall contain sufficient trees to meet at least the basal area, size, and phenotypic quality of tree requirement specified under the Seed Tree method.

(B) Group Selection.

1. At least eighty (80~~%~~) percent of the stocked plots must meet the Basal Area Stocking Standards of 14 CCR § 913.2(a)(2)(A).

2. Not more than 20% of the stocked plots may meet Stocking Standards utilizing the~~300 point count~~ standards of 14 CCR § 912.7(b)(1) with trees that are at least ~~10 (~~ten~~)~~ (10) years old.

3. An RPF or Supervised Designee may offset up to eight (8) plots per forty (40) plots where those plot centers are initially placed within Small Group clearings created during the current harvest. Unless substantially damaged by fire, the RPF or Supervised Designee shall not exclude Small Group clearings created by previous timber harvesting from the Stocking survey.

4. Unless the Plan submitter demonstrates how the proposed harvest will achieve MSP pursuant to 14 CCR § 913.11(a) or (b), the residual stand shall contain sufficient trees to meet at least the basal area, size, and phenotypic quality of tree requirement specified under the Seed Tree method.

(3) Within any THP, Small Group clearings under the selection method shall be separated by a logical Logging Area.

(4) Following completion of Timber Operations (including Site Preparation) not more than twenty (20~~%~~) percent of the THP area harvested by this method shall be covered by Small Group clearings.

(5) Exceptions to Stocking Standards in 14 CCR § 913.2(a)(2) above may be granted only when proposed by the RPF and explained and justified in the Plan, but in no case will the exceptions be less than specified in 14 CCR § 912.7(b)(2). Exceptions may only be granted when the RPF clearly demonstrates that the existing stand will grow substantially less than both the potential site productive capacity and the proposed post-harvest stand.

(b) Transition. The transition method may be used to develop an unevenaged stand from a stand that currently has an unbalanced irregular or evenaged structure. The transition method involves the removal of trees individually or in Small Groups from irregular or evenaged stands to create a balanced stand structure and to obtain natural ~~r~~Reproduction.

(1) Area for determination of preharvest Seed Tree retention levels shall be no greater than twenty (20) acres in size.

(2) This method is to be used to increase Stocking and improve the balance of age classes so as to allow the residual stand to be managed by the selection Regeneration Method. This method shall not be used more than two (2) times for a stand. The RPF shall delineate areas previously treated by the transition method on the Plan map.

(3) Stands suitable for the transition method contain adequate quantity and quality of seed producing trees to provide adequate regeneration for new age classes. Stands suitable for this method shall have no more than fifty (50) sq. ft. of basal area greater than the selection basal area standards.

(4) Trees to be harvested or trees to be retained shall be ~~m~~Marked by or under the supervision of a RPF before felling operations. A sample area must be ~~m~~Marked before the preharvest inspection for evaluation. The sample area shall include at least ten (10~~%~~) percent of the Harvest Area up to a maximum of twenty (20) acres per stand type which is representative of the range of conditions present.

(5) Immediately following the completion of Timber Operations, the minimum basal area standards in 14 CCR § 912.7(b)(2) shall be met.

(6) The post-harvest residual stand shall contain at least fifteen (15) square feet of Basal Area Per Acre of Seed Trees at least twelve (12) inches d.b.h. or greater for timber ~~s~~Sites I, II or III; or twelve (12) square feet of Basal Area Per Acre of Seed Trees twelve (12) inches d.b.h. or greater for timber sites IV or V., except for timber sites I with coast redwood. For timber sites I with coast redwood, the post-harvest residual stand shall contain sufficient trees to meet at least the basal area, size, and phenotypic quality of the leave tree requirement specified under the Seed Tree method (14 CCR§ 913.1(c)(1)(A)). Unless obviously stocked, these basal area requirements will be determined from sampling averaged across each harvested area required in 14 CCR § 913.2(b)(1). Unless the Plan submitter demonstrates how the proposed harvest will achieve MSP pursuant to 14 CCR § 913.11(a) or (b), where present in the preharvest stand, disease free, undamaged Seed Trees eighteen (18) inches d.b.h. or greater shall be retained post harvest until the stand exceeds the minimum Seed Tree requirements of 14 CCR § 913.1(c)(1)(A). The Seed Trees shall be full crown, capable of seed production and representative of the best phenotypes available in the pre-harvest stand.

(7) Following completion of Timber Operations (including Site Preparation) not more than twenty (20~~%~~) percent of the Plan area harvested by this method shall be occupied by Small Group clearings.

(8) The Plan Submitter must provide the Director sufficient information such as growth and stand description to demonstrate that the standards of the selection Regeneration Method will be met by the third and subsequent entries of Plan areas harvested by the transition method.

(c) Within six (6) months following completion of Timber Operations conducted pursuant to the selection and transition methods as described in the Plan, a report of Stocking shall be filed as stated in PRC § 4587.

(d) In the absence of a Sustained Yield Plan, to maintain and improve tree Species diversity, genetic material, and seed production, trees of each native Commercial Species where present at the time of harvest shall be retained after harvest. These leave trees shall be representative of the best phenotypes available in the preharvest stand. The RPF may propose and the Director may agree to a Species-specific plan in the THP which protects existing regeneration or provides for regeneration in-lieu of retaining trees.

Note: Authority cited: Sections 4551 and 4561, Public Resources Code. Reference: Sections 4561, 4582(h) and 4587, Public Resources Code.

# § 933.2. Regeneration Methods Used in Unevenaged Management.

Unevenaged Management is utilized to establish and maintain an unevenaged stand structure. Unevenaged Management attributes include the establishment and/or maintenance of a multi-aged, balanced stand structure, promotion of growth on leave trees throughout a broad range of Diameter classes, and encouragement of natural reproduction.

(a) Selection. Under the selection Regeneration Method, the trees are removed individually or in Small Groups sized from one-quarter (0.25) acres to two and one-half (2.5) acres.

(1) Trees to be harvested or trees to be retained shall be marked by or under the supervision of the RPF prior to felling operations. When openings greater than one-quarter (0.25) acres will be created, the boundaries of the Small Group(s) may be designated in lieu of Marking individual trees within the Small Group areas. A sample area must be marked prior to a preharvest inspection for evaluation. The sample area shall include at least ten (10~~%~~) percent of the Harvest Area up to a maximum of twenty (20) acres per stand type which is representative of the range of conditions present in the area.

(2) Post harvest stand Stocking levels shall be stated in the THP. The level of residual Stocking shall be consistent with maximum sustained production of high quality timber products. In no case shall Stocking be reduced below the following standards:

(A) Selection System.

