WAC 222-30-023 Riparian management zones for exempt 20-acre parcels.

Note: Compliance with this section does not ensure compliance with the federal Endangered Species Act or the Clean Water Act.

On parcels of 20 contiguous acres or less, landowners with total parcel ownership of less than 80 forested acres shall not be required to leave the riparian buffers described in WAC 222-30-021 and 222-30-022. These landowners are required to follow applicable watershed analysis riparian prescriptions in effect as of January 1, 1999, or if there are no watershed analysis riparian prescriptions in effect these landowners are required to follow the riparian management zone rules below.

- *(1) Western Washington RMZs for exempt 20-acre parcels. Riparian management zones are measured horizontally from the outer edge of bankfull width of a Type S or F Water and extend to the line where vegetation changes from wetland to upland plant community, or the line required to leave sufficient shade as required by WAC 222-30-040, whichever is greater, but must not be less than 29 feet in width nor more than the maximum widths described in (f) of this subsection, provided that the riparian management zone width shall be expanded as necessary to include wetlands or ponds adjacent to the stream. When the riparian management zone overlaps a Type A or B Wetland or a wetland management zone, the requirement which best protects public resources shall apply.
- (a) Harvest units shall be designed so that felling, bucking, yarding or skidding, and reforestation can be accomplished in accordance with these rules, including those rules relating to stream bank integrity and shade requirements to maintain stream temperature. Where the need for additional actions or restrictions adjacent to waters not covered by the following become evident, WAC 222-12-050 and 222-12-060 may apply.
- (b) When requested in writing by the applicant, the department shall assist in preparation of an alternate plan for the riparian management zone.
- (c) Landowners must meet the following shade requirements in effect January 1, 1999, to maintain stream temperature.
- *(i) Determination of adequate shade. The temperature prediction method in (c)(ii) and (iii) of this subsection shall be used to determine appropriate shade levels for flowing Type S and F Waters to prevent excessive water temperatures which may have detrimental impact on aquatic resources.
- *(ii) Temperature prediction method. In addition to the riparian management zone requirements described in (f) of this subsection, leave trees shall be retained within the maximum riparian management zones on flowing Type S and F Waters as provided by the method described in the board manual which includes the following considerations:
 - (A) Minimum shade retention requirements; and
 - (B) Regional water temperature characteristics; and
 - (C) Elevation; and
- (D) Temperature criteria defined for stream classes in chapter 173-201A WAC.
- *(iii) Leave tree requirements for shade. The method described in (c)(ii) of this subsection shall be used to establish the minimum shade cover based on site-specific characteristics. When site-specific data indicate that preharvest conditions do not meet the minimums established by the method, no additional shade removal from riparian management zones will be allowed.

- (iv) Waivers. The department may waive or modify the shade requirements where:
- (A) The applicant agrees to a staggered setting program producing equal or greater shade requirements to maintain stream temperature; or
- (B) The applicant provides alternative means of stream temperature control satisfactory to the department; or
- (C) The temperature method indicates that additional shade will not affect stream temperature.
- (d) For wildlife habitat within the riparian management zone, leave an average of 5 undisturbed and uncut wildlife trees per acre at the ratio of 1 deciduous tree to 1 conifer tree equal in size to the largest existing trees of those species within the zone. Where the 1 to 1 ratio is not possible, then substitute either species present. Forty percent or more of the leave trees shall be live and undamaged on completion of harvest. Wildlife trees shall be left in clumps whenever possible.
- (e) When 10 percent or more of the harvest unit lies within any combination of a riparian management zone of Type S or F Waters or a wetland management zone and the harvest unit is a clearcutting of 20 acres or less, leave not less than 50 percent of the trees required in (f) of this subsection.
- (f) Within the riparian management zone, trees shall be left for wildlife and fisheries habitat as provided for in the chart below. Fifty percent or more of the trees shall be live and undamaged on completion of the harvest. The leave trees shall be randomly distributed where feasible; some clumping is allowed to accommodate operational considerations. The number, size, species and ratio of leave trees, deciduous to conifer, is specified by the bed material and average width of the water type within the harvest unit. Trees left according to (c) of this subsection may be included in the number of required leave trees in this subsection.

Western Washington Riparian Leave Tree Requirements For exempt 20-acre parcels

Water Type/Average Bankfull Width	RMZ Maximum Width	Ratio of Conifer to Deciduous/ Minimum Size Leave Trees	# Trees/1000 ft. each side	
			Gravel/Cobble <10" Diameter	Boulder/Bedrock
S or F Water greater than or equal to 75'	115'	representative of stand	58 trees	29 trees
S Water less than 75' and F Water less than 75' and greater than or equal to 10'	86'	representative of stand	115 trees	60 trees
F Water less than 10' and greater than or equal to 5'	58'	2 to 1 12" or next largest available ¹	86 trees	29 trees
F Water less than 5'	29'	1 to 1 6" or next largest available ¹	29 trees	29 trees

^{1 &}quot;Or next largest available" requires that the next largest trees to those specified in the rule be left standing when those available are smaller than the size specified.

