

Title 222 WAC

FOREST PRACTICES BOARD

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Chapter 222-08 WAC

PRACTICES AND PROCEDURES

WAC

222-08-020	Orientation and training.
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222-08-035	Continuing review of forest practices rules.

WAC 222-08-020 Orientation and training. The department shall be responsible for a continuing program of orientation and training, relating to forest practices and rules thereof, pursuant to RCW 76.09.250. Such program shall include:

- (1) **Investigation of current** developments in and practical applications of forest resources and related technology.
- (2) **Continuing training of** department personnel in the current status of forest resources technology and related disciplines.
- (3) **Dissemination of information** on current forest practice technology to the public, in a manner determined by the department to be effective.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9), 01-12-042, § 222-08-020, filed 5/30/01, effective 7/1/01; Order 263, § 222-08-020, filed 6/16/76.]

WAC 222-08-030 Reporting procedures. The department shall:

- (1) **Survey and identify** all silviculturally related non-point sources of pollution and related control programs in the state,
- (2) **Prepare an analysis** of the above activities and programs, and
- (3) **Report and recommend** to the forest practices board and to the governor additional rules, procedures and/or methods necessary for the control of such sources to the extent feasible.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9), 01-12-042, § 222-08-030, filed 5/30/01, effective 7/1/01. Statutory Authority: RCW 76.09.040, 76.09.170 and chapter 34.05 RCW, 94-01-134, § 222-08-030, filed 12/20/93, effective 1/1/94; Order 263, § 222-08-030, filed 6/16/76.]

WAC 222-08-035 Continuing review of forest practices rules. *(1) Annual evaluations. The department, after consulting with affected state agencies, Indian tribes, forest landowners, fish and wildlife, natural resources, and environmental interest groups, shall beginning July 1, 1988, report annually to the forest practices board an assessment of how the rules and voluntary processes are working.

*(2) Adaptive management program. The adaptive management program will be used to determine the effectiveness of forest practices rules in aiding the state's salmon recovery effort and provide recommendations to the board on proposed changes to forest practices rules to meet timber industry viability and salmon recovery. The program provides assurances that rules and guidance not meeting aquatic resource objectives will be modified in a streamlined and timely manner. The board may also use this program to adjust other forest practice rules and guidance in order to further the purposes of chapter 76.09 RCW. The specific components of the adaptive management program are set forth in WAC 222-12-045.

(3) Resource management plans. The department is directed to develop a method for cooperative voluntary resource management planning among forest landowners, governmental agencies, affected Indian tribes, and environmental groups which would result in the development of plans which might be used as an alternative to the forest practice rules in achieving the purposes and policies set forth in the act. This should be done through pilot projects, at least one of which should be located on the east side of the Cascade summit and one on the west side of the Cascade summit.

(4) Compliance monitoring. The department shall conduct compliance monitoring that addresses the following key question: "Are forest practices being conducted in compliance with the rules?" The department shall provide statistically sound, biennial compliance audits and monitoring reports to the board for consideration and support of rule and guidance analysis. Compliance monitoring shall determine whether forest practices rules are being implemented on the ground. An infrastructure to support compliance will include adequate compliance monitoring, enforcement, training, education and budget.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9), 01-12-042, § 222-08-035, filed 5/30/01, effective 7/1/01. Statutory Authority: RCW 76.09.040 and chapter 34.05 RCW, 97-24-091, § 222-08-035, filed 12/3/97, effective 1/3/98. Statutory Authority: RCW 76.09.040, 87-23-036 (Order 535), § 222-08-035, filed 11/16/87, effective 1/1/88.]

Chapter 222-10 WAC

STATE ENVIRONMENTAL POLICY ACT GUIDELINES

WAC

222-10-010	Policies and authorities.
222-10-030	*SEPA policies for potentially unstable slopes and landforms.
222-10-035	*Watershed analysis SEPA policies.

222-10-041 Northern spotted owls.
 222-10-125 Exemption from RCW 43.21C.030 (2)(c).

WAC 222-10-010 Policies and authorities. (1) This chapter is promulgated pursuant to the authority granted in RCW 76.09.010, 43.21C.120 and chapter 197-11 WAC.

(2) The forest practices board, according to RCW 76.09.040, possesses the authority to promulgate forest practices rules establishing minimum standards for forest practices and setting forth necessary administrative provisions.

(3) The forest practices board adopts by reference the policies of SEPA as set forth in RCW 43.21C.020.

(4) A forest practices application or notification which requires a threshold determination will be conditioned when necessary to mitigate specific adverse impacts which are identified in the environmental documents prepared under SEPA. An application or notification will be denied when the proposal would result in significant adverse impacts identified in a final or supplemental environmental impact statement prepared under SEPA, and reasonable mitigation measures are insufficient to mitigate the identified impacts and denial is consistent with all provisions of the acts cited in subsection (1) of this section.

(5) SEPA policies and procedures shall be implemented by the department of natural resources.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-10-010, filed 5/30/01, effective 7/1/01. Statutory Authority: RCW 43.21C.120, 76.09.040 and 42.30.075. 84-18-021 (Order 429, Resolution No. 8-8-84), § 222-10-010, filed 8/29/84, effective 10/1/84; Order 258, § 222-10-010, filed 5/21/76.]

WAC 222-10-030 *SEPA policies for potentially unstable slopes and landforms. In addition to SEPA policies established elsewhere in this chapter, the following policies apply to forest practices described in WAC 222-16-050 (1)(d) relating to construction or harvest on potentially unstable slopes or landforms.

(1) In order to determine whether such forest practices are likely to have a probable significant adverse impact, and therefore require an environmental impact statement, the applicant must submit the following additional information, prepared by a qualified expert. The expert must describe the potentially unstable landforms in and around the application site, and analyze:

(a) The likelihood that the proposed forest practices will cause movement on the potentially unstable slopes or landforms, or contribute to further movement of a potentially unstable slope or landform;

(b) The likelihood of delivery of sediment or debris to any public resources, or in a manner that would threaten public safety; and

(c) Any possible mitigation for the identified hazards and risks.

