Agency: Forest Practices Board

Effective date of rule:
- Permanent Rules  
  - ☑️ 31 days after filing.
  - ☐️ Other (specify) __________
  (If less than 31 days after filing, a specific finding under RCW 34.05.380(3) is required and should be stated below)

Any other findings required by other provisions of law as precondition to adoption or effectiveness of rule?
- ☑️ Yes
- ☐️ No
  If Yes, explain:

Purpose:
- Amend WAC 222-16-080 Critical habitats (state) of threatened and endangered species to be consistent with federal and other state laws. The rule making reflects the changes made to the Federal Endangered and Threatened Wildlife list and changes made to WACs 232-12-014, 232-12-011, and 232-12-292 by the Washington Fish and Wildlife Commission by removing the bald eagle and the peregrine falcon from the Board’s critical habitats (state) list and removing the option to use a bald eagle site management plan. The proposal also updates the common and scientific names for the Western pond turtle on the Board’s critical habitats (state) list.
- Amend WAC 222-20-120 Notice of Forest Practices to Affected Indian Tribes to clarify language and to resolve issues with the rule’s landowner-tribe meeting requirement.
- Amend WAC 222-30-021 (1)(c)(ii), western Washington riparian management zone clumping strategy, to reflect the Board’s 2008 historic sites rule making. Clumping strategies for cultural resources are based on the Class IV-special rule for cultural resources. This correction simply replaces old Class IV-special language with the Class IV-special language adopted in 2008.

Citation of existing rules affected by this order:
- Repealed:
- Amended: 222-16-080, 222-20-120, 222-30-021
- Suspended:

Statutory authority for adoption: RCW 76.09.040

Other authority:

PERMANENT RULE (Including Expedited Rule Making)
Adopted under notice filed as WSR 11-19-009 on September 7, 2011 and WSR 11-23-105 on November 18, 2011. Describe any changes other than editing from proposed to adopted version: None

If a preliminary cost-benefit analysis was prepared under RCW 34.05.328, a final cost-benefit analysis is available by contacting:

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phone (360) 902.1413  
Address: Department of Natural Resources  
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P.O. Box 47012  
e-mail patricia.anderson@dnr.wa.gov
Olympia, WA 98504

Date adopted: February 14, 2012
Note: If any category is left blank, it will be calculated as zero.
No descriptive text.

Count by whole WAC sections only, from the WAC number through the history note.
A section may be counted in more than one category.

The number of sections adopted in order to comply with:

<table>
<thead>
<tr>
<th>Category</th>
<th>New</th>
<th>Amended</th>
<th>Repealed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal statute</td>
<td></td>
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</tr>
<tr>
<td>Federal rules or standards</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Recently enacted state statutes</td>
<td></td>
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</tr>
</tbody>
</table>

The number of sections adopted at the request of a nongovernmental entity:

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<th>Amended</th>
<th>Repealed</th>
</tr>
</thead>
</table>

The number of sections adopted in the agency's own initiative:

<table>
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<tr>
<th>New</th>
<th>Amended</th>
<th>Repealed</th>
</tr>
</thead>
</table>

The number of sections adopted in order to clarify, streamline, or reform agency procedures:

<table>
<thead>
<tr>
<th>New</th>
<th>Amended</th>
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The number of sections adopted using:

<table>
<thead>
<tr>
<th>Type</th>
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<th>Amended</th>
<th>Repealed</th>
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<tbody>
<tr>
<td>Negotiated rule making</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Pilot rule making</td>
<td></td>
<td></td>
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<tr>
<td>Other alternative rule making</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


WAC 222-30-021  *Western Washington riparian management zones.
These rules apply to all typed waters on forest land in Western Washington, except as provided in WAC 222-30-023. RMZs are measured horizontally from the outer edge of the bankfull width or channel migration zone, whichever is greater, and extend to the limits as described in this section. See board manual section 7 for riparian design and layout guidelines.

*(1) Western Washington RMZs for Type S and F Waters have three zones: The core zone is nearest to the water, the inner zone is the middle zone, and the outer zone is furthest from the water. (See definitions in WAC 222-16-010.) RMZ dimensions vary depending on the site class of the land, the management harvest option, and the bankfull width of the stream. See tables for management options 1 and 2 below.

None of the limitations on harvest in each of the three zones listed below will preclude or limit the construction and maintenance of roads for the purpose of crossing streams in WAC 222-24-030 and 222-24-050, or the creation and use of yarding corridors in WAC 222-30-060(1).

The shade requirements in WAC 222-30-040 must be met regardless of harvest opportunities provided in the inner zone RMZ rules. See board manual section 1.

(a) Core zones. No timber harvest or construction is allowed in the core zone except operations related to forest roads as detailed in subsection (1) of this section. Any trees cut for or damaged by yarding corridors in the core zone must be left on the site. Any trees cut as a result of road construction to cross a stream may be removed from the site, unless used as part of a large woody debris placement strategy or as needed to reach stand requirements.