1. On Site I lands at least one hundred (100) square feet per acre of basal area shall be retained.

2. On Site II and III lands at least seventy-five (75) square feet per acre of basal area shall be retained.

3. On Site IV and V lands at least fifty (50) square feet per acre of basal area shall be retained.

4. Unless the plan submitter demonstrates how the proposed harvest will achieve MSP pursuant to 14 CCR § 933.1(a) or (b), the residual stand shall contain sufficient trees to meet at least the basal area, size, and phenotypic quality of tree requirement specified under the seed tree method.

(B) Group Selection.

1. At least eighty (80~~%~~) percent of the stocked plots must meet the Basal Area Stocking Standards of 14 CCR § 933.2(a)(2)(A).

2. Not more than 20% of the stocked plots may meet Stocking Standards utilizing the ~~300 point count~~ standards of 14 CCR § 932.7(b)(1) with trees that are at least ~~10 (~~ten~~)~~ (10) years old.

3. An RPF or Supervised Designee may offset up to eight (8) plots per forty (40) plots where those plot centers are initially placed within Small Group clearings created during the current harvest. Unless substantially damaged by fire, the RPF or Supervised Designee shall not exclude Small Group clearings created by previous timber harvesting from the Stocking survey.

4. Unless the Plan submitter demonstrates how the proposed harvest will achieve MSP pursuant to 14 CCR § 933.11(a) or (b), the residual stand shall contain sufficient trees to meet at least the basal area, size, and phenotypic quality of tree requirement specified under the Seed Tree method.

(3) Within any THP, Small Group clearings under the selection method shall be separated by a logical Logging Area.

(4) Following completion of Timber Operations (including Site Preparation) not more than 20% of the THP area harvested by this method shall be covered by Small Group clearings.

(5) Exceptions to Stocking Standards in 14 CCR § 933.2(a)(2) above may be granted only when proposed by the RPF and explained and justified in the Plan, but in no case will the exceptions be less than specified in 14 CCR § 932.7(b)(2). Exceptions may only be granted when the RPF clearly demonstrates that the existing stand will grow substantially less than both the potential site productive capacity and the proposed post-harvest stand.

(b) Transition. The transition method may be used to develop an unevenaged stand from a stand that currently has an unbalanced irregular or evenaged structure. The transition method involves the removal of trees individually or in Small Groups from irregular or evenaged stands to create a balanced stand structure and to obtain natural reproduction.

(1) Area for determination of preharvest Seed Tree retention levels shall be no greater than twenty (20) acres in size.

(2) This method is to be used to increase Stocking and improve the balance of age classes so as to allow the residual stand to be managed by the selection Regeneration Method. This method shall not be used more than two (2) times for a stand. The RPF shall delineate areas previously treated by the transition method on the Plan map.

(3) Stands suitable for the transition method contain adequate quantity and quality of seed producing trees to provide adequate regeneration for new age classes. Stands suitable for this method shall have no more than fifty (50) sq. ft. of basal area greater than the selection basal area standards.

(4) Trees to be harvested or trees to be retained shall be ~~m~~Marked by or under the supervision of a RPF before felling operations. A sample area must be ~~m~~Marked before the preharvest inspection for evaluation. The sample area shall include at least ten (10~~%~~) percent of the Harvest Area up to a maximum of twenty (20) acres per stand type which is representative of the range of conditions present.

(5) Immediately following the completion of Timber Operations, the minimum basal area standards in 14 CCR § 932.7(b)(2) shall be met.

(6) The post harvested residual stand shall contain at least fifteen (15) square feet of Basal Area Per Acre of Seed Trees at least twelve (12) inches d.b.h. or greater for timber sites I, II or III; or twelve (12) square feet of Basal Area Per Acre of Seed Trees twelve (12) inches dbh or greater for timber sites IV or V. Unless obviously stocked, these basal area requirements will be determined from sampling averaged across each harvested area required in 14 CCR § 933.2(b)(1). Unless the Plan submitter demonstrates how the proposed harvest will achieve MSP pursuant to 14 CCR § 933.11(a) or (b), where present in the preharvest stand, disease free, undamaged Seed Trees eighteen (18) inches dbh or greater shall be retained post harvest until the stand exceeds the minimum Seed Tree requirements of 14 CCR § 933.1(c)(1)(A). The Seed Trees shall be full crown, capable of seed production and representative of the best phenotypes available in the pre-harvest stand.

(7) Following completion of Timber Operations (including Site Preparation) not more than twenty (20~~%~~) percent of the Plan area harvested by this method shall be occupied by Small Group clearings.

(8) The Plan Submitter must provide the Director sufficient information such as growth and stand description to demonstrate that the standards of the selection Regeneration Method will be met by the third and subsequent entries of Plan areas harvested by the transition method.

(c) Within six (6) months following completion of Timber Operations conducted pursuant to the selection and transition methods as described in the Plan, a report of Stocking shall be filed as stated in PRC § 4587.

(d) In the absence of a Sustained Yield Plan, to maintain and improve tree Species diversity, genetic material, and seed production, trees of each native Commercial Species where present at the time of harvest shall be retained after harvest. These leave trees shall be representative of the best phenotypes available in the preharvest stand. The RPF may propose and the Director may agree to a Species-specific plan in the THP which protects existing regeneration or provides for regeneration in-lieu of retaining trees.

Note: Authority cited: Sections 4551 and 4561, Public Resources Code. Reference: Sections 4561, 4582(h) and 4587, Public Resources Code.

# § 953.2. Regeneration Methods Used in Unevenaged Management.

Unevenaged Management is utilized to establish and maintain an unevenaged stand structure. Unevenaged Management attributes include the establishment and/or maintenance of a multi-aged, balanced stand structure, promotion of growth on leave trees throughout a broad range of Diameter classes, and encouragement of natural ~~r~~Reproduction.

(a) Selection. Under the selection Regeneration Method, the trees are removed individually or in Small Groups sized from one-quarter (0.25) acres to two and one-half (2.5) acres.

(1) Trees to be harvested or trees to be retained shall be ~~m~~Marked by or under the supervision of the RPF prior to felling operations. When openings greater than one-quarter (0.25) acres will be created, the boundaries of the Small Group(s) may be designated in lieu of Marking individual trees within the Small Group areas. A sample area must be ~~m~~Marked prior to a preharvest inspection for evaluation. The sample area shall include at least ten (10~~%~~) of the Harvest Area up to a maximum of twenty (20) acres per stand type which is representative of the range of conditions present in the area.