(2) The department's threshold determination will include an evaluation of whether the proposed forest practices:

(a) Are likely to increase the probability of a mass movement on or near the site;

(b) Would deliver sediment or debris to a public resource or would deliver sediment or debris in a manner that would threaten public safety; and

(c) Such movement and delivery are likely to cause significant adverse impacts.

If the department determines that (a), (b) and (c) of this subsection are likely to occur, then the forest practice is likely to have a probable significant adverse impact.

(3) The department will evaluate the proposal, using appropriate expertise and in consultation with other affected agencies and Indian tribes.

(4) Specific mitigation measures or conditions must be designed to avoid accelerating rates and magnitudes of mass wasting that could deliver sediment or debris to a public resource or could deliver sediment or debris in a manner that would threaten public safety.

(5) Qualified expert for the purposes of this section means a person with a master's degree in geology or geomorphology or a related field or a significant amount of postgraduate course or thesis work or other training in geomorphology or mass movement and, in either case, an additional 3 years of field experience in the evaluation of relevant problems in forested lands.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-10-030, filed 5/30/01, effective 7/1/01.]

WAC 222-10-035 *Watershed analysis SEPA policies. When the department considers a watershed analysis for approval as in WAC 222-22-080, the department will perform a review under SEPA as a nonproject proposal. When making the threshold determination for a watershed analysis, the department shall only make a determination of significance if, when compared to rules or prescriptions in place at the time of the analysis or the 5-year review, the prescriptions will cause a probable significant adverse impact on elements of the environment other than those addressed in the watershed analysis process.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-10-035, filed 5/30/01, effective 7/1/01.]

WAC 222-10-041 Northern spotted owls. The effective date of this section is July 1, 1996. The following policies shall apply to forest practices subject to SEPA if the forest practices may cause adverse impacts to northern spotted owls.

(1) In SOSEAs or areas of SOSEAs where the goal is demographic support, suitable spotted owl habitat should be maintained either to protect the viability of the owl(s) associated with each northern spotted owl site center or to provide demographic support for that particular SOSEA as described in the SOSEA goals.

(2) In SOSEAs or areas of SOSEAs where the goal is dispersal support, either suitable spotted owl habitat should be maintained to protect the viability of the owl(s) associated with each northern spotted owl site center or dispersal habitat should be managed, over time, to provide the dispersal support for that particular SOSEA as described in the SOSEA goals. Dispersal support is provided by a landscape which

includes dispersal habitat at the stand level interspersed with areas of higher quality habitat. Stands of dispersal habitat should be managed to reduce gaps between stands and to maintain a sufficient level of dispersal habitat to meet the SOSEA goals over time.

(3) **In SOSEAs or areas of SOSEAs where the goal is a combination of dispersal support and demographic support**, either suitable spotted owl habitat should be maintained to protect the viability of the owl(s) associated with each northern spotted owl site center or a variety of habitat conditions should be provided which in total are more than dispersal support and less than demographic support. This can be accomplished by providing:

(a) Dispersal support as described in subsection (2) of this section;

(b) Areas of suitable spotted owl habitat that contain some opportunities for nesting as well as roosting and foraging habitat; and

(c) Connectivity between areas of SOSEAs designated for demographic support or adjacent federal lands which are designated as late successional reserves, congressionally reserved areas, or administratively withdrawn areas.

(4) **Within SOSEAs**, the following amounts of suitable habitat are generally assumed to be necessary to maintain the viability of the owl(s) associated with each northern spotted owl site center, in the absence of more specific data or a mitigation plan, as provided for in subsections (6) and (7) of this section respectively:

(a) All suitable spotted owl habitat within 0.7 mile of each northern spotted owl site center;

(b) Including the suitable spotted owl habitat identified in (a) of this subsection:

(i) For the Hoh-Clearwater/Coastal Link SOSEA - A total of 5,863 acres of suitable spotted owl habitat within the median home range circle (2.7 mile radius).

(ii) For all other SOSEAs - A total of 2,605 acres of suitable spotted owl habitat within the median home range circle (1.8 mile radius).

The department shall first identify the highest quality suitable spotted owl habitat for this purpose. Consideration shall be given to habitat quality, proximity to the activity center and contiguity in selecting the most suitable habitat. Suitable spotted owl habitat identified outside 0.7 mile of a northern spotted owl site center may support more than one median home range circle.

Suitable spotted owl habitat harvested by a landowner shall continue to be counted as part of the total acres necessary under (b) of this subsection for other landowners within the median home range circle if the harvest is conducted pursuant to agreements or plans approved under subsection (6) of this section or WAC 222-16-080 (1)(h)(iv), (6)(a)(iv), or (f).

(5) **Outside SOSEAs**, during the nesting season (between March 1 and August 31), seventy acres of the highest quality suitable spotted owl habitat surrounding a northern spotted owl site center should be maintained. The seventy acres for one site center shall not be utilized for meeting suitable habitat needs of any other site center.

(6) The assumptions set forth in subsection (4) of this section are based on regional data. Applicants or others may

submit information that is more current, accurate, or specific to a northern spotted owl site center, proposal, or SOSEA circumstances or goals. The department shall use such information in making its determinations under this section where the department finds, in consultation with the department of fish and wildlife, that the information is more likely to be valid for the particular circumstances than the assumptions established under subsection (4) of this section. If the department does not use the information, it shall explain its reasons in writing to the applicant.

(7) The department shall consider measures to mitigate identified adverse impacts of an applicant's proposal. Mitigation measures must contribute to the achievement of SOSEA goals or to supporting the viability of impacted northern spotted owl site centers.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-10-041, filed 5/30/01, effective 7/1/01. Statutory Authority: Chapters 76.09 and 34.05 RCW. 96-12-038, § 222-10-041, filed 5/31/96, effective 7/1/96.]

WAC 222-10-125 Exemption from RCW 43.21C.030

(2)(c). Decisions pertaining to the following are not subject to any procedural requirements implementing RCW 43.21C.030 (2)(c): Approval of forest road maintenance and abandonment plans, approval of future timber harvest schedules involving east-side clear cuts, acquisitions of forest lands in the riparian open space program; and acquisitions of conservation easements pertaining to forest lands in riparian zones under the forest riparian easement program.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-10-125, filed 5/30/01, effective 7/1/01.]