(b) Inner zones. Forest practices in the inner zone must be conducted in such a way as to meet or exceed stand requirements to achieve the goal in WAC 222-30-010(2). The width of the inner zone is determined by site class, bankfull width, and management option. Timber harvest in this zone must be consistent with the stand requirements in order to reach the desired future condition targets.

"Stand requirement" means a number of trees per acre, the basal area and the proportion of conifer in the combined inner zone and adjacent core zone so that the growth of the trees would meet desired future conditions. The following table defines basal area targets when the stand is one hundred forty years old.
Growth modeling is necessary to calculate whether a particular stand meets stand requirement and is on a trajectory towards these desired future condition basal area target. The appropriate growth model will be based on stand characteristics and will include at a minimum, the following components: The number of trees by diameter class, the percent of conifer and hardwood, and the age of the stand. See board manual section 7.

(i) **Hardwood conversion in the inner zone.** When the existing stands in the combined core and inner zone do not meet stand requirements, no harvest is permitted in the inner zone, except in connection with hardwood conversion.

(A) The landowner may elect to convert hardwood-dominated stands in the *inner zone* to conifer-dominated stands. Harvesting and replanting shall be in accordance with the following limits:

(I) Conversion activities in the *inner zone* of any harvest unit are only allowed where all of the following are present:

- Existing stands in the combined core and inner zone do not meet stand requirements (WAC 222-30-021 (1)(b));
- There are fewer than fifty-seven conifer trees per acre eight inches or larger dbh in the conversion area;
- There are fewer than one hundred conifer trees per acre larger than four inches dbh in the conversion area;
- There is evidence (such as conifer stumps, historical photos, or a conifer understory) that the conversion area can be successfully reforested with conifer and support the development of conifer stands;
- The landowner owns five hundred feet upstream and five hundred feet downstream of the harvest unit;
- The core and inner zones contain no stream adjacent parallel roads;
- Riparian areas contiguous to the proposed harvest unit are owned by the landowner proposing to conduct the conversion activities, and meet shade requirements of WAC 222-30-040 or have a seventy-five foot buffer with trees at least forty feet tall on both sides of the stream for five hundred feet upstream and five hundred feet downstream of the proposed harvest unit (or the length of the stream, if less);
- If the landowner has previously converted hardwood-dominated stands, then post-harvest treatments must have been performed to the satisfaction of the department.

(II) In addition to the conditions set forth above, permitted conversion activities in the *inner zone* of any harvest unit are limited by the following:

- Each continuous conversion area is not more than five
hundred feet in length; two conversion areas will be considered "continuous" unless the no-harvest area separating the two conversion areas is at least half the length of the larger of the two conversion areas.

- Type S and F (Type 1, 2, or 3) Water: Up to fifty percent of the inner zone area of the harvest unit on one side of the stream may be converted provided that:
  - The landowner owns the opposite side of the stream and the landowner's riparian area on the opposite bank meets the shade requirements of WAC 222-30-040 or has a seventy-five foot buffer of trees at least forty feet tall or:
  - The landowner does not own land on the opposite side of the stream but the riparian area on the opposite bank meets the shade requirements of WAC 222-30-040 or has a seventy-five foot buffer of trees at least forty feet tall.
- Not more than twenty-five percent of the inner zone of the harvest unit on both sides of a Type S or F Water may be converted if the landowner owns both sides.

(III) Where conversion is allowed in the inner zone, trees within the conversion area may be harvested except that:
- Conifer trees larger than twenty inches dbh shall not be harvested;
- Not more than ten percent of the conifer stems greater than eight inches dbh, exclusive of the conifer noted above, within the conversion area may be harvested; and
- The landowner must exercise reasonable care in the conduct of harvest activities to minimize damage to all residual conifer trees within the conversion area including conifer trees less than eight inches dbh.

(IV) Following harvest in conversion areas, the landowner must:
- Reforest the conversion area with conifer tree species suitable to the site in accordance with the requirements of WAC 222-34-010; and
- Conduct post-harvest treatment of the site until the conifer trees necessary to meet acceptable stocking levels in WAC 222-34-010(2) have crowns above the brush or until the conversion area contains a minimum of one hundred fifty conifer trees greater than eight inches dbh per acre.
- Notify the department in writing within three years of the approval of the forest practices application for hardwood conversion, if the hardwood conversion has been completed.

(V) Tracking hardwood conversion. The purpose of tracking hardwood conversion is to determine if hardwood conversion is resulting in adequate enhancement of riparian functions toward the desired future condition while minimizing the short term impacts on functions. The department will use existing or updated data bases developed in cooperation with the Washington Hardwoods Commission to identify watershed administrative units (WAUs) with a high percentage of hardwood-dominated riparian areas and, thus have the potential for excessive hardwood conversion under these rules. The department will track the rate of conversion of hardwoods in the
riparian zone: (1) Through the application process on an annual basis; and (2) at a WAU scale on a biennial basis as per WAC 222-30-120 through the adaptive management process which will develop thresholds of impact for hardwood conversion at the watershed scale.

(ii) Harvest options.