(2) Post harvest stand Stocking levels shall be stated in the THP. The level of residual Stocking shall be consistent with maximum sustained production of high quality timber products. In no case shall Stocking~~ocking~~ be reduced below the following standards:

(A) Selection System.

1. On Site I lands at least one hundred (100) square feet per acre of basal area shall be retained.

2. On Site II and III lands at least seventy-five (75) square feet per acre of basal area shall be retained.

3. On Site IV and V lands at least fifty (50) square feet per acre of basal area shall be retained.

4. Unless the Plan submitter demonstrates how the proposed harvest will achieve MSP pursuant to 14 CCR § 953.11(a) or (b), the residual stand shall contain sufficient trees to meet at least the basal area, size, and phenotypic quality of tree requirement specified under the Seed Tree method.

(B) Group Selection.

1. At least eighty (80~~%~~) percent of the stocked plots must meet the Basal Area Standards of 14 CCR § 953.2(a)(2)(A).

2. Not more than twenty (20~~%~~) percent of the stocked plots may meet stocking standards utilizing the ~~300 point count~~ standards of 14 CCR § 952.7(b)(1) with trees that are at least ~~10 (~~ten~~)~~ (10) years old.

3. An RPF or Supervised Designee may offset up to eight (8) plots per forty (40) plots where those plot centers are initially placed within Small Group clearings created during the current harvest. Unless substantially damaged by fire, the RPF or Supervised Designee shall not exclude Small Group clearings created by previous timber harvesting from the Stocking survey.

4. Unless the Plan submitter demonstrates how the proposed harvest will achieve MSP pursuant to 14 CCR § 953.11(a) or (b), the residual stand shall contain sufficient trees to meet at least the basal area, size, and phenotypic quality of tree requirement specified under the Seed Tree method.

(3) Within any THP, Small Group clearings under the selection method shall be separated by a logical Logging Area.

(4) Following completion of Timber Operations (including Site Preparation) not more than twenty (20~~%~~) percent of the THP area harvested by this method shall be covered by Small Group clearings.

(5) Exceptions to Stocking Standards in 14 CCR § 953.2(a)(2) above may be granted only when proposed by the RPF and explained and justified in the Plan, but in no case will the exceptions be less than specified in 14 CCR § 952.7(b)(2). Exceptions may only be granted when the RPF clearly demonstrates that the existing stand will grow substantially less than both the potential site productive capacity and the proposed post-harvest stand.

(b) Transition. The transition method may be used to develop an unevenaged stand from a stand that currently has an unbalanced irregular or evenaged structure. The transition method involves the removal of trees individually or in Small Groups from irregular or evenaged stands to create a balanced stand structure and to obtain natural ~~r~~Reproduction.

(1) Area for determination of preharvest Seed Tree retention levels shall be no greater than twenty (20) acres in size.

(2) This method is to be used to increase Stocking and improve the balance of age classes so as to allow the residual stand to be managed by the selection Regeneration Method. This method shall not be used more than two (2) times for a stand. The RPF shall delineate areas previously treated by the transition method on the Plan map.

(3) Stands suitable for the transition method contain adequate quantity and quality of seed producing trees to provide adequate regeneration for new age classes. Stands suitable for this method shall have no more than fifty (50) sq. ft. of basal area greater than the selection basal area standards.

(4) Trees to be harvested or trees to be retained shall be ~~m~~Marked by or under the supervision of a RPF before felling operations. A sample area must be ~~m~~Marked before the preharvest inspection for evaluation. The sample area shall include at least ten (10~~%~~) percent of the Harvest Area up to a maximum of twenty (20) acres per stand type which is representative of the range of conditions present.

(5) Immediately following the completion of Timber Operations, the minimum basal area standards in 14 CCR § 952.7(b)(2) shall be met.

(6) The post harvested residual stand shall contain at least fifteen (15) square feet of Basal Area Per Acre of Seed Trees at least twelve (12) inches d.b.h. or greater for timber sites I, II or III; or twelve (12) square feet of Basal Area Per Acre of Seed Trees twelve (12) inches d.b.h. or greater for timber sites IV or V. Unless obviously stocked, these basal area requirements will be determined from sampling averaged across each harvested area required in 14 CCR § 953.2(b)(1). Unless the Plan submitter demonstrates how the proposed harvest will achieve MSP pursuant to 14 CCR § 953.11(a) or (b), where present in the preharvest stand, disease free, undamaged Seed Trees eighteen (18) inches d.b.h. or greater shall be retained post harvest until the stand exceeds the minimum Seed Tree requirements of 14 CCR § 953.1(c)(1)(A). The Seed Trees shall be full crown, capable of seed production and representative of the best phenotypes available in the present stand.

(7) Following completion of Timber Operations (including Site Preparation) not more than twenty (20~~%~~) of the Plan area harvested by this method shall be occupied by Small Group clearings.

(8) The Plan Submitter must provide the Director sufficient information such as growth and stand description to demonstrate that the standards of the selection Regeneration Method will be met by the third and subsequent entries of Plan areas harvested by the transition method.

(c) Within six (6) months following completion of timber operations conducted pursuant to the selection and transition methods as described in the Plan, a report of stocking shall be filed as stated in PRC § 4587.

(d) In the absence of a Sustained Yield Plan, to maintain and improve tree Species diversity, genetic material, and seed production, trees of each native commercial species where present at the time of harvest shall be retained after harvest. These leave trees shall be representative of the best phenotypes available in the preharvest stand. The RPF may propose and the Director may agree to a species-specific plan in the THP which protects existing regeneration or provides for regeneration in-lieu of retaining trees.

Note: Authority cited: Sections 4551 and 4561, Public Resources Code. Reference: Sections 4561, 4582(h) and 4587, Public Resources Code.

# § 913.3. Intermediate Treatments.

(a) Commercial Thinning. Commercial thinning is the removal of trees in a young-growth stand to maintain or increase average stand Diameter of the residual crop trees, promote timber growth, and/or improve forest health. The residual stand shall consist primarily of healthy and vigorous dominant and codominant trees from the preharvest stand.

(1) Post harvest stand Stocking levels shall be stated in the THP. The level of residual Stocking shall be consistent with maximum sustained production of high quality timber products. Generally, stands will develop stand structures with considerably higher levels of basal area than provided in these minimum standards as stand age increases. In no case shall Stocking be reduced below the following standards:

(A) Where the preharvest dominant and codominant crown Canopy is occupied primarily by trees greater than fourteen (14) inches d.b.h.:

1. On Site I lands at least one hundred twenty-five (125) sq.ft. per acre of basal area shall be left.

2. On Site II and III lands at least one hundred (100) sq.ft. per acre of basal area shall be left.

3. On Site IV lands at least seventy-five (75) sq.ft. per acre of basal area shall be left.

4. On Site V lands, at least fifty (50) sq.ft. per acre of basal area shall be left.

(B) Where the preharvest dominant and codominant crown Canopy is occupied primarily by trees less than fourteen (14) inches d.b.h., a minimum of one hundred (100) trees per acre over four (4) inches d.b.h. shall be retained ~~for site I, II and III. For site IV and V 75 trees per acre over 4 inches dbh shall be retained~~.