Chapter 222-12 WAC

POLICY AND ORGANIZATION

WAC

222-12-010	Authority.
222-12-020	Rule sections.
222-12-030	Classes of forest practices.
222-12-040	*Alternate plans—Policy.
222-12-0401	*Alternate plans—Process.
222-12-0402	*Assistance available for small forest landowners.
222-12-0403	*Cooperative development of guidelines for alternate plans.
222-12-0404	*Cooperation for effective alternate planning.
222-12-0405	*Auditing and monitoring.
222-12-041	Use of approved state and federal conservation agreements for aquatic resources.
222-12-044	Cooperative opportunities.
222-12-045	*Adaptive management program.
222-12-046	Cumulative effects.
222-12-050	Notices to comply—Stop work orders.
222-12-070	Enforcement policy.
222-12-090	Forest practices board manual.

WAC 222-12-010 Authority. These forest practices rules are adopted pursuant to chapter 76.09 RCW, RCW 76.13.100 through 76.13.130, and RCW 77.85.180 through 77.85.190. Where necessary to accomplish the purposes and policies stated in the act, the board is authorized to promulgate forest practices rules pursuant to chapter 34.05 RCW and in accordance with the procedures enumerated in the act. These rules establish minimum standards for forest practices, provide procedures for the voluntary development of

resource management plans, set forth necessary administrative provisions, establish procedures for the collection and administration of forest practice fees, allow for the development of watershed analyses, and establish the riparian open space program. The board also establishes which forest practices will be included within each class and is authorized to adopt rules under RCW 76.09.055, 76.09.370, and 76.13.120(9).

Promulgation of all forest practices rules shall be accomplished so that compliance with such forest practices rules will achieve compliance with the water quality laws.

Those rules marked with an asterisk (*) pertain to water quality protection; pursuant to RCW 76.09.040 they can be amended only by agreement between the board and the department of ecology.

Forest practices rules shall be administered and enforced by the department except as otherwise provided in the act. Such rules shall be administered so as to give consideration to all purposes and policies set forth in RCW 76.09.010.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-12-010, filed 5/30/01, effective 7/1/01; Order 263, § 222-12-010, filed 6/16/76.]

WAC 222-12-020 Rule sections. These rules are organized as follows:

Chapter 222-08 WAC	Practices and procedures.
Chapter 222-10 WAC	State Environmental Policy Act Guidelines.
Chapter 222-12 WAC	Policy and organization.
Chapter 222-16 WAC	Definitions.
Chapter 222-20 WAC	Application and notification procedures.
Chapter 222-21 WAC	Small forest landowner forestry riparian easement program.
Chapter 222-22 WAC	Watershed analysis.
Chapter 222-23 WAC	Riparian open space program.
Chapter 222-24 WAC	Road construction and maintenance.
Chapter 222-30 WAC	Timber harvesting.
Chapter 222-34 WAC	Reforestation.
Chapter 222-38 WAC	Forest chemicals.
Chapter 222-42 WAC	Supplemental directives.
Chapter 222-46 WAC	Consultation and enforcement.
Chapter 222-50 WAC	Relationship to other laws and rules.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-12-020, filed 5/30/01, effective 7/1/01. Statutory Authority: RCW 76.09.040, 76.09.170 and chapter 34.05 RCW. 94-01-134, § 222-12-020, filed 12/20/93, effective 1/1/94. Statutory Authority: RCW 76.09.040 and chapter 34.05 RCW. 93-12-001, § 222-12-020, filed 5/19/93, effective 6/19/93; Order 263, § 222-12-020, filed 6/16/76.]

WAC 222-12-030 Classes of forest practices. Forest practices are divided into four classes as specified by RCW 76.09.050. In certain emergencies, as defined in RCW 76.09.060(7), the application or notification may be submitted within 48 hours after commencement of the practice.

(1) **Class I forest practices** require no application or notification, but do require compliance with all other forest practices rules.

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(2) **Class II forest practices** require a notification to the department, and may begin 5 calendar days (or such lesser time as the department may determine) after receipt of a notification by the department.

(3) **Class III forest practices** must be approved or disapproved within 30 or fewer calendar days of receipt of an application by the department. The department is directed to approve or disapprove within 14 calendar days Class III applications not requiring additional field review. Multiyear applications must be approved or disapproved within 45 days of receipt of an application by the department.

(4) **Class IV forest practices** are divided into "Class IV - special," and "Class IV - general," and must be approved or disapproved within 30 calendar days of receipt of an application by the department, except that if a detailed environmental statement is necessary, additional time for approval or disapproval as specified in RCW 76.09.050 will be required.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-12-030, filed 5/30/01, effective 7/1/01. Statutory Authority: RCW 76.09.040. 87-23-036 (Order 535), § 222-12-030, filed 11/16/87, effective 1/1/88; Order 263, § 222-12-030, filed 6/16/76.]

WAC 222-12-040 *Alternate plans—Policy. All forest practice operations must comply with both the act and the rules promulgated pursuant to the act, unless an alternate plan has been approved by the department.

(1) The alternate plan process can be used as a tool to deal with a variety of situations, including where the cumulative impacts of regulations disproportionately impact a landowner. In some instances an alternate plan may be used to make minor on-the-ground modifications, which result in significant operation efficiencies. The alternate plan process may be used to address circumstances where a landowner has an economically inaccessible unit. The alternate plan process may also be used to facilitate voluntary landscape, riparian or stream restoration. In all cases, the alternate planning process will result in a plan that provides protection to public resources at least equal in overall effectiveness as provided by the act and rules while seeking to minimize constraints to the management of the affected lands.

(2) The legislature has found in RCW 76.13.100(2) that small forest landowners should also have the option of alternate management plans or alternate harvest restrictions on smaller harvest units that may have a relatively low impact on aquatic resources. These alternate plans are intended to provide flexibility to small forest landowners that will still provide protection of riparian functions based on specific field conditions or stream conditions on the landowner's property.