(A) No inner zone management. When the existing stands in the combined core and inner zone do not meet stand requirements, no harvest is permitted in the inner zone. When no harvest is permitted in the inner zone or the landowner chooses not to enter the inner zone, the width of core, inner and outer zones are as provided in the following table:

<table>
<thead>
<tr>
<th>Site Class</th>
<th>RMZ width</th>
<th>Core zone width</th>
<th>Inner zone width</th>
<th>Outer zone width</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(measured from outer edge of bankfull width or outer edge of CMZ of water)</td>
<td>(measured from outer edge of core zone)</td>
<td>(measured from outer edge of inner zone)</td>
<td></td>
</tr>
<tr>
<td>stream width ≤10'</td>
<td>stream width &gt;10'</td>
<td>stream width ≤10'</td>
<td>stream width &gt;10'</td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>200'</td>
<td>50'</td>
<td>83'</td>
<td>100'</td>
</tr>
<tr>
<td>II</td>
<td>170'</td>
<td>50'</td>
<td>63'</td>
<td>78'</td>
</tr>
<tr>
<td>III</td>
<td>140'</td>
<td>50'</td>
<td>43'</td>
<td>55'</td>
</tr>
<tr>
<td>IV</td>
<td>110'</td>
<td>50'</td>
<td>23'</td>
<td>33'</td>
</tr>
<tr>
<td>V</td>
<td>90'</td>
<td>50'</td>
<td>10'</td>
<td>18'</td>
</tr>
</tbody>
</table>

(B) Inner zone management. If trees can be harvested and removed from the inner zone because of surplus basal area consistent with the stand requirement, the harvest and removal of the trees must be undertaken consistent with one of two options:

(I) Option 1. Thinning from below. The objective of thinning is to distribute stand requirement trees in such a way as to shorten the time required to meet large wood, fish habitat and water quality needs. This is achieved by increasing the potential for leave trees to grow larger than they otherwise would without thinning. Thinning harvest under option 1 must comply with the following:

- Residual trees left in the combined core and inner zones must meet stand requirements necessary to be on a trajectory to desired future condition. See board manual section 7 for guidelines.
- Thinning must be from below, meaning the smallest dbh trees are selected for harvest first, then progressing to successively larger diameters.
- Thinning cannot decrease the proportion of conifer in the stand.
- Shade retention to meet the shade rule must be confirmed by the landowner for any harvest inside of seventy-five feet from the outer edge of bankfull width or outer edge of CMZ, whichever is greater.
- The number of residual conifer trees per acre in the inner zone will equal or exceed fifty-seven.
Option 1. Thinning from below.

<table>
<thead>
<tr>
<th>Site class</th>
<th>RMZ width</th>
<th>Core zone width</th>
<th>Inner zone width</th>
<th>Outer zone width</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(measured from outer edge of bankfull width)</td>
<td>(measured from outer edge of core zone)</td>
<td>stream width ≤10'</td>
<td>stream width &gt;10'</td>
</tr>
<tr>
<td>I</td>
<td>200'</td>
<td>50'</td>
<td>83'</td>
<td>100'</td>
</tr>
<tr>
<td>II</td>
<td>170'</td>
<td>50'</td>
<td>63'</td>
<td>78'</td>
</tr>
<tr>
<td>III</td>
<td>140'</td>
<td>50'</td>
<td>43'</td>
<td>55'</td>
</tr>
<tr>
<td>IV</td>
<td>110'</td>
<td>50'</td>
<td>23'</td>
<td>33'</td>
</tr>
<tr>
<td>V</td>
<td>90'</td>
<td>50'</td>
<td>10'</td>
<td>18'</td>
</tr>
</tbody>
</table>

(II) Option 2. Leaving trees closest to the water.

Management option 2 applies only to riparian management zones for site class I, II, and III on streams that are less than or equal to ten feet wide and RMZs in site class I and II for streams greater than ten feet wide. Harvest must comply with the following:

- Harvest is not permitted within thirty feet of the core zone for streams less than or equal to ten feet wide and harvest is not permitted within fifty feet of the core zone for streams greater than ten feet wide;
- Residual leave trees in the combined core and inner zone must meet stand requirements necessary to be on a trajectory to desired future condition. See board manual section 7 for calculating stand requirements;
- A minimum of twenty conifers per acre, with a minimum twelve inch dbh, will be retained in any portion of the inner zone where even-age harvest occurs. These riparian leave trees will be counted towards meeting applicable stand requirements. The number of riparian leave trees cannot be reduced below twenty for any reason.
- Trees are selected for harvest starting from the outer most portion of the inner zone first then progressively closer to the stream.
- If (II) of this subsection results in surplus basal area per the stand requirement, the landowner may take credit for the surplus by harvesting additional riparian leave trees required to be left in the adjacent outer zone on a basal area-for-basal area basis. The number of leave trees in the outer zone can be reduced only to a minimum of ten trees per acre.