(2) Exceptions to these Stocking Standards may be proposed by the RPF when explained and justified in the Plan, but in no case will the standards be below those specified in 14 CCR § 912.7(b)(2).

(3) For stands harvested in compliance with 14 CCR § 913.3(a)(1)(A), the trees to be harvested or the trees to be retained shall be ~~m~~Marked by or under the supervision of an RPF prior to felling operations. For all thinning proposals, a sample area must be ~~m~~Marked prior to a preharvest inspection for evaluation. The sample area shall include at least ten (10~~%~~) percent of the thinning area up to a maximum of twenty (20) acres per stand type which is representative of the range of conditions present in the area. The Director may waive the Marking requirements for the remainder of the THP area when explained and justified in the THP.

(4) Within six (6) months following completion of Timber Operations as described in the Plan a report of Stocking shall be filed as stated in PRC § 4587.

(b) Sanitation-Salvage. Sanitation is the removal of insect-attacked or Diseased Trees in order to maintain or improve the health of the stand. Salvage is the removal of only those trees which are dead, dying or deteriorating, because of damage from fire, wind, insects, disease, flood or other injurious agents. Salvage provides for the economic recovery of trees prior to a total loss of their wood product value. Sanitation and salvage may be combined into a single operation. The following requirements apply to the use of the sanitation-salvage treatment:

(1) The RPF shall estimate in the THP expected level of Stocking to be retained upon completion of Timber ~~o~~Operations.

(2) Immediately upon completion of Timber ~~o~~Operations, the area shall meet the Stocking Standards of 14 CCR § 912.7(b) unless explained and justified in the Plan. If Stocking is to be met immediately following completion of Timber ~~o~~Operations, a report of Stocking shall be filed within six (6) months of completion. If this standard cannot be met, the area must be planted during the first planting season following completion of Timber ~~o~~Operations and the minimum Stocking Standards of 14 CCR § 912.7(b)(1) must be met within five (5) years following completion of Timber ~~o~~Operations.

(3) Trees to be harvested or trees to be retained shall be ~~m~~Marked by or under the supervision of an RPF prior to felling operations. When openings greater than one-quarter (0.25) acres will be created, the boundaries of the Small Group(s) may be designated in lieu of Marking individual trees within the Small Group areas. A sample area must be ~~m~~Marked prior to a preharvest inspection for evaluation. The sample area shall include at least ten (10~~%~~) percent of the area, up to a maximum of twenty (20) acres per stand type, whichever is less, which is representative of the range of conditions present in the area. The Director may waive the Marking requirement for the remainder of the THP area when explained and justified in the THP.

Note: Authority cited: Sections 4551 and 4561, Public Resources Code. Reference: Sections 4582(d), (h) and 4587, Public Resources Code.

# § 933.3. Intermediate Treatments.

(a) Commercial Thinning. Commercial thinning is the removal of trees in a young-growth stand to maintain or increase average stand Diameter of the residual crop trees, promote timber growth, and/or improve forest health. The residual stand shall consist primarily of healthy and vigorous dominant and codominant trees from the preharvest stand.

(1) Post harvest stand Stocking levels shall be stated in the THP. The level of residual Stocking shall be consistent with maximum sustained production of high quality timber products. Generally, stands will develop stand structures with considerably higher levels of basal area than provided in these minimum standards as stand age increases. In no case shall Stocking be reduced below the following standards:

(A) Where the preharvest dominant and codominant crown Canopy is occupied primarily by trees greater than fourteen (14) inches d.b.h.:

1. On Site I mixed conifer lands at least one hundred twenty-five (125) sq.ft. per acre of basal area shall be left, and on Site I lands where greater than fifty (50~~%~~) percent of the basal area is pine, at least one hundred (100) sq.~~uare~~ f~~ee~~t. per acre of basal area shall be left.

2. On Site II mixed conifer lands at least one hundred (100) sq.ft. per acre of basal area shall be left, and on Site II lands where greater than fifty (50~~%~~) percent of the basal area is pine, at least seventy-five (75) sq.~~uare~~ f~~ee~~t. per acre of basal area shall be left.

3. On Site III mixed conifer lands at least seventy-five (75) sq.ft. per acre of basal area shall be left, and on Site III lands where greater than fifty (50~~%~~) percent of the basal area is pine, at least seventy-five (75) sq.~~uare~~ f~~ee~~t. per acre of basal area shall be left.

4. On Site IV and V mixed conifer lands, at least fifty (50) sq.ft. per acre of basal area shall be left, and on Site IV and V lands where greater than fifty (50~~%~~) percent of the basal area is pine at least fifty (50) sq.~~uare~~ f~~ee~~t. per acre of basal area shall be left.

(B) Where the preharvest dominant and codominant crown Canopy is occupied primarily by trees less than fourteen (14) inches d.b.h., a minimum of ~~100~~sixty-five (65) trees per acre over four (4) inches d.b.h.shall be retained ~~for site I, II and III. For site IV and V 75 trees per acre over 4 inches dbhshall be retained~~.

(2) Exceptions to these Stocking Standards may be proposed by the RPF when explained and justified in the Plan, but in no case will the standards be below those specified in 14 CCR § 932.7(b)(2).

(3) For stands harvested in compliance with 14 CCR § 933.3(a)(1)(A), the trees to be harvested or the trees to be retained shall be marked by or under the supervision of an RPF prior to felling operations. For all thinning proposals, a sample area must be marked prior to a preharvest inspection for evaluation. The sample area shall include at least ten (10~~%~~) percent of the thinning area up to a maximum of twenty (20) acres per stand type which is representative of the range of conditions present in the area. The Director may waive the Marking requirements for the remainder of the THP area when explained and justified in the THP.

(4) Within six months following completion of Timber Operations as described in the Plan a report of Stocking shall be filed as stated in PRC § 4587.

(b) Sanitation-Salvage. Sanitation is the removal of insect-attacked or Diseased Trees in order to maintain or improve the health of the stand. Salvage is the removal of only those trees which are dead, dying or deteriorating, because of damage from fire, wind, insects, disease, flood or other injurious agents. Salvage provides for the economic recovery of trees prior to a total loss of their wood product value. Sanitation and salvage may be combined into a single operation. The following requirements apply to the use of the sanitation-salvage treatment:

(1) The RPF shall estimate in the THP expected level of Stocking to be retained upon completion of Timber ~~o~~Operations.

