AMENDATORY SECTION (Amending WSR 13-21-032, filed 10/8/13, effective 12/30/13)

WAC 222-30-020 *Harvest unit planning and design. (1) **Preapplication consultation and harvest-related forest practices hydraulic projects.**

(a) Landowners contemplating forest practices hydraulic projects related to timber harvest are encouraged to consult with the department and the department of fish and wildlife prior to submitting an application to help ensure that project plans and specifications meet fish protection standards.

(b) Harvest-related forest practices hydraulic projects include, but are not limited to, projects associated with:

(i) Felling and bucking (WAC 222-30-050);

(ii) Cable yarding (WAC 222-30-060); and

(iii) Large woody material removal or repositioning (WAC 222-30-062).

(2) **Logging system.** The logging system, including forest biomass removal operations, should be appropriate for the terrain, soils, and timber type so that yarding or skidding can be economically accomplished and achieve the ecological goals of WAC 222-30-010 (2), (3) and (4) in compliance with these rules.

*(3) **Landing locations.** Locate landings to prevent damage to public resources. Avoid excessive excavation and filling.

*(4) **Western Washington riparian management zones.** (See WAC 222-30-021 and 222-30-023.)

*(5) **Eastern Washington riparian management zones.** (See WAC 222-30-022 and 222-30-023.)

*(6) **Riparian leave tree areas.** (See WAC 222-30-021, 222-30-022, and 222-30-023.)

*(7) **Forested wetlands.** Within the wetland, unless otherwise approved in writing by the department, harvest methods shall be limited to low impact harvest or cable systems. Where feasible, at least one end of the log shall be suspended during yarding.

(a) When forested wetlands are included within the harvest area, landowners are encouraged to leave a portion (thirty to seventy percent) of the wildlife reserve tree requirement for the harvest area within a wetland. In order to retain undisturbed habitat within forested wetlands, these trees should be left in clumps. Leave tree areas should be clumped adjacent to streams, riparian management zones, or wetland management zones where possible and they exist within forested wetlands. Green recruitment trees should be representative of the size and species found within the wetland. Leave nonmerchantable trees standing where feasible.

(b) If a RMZ or WMZ lies within a forested wetland, the leave tree requirement associated with those areas may be counted toward the percentages in (a) of this subsection.

(c) Where riparian associated wetlands are present in the outer zone of a RMZ, trees may be left in the zone to maximize wetland function. See WAC 222-30-021 *(1)(c)(ii).

(d) If the conditions described in (a) and (b) of this subsection are met, the distribution requirements for wildlife reserve trees and green recruitment trees (subsection ((~~(11)~~)) (12)(e) of this section) are modified as follows: For purposes of distribution, no point within the harvest unit shall be more than one thousand feet from a wildlife reserve tree and green recruitment tree retention area.

(e) Approximate determination of the boundaries of forested wetlands greater than three acres shall be required. Approximate boundaries and areas shall be deemed to be sufficient for harvest operations.

(f) The department shall consult with the department of fish and wildlife and affected Indian tribes about site specific impacts of forest practices on wetland-sensitive species in forested wetlands.

*(8) **Wetland management zones (WMZ).** These zones shall apply to Type A and B Wetlands, as indicated in (a) of this subsection, and shall be measured horizontally from the wetland edge or the point where the nonforested wetland becomes a forested wetland, as determined by the method described in the board manual section 8, and shall be of an average width as described in (a) of this subsection. These zones shall not be less than the minimum nor more than the maximum widths described in (a) of this subsection. When these zones overlap a riparian management zone the requirement which best protects public resources shall apply.

*(a) Wetland management zones (WMZ) shall have variable widths based on the size of the wetland and the wetland type, described as follows:

Wetland Management Zones

Wetland Type	Acres of Nonforested Wetland*	Maximum WMZ Width	Average WMZ Width	Minimum WMZ Width
A (including bogs)	Greater than 5	200 feet	100 feet	50 feet
A (including bogs)	0.5 to 5	100 feet	50 feet	25 feet
A (bogs only)	0.25 to 0.5	100 feet	50 feet	25 feet
B	Greater than 5	100 feet	50 feet	25 feet
B	0.5 to 5			25 feet
B	0.25 to 0.5	No WMZ required	No WMZ required	

* For bogs, both forested and nonforested acres are included.

(b) Within the WMZ, leave a total of seventy-five trees per acre of WMZ greater than six inches dbh in Western Washington and greater than four inches dbh in Eastern Washington, twenty-five of which shall be greater than twelve inches dbh including five trees greater than twenty inches dbh, where they exist. Leave trees shall be representative of the species found within the WMZ.