Option 2. Leaving trees closest to water.
## Table: Site Class and RMZ Width

<table>
<thead>
<tr>
<th>Site class</th>
<th>RMZ width</th>
<th>Core zone width</th>
<th>Inner zone width</th>
<th>Outer zone width</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(measured from outer edge of bankfull width or outer edge of CMZ of water)</td>
<td>(measured from outer edge of core zone)</td>
<td>(measured from outer edge of core zone)</td>
<td>(measured from outer edge of core zone)</td>
</tr>
<tr>
<td>I</td>
<td>200'</td>
<td>50'</td>
<td>84'</td>
<td>30'</td>
</tr>
<tr>
<td>II</td>
<td>170'</td>
<td>50'</td>
<td>64'</td>
<td>30'</td>
</tr>
<tr>
<td>III</td>
<td>140'</td>
<td>50'</td>
<td>44'</td>
<td>30'</td>
</tr>
</tbody>
</table>

*Option 2 for site class III on streams >10' is not permitted because of the minimum floor (100') constraint.

**(iii) Where the basal area components of the stand requirement cannot be met** within the sum of the areas in the inner and core zone due to the presence of a stream-adjacent parallel road in the inner or core zone, a determination must be made of the approximate basal area that would have been present in the inner and core zones if the road was not occupying space in the core or inner zone and the shortfall in the basal area component of the stand requirement. See definition of "stream-adjacent parallel road" in WAC 222-16-010.

(A) Trees containing basal area equal to the amount determined in (iii) of this subsection will be left elsewhere in the inner or outer zone, or if the zones contain insufficient riparian leave trees, substitute riparian leave trees will be left within the RMZ width of other Type S or F Waters in the same unit or along Type Np or Ns Waters in the same unit in addition to all other RMZ requirements on those same Type S, F, Np or Ns Waters.

(B) When the stream-adjacent road basal area calculated in (iii) of this subsection results in an excess in basal area (above stand requirement) then the landowner may receive credit for such excess which can be applied on a basal area-by-basal area basis against the landowner's obligation to leave trees in the outer zone of the RMZ of such stream or other waters within the same unit, provided that the number of trees per acre in the outer zone is not reduced to less than ten trees per acre.

(C) When the basal area requirement cannot be met, as explained in (iii) of this subsection, the shortfall may be reduced through the implementation of an acceptable large woody debris placement plan. See board manual section 26 for guidelines.

(iv) If a harvest operation includes both yarding and harvest activities within the RMZ, all calculations of basal area for stand requirements will be determined as if the yarding corridors were constructed prior to any other harvest activities. If trees cut or damaged by yarding are taken from excess basal area, these trees may be removed from the inner zone. Trees cut or damaged by
yarding in a unit which does not meet the basal area target of the stand requirements cannot be removed from the inner zone. Any trees cut or damaged by yarding in the core zone may not be removed.

(c) **Outer zones.** Timber harvest in the outer zone must leave twenty riparian leave trees per acre after harvest. "Outer zone riparian leave trees" are trees that must be left after harvest in the outer zone in Western Washington. Riparian leave trees must be left uncut throughout all future harvests:

<table>
<thead>
<tr>
<th>Application</th>
<th>Leave tree spacing</th>
<th>Tree species</th>
<th>Minimum dbh required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outer zone</td>
<td>Dispersed</td>
<td>Conifer</td>
<td>12” dbh or greater</td>
</tr>
<tr>
<td>Outer zone</td>
<td>Clumped</td>
<td>Conifer</td>
<td>12” dbh or greater</td>
</tr>
<tr>
<td>Protection of sensitive features</td>
<td>Clumped</td>
<td>Trees representative of the overstory including both hardwood and conifer</td>
<td>8” dbh or greater</td>
</tr>
</tbody>
</table>

The twenty riparian leave trees to be left can be reduced in number under the circumstances delineated in (c)(iv) of this subsection. The riparian leave trees must be left on the landscape according to one of the following two strategies. A third strategy is available to landowners who agree to a LWD placement plan.

(i) **Dispersal strategy.** Riparian leave trees, which means conifer species with a diameter measured at breast height (dbh) of twelve inches or greater, must be left dispersed approximately evenly throughout the outer zone. If riparian leave trees of twelve inches dbh or greater are not available, then the next largest conifers must be left. If conifers are not present, riparian leave trees must be left according to the clumping strategy in subsection (ii) below.

(ii) **Clumping strategy.** Riparian leave trees must be left clumped in the following way:

(A) Clump trees in or around one or more of the following sensitive features to the extent available within the outer zone. When clumping around sensitive features, riparian leave trees must be eight inches dbh or greater and representative of the overstory canopy trees in or around the sensitive feature and may include both hardwood and conifer species. Sensitive features are:

(I) Seeps and springs;

(II) Forested wetlands;

(III) Topographic locations (and orientation) from which leave trees currently on the site will be delivered to the water;

(IV) Areas where riparian leave trees may provide windthrow protection;

(V) Small unstable, or potentially unstable, slopes not of sufficient area to be detected by other site evaluations. See WAC 222-16-050 (1)(d).

(VI) Archaeological (or historical) sites (registered with) or historic archaeological resources as defined in RCW...
27.53.030;
(VII) Historic sites eligible for listing on the National Register of Historic Places or the Washington Heritage Register as determined by the Washington state department of archaeology and historic preservation. See WAC 222-16-050 (1)(((g)))((f)); or
(((VII)) (VIII) Sites containing evidence of Native American cairns, graves or glyptic records as provided for in chapters 27.44 and 27.53 RCW. See WAC 222-16-050 (1)(f).