(2) Immediately upon completion of Timber ~~o~~Operations, the area shall meet the Stocking Standards of 14 CCR § 932.7(b) unless explained and justified in the Plan. If Stocking is to be met immediately following completion of Timber Operations, a report of Stocking shall be filed within six (6) months of completion. If this standard cannot be met, the area must be planted during the first planting season following completion of operations and the minimum Stocking Standards of 14 CCR § 32.7(b)(1) must be met within five (5) years following completion of Timber ~~o~~Operations.

(3) Trees to be harvested or trees to be retained shall be ~~m~~Marked by or under the supervision of an RPF prior to felling operations. When openings greater than one-quarter (0.25) acres will be created, the boundaries of the Small Group(s) may be designated in lieu of Marking individual trees within the Small Group areas. A sample area must be ~~m~~Marked prior to a preharvest inspection for evaluation. The sample area shall include at least ten (10~~%~~) percent of the area, up to a maximum of twenty (20) acres per stand type, whichever is less, which is representative of the range of conditions present in the area. The Director may waive the Marking requirement for the remainder of the THP area when explained and justified in the THP.

Note: Authority cited: Sections 4551 and 4561, Public Resources Code. Reference: Sections 4582(d), 4582(h) and 4587, Public Resources Code.

# § 953.3. Intermediate Treatments.

(a) Commercial Thinning. Commercial thinning is the removal of trees in a young-growth stand to maintain or increase average stand Diameter of the residual crop trees, promote timber growth, and/or improve forest health. The residual stand shall consist primarily of healthy and vigorous dominant and codominant trees from the preharvest stand.

(1) Post harvest stand Stocking levels shall be stated in the THP. The level of residual Stocking shall be consistent with maximum sustained production of high quality timber products. Generally, stands will develop stand structures with considerably higher levels of basal area than provided in these minimum standards as stand age increases. In no case shall Stocking be reduced below the following standards:

(A) Where the preharvest dominant and codominant crown Canopy is occupied primarily by trees greater than fourteen (14) inches d.b.h.:

1. On Site I mixed conifer lands at least one hundred twenty-five (125) sq.ft. per acre of basal area shall be left, and on Site I land where greater than fifty (50~~%~~) percent of the basal area is pine, at least one hundred (100) sq.ft. per acre of basal area shall be left.

2. On Site II mixed conifer lands at least one hundred (100) sq.ft. per acre of basal area shall be left, and on Site II lands where greater than fifty (50~~%~~) percent of the basal area is pine, at least seventy-five (75) sq.ft. per acre of basal are shall be left.

3. On Site III mixed conifer lands at least seventy-five (75) sq.ft. per acre of basal area shall be left, and on Site III lands where greater than fifty (50~~%~~) percent of the basal area is pine, at least seventy-five (75) sq.ft. per acre of basal area shall be left.

4. On Site IV and V mixed conifer lands, at least fifty (50) sq.ft. per acre of basal area shall be left, and on Site IV and V lands where greater than fifty (50~~%~~) percent of the basal area is pine at least fifty (50) sq.ft. per acre of basal area shall be left.

 (B) Where the preharvest dominant and codominant crown Canopy is occupied primarily by trees less than fourteen (14) inches d.b.h., a minimum of ~~100~~sixty-five (65) trees per acre over four (4) inches d.b.h.shall be retained ~~for site I, II and III. For site IV and V 75 trees per acre over 4 inches dbhshall be retained~~.

(2) Exceptions to these Stocking Standards may be proposed by the RPF when explained and justified in the Plan, but in no case will the standards be below those specified in 14 CCR § 952.7(b)(2).

(3) For stands harvested in compliance with 14 CCR § 953.3(a)(1)(A), the trees to be harvested or the trees to be retained shall be ~~m~~Marked by or under the supervision of an RPF prior to felling operations. For all thinning proposals, a sample area must be ~~m~~Marked prior to a preharvest inspection for evaluation. The sample area shall include at least ten (10~~%~~) percent of the thinning area up to a maximum of twenty (20) acres per stand type which is representative of the range of conditions present in the area. The Director may waive the Marking requirements for the remainder of the THP area when explained and justified in the THP.

(4) Within six (6) months following completion of Timber Operations as described in the Plan a report of Stocking shall be filed as stated in PRC § 4587.

(b) Sanitation-Salvage. Sanitation is the removal of insect-attacked or Diseased Trees in order to maintain or improve the health of the stand. Salvage is the removal of only those trees which are dead, dying or deteriorating, because of damage from fire, wind, insects, disease, flood or other injurious agents. Salvage provides for the economic recovery of trees prior to a total loss of their wood product value. Sanitation and salvage may be combined into a single operation. The following requirements apply to the use of the sanitation-salvage treatment:

(1) The RPF shall estimate in the THP expected level of Stocking to be retained upon completion of Timber ~~o~~Operations.

(2) Immediately upon completion of Timber ~~o~~Operations, the area shall meet the Stocking Standards of 14 CCR § 952.7(b) unless explained and justified in the Plan. If Stocking is to be met immediately following completion of Timber ~~o~~Operations, a report of Stocking shall be filed within six (6) months of completion. If this standard cannot be met, the area must be planted during the first planting season following completion of Timber ~~o~~Operations and the minimum Stocking Standards of 14 CCR § 952.7(b)(1) must be met within five (5) years following completion of Timber ~~o~~Operations.

(3) Trees to be harvested or trees to be retained shall be ~~m~~Marked by or under the supervision of an RPF prior to felling operations. When openings greater than one-quarter (0.25) acres will be created, the boundaries of the Small Group(s) may be designated in lieu of Marking individual trees within the Small Group areas. A sample area must be ~~m~~Marked prior to a preharvest inspection for evaluation. The sample area shall include at least ten (10~~%~~) percent of the area, up to a maximum of twenty (20) acres per stand type, whichever is less, which is representative of the range of conditions present in the area. The Director may waive the Marking requirement for the remainder of the THP area when explained and justified in the THP.

Note: Authority cited: Sections 4551 and 4561, Public Resources Code. Reference: Sections 4582(d), 4582(h) and 4587, Public Resources Code.

