

1 **Board of Forestry and Fire Protection**

2 **“Stocking Standard Amendments, 2019”**

3 **Title 14 California Code of Regulations**

4 **Division 1.5, Chapter 4**

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

6 **Subchapter 7 Article 7**

7 **Amend:**

8 **§912.7, 932.7, 952.7 Resource Conservation Standards for Minimum Stocking**

9 **§913.2, 933.2, 953.2 Regeneration Methods Used in Unevenaged Management**

10 **913.3, 933.3, 953.3 Intermediate Treatments**

11 **§913.4, 933.4, 953.4 Special Prescriptions**

12 **§916.9, 936.9, 956.9 Protection and Restoration of the Beneficial Functions of the Riparian Zone**
13 **in Watersheds with Listed Anadromous Salmonids.**

14 **§1080.1 Stocking Requirements for Substantially Damaged Timberlands**

15
16 **912.7, 932.7, 952.7 Resource Conservation Standards for Minimum Stocking [All Districts, note**
17 **(b)(1)(D)]**

18 The following resource conservation standards constitute minimum acceptable stocking in the Coast
19 [Northern, Southern] Forest District after timber operations have been completed.

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

22 **(b)** An area on which timber operations have taken place shall be classified as acceptably stocked if
23 either of the standards set forth in (1) or (2) below are met within five (5) years after completion of timber
24 operations unless otherwise specified in the rules.

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

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

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

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

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

12 **(1)[Coast]** An area contains an average point count of 200 per acre on Site I and II lands, 125
13 on Site III lands, or 100 on site IV and V lands. ~~For the Southern Subdistrict. An area contains~~
14 ~~an average point count of 300 per acre on Site I and II lands, and 200 on Site III, IV, or V lands.~~

15 The point count to be computed as follows:

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

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

20 **(C)** Each countable tree over 12 inches d.b.h. counts as ~~6~~ points. [SD1]

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

24 **(1)[Northern, Southern]** An area contains an average point count of 125 per acre on Site I, II
25 and III lands or 100 on site IV and V lands to be computed as follows:

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

3 (B) Each countable tree over 4 inches and not more than 12 inches d.b.h. counts 32
4 points.

5 (C) Each countable tree over 12 inches d.b.h. counts as 63 points. [SD2]

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

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

11 **(2)** The average residual basal area measured in stems 1 inch or larger in diameter, is at least
12 85 square ft. per acre on Site I lands, and 50 square ft. per acre on lands of Site II classification
13 or lower. Site classification shall be determined by the RPF who prepared the plan.

14 **(3)** To the extent basal area standards are specified in the rules in excess of 14 CCR §
15 912.7(b)(2) [932.7(b)(2), 952.7(b)(2)], up to 15 square feet of basal area of those standards
16 higher than the minimum may be met by counting snags, and decadent or deformed trees of
17 value to wildlife in the following sizes:

18 **(A)** 30 inches or greater dbh and 50 feet or greater in height on site I and II lands;

19 **(B)** 24 inches or greater dbh and 30 feet or greater in height on site III lands; and

20 **(C)** 20 inches or greater dbh and 20 feet or greater in height on site IV and V lands.

21 **(c)** The substitution provided for in 14 CCR § 912.7(b)(3) [932.7(b)(2), 952.7(b)(2)] may only be done
22 when the potential spread of insects and diseases will not have a significantly adverse impact on long
23 term productivity or forest health.

24 **(d)** The resource conservation standards of the rules may be met with Group A and/or B commercial
25 species. The percentage of the stocking requirements met with Group A species shall be no less than

1 the percentage of the stand basal area they comprised before harvesting. The site occupancy provided
2 by Group A species shall not be reduced relative to Group B species. When considering site occupancy,
3 the Director shall consider the potential long term effects of relative site occupancy of Group A species
4 versus Group B species as a result of harvest. If Group A species will likely recapture the site after
5 harvest, Group B species do not need to be reduced. The time frames for recapturing the site shall be
6 consistent with achieving MSP. The Director may prohibit the use of Group A and/or B commercial
7 species which are non-indigenous or are not physiologically suited to the area involved. Exceptions may
8 be approved by the Director if the THP provides the following information and those exceptions are
9 agreed to by the timberland owner:

10 (e) A Registered Professional Forester (RPF) may propose an alternative stocking standard for any
11 proposed regeneration method, intermediate treatment or special prescription.

12 (1) The proposed alternative shall not fall below resource conservation standards for minimum
13 stocking described above. The proposed alternative stocking shall achieve suitable resource
14 conservation and contribute to the following forest health and ecological goals:

15 (A) Improved fire resilience; or

16 (B) Increased drought tolerance; or

17 (C) Improved forest pest and disease resistance; or

18 (D) Increased carbon sequestration rates and climate benefits related to forests and
19 durable wood products.