(3) Alternate plans do not replace other rules that recognize different types of landowner plans. See e.g., WAC 222-08-035(3), 222-12-041, 222-16-080(6), 222-16-100(1), and 222-16-105.

(4) Landowners are encouraged to communicate with the departments of ecology, fish and wildlife, affected Indian tribes, the National Marine Fisheries Service, the United States Fish and Wildlife Service and other interested parties prior to submission of an application accompanied by an alternate plan.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-12-040, filed 5/30/01, effective 7/1/01. Statutory Authority: RCW 76.09.040 and chapter 34.05 RCW. 97-24-091, § 222-12-040, filed 12/3/97, effective 1/3/98. Statutory Authority: RCW 76.09.040, 76.09.050 and chapter 34.05 RCW. 92-15-011, § 222-12-040, filed 7/2/92, effective 8/2/92. Statutory Authority: RCW 76.09.040. 87-23-036 (Order 535), § 222-12-040, filed 11/16/87, effective 1/1/88; Order 263, § 222-12-040, filed 6/16/76.]

WAC 222-12-0401 *Alternate plans—Process. (1)

Application. A landowner may submit an alternate plan that departs from the specific provisions of chapters 222-22 through 222-38 WAC for any or all of the activities described in the application. Alternate plans must be submitted with either a two-year or multiyear application. Alternate plans may support a single forest practices application or multiple applications if the sites included in the plan have sufficient common physical characteristics and elements to justify being considered together. See *board manual* section 21.

(2) Plan preparation. The landowner is responsible for preparing and submitting an alternate plan. Small forest landowners may wish to seek the assistance of the small forest landowner office. See WAC 222-12-0402.

(3) Contents of alternate plans. Alternate plans must contain all of the following:

(a) A map of the area covered, at a scale acceptable to the department showing the location of any affected streams and other waters, wetlands, unstable slopes, and existing roads. The map must also show the location of proposed road construction, timber harvest, and other forest practices;

(b) A description of how the alternate plan provides public resource protection to meet the approval standard, including a description of the proposed alternate management strategy, prescriptions, and where applicable, aquatic resource enhancements;

(c) A list of the forest practices rules that the alternate management plan is intended to replace;

(d) Where applicable, descriptions of monitoring and adaptive management strategies, including landowner plans for annual performance reviews;

(e) Where applicable, descriptions of an implementation schedule; and

(f) When multiple forest practices applications are submitted with the same alternate plan or when an alternate plan has been used for previous applications, justification that the sites included in the plan share sufficient common physical characteristics and elements to be considered together.

(4) Review of proposed plan. Upon receipt of a forest practices application together with an alternate plan, the department will do all of the following:

(a) Appoint an interdisciplinary team.

(b) Establish a deadline for completion of the interdisciplinary team review that is consistent with the requirements of subsection (5) of this rule; and

(c) Within 5 business days of receipt of an application with an alternate plan, provide copies of the application and alternate plan to the departments of ecology and fish and wildlife, affected Indian tribes, the National Marine Fisheries Service, the United States Fish and Wildlife Service, and other parties that have expressed an interest in alternate plans in the area of the application. If the landowner is a small for-

est landowner under WAC 222-21-010(11), copies should also be provided to the small forest landowners office.

(5) Interdisciplinary team.

(a) The department will determine the members invited to participate on an interdisciplinary team. Teams will include members with the qualifications necessary to evaluate the alternate plan. A representative of any affected Indian tribe, and departments of ecology and fish and wildlife will be invited to participate. Each team will include a representative of the landowner and a professional forester employed by the department and shall be led by a department employee.

(b) The interdisciplinary team will conduct a site visit and submit a recommendation to the department at least 3 days prior to the expiration of the application time limit in WAC 222-20-020. The interdisciplinary team may submit a recommendation without a site visit if a small forest landowner under WAC 222-21-010(11) submitted the alternate plan using a template contained in the *board manual* and is a low impact alternate plan and the team determines a visit is not necessary to evaluate the site specific application of a template or a low impact alternate plan.

(c) The recommendation of the interdisciplinary team shall indicate whether the alternate plan meets the approval standard, or what revisions are necessary to meet the approval standard. The team is intended to work with the landowner in an attempt to reach consensus on the efficacy of the alternate plan. In the absence of consensus, the team will forward reports reflecting the majority and minority opinions, or the landowner may elect to withdraw or revise the proposal.

(6) Approval standard. An alternate plan must provide protection for public resources at least equal in overall effectiveness to the protection provided in the act and rules.

(7) Approval, conditions, or disapproval. Upon receipt of the interdisciplinary team's recommendation, the department shall determine whether to approve, disapprove, or condition the application based on the approval standard. The department shall give substantial weight to the recommendations of the interdisciplinary team in cases where a consensus recommendation is forwarded. If the department disapproves or conditions a forest practices application with an alternate plan, the department will provide a written statement to the landowner explaining why the application was conditioned or denied.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-12-0401, filed 5/30/01, effective 7/1/01.]

WAC 222-12-0402 *Assistance available for small forest landowners. (1)

The small forest landowner office has been established within the department to be a resource and focal point for small forest landowner concerns and policies. A small forest landowner is defined in WAC 222-21-010(11). The legislature recognized that the further reduction in harvestable timber owned by small forest landowners would further erode small forest landowner's economic viability and willingness or ability to keep the lands in forestry use, and, therefore, reduced the amount of habitat available for salmon recovery and conservation of other aquatic resources. The legislature has directed that office to assist small forest land-

owners in preparing alternate plans appropriate to small forest landowners. See RCW 76.13.100 and 76.13.110(3).

(2) Small forest landowners interested in alternate plans are encouraged to contact the small forest landowner office for assistance in preparing an alternate plan. The office may provide technical assistance in understanding and using the *board manual* for alternate plans (section 21), assistance in developing an individualized alternate plan for the small forest landowner and facilitation of small forest landowner interactions with the department, other state agencies, federal agencies, affected Indian tribes and the interdisciplinary team that may review the small forest landowner's alternate plan.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-12-0402, filed 5/30/01, effective 7/1/01.]