(B) If sensitive features are not present, then clumps must be well distributed throughout the outer zone and the leave trees must be of conifer species with a dbh of twelve inches or greater. When placing clumps, the applicant will consider operational and biological concerns. Tree counts must be satisfied regardless of the presence of stream-adjacent parallel roads in the outer zone.

(iii) Large woody debris in-channel placement strategy. A landowner may design a LWD placement plan in cooperation with the department of fish and wildlife. The plan must be consistent with guidelines in board manual section 26. The landowner may reduce the number of trees required to be left in the outer zone to the extent provided in the approved LWD placement plan. Reduction of trees in the outer zone must not go below a minimum of ten trees per acre. If this strategy is chosen, a complete forest practices application must include a copy of the WDFW approved hydraulics project approval (HPA) permit.

(iv) Twenty riparian leave trees must be left after harvest with the exception of the following:
(A) If a landowner agrees to implement a placement strategy, see (iii) of this subsection.
(B) If trees are left in an associated channel migration zone, the landowner may reduce the number of trees required to be left according to the following:
(I) Offsets will be measured on a basal area-for-basal area basis.
(II) Conifer in a CMZ equal to or greater than six inches dbh will offset conifer in the outer zone at a one-to-one ratio.
(III) Hardwood in a CMZ equal to or greater than ten inches dbh will offset hardwood in the outer zone at a one-to-one ratio.
(IV) Hardwood in a CMZ equal to or greater than ten inches dbh will offset conifer in the outer zone at a three-to-one ratio.

*(2) Western Washington protection for Type Np and Ns Waters.
(a) An equipment limitation zone is a thirty-foot wide zone measured horizontally from the outer edge of the bankfull width of a Type Np or Ns Water where equipment use and other forest practices that are specifically limited by these rules. It applies to all perennial and seasonal streams.
(i) On-site mitigation is required if any of the following activities exposes the soil on more than ten percent of the surface area of the zone:
(A) Ground based equipment;
(B) Skid trails;
(C) Stream crossings (other than existing roads); or
(D) Cabled logs that are partially suspended.
(ii) Mitigation must be designed to replace the equivalent of lost functions especially prevention of sediment delivery. Examples include water bars, grass seeding, mulching, etc.

(iii) Nothing in this subsection (2) reduces or eliminates the department's authority to prevent actual or potential material damage to public resources under WAC 222-46-030 or 222-46-040 or any related authority to condition forest practices notifications or applications.

(b) **Sensitive site and RMZs protection along Type Np Waters.**

Forest practices must be conducted to protect Type Np RMZs and sensitive sites as detailed below:

(i) A fifty-foot, no-harvest buffer, measured horizontally from the outer edge of bankfull width, will be established along each side of the Type Np Water as follows:

<table>
<thead>
<tr>
<th>Length of Type Np Water from the confluence of Type S or F Water</th>
<th>Length of 50' buffer required on Type Np Water (starting at the confluence of the Type Np and connecting water)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greater than 1000'</td>
<td>500'</td>
</tr>
<tr>
<td>Greater than 300' but less than 1000'</td>
<td>Distance of the greater of 300' or 50% of the entire length of the Type Np Water</td>
</tr>
<tr>
<td>Less than or equal to 300'</td>
<td>The entire length of Type Np Water</td>
</tr>
</tbody>
</table>

(ii) No timber harvest is permitted in an area within fifty feet of the outer perimeter of a soil zone perennially saturated from a headwall seep.

(iii) No timber harvest is permitted in an area within fifty feet of the outer perimeter of a soil zone perennially saturated from a side-slope seep.

(iv) No timber harvest is permitted within a fifty-six foot radius buffer patch centered on the point of intersection of two or more Type Np Waters.

(v) No timber harvest is permitted within a fifty-six foot radius buffer patch centered on a headwater spring or, in the absence of a headwater spring, on a point at the uppermost extent of a Type Np Water as defined in WAC 222-16-030(3) and 222-16-031.

(vi) No timber harvest is permitted within an alluvial fan.

(vii) At least fifty percent of a Type Np Waters' length must be protected by buffers on both sides of the stream (2-sided buffers). Buffered segments must be a minimum of one hundred feet in length. If an operating area is located more than five hundred feet upstream from the confluence of a Type S or F Water and the Type Np Water is more than one thousand feet in length, then buffer the Type Np Water according to the following table. If the
percentage is not met by protecting sensitive sites listed in (b)(i) through (vii) of this subsection, then additional buffers are required on the Type Np Water to meet the requirements listed in the table.