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

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

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

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

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

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

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

16 (3) The proposed alternative stocking area shall be inspected on site by the Director. A sample
17 mark may be required based upon the type of harvest. The Director will verify on-site conditions
18 and certify that the proposed alternative Stocking will achieve suitable resource conservation.
19 The Director may approve the proposed alternative if the intent of the Act and the Rules will be
20 met, and there will not be an immediate significant and long-term harm to the natural resources
21 of the state.

22
23 Note: Authority cited: Sections 4551, 4553, ~~and~~ 4561.1, and 4561.2, Public Resources Code. Reference:
24 Sections 4561, ~~and~~ 4561.1, and 4561.2, Public Resources Code.

1 **913.2, 933.2, 953.2 Regeneration Methods Used in Unevenaged Management [All Districts, Note**
2 **variations by District in (a)(2)(A)(1)]**

3 Unevenaged management is utilized to establish and maintain an unevenaged stand structure.

4 Unevenaged management attributes include the establishment and/or maintenance of a multi-aged,
5 balanced stand structure, promotion of growth on leave trees throughout a broad range of diameter
6 classes, and encouragement of natural reproduction.

7 **(a) Selection** Under the selection regeneration method, the trees are removed individually or in small
8 groups sized from .25 acres to 2.5 acres.

9 **(1)** Trees to be harvested or trees to be retained shall be marked by or under the supervision of
10 the RPF prior to felling operations. When openings greater than .25 acres will be created, the
11 boundaries of the small group(s) may be designated in lieu of marking individual trees within the
12 small group areas. A sample area must be marked prior to a preharvest inspection for
13 evaluation. The sample area shall include at least 10% of the harvest area up to a maximum of
14 20 acres per stand type which is representative of the range of conditions present in the area.

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

18 **(A) Selection System.**

- 19 **1.** On Site I lands at least **[125 Coast] [100 Northern & Southern]** square feet
20 per acre of basal area shall be retained.
- 21 **2.** On Site II and III lands at least 75 square feet per acre of basal area shall be
22 retained.
- 23 **3.** On Site IV and V lands at least 50 square feet per acre of basal area shall be
24 retained.

1 **4.** Unless the plan submitter demonstrates how the proposed harvest will
2 achieveMSP pursuant to 14 CCR § 913.11 [933.11, 953.11] (a) or (b), the
3 residual stand shall contain sufficient trees to meet at least the basal area, size,
4 and phenotypic quality of tree requirement specified under the seed tree
5 method.

6 **(B) Group Selection.**

7 **1.** At least 80% of the stocked plots must meet the Basal Area stocking
8 standards of 14 CCR § 913.2(a)(2)(A), [933.2(a)(2)(A); 953.2(a)(2)(A)].

9 **2.** Not more than 20% of the stocked plots may meet stocking standards utilizing
10 the ~~300 point count~~ standards of 14 CCR § 912.7 [932.7, 952.7] with trees that
11 are at least 10 (ten) years old.

12 **3.** An RPF or supervised designee may offset up to 8 plots per 40 plots where
13 those plot centers are initially placed within small group clearings created during
14 the current harvest. Unless substantially damaged by fire, the RPF or
15 supervised designee shall not exclude small group clearings created by
16 previous timber harvesting from the stocking survey.

17 **4.** Unless the plan submitter demonstrates how the proposed harvest will
18 achieve MSP pursuant to 14 CCR § 913.11 [933.11, 953.11] (a) or (b), the
19 residual stand shall contain sufficient trees to meet at least the basal area, size,
20 and phenotypic quality of tree requirements specified under the seed tree
21 method.

22 **(3)** Within any THP, small group clearings under the selection method shall be
23 separated by a logical logging area.

1 (4) Following completion of timber operations (including site preparation) not
2 more than 20 percent of the THP area harvested by this method shall be
3 covered by small group clearings.

4 (5) Exceptions to stocking standards in 14 CCR § 913.2(a)(2), [933.2(a)(2),
5 953.2(a)(2)] above may be granted only when proposed by the RPF and
6 explained and justified in the plan, but in no case will the exceptions be less
7 than specified in 14 CCR § 912.7 (b)(2), [932.7(b)(2), 952.7(b)(2)]. Exceptions
8 may only be granted when the RPF clearly demonstrates that the existing stand
9 will grow substantially less than both the potential site productive capacity and
10 the proposed post-harvest stand.

11
12 Note: Authority cited: Sections 4551 and 4561, Public Resources Code. Reference: Sections 4561,
13 4582(h) and 4587, Public Resources Code.