(c) Retain wildlife reserve trees where feasible. Type 1 and 3 wildlife reserve trees may be counted among, and need not exceed, the trees required in (b) of this subsection. Leave all cull logs on site.

(d) Partial-cutting or removal of groups of trees is acceptable within the WMZ. The maximum width of openings created by harvesting within the WMZ shall not exceed one hundred feet as measured parallel to the wetland edge. Openings within WMZs shall be no closer than two hundred feet. Landowners are encouraged to concentrate leave trees within the WMZ to the wetland edge.

*(e) Tractors, wheeled skidders, or other ground based harvesting systems shall not be used within the minimum WMZ width without written approval of the department.

*(f) When ten percent or more of a harvest unit lies within a wetland management zone and either the harvest unit is a clearcut of thirty acres or less or the harvest unit is a partial cut of eighty acres or less, leave not less than fifty percent of the trees required in (b) of this subsection.

*(9) **Type A or B Wetlands.** Within the boundaries of Type A or B Wetlands the following shall apply:

(a) Individual trees or forested wetland areas less than 0.5 acre in size may occur. These trees have a high habitat value to the non-forested wetland. Leave individual trees or forested wetlands less than 0.5 acre. These trees may be counted toward the WMZ requirements.

(b) Harvest of upland areas or forested wetlands which are surrounded by Type A or B Wetlands must be conducted in accordance with a plan, approved in writing by the department.

(c) No timber shall be felled into or cable yarded across Type A or B Wetlands without written approval of the department.

(d) Harvest shall not be allowed within a Type A Wetland which meets the definition of a bog.

(10) **Future productivity.** Harvesting shall leave the land in a condition conducive to future timber production except:

(a) To the degree required for riparian management zones; or

(b) Where the lands are being converted to another use or classified urban lands as specified in WAC 222-34-050.

(11) **Wildlife habitat.** This subsection is designed to encourage timber harvest practices that would protect wildlife habitats, provided, that such action shall not unreasonably restrict landowners action without compensation.

(a) The applicant should make every reasonable effort to cooperate with the department of fish and wildlife to identify critical habitats (state) as defined by the board. Where these habitats are known to the applicant, they shall be identified in the application or notification.

(b) Harvesting methods and patterns in established big game winter ranges should be designed to ensure adequate access routes and escape cover where practical.

(i) Where practical, cutting units should be designed to conform with topographical features.

(ii) Where practical on established big game winter ranges, cutting units should be dispersed over the area to provide cover, access for wildlife, and to increase edge effect.

(12) **Wildlife reserve tree management.** In areas where leaving wildlife reserve trees under this section will not create a significant fire hazard, or significant hazard to overhead power lines and operations that are proposed in the vicinity of wildlife reserve trees will not create a significant safety or residential hazard nor conflict with achieving conformance with the limitation of or performance with the provisions of chapter 76.04 RCW (snag falling law) and chapter 49.17 RCW (safety), wildlife reserve trees will be left to protect habitat for cavity nesting wildlife in accordance with the following:

(a) For the purposes of this subsection the following defines eastern and western Washington boundaries for wildlife reserve tree management. Beginning at the International Border and Okanogan National Forest boundary at the N1/4 corner Section 6, T. 40N, R. 24E., W.M., south and west along the Pasayten Wilderness boundary to the west line of Section 30, T. 37N, R. 19E.,

Thence south on range line between R. 18E. and R. 19E., to the Lake Chelan-Sawtooth Wilderness at Section 31, T. 35N, R. 19E.,

Thence south and east along the eastern wilderness boundary of Lake Chelan-Sawtooth Wilderness to the west line of Section 18, T. 31N, R. 19E. on the north shore of Lake Chelan,

Thence south on the range line between R. 18E. and R. 19E. to the SE corner of T. 28N, R. 18E.,

Thence west on the township line between T. 27N, and T. 28N to the NW corner of T. 27N, R. 17E.,

Thence south on range line between R. 16E. and R. 17E. to the Alpine Lakes Wilderness at Section 31, T. 26N, R. 17E.,

Thence south along the eastern wilderness boundary to the west line of Section 6, T. 22N, R. 17E.,

Thence south on range line between R. 16E. and R. 17E. to the SE corner of T. 22N, R. 16E.,

Thence west along township line between T. 21N, and T. 22N to the NW corner of T. 21N, R. 15E.,

Thence south along range line between R. 14E. and R. 15E. to the SW corner of T. 20N, R. 15E.,

Thence east along township line between T. 19N, and T. 20N to the SW corner of T. 20N, R. 16E.,