Minimum percent of length of Type Np Waters to be buffered when more than 500 feet upstream from the confluence of a Type S or F Water

<table>
<thead>
<tr>
<th>Total length of a Type Np Water upstream from the confluence of a Type S or F Water</th>
<th>Percent of length of Type Np Water that must be protected with a 50 foot no harvest buffer more than 500 feet upstream from the confluence of a Type S or F Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000 feet or less</td>
<td>Refer to table in this subsection (i) above</td>
</tr>
<tr>
<td>1001 - 1300 feet</td>
<td>19%</td>
</tr>
<tr>
<td>1301 - 1600 feet</td>
<td>27%</td>
</tr>
<tr>
<td>1601 - 2000 feet</td>
<td>33%</td>
</tr>
<tr>
<td>2001 - 2500 feet</td>
<td>38%</td>
</tr>
<tr>
<td>2501 - 3500 feet</td>
<td>42%</td>
</tr>
<tr>
<td>3501 - 5000 feet</td>
<td>44%</td>
</tr>
<tr>
<td>Greater than 5000 feet</td>
<td>45%</td>
</tr>
</tbody>
</table>

The landowner must select the necessary priority areas for additional two-sided buffers according to the following priorities:

(A) Low gradient areas;

(B) Perennial water reaches of nonsedimentary rock with gradients greater than twenty percent in the tailed frog habitat range;

(C) Hyporheic and groundwater influence zones; and

(D) Areas downstream from other buffered areas.

Except for the construction and maintenance of road crossings and the creation and use of yarding corridors, no timber harvest will be allowed in the designated priority areas. Landowners must leave additional acres equal to the number of acres (including partial acres) occupied by an existing stream-adjacent parallel road within a designated priority area buffer.

(c) None of the limitations on harvest in or around Type Np Water RMZs or sensitive sites listed in (b) of this subsection will preclude or limit:

(i) The construction and maintenance of roads for the purpose of crossing streams in WAC 222-24-030 and 222-24-050.

(ii) The creation and use of yarding corridors in WAC 222-30-060(1).

To the extent reasonably practical, the operation will both avoid creating yarding corridors or road crossings through Type Np Water RMZ or sensitive sites and associated buffers, and avoid management activities which would result in soil compaction, the loss of protective vegetation or sedimentation in perennially moist areas.
Where yarding corridors or road crossings through Type Np Water RMZs or sensitive sites and their buffers cannot reasonably be avoided, the buffer area must be expanded to protect the sensitive site by an area equivalent to the disturbed area or by providing comparable functions through other management initiated efforts.

Landowners must leave additional acres equal to the number of acres (including partial acres) occupied by an existing stream-adjacent parallel road within a Type Np Water RMZs or sensitive site buffer.
WAC 222-20-120  Notice of forest practices that may contain cultural resources to affected Indian tribes. (1) The department shall notify affected Indian tribes of all applications in geographic areas of (concern to) interest that have been identified by such tribes, including those (involving) areas that may contain cultural resources (identified by the tribes).

(2) Where an application (involves) is within a tribe's geographic area of interest and contains cultural resources the landowner, at the tribe's discretion, shall meet with the affected tribe(s) prior to the application decision due date with the objective of agreeing on a plan for protecting the archaeological or cultural value. (The department may condition the application in accordance with the plan.)

(3) Affected Indian tribes shall determine whether plans for protection of cultural resources will be forwarded to the department of archaeological and historic preservation (DAHP). The department will consider the requirements in subsection (2) of this section complete if prior to the application decision due date:

(a) The landowner meets with the tribe(s) and notifies the department that a meeting took place and whether or not there is agreement on a plan. The department shall confirm the landowner's information with the tribe(s); or

(b) The department receives written notice from the tribe(s) that the tribe(s) is declining a meeting with the landowner; or

(c) The tribe(s) does not respond to the landowner's attempts to meet and the landowner provides to the department:

(i) Written documentation of telephone or e-mail attempts to meet with the tribe's designated cultural resources contact for forest practices; and

(ii) A copy of a certified letter with a signed return receipt addressed to the tribe's cultural resources contact for forest practices requesting a meeting with the tribe; or

(d) The department receives other acceptable documentation.

(4) The department may condition the application in accordance with the plan.
WAC 222-16-080  Critical habitats (state) of threatened and endangered species. (1) Critical habitats (state) of threatened or endangered species and specific forest practices designated as Class IV-Special are as follows:

(a) Bald eagle (Haliaeetus leucocephalus) - Harvesting, road construction, aerial application of pesticides, or site preparation within 0.5 mile of a known active nest site, documented by the department of fish and wildlife, between the dates of January 1 and August 15 or 0.25 mile at other times of the year; and within 0.25 mile of a communal roosting site. Communal roosting sites shall not include refuse or garbage dumping sites.

(b) Gray wolf (Canis lupus) - Harvesting, road construction, or site preparation within 1 mile of a known active den site, documented by the department of fish and wildlife, between the dates of March 15 and July 30 or 0.25 mile from the den site at other times of the year.

(c) Grizzly bear (Ursus arctos) - Harvesting, road construction, aerial application of pesticides, or site preparation within 1 mile of a known active den site, documented by the department of fish and wildlife, between the dates of October 1 and May 30 or 0.25 mile at other times of the year.

(d) Mountain (woodland) caribou (Rangifer tarandus) - Harvesting, road construction, aerial application of pesticides, or site preparation within 0.25 mile of a known active breeding area, documented by the department of fish and wildlife.