14 **913.3, 933.3, 953.3 Intermediate Treatments**

15
16 (a) **Commercial Thinning.** Commercial thinning is the removal of trees in a young-growth stand to
17 maintain or increase average stand Diameter of the residual crop trees, promote timber growth, and/or
18 improve forest health. The residual stand shall consist primarily of healthy and vigorous dominant and
19 codominant trees from the preharvest stand.

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

24 (A) Where the preharvest dominant and codominant crown Canopy is occupied primarily by trees
25 greater than 14 inches dbh:

1 1. On Site I lands at least 125 sq.ft. per acre of basal area shall be left.

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

3 3. On Site IV lands at least 75 sq.ft. per acre of basal area shall be left.

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

5 **(B)** Where the preharvest dominant and codominant crown Canopy is occupied primarily by trees less
6 than 14 inches dbh, a minimum of one hundred (100) trees per acre over 4 inches dbh shall be retained
7 for site I, II and III. For site IV and V 75 the Coast District and sixty (60) trees per acre over 4 inches dbh
8 shall be retained for the Northern and Southern Districts. [SD3]

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

11 **(3)** For stands harvested in compliance with 14 CCR § 913.3(a)(1)(A), the trees to be harvested or the
12 trees to be retained shall be marked by or under the supervision of an RPF prior to felling operations.

13 For all thinning proposals, a sample area must be marked prior to a preharvest inspection for evaluation.

14 The sample area shall include at least 10% of the thinning area up to a maximum of 20 acres per stand
15 type which is representative of the range of conditions present in the area. The Director may waive the

16 Marking requirements for the remainder of the THP area when explained and justified in the THP.

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

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

1 **(1)** The RPF shall estimate in the THP expected level of Stocking to be retained upon completion of
2 operations.

3 **(2)** Immediately upon completion of operations, the area shall meet the Stocking Standards of 14 CCR §
4 912.7(b) unless explained and justified in the Plan. If Stocking is to be met immediately following
5 completion of operations, a report of Stocking shall be filed within 6 months of completion. If this
6 standard cannot be met, the area must be planted during the first planting season following completion
7 of operations and the minimum Stocking Standards of 14 CCR § 912.7(b)(1) must be met within 5 years
8 following completion of operations.

9 **(3)** Trees to be harvested or trees to be retained shall be marked by or under the supervision of an RPF
10 prior to felling operations. When openings greater than .25 acres will be created, the boundaries of the
11 Small Group(s) may be designated in lieu of Marking individual trees within the Small Group areas. A
12 sample area must be marked prior to a preharvest inspection for evaluation. The sample area shall
13 include at least 10% of the area, up to a maximum of 20 acres per stand type, whichever is less, which is
14 representative of the range of conditions present in the area. The Director may waive the Marking
15 requirement for the remainder of the THP area when explained and justified in the THP.

16
17 Note: Authority cited: Sections 4551 and 4561, Public Resources Code. Reference: Sections 4582(d),
18 (h) and 4587, Public Resources Code.

19
20 **913.4, 933.4, 953.4 Special Prescriptions**

21 The following special harvesting methods are appropriate under certain conditions:

22 **(a) Special Treatment Area Prescriptions.** Special consideration in Special Treatment Areas shall be
23 given to selection of a regeneration method or intermediate treatment compatible with the objectives for
24 which the special area was established. Such areas shall be identified in the plan. To assure the integrity
25 of legally designated historical and archaeological sites and legally designated ecological reserves, and

1 that the objectives of the special treatment areas are met, the RPF and the Director may agree, after on-
2 the-ground inspection, if requested by either party, on specific silvicultural and logging practices to
3 protect such areas. The Director shall notify affected agencies or groups with expertise in the resource
4 involved in the special treatment area of any such areas located during the THP review process.

5 **(b) Rehabilitation of Understocked Area Prescription.** For the purposes of restoring and enhancing
6 the productivity of commercial timberlands which do not meet the stocking standards defined in 14 CCR
7 912.7 [932.7, 952.7] prior to any timber operations on such lands, an area may be harvested provided it
8 is restocked in accordance with Subsections (l) or (2). To facilitate restocking, a regeneration plan must
9 be included in the THP. The regeneration plan shall include site preparation, method of regeneration,
10 and other information appropriate to evaluate the plan.

11 (1) If the area meets the standards of 14 CCR 912.7 [932.7, 952.7] within five years of
12 completion of timber operations, the area shall be considered acceptably stocked, or shall be
13 considered acceptably stocked if it contains at least 10 planted countable trees for each tree
14 harvested on sites I, II, and III, and 5 planted countable trees for each tree harvested on site IV
15 and V.