WAC 222-12-0403 *Cooperative development of guidelines for alternate plans. The department will develop the section for alternate plans (WAC 222-12-090(21)) to submit to the board in cooperation with representatives of the small forest landowner office and advisory committee, the departments of ecology and fish and wildlife, United States Fish and Wildlife Service, National Marine Fisheries Service, and affected Indian tribes.

The manual should include:

(1) As required by RCW 76.13.110(3), the small forest landowner office recommendations for alternate plans or alternate harvest restrictions that meet riparian functions while generally requiring less costly regulatory prescriptions;

(2) The effectiveness of strategies for meeting resource objectives and protecting public resources;

(3) Template prescriptions designed to meet resource objectives to address common situations that are repeatedly addressed in alternate plans or strategies to simplify the development of future plans or strategies, including low impact situations and site-specific physical features;

(4) Appropriate recognition or credit for improving the condition of public resources; and

(5) Criteria to assist the department in determining whether a small forest landowner alternate plan qualifies as a low impact alternate plan.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-12-0403, filed 5/30/01, effective 7/1/01.]

WAC 222-12-0404 *Cooperation for effective alternate planning. The department will work cooperatively with associations representing the interests of large and small forest landowners to develop more efficient alternate planning guidance and processes. In pursuing greater efficiency and technical assistance, the department will consider:

(1) Successful alternate plans, and small forest landowner alternate management strategies and processes that can be used by other small forest landowners as examples of the plan development and approval process;

(2) Auditing and monitoring results;

(3) Maintaining a list of technical experts available to landowners in preparing such plans; and

(4) Partnerships between the department and organizations supporting forest land stewardship principles.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-12-0404, filed 5/30/01, effective 7/1/01.]

WAC 222-12-0405 *Auditing and monitoring. (1) Audits. The department will conduct audits of landowner's compliance with the terms of alternate plans. The department will specifically review and approve each landowner's scheduled performance reports, if a performance report is required, by checking the reports themselves or by implementing a more extensive audit involving field verification. The department audit program for alternate plans will be designed to be consistent with the terms of any agreements with the federal government regarding fish and water quality.

(2) The small landowners office is required by RCW 76.13.110(3) to evaluate the cumulative impact of alternate plans for small forest landowners on essential riparian functions at the subbasin or watershed level. The department will provide the result of this evaluation to the board.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-12-0405, filed 5/30/01, effective 7/1/01.]

WAC 222-12-041 Use of approved state and federal conservation agreements for aquatic resources. (1) Forest practices consistent with an agreement described in subsection (3) below are exempt from the forest practices rules in chapters 222-22 through 222-38 WAC if the following criteria are met:

(a) The forest practices rule pertains to a species included within aquatic resources and that species is covered by an agreement listed in subsection (3) below; and

(b) The primary risk(s) to public resources addressed by the forest practice rules (e.g., delivery of sediment to waters from roads, harvest activities, or mass wasting events; chemical contamination of waters; inadequate recruitment of large woody debris; delivery of thermal energy to waters) is addressed in the agreement. The agreement may address the risk using different prescriptions, approaches, or timing than the forest practice rule.

(2)(a) When the landowner submits an application or notification, the landowner must include a proposed list of specific rules replaced.

(b) The department will review and confirm whether the rules identified by the landowner meet the criteria identified in subsection (1) above.

(c) At the request of the department, the landowner will confer in good faith with the department and provide the department and other interested parties with information necessary to assist the department in implementing this section.

(3) This section applies to landowners who are operating consistent with one of the following agreements that covers a species included within aquatic resources provided that the agreement has received environmental review with an opportunity for public comment under the National Environmental Policy Act, 42 U.S.C. section 4321 et seq., the Endangered Species Act, 16 U.S.C. section 1531 et seq., or the State Environmental Policy Act, chapter 43.21C RCW;

(a) A habitat conservation plan and incidental take permit approved by the Secretary of the Interior or Commerce pursuant to 16 U.S.C. section 1539(a);

(b) An incidental take statement issued by the Secretary of the Interior or Commerce pursuant to 16 U.S.C. 1536(b);

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

(d) A candidate conservation agreement or other cooperative or conservation agreement entered into with a federal or state fish and wildlife agency pursuant to its statutory authority for fish and wildlife protection.

For any agreement with a formal application date after July 1, 2001, the landowner must have made a good faith effort to involve the department of fish and wildlife, the department of ecology, department of natural resources, and affected Indian tribes in the development of the related plan or management strategy.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-12-041, filed 5/30/01, effective 7/1/01.]

WAC 222-12-044 Cooperative opportunities. The forest practices board recognizes and encourages collaborative efforts to build solutions to pressing forest practices issues. The forest practices board may at any time use this method to assist in assessing and recommending solutions to issues. The benefits of this method lie in the ability of disparate groups to use consensus processes to bring recommendations to the forest practices board. The board will continue to utilize collaborative efforts, such as the Timber, Fish, and Wildlife (TFW) or similar forum. Participants would ideally consist of representation by timber interests, environmental interests, state agencies, local government, federal agencies, tribal governments and other interested parties so long as the collaborative effort utilizes a consensus approach to resolving or addressing issues.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-12-044, filed 5/30/01, effective 7/1/01.]

WAC 222-12-045 *Adaptive management program.
***Adaptive management program.** In order to further the purposes of chapter 76.09 RCW, the board has adopted and will manage a formal science-based program, as set forth in WAC 222-08-035(2). Refer to board manual section 22 for program guidance and further information.

(1) **Purpose:** The purpose of the program is to provide science-based recommendations and technical information to assist the board in determining if and when it is necessary or advisable to adjust rules and guidance for aquatic resources to achieve resource goals and objectives. The board may also use this program to adjust other rules and guidance. The goal of the program is to affect change when it is necessary or advisable to adjust rules and guidance to achieve the goals of the forests and fish report or other goals identified by the board. There are three desired outcomes: Certainty of change as needed to protect targeted resources; predictability and stability of the process of change so that landowners, regulators and interested members of the public can anticipate and pre-

pare for change; and application of quality controls to study design and execution and to the interpreted results.