Thence south along range line between R. 15E. and R. 16E. to the SW corner of T. 18N, R. 16E.,

Thence west along township line between T. 17N, and T. 18N to the SE corner of T. 18N, R. 14E.,

Thence south along range line between T. 14E. and R. 15E. to the SW corner of T. 14N, R. 15E.,

Thence south and west along Wenatchee National Forest boundary to the NW corner of T. 12N, R. 14E.,

Thence south along range line between R. 13E. and R. 14E. to the SE corner of T. 10N, R. 13E.,

Thence west along township line between T. 9N, and T. 10N to the NW corner of T. 9N, R. 12E.,

Thence south along range line between R. 11E. and R. 12E. to the SE corner of T. 8N, R. 11E.,

Thence west along township line between T. 7N, and T. 8N to the Gifford Pinchot National Forest boundary,

Thence south along forest boundary to the SE corner of Section 33, T. 7N, R. 11E.,

Thence west along township line between T. 6N, and T. 7N to the SE corner of T. 7N, R. 9E.,

Thence south along Skamania-Klickitat County line to Oregon-Washington.

(b) In Western Washington, for each acre harvested three wildlife reserve trees, two green recruitment trees, and two down logs shall be left. In Eastern Washington for each acre harvested two wildlife reserve trees, two green recruitment trees, and two down logs shall be left. Type 1 wildlife reserve trees may be counted, at the landowner's option, either as a wildlife reserve tree or as a green recruitment tree. If adequate wildlife reserve trees are not available, no additional green recruitment trees will be required as substitutes. Landowners shall not under any circumstances be required to leave more than two green recruitment trees per acre for the purpose of wildlife reserve tree recruitment, or be required to leave Type 3 or 4 wildlife reserve trees.

(c) In Western Washington, only those wildlife reserve trees ten or more feet in height and twelve or more inches dbh shall be counted toward wildlife reserve tree retention requirements. In Eastern Washington, only those wildlife reserve trees ten or more feet in height and ten or more inches dbh shall be counted toward wildlife reserve tree retention requirements. Green recruitment trees, ten or more inches dbh and thirty or more feet in height and with at least one-third of their height in live crown, left standing after harvest may be counted toward green recruitment tree requirements. Green recruitment

trees and/or wildlife reserve trees left to meet other requirements of the rules or those left voluntarily by the landowner shall be counted toward satisfying the requirements of this section. Large, live defective trees with broken tops, cavities, and other severe defects are preferred as green recruitment trees. Only down logs with a small end diameter greater than or equal to twelve inches and a length greater than or equal to twenty feet or equivalent volume shall be counted under (a) of this subsection. Large cull logs are preferred as down logs.

(d) In the areas where wildlife reserve trees are left, the largest diameter wildlife reserve trees shall be retained to meet the specific needs of cavity nesters. Where the opportunity exists, larger trees with numerous cavities should be retained and count as recruitment trees.

(e) In order to facilitate safe and efficient harvesting operations, wildlife reserve trees and recruitment trees may be left in clumps. For purposes of distribution, no point within the harvest unit shall be more than eight hundred feet from a wildlife reserve tree or green recruitment tree retention area. Subject to this distribution requirement, the location of these retention areas and the selection of recruitment trees shall be at the landowner's discretion. Closer spacing of retention areas through voluntary action of the landowner is encouraged. Wildlife reserve tree and green recruitment tree retention areas may include, but are not limited to, riparian management zones, riparian leave tree areas, other regulatory leave areas, or voluntary leave areas that contain wildlife reserve trees and/or green recruitment trees.

(f) In order to provide for safety, landowners may remove any Type 3 or 4 wildlife reserve tree, which poses a threat to humans working, recreating, or residing within the hazard area of that tree. In order to provide for fire safety, the distribution of wildlife reserve tree retention areas, described in (e) of this subsection, may be modified as necessary based on a wildlife reserve tree management plan proposed by the landowner and approved by the department.

*(13) **Channel migration zones.** No harvest, construction or salvage will be permitted within the boundaries of a channel migration zone except for the construction and maintenance of road crossings in accordance with applicable rules and the creation and use of yarding corridors consistent with WAC 222-24-020(6), 222-30-060(1), and 222-30-045(2).

(14) **Bankfull width.** No harvest or construction will be permitted within the bankfull width of any Type S or F Water or any buffered length of Type Np Water, except for the construction and maintenance of road crossings in accordance with applicable rules and creation and use of yarding corridors consistent with WAC 222-30-020 *(6) and 222-24-060(1). No salvage may take place within the bankfull width of any typed water (see WAC 222-30-045).