(e) Oregon silverspot butterfly (Speyeria zerene hippolyta) - Harvesting, road construction, aerial or ground application of pesticides, or site preparation within 0.25 mile of an individual occurrence, documented by the department of fish and wildlife.

(f) Peregrine falcon (Falco peregrinus) - Harvesting, road construction, aerial application of pesticides, or site preparation within 0.5 mile of a known active nest site, documented by the department of fish and wildlife, between the dates of March 1 and July 30; or harvesting, road construction, or aerial application of pesticides within 0.25 mile of the nest site at other times of the year.

(g) Sandhill crane (Grus canadensis) - Harvesting, road construction, aerial application of pesticides, or site preparation within 0.25 mile of a known active nesting area, documented by the department of fish and wildlife.

(h) Northern spotted owl (Strix occidentalis caurina).  
  (i) Within a SOSEA boundary (see maps in WAC 222-16-086), except as indicated in (h)(ii) of this subsection, harvesting, road
construction, or aerial application of pesticides on suitable spotted owl habitat within a median home range circle that is centered within the SOSEA or on adjacent federal lands.

(ii) **Within the Entiat SOSEA,** harvesting, road construction, or aerial application of pesticides within the areas indicated for demographic support (see WAC 222-16-086(2)) on suitable spotted owl habitat located within a median home range circle that is centered within the demographic support area.

(iii) **Outside of a SOSEA,** harvesting, road construction, or aerial application of pesticides, between March 1 and August 31 on the seventy acres of highest quality suitable spotted owl habitat surrounding a northern spotted owl site center located outside a SOSEA. The highest quality suitable habitat shall be determined by the department in cooperation with the department of fish and wildlife. Consideration shall be given to habitat quality, proximity to the activity center and contiguity.

(iv) **Small parcel northern spotted owl exemption.** Forest practices proposed on the lands owned or controlled by a landowner whose forest land ownership within the SOSEA is less than or equal to 500 acres and where the forest practice is not within 0.7 mile of a northern spotted owl site center shall not be considered to be on lands designated as critical habitat (state) for northern spotted owls.

((i) Western) (g) **Pacific pond turtle (Clemmys marmorata)** - Harvesting, road construction, aerial application of pesticides, or site preparation within 0.25 mile of a known individual occurrence, documented by the department of wildlife.

((f)) (h) **Marbled murrelet (Brachyramphus marmoratus).**

(i) Harvesting, other than removal of down trees outside of the critical nesting season, or road construction within an occupied marbled murrelet site.

(ii) Harvesting, other than removal of down trees outside of the critical nesting season, or road construction within suitable marbled murrelet habitat within a marbled murrelet detection area.

(iii) Harvesting, other than removal of down trees outside of the critical nesting season, or road construction within suitable marbled murrelet habitat containing 7 platforms per acre outside a marbled murrelet detection area.

(iv) Harvesting, other than removal of down trees outside of the critical nesting season, or road construction outside a marbled murrelet detection area within a marbled murrelet special landscape and within suitable marbled murrelet habitat with 5 or more platforms per acre.

(v) Harvesting within a 300 foot managed buffer zone adjacent to an occupied marbled murrelet site that results in less than a residual stand stem density of 75 trees per acre greater than 6 inches in dbh; provided that 25 of which shall be greater than 12 inches dbh including 5 trees greater than 20 inches in dbh, where they exist. The primary consideration for the design of managed buffer zone widths and leave tree retention patterns shall be to mediate edge effects. The width of the buffer zone may be reduced in some areas to a minimum of 200 feet and extended to a maximum of
400 feet as long as the average of 300 feet is maintained.

(vi) Except that the following shall not be critical habitat (state):

(A) Where a landowner owns less than 500 acres of forest land within 50 miles of saltwater and the land does not contain an occupied marbled murrelet site; or

(B) Where a protocol survey (see WAC 222-12-090(14)) has been conducted and no murrelets were detected. The landowner is then relieved from further survey requirements. However, if an occupied marbled murrelet site is established, this exemption is void.

(2) The following critical habitats (federal) designated by the United States Secretary of the Interior or Commerce, or specific forest practices within those habitats, have been determined to have the potential for a substantial impact on the environment and therefore are designated as critical habitats (state) of threatened or endangered species.

(3) For the purpose of identifying forest practices which have the potential for a substantial impact on the environment with regard to threatened or endangered species newly listed by the Washington fish and wildlife commission and/or the United States Secretary of the Interior or Commerce, the department shall after consultation with the department of fish and wildlife, prepare and submit to the board a proposed list of critical habitats (state) of threatened or endangered species. This list shall be submitted to the board within 30 days of the listing of the species. The department shall, at a minimum, consider potential impacts of forest practices on habitats essential to meeting the life requisites for each species listed as threatened or endangered. Those critical habitats (state) adopted by the board shall be added to the list in subsection (1) of this section. See WAC 222-16-050 (1)(b).