Ponds or lakes which are Type S or F Waters shall have the same leave tree requirements as boulder/bedrock streams.

*(2) Eastern Washington riparian management zones for exempt 20-acre parcels. These zones shall be measured horizontally from the outer edge of bankfull width of Type S or F Waters and extend to the line

where vegetation changes from wetland to upland plant community, or to the line required to leave sufficient shade as required by WAC 222-30-040, whichever is greater, but shall not be less than the minimum width nor more than the maximum widths described in (c) of this subsection, provided that the riparian management zone width shall be expanded as necessary to include wetlands or ponds adjacent to the stream. When the riparian management zone overlaps a Type A or B Wetland or a wetland management zone, the requirement which best protects public resources shall apply.

- (a) Harvest units shall be designed so that felling, bucking, yarding or skidding, and reforestation can be accomplished in accordance with these rules, including those rules relating to stream bank integrity and shade requirements to maintain stream temperature. Where the need for additional actions or restrictions adjacent to waters not covered by the following become evident, WAC 222-12-050 and 222-12-060 may apply.
- (b) When requested in writing by the applicant, the department shall assist in preparation of an alternate plan for the riparian management zone.
- (c) Within the riparian management zone, trees shall be left for wildlife and fisheries habitat as provided for below. Fifty percent or more of the trees shall be live and undamaged on completion of the harvest. The leave trees shall be randomly distributed where feasible; some clumping is allowed to accommodate operational considerations.
- (i) The width of the riparian management zone shall be based on the adjacent harvest type as defined in WAC 222-16-010 "Partial cutting." When the adjacent unit harvest type is:

Partial cutting - The riparian management zone width shall be a minimum of 35 feet to a maximum of 58 feet on each side of the stream.

Other harvest types - The riparian management zone shall average 58 feet in width on each side of the stream with a minimum width of 35 feet and a maximum of 345 feet on each side of the stream.

- (ii) Leave tree requirements within the riparian management zones of Type S or F Waters:
- (A) Leave all trees 12 inches or less in diameter breast height (dbh); and
- (B) Leave all wildlife reserve trees within the riparian management zone where operations in the vicinity do not violate the state safety regulations (chapter 296-54 WAC and chapter 49.17 RCW administered by department of labor and industries, safety division); and
- (C) Leave 18 live conifer trees per acre between 12 inches dbh and 20 inches dbh distributed by size, as representative of the stand; and
- (D) Leave 4 live conifer trees per acre 20 inches dbh or larger and the 2 largest live deciduous trees per acre 16 inches dbh or larger. Where these deciduous trees do not exist, and where 2 wildlife reserve trees per acre 20 inches or larger do not exist, substitute 2 live conifer trees per acre 20 inches dbh or larger. If live conifer trees of 20 inches dbh or larger do not exist within the riparian management zone, then substitute the 5 largest live conifer trees per acre; and
- (E) Leave 3 live deciduous trees per acre between 12 inches and 16 inches dbh where they exist.
- (iii) Minimum leave tree requirements per acre for Type S or F Waters. Trees left for (c)(ii) of this subsection shall be included in the minimum counts.

- (A) On streams with a boulder/bedrock bed, the minimum leave tree requirements shall be 75 trees per acre 4 inches dbh or larger.
- (B) On streams with a gravel/cobble (less than 10 inches diameter) bed, the minimum leave tree requirement shall be 155 trees per acre 4 inches dbh or larger.
- (C) On lakes or ponds, the minimum leave tree requirement shall be 86 trees per acre 4 inches dbh or larger.

Note: See the board manual for guidelines for calculating trees per acre and average RMZ widths.

- (d) When 10 percent or more of the harvest unit lies within any combination of a riparian management zone of Type S or F Waters or a wetland management zone and the harvest unit is 20 acres or less, leave not less than 50 percent of the trees required in (c) of this subsection. (See WAC 222-16-010 "Partial cutting.")
- *(3) Riparian leave tree areas for exempt 20-acre parcels. The department will require trees to be left along Type Np Waters where such practices are necessary to protect public resources. Where such practices are necessary, leave at least 29 conifer or deciduous trees, 6 inches in diameter or larger, on each side of every 1000 feet of stream length within 29 feet of the stream. The leave trees may be arranged to accommodate the operation.
- (4) For the purposes of this section RMZ means: A specified area alongside Type S and F Waters where specific measures are taken to protect water quality and fish and wildlife habitat.

[Statutory Authority: RCW 76.09.040. WSR 10-23-077, § 222-30-023, filed 11/15/10, effective 12/16/10; WSR 08-24-011, § 222-30-023, filed 11/21/08, effective 12/22/08; WSR 05-12-119, § 222-30-023, filed 5/31/05, effective 7/1/05. Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). WSR 01-12-042, § 222-30-023, filed 5/30/01, effective 7/1/01.]