(2) **Program elements:** By this rule, the board establishes an active, ongoing program composed of the following initial elements, but not to exclude other program elements as needed:

(a) **Key questions and resource objectives:** Upon receiving recommendations from the TFW policy committee, or similar collaborative forum, the board will establish key questions and resource objectives and prioritize them.

(i) Projects designed to address the key questions shall be established in the order and subject to the priorities identified by the board.

(ii) Resource objectives are intended to ensure that forest practices, either singularly or cumulatively, will not significantly impair the capacity of aquatic habitat to:

(A) Support harvestable levels of salmonids;

(B) Support the long-term viability of other covered species; or

(C) Meet or exceed water quality standards (protection of beneficial uses, narrative and numeric criteria, and anti-degradation).

(iii) Resource objectives consist of functional objectives and performance targets. Functional objectives are broad statements regarding the major watershed functions potentially affected by forest practices. Performance targets are the measurable criteria defining specific, attainable target forest conditions and processes.

(iv) Resource objectives are intended for use in adaptive management, rather than in the regulatory process. Best management practices, as defined in the rules and manual, apply to all forest practices regardless of whether or not resource objectives are met at a given site.

(b) **Participants:** The board will manage the program and has empowered the following entities to participate in the program: The cooperative monitoring evaluation and research committee (CMER), the TFW policy committee (or similar collaborative forum), the adaptive management program administrator, and other participants as directed to conduct the independent scientific peer review process. The program will strive to use a consensus-based approach to make decisions at all stages of the process. Specific consensus-decision stages will be established by CMER and approved by the board. Ground rules will follow those established by the TFW process as defined in the board manual.

(i) **CMER.** By this rule, the board establishes a cooperative monitoring evaluation and research (CMER) committee to impose accountability and formality of process, and to conduct research and validation and effectiveness monitoring to facilitate achieving the resource objectives. The purpose of CMER is to advance the science needed to support adaptive management. CMER also has ongoing responsibility to continue research and education in terrestrial resource issues. CMER will be made up of members that have expertise in a scientific discipline that will enable them to be most effective in addressing forestry, fish, wildlife, and landscape process issues. Members will represent timber landowners, environmental interests, state agencies, county governments, federal agencies and tribal governments from a scientific standpoint, not a policy view. CMER members will be approved by the

board. This will not preclude others from participating in and contributing to the CMER process or its subcommittees. CMER shall also develop and manage as appropriate:

- (A) Scientific advisory groups and subgroups;
- (B) Research and monitoring programs;
- (C) A set of protocols and standards to define and guide execution of the process including, but not limited to, research and monitoring data, watershed analysis reports, interdisciplinary team evaluations and reports, literature reviews, and quality control/quality assurance processes;
- (D) A baseline data set used to monitor change; and
- (E) A process for policy approval of research, monitoring, and assessment projects and use of external information, including the questions to be answered and the timelines.

(ii) **TFW policy committee (policy).** TFW, or a similar collaborative forum, is managed by a policy committee (hereafter referred to in this section as "policy"). Policy membership is self-selecting, and at a minimum should include representatives of the following caucuses: Timber landowners (industrial and nonindustrial private landowners); environmental community; tribal governments; county governments; state departments (including fish and wildlife, ecology, and natural resources); and federal agencies (including National Marine Fisheries Service, U.S. Fish and Wildlife Service, U.S. Environmental Protection Agency and U.S. Forest Service). Policy members will participate without compensation or per diem.

(iii) **Adaptive management program administrator (program administrator).** The department will employ a full-time independent program administrator to oversee the program and support CMER. The program administrator will have credentials as a program manager, scientist, and researcher. The program administrator will make reports to the board and have other responsibilities as defined in the board manual.

(c) **Independent scientific peer review process.** By this rule, the board establishes an independent scientific peer review process to determine if the scientific studies that address program issues are scientifically sound and technically reliable; and provide advice on the scientific basis or reliability of CMER's reports. Products that must be reviewed include final reports of CMER funded studies, certain CMER recommendations, and pertinent studies not published in a CMER-approved, peer-reviewed journal. Other products that may require review include, but are not limited to, external information, work plans, requests for proposal, subsequent study proposals, the final study plan, and progress reports.

(d) **Process:** The following stages will be used to affect change for managing adaptive management proposals and approved projects. If consensus cannot be reached by participants at any stage, the issue will be addressed within the dispute resolution process.

(i) **Proposal initiation:** Adaptive management proposals can be initiated at this stage by any of the participants listed in (2)(b) of this subsection to the program administrator, or initiation may be proposed by the general public at board meetings. Proposals must provide the minimum information as outlined in the board manual and demonstrate how results of the proposal will address key questions and

resource objectives or other program rule and/or guidance issues. The board may initiate proposals or research questions in the course of fulfilling their duties according to statute.

(ii) **Proposal approval and prioritization:** The program administrator will manage the proposal approval and prioritization process at this stage and consult with CMER on the program workplan. CMER proposals will be forwarded by the program administrator to policy and then to the board. The board will make the final determination regarding proposal approvals and prioritization. The board will act on proposal approval and prioritization in a timely manner.

(iii) **CMER implementation of proposal:** Board approved proposals are systematically implemented through CMER at this stage by the program administrator.

(iv) **Independent scientific peer review:** An independent scientific peer review process will be used at identified points within this stage of implementation depending upon the study and will be used on specified final studies or at the direction of the board.

(v) **CMER committee technical recommendations:** Upon completion, final CMER reports and information will be forwarded at this stage by the program administrator to policy in the form of a report that includes technical recommendations and a discussion of rule and/or guidance implications.

(vi) **Policy petitions for amendment:** Upon receipt of the CMER report, policy will prepare program rule amendments and/or guidance recommendations in the form of petitions for amendment. When completed, the petitions and the original CMER report and/or other information as applicable will be forwarded by the program administrator to the board for review and action. Policy recommendations to the board will be accompanied by formal petitions for rule making (RCW 34.05.330). Policy will use the CMER results to make specific petitions to the board for amending:

(A) The regulatory scheme of forest practices management (Title 222 WAC rules and board manual);

(B) Voluntary, incentive-based, and training programs affecting forestry;

(C) The resource objectives; and

(D) CMER itself, adaptive management procedures, or other mechanisms implementing the recommendations contained in the most current forests and fish report.