# § 913.4. Special Prescriptions.

The following special Harvesting Methods are appropriate under certain conditions:

(a) Special Treatment Areas Prescriptions. Special consideration in Special Treatment Areas shall be given to selection of a Regeneration Method or Intermediate Treatments compatible with the objectives for which the special area was established. Such areas shall be identified in the Plan. To assure the integrity of legally designated historical and archaeological sites and legally designated ecological reserves, and that the objectives of the Special Treatment Areas are met, the RPF and the Director may agree, after on-the-ground inspection, if requested by either party, on specific silvicultural and logging practices to protect such areas. The Director shall notify affected agencies or groups with expertise in the resource involved in the special treatment area of any such areas located during the THP review process.

(b) Rehabilitation of Understocked Area Prescription. For the purposes of restoring and enhancing the productivity of commercial Timberlands which do not meet the Stocking Standards defined in 14 CCR § 912.7 prior to any Timber Operations on such lands, an area may be harvested provided it is restocked in accordance with subsections (1) or (2). To facilitate restocking, a regeneration Plan must be included in the THP. The regeneration Plan shall include Site Preparation, method of regeneration, and other information appropriate to evaluate the Plan.

(1) If the area meets the standards of 14 CCR § 912.7 within five (5) years of completion of Timber Operations, the area shall be considered acceptably stocked, or shall be considered acceptably stocked if it contains at least ten (10) planted Countable Trees for each tree harvested on sites I, II, and III, and five (5) planted Countable Trees for each tree harvested on site IV and V.

(2) On understocked Timberlands where no countable conifer trees are to be harvested and the broadleaf Species are not designated for management, the area shall be planted to equal or exceed the Stocking Standards of 14 CCR § 912.7(b)(1) and shall be considered acceptably stocked if within five (5) years of completion of Timber Operations it contains at least an average point count of ~~150~~100 of Group A Species on all Site Classifications.

(c) Fuelbreak/Defensible Space. Where some trees and other vegetation and fuels are removed to create or maintain a shaded fuel break or defensible space in an area to reduce the potential for wildfires and the damage they might cause. Minimum Stocking Standards within the timber operating area shall be met immediately after harvest and shall be those found in 14 CCR § 912.7. The RPF shall describe in the Plan specific vegetation and fuels treatment, including timing, to reduce fuels to meet the objectives of ~~the~~a Community Fuelbreak Area or other objectives identified by the RPF with the written concurrence of a public fire agency and determined by the Director to be consistent with the purposes of the Act.

\*\*\*\*no changes to the remainder of the section\*\*\*\*

Note: Authority cited: Sections 4551 and 4553, Public Resources Code. Reference: Sections 4512, 4551.5, 4561, 4561.2, 4582 and 4582.5, Public Resources Code.

# § 933.4. Special Prescriptions.

The following special Harvesting Methods are appropriate under certain conditions:

(a) Special Treatment Areas Prescriptions. Special consideration in Special Treatment Areas shall be given to selection of a Regeneration Method or Intermediate Treatment compatible with the objectives for which the special area was established. Such areas shall be identified in the Plan. To assure the integrity of legally designated historical and archaeological sites and legally designated ecological reserves, and that the objectives of the Special Treatment Areas are met, the RPF and the Director may agree, after on-the-ground inspection, if requested by either party, on specific silvicultural and logging practices to protect such areas. The Director shall notify affected agencies or groups with expertise in the resource involved in the special treatment area of any such areas located during the THP review process.

(b) Rehabilitation of Understocked Area Prescription. Rehabilitation is a procedure for restoring and enhancing the productivity of commercial timberlands which do not meet the stocking standards in 14 CCR § 952.7, prior to any Timber Operations. On such lands an area may be harvested provided it is restocked in accordance with Subsections (1) or (2). To facilitate restocking, a regeneration plan must be included in the THP. The regeneration plan shall include Site Preparation, method of regeneration, and other information appropriate to evaluate the plan.

(1) If the area meets the standards of 14 CCR § 932.7 within five (5) years of completion of Timber Operations, the area shall be considered acceptably stocked, or shall be considered acceptably stocked if it contains at least ten (10) planted Countable Trees for each tree harvested on sites I, II, and III, and five (5) planted Countable Trees for each tree harvested on site IV and V.

(2) On understocked Timberlands where no countable conifer trees are to be harvested and the broadleaf Species are not designated for management, the area shall be planted to equal or exceed the Stocking Standards of 14 CCR § 932.7(b)(1) and shall be considered acceptably stocked if within five years of completion of Timber Operations it contains at least an average point count of ~~150~~100 of Group A Species on all Site Classifications.

(c) Fuelbreak/Defensible Space. Where some trees and other vegetation and fuels are removed to create or maintain a shaded fuel break or defensible space in an area to reduce the potential for wildfires and the damage they might cause. Minimum Stocking Standards within the timber operating area shall be met immediately after harvest and shall be those found in 14 CCR § 932.7. The RPF shall describe in the Plan specific vegetation and fuels treatment, including timing, to reduce fuels to meet the objectives of ~~the~~a Community Fuelbreak Area or other objectives identified by the RPF with the written concurrence of a public fire agency and determined by the Director to be consistent with the purposes of the Act.

\*\*\*\*no changes to the remainder of the section\*\*\*\*

Note: Authority cited: Sections 4551 and 4553, Public Resources Code. Reference: Sections 4512, 4551.5, 4561, 4561.2, 4582 and 4582.5, Public Resources Code.

# § 953.4. Special Prescriptions.

The following special Harvesting Methods are appropriate under certain conditions:

(a) Special Treatment Areas Prescriptions. Special consideration in Special Treatment Areas shall be given to selection of a Regeneration Method or Intermediate Treatments compatible with the objectives for which the special area was established. Such areas shall be identified in the Plan. To assure the integrity of legally designated historical and archaeological sites and legally designated ecological reserves, and that the objectives of the Special Treatment Areas are met, the RPF and the Director may agree, after on-the-ground inspection, if requested by either party, on specific silvicultural and logging practices to protect such areas. The Director shall notify affected agencies or groups with expertise in the resource involved in the special treatment area of any such areas located during the THP review process.

(b) Rehabilitation of Understocked Area Prescription. For the purposes of restoring and enhancing the productivity of commercial Timberlands~~s~~ which do not meet the Stocking Standards defined in 14 CCR § 952.7 prior to any Timber Operations. On such lands, an area may be harvested provided it is restocked in accordance with Sub-Sections (1) or (2). To facilitate restocking, a regeneration plan must be included in the THP. The regeneration plan shall include Site Preparation, method of regeneration, and other information appropriate to evaluate the Plan.

(1) If the area meets the standards of 14 CCR § 952.7 within five (5) years of completion of Timber Operations, the area shall be considered acceptably stocked, or shall be considered acceptably stocked if it contains at least ten (10) planted countable trees for each tree harvested on sites I, II, and III, and five (5) planted Countable Trees for each tree harvested on site IV and V.