(4) For the purpose of identifying any areas and/or forest practices within critical habitats (federal) designated by the United States Secretary of the Interior or Commerce which have the potential for a substantial impact on the environment, the department shall, after consultation with the department of fish and wildlife, submit to the board a proposed list of any forest practices and/or areas proposed for inclusion in Class IV - Special forest practices. The department shall submit the list to the board within 30 days of the date the United States Secretary of the Interior or Commerce publishes a final rule designating critical habitat (federal) in the Federal Register. Those critical habitats included by the board in Class IV - Special shall be added to the list in subsection (2) of this section. See WAC 222-16-050 (1)(b).

(5)(a) ((Except for bald eagles under subsection (1) (a) of this section,)) The critical habitats (state) of threatened and endangered species and specific forest practices designated in subsections (1) and (2) of this section are intended to be interim. These interim designations shall expire for a given species on the earliest of:

(i) The effective date of a regulatory system for wildlife protection referred to in (b) of this subsection or of substantive rules on the species.
(ii) The delisting of a threatened or endangered species by the Washington fish and wildlife commission and by the United States Secretary of Interior or Commerce.

(b) The board shall examine current wildlife protection and department authority to protect wildlife and develop and recommend a regulatory system, including baseline rules for wildlife protection. To the extent possible, this system shall:

(i) Use the best science and management advice available;

(ii) Use a landscape approach to wildlife protection;

(iii) Be designed to avoid the potential for substantial impact to the environment;

(iv) Protect known populations of threatened and endangered species of wildlife from negative effects of forest practices consistent with RCW 76.09.010; and

(v) Consider and be consistent with recovery plans adopted by the department of fish and wildlife pursuant to RCW 77.12.020(6) or habitat conservation plans or 16 U.S.C. 1533(d) rule changes of the Endangered Species Act.

(6) Regardless of any other provision in this section, forest practices applications shall not be classified as Class IV - Special based on critical habitat (state) (WAC 222-16-080 and 222-16-050 (1)(b)) for a species, if the forest practices are consistent with one or more of the following:

(a) Documents addressing the needs of the affected species provided such documents have received environmental review with an opportunity for public comment under the National Environmental Policy Act, 42 U.S.C. section 4321 et seq.:

(i) A habitat conservation plan and incidental take permit; or

(ii) An "unlisted species agreement" covering such species approved by the U.S. Fish and Wildlife Service or National Marine Fisheries Service; or

(iii) Other conservation agreement entered into with a federal agency pursuant to its statutory authority for fish and wildlife protection that addresses the needs of the affected species; or

(iv) A rule adopted by the U.S. Fish and Wildlife Service or the National Marine Fisheries Service for the conservation of an affected species pursuant to 16 U.S.C. § 1536(b) or 1539(a); or

(b) Documents addressing the needs of the affected species so long as they have been reviewed under the State Environmental Policy Act:

(i) A landscape management plan; or

(ii) Another cooperative or conservation agreement entered into with a state resource agency pursuant to its statutory authority for fish and wildlife protection;

(c) A special wildlife management plan (SWMP) developed by the landowner and approved by the department in consultation with the department of fish and wildlife;

(d) ((A bald eagle management plan approved under WAC 232-12-292;)) A landowner option plan (LOP) for northern spotted owls

(e)) A landowner option plan (LOP) for northern spotted owls
developed pursuant to WAC 222-16-100(1);

((f)) (e) A cooperative habitat enhancement agreement (CHEA) developed pursuant to WAC 222-16-105; or

((g)) (f) A take avoidance plan issued by the U.S. Fish and Wildlife Service or the National Marine Fisheries Service prior to March 20, 2000;

((h)) (g) Surveys demonstrating the absence of northern spotted owls at a northern spotted owl site center have been reviewed and approved by the department of fish and wildlife and all three of the following criteria have been met:

(i) The site has been evaluated by the spotted owl conservation advisory group; and

(ii) As part of the spotted owl conservation advisory group's evaluation, the department's representative has consulted with the department of fish and wildlife; and

(iii) The spotted owl conservation advisory group has reached consensus that the site need not be maintained while the board completes its evaluation of rules affecting the northern spotted owl. The spotted owl conservation advisory group shall communicate its findings to the department in writing within sixty days of the department of fish and wildlife's approval of surveys demonstrating the absence of northern spotted owls.

In those situations where one of the options above has been used, forest practices applications may still be classified as Class IV-Special based upon the presence of one or more of the factors listed in WAC 222-16-050(1), other than critical habitat (state) for the species covered by the existing plan or evaluations.

(7) The department, in consultation with the department of fish and wildlife, shall review each SOSEA to determine whether the goals for that SOSEA are being met through approved plans, permits, statements, letters, or agreements referred to in subsection (6) of this section. Based on the consultation, the department shall recommend to the board the suspension, deletion, modification or reestablishment of the applicable SOSEA from the rules. The department shall conduct a review for a particular SOSEA upon approval of a landowner option plan, a petition from a landowner in the SOSEA, or under its own initiative.

(8) The department, in consultation with the department of fish and wildlife, shall report annually to the board on the status of the northern spotted owl to determine whether circumstances exist that substantially interfere with meeting the goals of the SOSEAs.