(vii) **Board action to adopt petitions for amendment:** Upon receiving a formal petition for amendment to rules and/or guidance, the board will take appropriate and timely action. There will be a public review of all petitions as applicable. The board will make the final determination.

(e) **Biennial fiscal and performance audits.** The board shall require biennial fiscal and performance audits of the program by the department or other appropriate and accepting independent state agency.

(f) **CMER five-year peer review process.** Every five years the board will establish a peer review process to review all work of CMER and other available, relevant data, including recommendations from the CMER staff. There will be a specified, but limited, period for public review and comment.

(g) **Funding.** Funding is essential to implement the adaptive management program, which is dependent on qual-

ity and relevant data. The department shall request biennial budgets to support the program priority projects and basic infrastructure needs including funding to staff the adaptive management program administrator position. A stable, long-term funding source is needed for these activities.

(h) **Dispute resolution process.** If consensus cannot be reached through the adaptive management program process, participants will have their issues addressed by this dispute resolution process. Potential failures include, but are not limited to: The inability of policy to agree on research priorities, program direction, or recommendations to the board for uses of monitoring and/or research after receiving a report from CMER; the inability of CMER to produce a report and recommendation on schedule; and the failure of participants to act on policy recommendations on a specified schedule. Key attributes of the dispute resolution process are:

(i) Specific substantive and benchmark (schedule) triggers will be established by the board for each monitoring and research project for invoking dispute resolution;

(ii) The dispute resolution process will be staged in three parts and may be applied at any level of the adaptive management process. Any participant, or the board, may invoke each succeeding stage, if agreement is not reached by the previous stage, within the specified time (or if agreements are not substantially implemented) as follows:

(A) Stage one will be an attempt by CMER and policy to reach consensus. On technical issues, CMER shall have up to six months to reach a consensus unless otherwise agreed upon by policy. Parties may move the process to stage two after an issue has been before policy for six months unless otherwise agreed. The time periods commence from referral of technical issues to CMER, report by CMER to policy, or the raising of a nontechnical issue (or matter not otherwise referable to CMER) directly at policy.

(B) Stage two will be either informal mediation or formal arbitration. Within one month, one or the other will be picked, with the default being formal unless otherwise agreed. Stage two will be completed within three months (including the one month to select the process) unless otherwise agreed.

(C) If stage two does not result in consensus, stage three will be action by the board. The board will consider policy and CMER reports, and majority and minority thinking regarding the results and uses of the results can be brought forward to the board. The board will make the final determination regarding dispute resolution.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-12-045, filed 5/30/01, effective 7/1/01. Statutory Authority: RCW 76.09.040. 87-23-036 (Order 535), § 222-12-045, filed 11/16/87, effective 1/1/88.]

WAC 222-12-046 Cumulative effects. The purpose of this section is to identify how the forest practices rules address changes to the environment caused by the interaction of natural ecosystem processes with the effects of two or more forest practices. This interaction is referred to as "cumulative effects." The following approaches have been taken:

(1) Title 222 WAC establishes minimum standards for all forest practices, regardless of the class of forest practice application.

(2) Forest practices which have a potential for a substantial impact on the environment are classified as Class IV-Special or Class IV-General by WAC 222-16-050 and receive an evaluation as to whether or not a detailed statement must be prepared pursuant to chapter 43.21C RCW.

(3) Certain rules are designed to focus on specific aspects of cumulative effects of forest practices. For example:

(a) WAC 222-08-035 requires continuing review of the forest practices rules and voluntary processes and adopts the concept of adaptive management. WAC 222-12-045 also adopts adaptive management.

(b) WAC 222-12-040 allows alternate plans that provide protection to public resources at least equal in overall effectiveness to the protection provided in the Forest Practices Act and rules.

(c) WAC 222-24-051 allows the department to require road maintenance and abandonment plans.

(d) WAC 222-30-025 addresses harvest unit size and separation requirements.

(e) Chapter 222-22 WAC addresses cumulative effects on the public resources of fish, water, and capital improvements of the state or its political subdivisions.

(f) Chapter 222-46 WAC establishes the enforcement policy for forest practices.

The board shall continue consultation with the departments of ecology, fish and wildlife, natural resources, forest landowners, and federally recognized tribes to further protect cultural resources and wildlife resource issues.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-12-046, filed 5/30/01, effective 7/1/01. Statutory Authority: RCW 76.09.040 and chapter 34.05 RCW. 97-24-091, § 222-12-046, filed 12/3/97, effective 1/3/98. Statutory Authority: RCW 76.09.040, 76.09.050 and chapter 34.05 RCW. 92-15-011, § 222-12-046, filed 7/2/92, effective 8/2/92.]

WAC 222-12-050 Notices to comply—Stop work orders. (1) **Violations.** When a forest practice has been completed, the department may issue a notice to comply requiring the operator or landowner to correct or compensate for damage to public resources where there was:

- (a) A violation of the act, or these rules; or
- (b) A deviation from the approved application; or
- (c) A willful or negligent disregard for potential damage to a public resource.

(2) **Other required action.** When a forest practice has not yet been completed, the department may issue either a notice to comply to the operator and/or landowner, or a stop work order to the operator, requiring him/her to prevent potential or continuing damage to a public resource where:

- (a) The need for additional actions or restrictions has become evident; and
- (b) The department determines that a specific course of action is needed to prevent potential or continuing damage to public resources; and

(c) The damage would result or is resulting from the forest practices activities, whether or not the activities involve any violation, unauthorized deviation or negligence.

(3) **No notice to comply** shall be issued to require a person to prevent, correct, or compensate for any damage to public resources which occurs more than 1 year after the date of completion of the forest practices operations involved exclusive of reforestation, unless such forest practices were not conducted in accordance with forest practices rules: Provided, That this provision shall not relieve the forest landowner from any obligation to comply with forest practices rules pertaining to providing continuing road maintenance.