(2) On understocked Timberlands where no countable conifer trees are to be harvested and the broadleaf Species are not designated for management, the area shall be planted to equal or exceed the Stocking Standards of 14 CCR § 952.7(b)(1) and shall be considered acceptably stocked if within five (5) years of completion of Timber Operations it contains at least an average point count of ~~150~~100 of Group A Species on all Site Classifications.

(c) Fuelbreak/Defensible Space. Where some trees and other vegetation and fuels are removed to create or maintain a shaded fuel break or defensible space in an area to reduce the potential for wildfires and the damage they might cause. Minimum Stocking Standards within the timber operating area shall be met immediately after harvest and shall be those found in 14 CCR § 952.7. The RPF shall describe in the Plan specific vegetation and fuels treatment, including timing, to reduce fuels to meet the objectives of ~~the~~a Community Fuelbreak Area or other objectives identified by the RPF with the written concurrence of a public fire agency and determined by the Director to be consistent with the purpose of the Act.

\*\*\*\*no changes to the remainder of the section\*\*\*\*

Note: Authority cited: Sections 4551, 4553 and 4561, Public Resources Code. Reference: Sections 4512, 4551.5, 4582 and 4582.5, Public Resources Code.

# § 916.9. Protection and Restoration of the Beneficial Functions of the Riparian Zone in Watersheds with Listed Anadromous Salmonids.

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

\*\*\*\*

(t) Emergency notices - No Timber Operations are allowed in a WLPZ, or within any ELZ or EEZ designated for Watercourse or Lake protection, under emergency notices except for:

(1) Hauling on existing roads.

(2) Road Maintenance.

(3) Operations conducted for public safety.

(4) Construction or reconstruction of approved Watercourse crossings.

(5) Temporary crossings of dry Class III Watercourses that do not require notification under the Fish and Game Code §1600 et seq.

(6) Harvesting recommended in writing by CDFW to address specifically identified forest conditions.

(7) The harvest of dead or dying conifer trees subject to the following conditions:

(A) Retention of all trees in the core zone of Class I and Class II-L Watercourses.

(B) Within any WLPZ, ELZ, or EEZ designated for Class II or III Watercourse protection, a minimum of two dead, dying, or diseased conifer trees per acre at least sixteen (16) inches d.b.h.~~Diameter breast high~~ and fifty (50) feet tall shall be retained within fifty (50) feet of the Watercourse Transition Line.

(C) Trees to be harvested or retained shall be marked by, or under the supervision of, an RPF prior to Timber Operations within the WLPZ or ELZ/EEZ.

(D) Within the WLPZ, or ELZ/EEZ, if the Stocking Standards of 14 CCR § 912.7 are not met upon completion of Timber Operations, unless the area meets the definition of Substantially Damaged Timberlands, at least ten (10) trees shall be planted for each tree harvested but need not exceed the point count standards contained in 14 CCR § 912.7(b)(1), as appropriate~~an average point count of 300 trees per acre~~.

(8) The harvest of trees or vegetation designated for removal pursuant to 14 CCR § 1052.5 to address Sudden Oak Death that are:

(A) symptomatic of the pathogen that causes Sudden Oak Death and confirmed infected by a certified lab; or

(B) host hardwood trees that could spread the pathogen.

\*\*\*No changes to the remainder of this section\*\*\*\*

Note: Authority cited: Sections 4551, 4562.7 and 21000(g), Public Resources Code. Reference: Sections 751, 4512, 4513, 4551.5, 4750, 4750.3, 4750.4, 21000(g), 21001(b) and 21002.1, Public Resources Code; Sections 100, 1243 and 13050(f), Water Code; and Sections 1600 and 5650(c), Fish and Game Code.

# § 936.9. Protection and Restoration of the Beneficial Functions of the Riparian Zone in Watersheds with Listed Anadromous Salmonids.

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

\*\*\*\*

(t) Emergency notices - No Timber Operations are allowed in a WLPZ, or within any ELZ or EEZ designated for Watercourse or Lake protection, under emergency notices except for:

(1) Hauling on existing roads.

(2) Road Maintenance.

(3) Operations conducted for public safety.

(4) Construction or reconstruction of approved Watercourse crossings.

(5) Temporary crossings of dry Class III Watercourses that do not require notification under the Fish and Game Code §1600 et seq.

(6) Harvesting recommended in writing by CDFW to address specifically identified forest conditions.

(7) The harvest of dead or dying conifer trees subject to the following conditions:

(A) Retention of all trees in the core zone of Class I and Class II-L Watercourses.

(B) Within any WLPZ, ELZ, or EEZ designated for Class II or III Watercourse protection, a minimum of two dead, dying, or diseased conifer trees per acre at least sixteen (16) inches d.b.h.~~Diameter breast high~~ and fifty (50) feet tall shall be retained within fifty (50) feet of the Watercourse Transition Line.

(C) Trees to be harvested or retained shall be marked by, or under the supervision of, an RPF prior to Timber Operations within the WLPZ or ELZ/EEZ.

(D) Within the WLPZ, or ELZ/EEZ, if the Stocking Standards of 14 CCR § 932.7 are not met upon completion of Timber Operations, unless the area meets the definition of Substantially Damaged Timberlands, at least ten (10) trees shall be planted for each tree harvested but need not exceed the point count standards contained in 14 CCR § 932.7(b)(1), as appropriate~~an average point count of 300 trees per acre~~.

\*\*\*No changes to the remainder of this section\*\*\*\*

Note: Authority cited: Sections 4551, 4562.7 and 21000(g), Public Resources Code. Reference: Sections 751, 4512, 4513, 4551.5, 21000(g), 21001(b) and 21002.1, Public Resources Code; Sections 100, 1243 and 13050(f), Water Code; and Sections 1600 and 5650(c), Fish and Game Code.

# § 956.9. Protection and Restoration of the Beneficial Functions of the Riparian Zone in Watersheds with Listed Anadromous Salmonids.

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

\*\*\*\*

(t) Emergency notices - No Timber Operations are allowed in a WLPZ, or within any ELZ or EEZ designated for Watercourse or Lake protection, under emergency notices except for:

(1) Hauling on existing roads.

(2) Road Maintenance.

(3) Operations conducted for public safety.

(4) Construction or reconstruction of approved Watercourse crossings.

(5) Temporary crossings of dry Class III Watercourses that do not require notification under the Fish and Game Code §1600 et seq.

(6) Harvesting recommended in writing by CDFW to address specifically identified forest conditions.