16 ~~(2) On understocked timberlands where no countable conifer trees are to be harvested and the~~
17 ~~broadleaf species are not designated for management, the area shall be planted to equal or~~
18 ~~exceed the stocking standards of 14 CCR 912.7(b)(1) [932.7(b)(1), 952.7(b)(1)] and shall be~~
19 ~~considered acceptably stocked if within five years of completion of timber operations it contains~~
20 ~~at least an average point count of 150 100 of Group A species on all site classifications.~~

21 **OPTIONAL AMENDMENTS (c) Fuelbreak/Defensible Space.** Where some trees and other vegetation
22 and fuels are removed to create or maintain a shaded fuel break or defensible space in an area to
23 reduce the potential for wildfires and the damage they might cause. Minimum stocking standards within
24 the timber operating area shall be met immediately after harvest and shall be those found in 14 CCR
25 912.7 [932.7, 952.7]. The RPF shall describe in the plan specific vegetation and fuels treatment,

1 including timing, to reduce fuels to meet the objectives of ~~the~~ Community Fuelbreak area or other
2 objectives identified by the RPF with the written concurrence of a public fire agency and determined by
3 the Director to be consistent with the purpose of the Act. **OPTION** or a fire prevention plan with the
4 written concurrence of a public fire agency and as accepted by the Director. **OPTION** or a current and
5 approved CAL FIRE Unit Fire Plan.

6 ****

7 Note: Authority cited: Sections 4551 and 4553, Public Resources Code. Reference: Sections 4512,
8 4551.5, 4561, 4561.2, 4582 and 4582.5, Public Resources Code.

9
10 **916.9, 936.9, 956.9 Protection and Restoration of the Beneficial Functions of the Riparian Zone in**
11 **Watersheds with Listed Anadromous Salmonids. [All Districts]**

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

15 ****(t) **Emergency notices** - No timber operations are allowed in a WLPZ, or within any ELZ or EEZ
16 designated for watercourse or lake protection, under emergency notices except for:

- 17 (1) Hauling on existing roads.
- 18 (2) Road maintenance.
- 19 (3) Operations conducted for public safety.
- 20 (4) Construction or reconstruction of approved watercourse crossings.
- 21 (5) Temporary crossings of dry Class III watercourses that do not require notification under Fish
22 and Game Code §1600 et seq.
- 23 (6) Harvesting recommended in writing by CDFW to address specifically identified forest
24 conditions.
- 25 (7) The harvest of dead or dying conifer trees subject to the following conditions:

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

2 (B) Within any WLPZ, ELZ, or EEZ designated for Class II or III watercourse protection,
3 a minimum of two dead, dying, or diseased conifer trees per acre at least 16 inches
4 diameter breast high and 50 feet tall shall be retained within 50 feet of the watercourse
5 transition line.

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

8 (D) Within the WLPZ or ELZ/EEZ, if the stocking standards of 14 CCR § 912 [932,
9 952].7 are not met upon completion of timber operations, unless the area meets the
10 definition of substantially damaged timberlands, at least ten trees shall be planted for
11 each tree harvested but need not exceed an average point count of ~~300~~ 200 trees per
12 acre.

13
14 Note: Authority cited: Sections 4551, 4562.7 and 21000(g), Public Resources Code. Reference: Sections
15 751, 4512, 4513, 4551.5, 4750, 4750.3, 4750.4, 21000(g), 21001(b) and 21002.1, Public Resources
16 Code; Sections 100, 1243 and 13050(f), Water Code; and Sections 1600 and 5650(c), Fish and Game
17 Code.

18 19 **1080.1 Stocking Requirements for Substantially Damaged Timberlands**

20 (a) The stocking standards to be maintained or established where substantial damage has occurred prior
21 to the start of timber operations, or where such damage has occurred following the start of timber
22 operations but before a stocking report has been submitted or approved by the Director, are:

23 (1) On Sites III and better, the stocking shall consist of at least ten countable trees planted for
24 each live tree harvested during conduct of salvage operations following the substantial damage,
25 but need not exceed an average point count of 912.7, 932.7, 952.7, as appropriate ~~300~~ 200 per

1 ~~acre~~ (741.3 per ha). The number of live trees harvested shall be determined by stump count or
2 by an equivalent procedure proposed by the RPF and approved by the Department.

3 **(2)** Where only dead, down, or dying trees were salvage logged following the substantial
4 damage, no restocking is required.

5 **(3)** No restocking requirements need be met on substantially damaged timberlands on Sites IV
6 and V after timber operations.

7
8 Note: Authority cited: Sections 4551, 4553 and 4561.6, Public Resources Code. Reference: Section
9 4561.6, Public Resources Code.

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