WAC 222-30-070 Ground-based logging systems. $^{\star}(1)$ Typed waters and wetlands.

- (a) Ground-based equipment shall not be used in Type S or F Water, except with approval by the department. Yarding across Type S or F Waters is limited to cable or other aerial logging methods.
- (b) Ground-based transport of logs across Type Np and Ns Waters shall minimize the potential for damage to public resources.
- (i) Skidding logs and driving ground-based equipment through defined channels with flowing water is not allowed.
- (ii) Ground-based transport of logs to landings across any Typed Np or Ns Water shall minimize the potential to damage public resources.
- (iii) Whenever skidding across Type Np or Ns Waters, the direction of log movement between stream banks shall be designed to minimize sediment delivery to the stream.
- (c) In order to maintain wetland water movement and water quality, and to prevent soil compaction, ground-based logging systems shall not be used in Type A or B wetlands.
- (d) Where harvest in wetlands is permitted, ground-based logging systems shall be limited to low impact harvest systems. Ground-based logging systems operating in wetlands shall only be allowed during periods of low soil moisture or frozen soil conditions.
- (e) Locations of temporary stream crossings to Np Waters shall be shown on the base map of the forest practices application. Whenever skidding in or across Type Np or Ns Waters, the direction of log movement between stream banks shall be designed to minimize sediment delivery to the stream. BMPs for stream crossings can be found in board manual section 5.

*(2) Riparian management zone.

- (a) Logging will be permitted within the riparian management zone subject to riparian management zone protection in chapter 222-30 WAC. However, any use of ground-based yarding machines within the zone must be as described in an approved forest practices application or otherwise approved in writing by the department.
- (b) When transporting logs in or through the riparian management zone with ground-based equipment, the number of routes through the zone shall be minimized.
- (c) Logs shall be transported so as to minimize damage to leave trees and vegetation in the riparian management zone, to the extent practical and consistent with good safety practices.

*(3) Wetlands management zones.

- (a) Logging will be permitted within wetland management zones subject to restrictions in WAC 222-30-020(8).
- (b) Where feasible logs shall be skidded with at least one end suspended from the ground so as to minimize soil disturbance and damage to leave trees and vegetation in the wetland management zone.
- (c) Ground-based harvesting systems shall not be used within the minimum WMZ width unless described in an approved forest practices application or otherwise approved in writing by the department.
- *(4) **Deadfalls.** Logs firmly embedded in the bed or bank of Type S or F Waters shall not be removed or disturbed without approval from the department.

*(5) Moisture conditions.

(a) Ground-based logging systems shall not be used on exposed erodible soils or saturated soils if sediment delivery is likely to disturb a wetland, stream, lake or pond.

- (b) When soil moisture is high and unrestricted operation of ground-based equipment would result in unreasonable soil compaction, operations shall be restricted to methods that minimize widespread soil compaction, or postponed until site conditions improve such that yarding may proceed without causing unreasonable soil compaction and the long-term impacts to soil productivity and moisture absorption capacity that can result.
- (6) **Protection of residual timber.** Reasonable care shall be taken to minimize damage from skidding to the stems and root systems of residual timber and to young reproduction.
 - *(7) Skid trail location and construction.
 - (a) Skid trails shall be kept to the minimum width.
- (b) Reasonable care shall be taken to minimize the amount of sidecast required and shall only be permitted above the 100-year flood level.
- (c) Skid trails shall be outsloped where practical, but be insloped where necessary to prevent logs from sliding or rolling downhill off the skid trail.
- (d) Skid trails running parallel or near parallel to streams shall be located outside the no-harvest zone of all typed waters and at least thirty feet from the outer edge of the bankfull width of the unbuffered portions of Type Np or Ns Water unless approved in writing by the department.
- (e) Skid trails shall cross the drainage point of swales at an angle to minimize the potential for delivering sediment to a typed water or where channelization is likely to occur. See board manual section 3.
 - *(8) Skid trail maintenance.
- (a) Upon completion of use and termination of seasonal use, skid trails on slopes in exposed soils shall be water barred where necessary to prevent soil erosion.
- (b) Skid trails located within two hundred feet horizontal distance of any typed water that directly delivers to the stream network shall use water bars, grade breaks, and/or slash to minimize sediment delivery to the stream. Water bars shall be placed at a frequency to minimize gullying and soil erosion. In addition to water barring, skid trails with exposed soil that is erodible and may be reasonably expected to cause damage to a public resource shall be seeded with a noninvasive plant species (preferably a species native to the state) and adapted for rapid revegetation of disturbed soil, or treated with other erosion control measures acceptable to the department.
- *(9) **Slope restrictions.** Ground-based systems shall not be used on slopes where in the opinion of the department this method of operation would cause actual or potential material damage to a public resource.
- (10) Disturbance avoidance for northern spotted owls. The operation of heavy equipment within a SOSEA boundary shall not be allowed within 0.25 mile of a northern spotted owl site center between March 1st and August 31st, provided that, this restriction shall not apply if:
- (a) The landowner demonstrates that the owls are not actively nesting during the current nesting season; or
- (b) The forest practice is operating in compliance with a plan or agreement developed for the protection of the northern spotted owl under WAC 222-16-080 (6)(a), (e), or (f).
- (11) Disturbance avoidance for marbled murrelets. Operation of heavy equipment shall not be allowed within 0.25 mile of an occupied

marbled murrelet site during the daily peak activity periods within the critical nesting season, provided that, this restriction shall not apply if the forest practice is operating in compliance with a plan or agreement developed for the protection of the marbled murrelet under WAC 222-16-080 (6)(a) or (c).

[Statutory Authority: RCW 76.09.040(3). WSR 13-21-032, § 222-30-070, filed 10/8/13, effective 12/30/13. Statutory Authority: RCW 76.09.040. WSR 08-24-011, § 222-30-070, filed 11/21/08, effective 12/22/08. Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). WSR 01-12-042, § 222-30-070, filed 5/30/01, effective 7/1/01. Statutory Authority: RCW 76.09.040 and chapter 34.05 RCW. WSR 97-24-091, § 222-30-070, filed 12/3/97, effective 1/3/98; WSR 97-15-105, § 222-30-070, filed 7/21/97, effective 8/21/97. Statutory Authority: Chapters 76.09 and 34.05 RCW. WSR 96-12-038, § 222-30-070, filed 5/31/96, effective 7/1/96. Statutory Authority: RCW 76.09.040, 76.09.050 and chapter 34.05 RCW. WSR 92-15-011, § 222-30-070, filed 7/2/92, effective 8/2/92. Statutory Authority: RCW 76.09.040. WSR 87-23-036 (Order 535), § 222-30-070, filed 11/16/87, effective 1/1/88. Statutory Authority: RCW 76.09.040 and 76.09.050. WSR 82-16-077 (Resolution No. 82-1), § 222-30-070, filed 8/3/82, effective 10/1/82; Order 263, § 222-30-070, filed 6/16/76.]