(7) The harvest of dead or dying conifer trees subject to the following conditions:

(A) Retention of all trees in the core zone of Class I and Class II-L Watercourses.

(B) Within any WLPZ, ELZ, or EEZ designated for Class II or III Watercourse protection, a minimum of two dead, dying, or diseased conifer trees per acre at least sixteen (16) inches d.b.h.~~Diameter breast high~~ and fifty (50) feet tall shall be retained within fifty (50) feet of the Watercourse Transition Line.

(C) Trees to be harvested or retained shall be marked by, or under the supervision of, an RPF prior to Timber Operations within the WLPZ or ELZ/EEZ.

(D) Within the WLPZ, or ELZ/EEZ, if the Stocking Standards of 14 CCR § 952.7 are not met upon completion of Timber Operations, unless the area meets the definition of Substantially Damaged Timberlands, at least ten (10) trees shall be planted for each tree harvested but need not exceed the point count standards contained in 14 CCR § 952.7(b)(1), as appropriate~~an average point count of 300 trees per acre~~.

\*\*\*No changes to the remainder of this section\*\*\*\*

Note: Authority cited: Sections 4551, 4562.7 and 21000(g), Public Resources Code. Reference: Sections 751, 4512, 4513, 4551.5, 21000(g), 21001(b) and 21002.1, Public Resources Code; Sections 100, 1243 and 13050(f), Water Code; and Sections 1600 and 5650(c), Fish and Game Code.

# § 1072.6. Point Count Stocking Sampling Procedure

The silvicultural Rules of each forest District and the Act contain point count Stocking Standards to be met following the completion of a Timber Operation. The following procedure shall be used to determine if these Stocking Standards have been met.

Since there are separate values for three different size classes, three circular concentric plots may be needed at each plot center. The following standards are for ~~a 300 point count~~each Forest District listed below~~.~~:

(a) Coast Forest District (two hundred (200) point count)

(~~a~~1) For trees counted as one point each, a plot with an ~~6.80~~8.33 foot radius is used (1/~~300~~200th of an acre). If a Countable Tree of a value of at least one point is found in the plot, it is stocked, so recorded, and the Timber Owner or agent thereof moves on to the next plot center. If no Countable Tree is found, the next concentric plot is measured.

(~~b~~2) For trees counted as ~~three~~ two (2) points each, a plot with an 11.78 foot radius is used (1/100th of an acre). If a Countable Tree of a value of at least two 2)~~three~~ points is found in the plot, it is stocked, so recorded, and the Timber Owner or the agent thereof moves on to the next plot center. If no Countable Tree is found, the next larger concentric plot is measured.

(~~c~~3) For trees counted as ~~six~~ four (4) points each, a plot with a 16.65 foot radius is used (1/50th of an acre). If a Countable Tree of a value of at least four (4)~~six~~ points is found in the plot, it is stocked. If no Countable Trees of the required sizes are found in the three (3) concentric plots, the plot center is recorded as being unstocked and the Timber Owner or agent thereof moves on to the next plot center. For point counts of ~~450~~one hundred twenty-five (125) per acre, the three (3) concentric circular plot radius sizes are: ~~5.55~~10.53 feet (1/~~450~~125th of an acre), ~~9.61~~ 14.89 feet (1/~~150~~62.5th of an acre), and ~~13.6~~ 21.06 feet (1/~~75~~ 31.25th of an acre). For point counts of ~~150~~one hundred (100) per acre, the three (3) concentric circular plot radius sizes are: ~~9.61~~ 11.78 feet (1/~~150~~100th of an acre), 16.65 feet (1/50th of an acre), 23.55 feet (1/25th of an acre).

(4) The point count values of various size trees and for determining how sprouts will be counted is found in 14 CCR §~~§~~ 912.7~~, 932.7 and 952.7~~.

(b) Northern and Southern (one hundred twenty-five (125) point count)

(1) For trees counted as one (1) point each, a plot with a 10.53 foot radius is used (1/125th of an acre). If a Countable Tree of a value of at least one (1) point is found in the plot, it is stocked, so recorded, and the Timber Owner or agent thereof moves on to the next plot center. If no Countable Tree is found, the next concentric plot is measured.

(2) For trees counted as two (2) points each, a plot with a 14.89 foot radius is used (1/62.5th of an acre). If a Countable Tree of a value of at least two (2) points is found in the plot, it is stocked, so recorded, and the Timber Owner or the agent thereof moves on to the next plot center. If no Countable Tree is found, the next larger concentric plot is measured.

(3) For trees counted as three (3) points each, a plot with an 18.24 foot radius is used (1/41.67th of an acre). If a Countable Tree of a value of at least three (3) points is found in the plot, it is stocked. If no Countable Trees of the required sizes are found in the three concentric plots, the plot center is recorded as being unstocked and the Timber Owner or agent thereof moves on to the next plot center. For point counts of one hundred (100) per acre, the three concentric circular plot radius sizes are: 11.78 feet (1/100th of an acre), 16.65 feet (1/50th of an acre), and 20.39 feet (1/33.34th of an acre).

(4) The point count values of various size trees and for determining how sprouts will be counted is found in 14 CCR §§ 932.7 and 952.7.

Note: Authority cited: Sections 4551 and 4587, Public Resources Code. Reference: Sections 4587 and 4561.2 Public Resources Code.

# § 1080.1 Stocking Requirements for Substantially Damaged Timberlands

(a) The Stocking Standards to be maintained or established where substantial damage has occurred prior to the start of Timber Operations, or where such damage has occurred following the start of Timber Operations but before a Stocking report has been submitted or approved by the Director, are:

(1) On Sites III and better, the Stocking shall consist of at least ten (10) Countable Trees planted for each live tree harvested during conduct of salvage operations following the substantial damage, but need not exceed an average point count of those standards established within 14 CCR § 912.7, 932.7, or 952.7, as appropriate~~300 per acre~~ ~~(741.3 per ha)~~. The number of live trees harvested shall be determined by stump count or by an equivalent procedure proposed by the RPF and approved by the Department.

(2) Where only dead, down, or Dying Trees were salvage logged following the substantial damage, no restocking is required.

(3) No restocking requirements need be met on Substantially Damaged Timberlands on Sites IV and V after Timber Operations.

(b) If Stocking Standards were met, but substantial damage occurred before a report of Stocking was approved by the Director, a report of Stocking may be submitted and approved as specified in 14 CCR § 1080.4(a).

Note: Authority cited: Sections 4551, 4553 and 4561.6, Public Resources Code. Reference: Sections 4561.2 and 4561.6, Public Resources Code.

END