(4) **No notice to comply** to recover money damages shall be issued more than 2 years after the date the damage involved occurs.

(5) **In emergency action**, where the department requires the operator or landowner to do immediate work in the bed of the stream the department shall first seek approval from the department of fish and wildlife.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-12-050, filed 5/30/01, effective 7/1/01. Statutory Authority: RCW 76.09.040 and chapter 34.05 RCW. 97-24-091, § 222-12-050, filed 12/3/97, effective 1/3/98; 93-12-001, § 222-12-050, filed 5/19/93, effective 6/19/93; Order 263, § 222-12-050, filed 6/16/76.]

WAC 222-12-070 Enforcement policy. Procedures for enforcement of these rules by the department are provided in chapter 222-46 WAC. Where the department of ecology determines that a person has failed to comply with the forest practices rules relating to water quality protection, and that the department of natural resources has not issued a stop work order or notice to comply, the department of ecology shall inform the department thereof in writing. If the department of natural resources fails to take authorized enforcement action within 24 hours, under RCW 76.09.080, 76.09.090, 76.09.120 or 76.09.130, the department of ecology may petition to the chairman of the appeals board, who shall, within 48 hours, either deny the petition or direct the department of natural resources to immediately issue a stop work order or a notice to comply or impose a penalty. No civil or criminal penalties shall be imposed for past actions or omissions if such actions or omissions were conducted pursuant to an approval or directive of the department of natural resources.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-12-070, filed 5/30/01, effective 7/1/01; Order 263, § 222-12-070, filed 6/16/76.]

WAC 222-12-090 Forest practices board manual. When approved by the board the manual serves as an advisory technical supplement to these forest practices rules. The department, in cooperation with the departments of fish and wildlife, agriculture, ecology, and such other agencies, affected Indian tribes, or interested parties as may have appropriate expertise, is directed to prepare, and submit to the board for approval, revisions to the forest practices board manual. The manual shall include:

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(1) **Method for determination of adequate shade requirements on streams** needed for use with WAC 222-30-040.

(2) Standards for identifying channel migration zones and bankfull channel features.

(3) **Guidelines** for forest roads.

(4) **Guidelines** for clearing slash and debris from Type Np and Ns Waters.

(5) **Guidelines** for landing location and construction.

(6) **Guidelines** for determining acceptable stocking levels.

(7) **Guidelines** for riparian management zones.

(8) **Guidelines** for wetland delineation.

(9) **Guidelines** for wetland replacement or substitution.

(10) A list of nonnative wetland plant species.

(11) The standard methodology, which shall specify the quantitative methods, indices of resource conditions, and definitions, for conducting watershed analysis under chapter 222-22 WAC. The department, in consultation with Timber/Fish/Wildlife's Cooperative Monitoring, Evaluation and Research Committee (CMER), may make minor modifications to the version of the standard methodology approved by the board. Substantial amendments to the standard methodology requires approval by the board.

(12) **Guidelines** for forest chemicals.

(a) A list of special concerns related to aerial application of pesticides developed under WAC 222-16-070(3).

(b) Guidelines for aerial applications of pesticides and other forest chemicals under chapter 222-38 WAC.

(13) **Guidelines** for determining fish use for the purpose of typing waters under WAC 222-16-031.

(14) **Survey protocol for marbled murrelets.** The Pacific seabird survey protocol in effect March 1, 1997, shall be used when surveying for marbled murrelets in a stand. Surveys conducted before the effective date of this rule are valid if they were conducted in substantial compliance with generally accepted survey protocols in effect at the beginning of the season in which they were conducted.

(15) The department shall, in consultation with the department of fish and wildlife, develop **platform protocols** for use by applicants in estimating the number of platforms, and by the department in reviewing and classifying forest practices under WAC 222-16-050. These protocols shall include:

(a) A sampling method to determine platforms per acre in the field;

(b) A method to predict the number of platforms per acre based on information measurable from typical forest inventories. The method shall be derived from regression models or other accepted statistical methodology, and incorporate the best available data; and

(c) Other methods determined to be reliable by the department, in consultation with the department of fish and wildlife.

(16) **Guidelines** for evaluating potentially unstable slopes and landforms.

(17) **Guidelines** for the small forest landowner forestry riparian easement program.

(18) **Guidelines** for riparian open space program.

- (19) **Guidelines** for hardwood conversion.
- (20) **Guidelines** for financial assurances.
- (21) **Guidelines** for alternate plans.
- (22) **Guidelines** for adaptive management program.
- (23) **Guidelines** for field protocol to locate mapped divisions between stream types and perennial stream identification.
- (24) **Guidelines** for interim modification of bull trout habitat overlay.
- (25) **Guidelines** for bull trout presence survey protocol.
- (26) **Guidelines** for placement strategy for woody debris in streams.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9), 01-12-042, § 222-12-090, filed 5/30/01, effective 7/1/01. Statutory Authority: RCW 76.09.040 and chapter 34.05 RCW. 97-24-091, § 222-12-090, filed 12/3/97, effective 1/3/98; 97-15-105, § 222-12-090, filed 7/21/97, effective 8/21/97. Statutory Authority: RCW 76.09.040, 76.09.050 and chapter 34.05 RCW. 92-15-113, § 222-12-090, filed 7/21/92, effective 8/21/92. Statutory Authority: RCW 76.09.040. 88-19-112 (Order 551, Resolution No. 88-1), § 222-12-090, filed 9/21/88, effective 11/1/88; 87-23-036 (Order 535), § 222-12-090, filed 11/16/87, effective 1/1/88. Statutory Authority: RCW 76.09.040 and 76.09.050. 82-16-077 (Resolution No. 82-1), § 222-12-090, filed 8/3/82, effective 10/1/82; Order 263, § 222-12-090, filed 6/16/76.]

Chapter 222-16 WAC DEFINITIONS

WAC

222-16-010	General definitions.*
222-16-030	Water typing system.
222-16-031	Interim water typing system.
222-16-035	Wetland typing system.
*222-16-036	Wetland mapping.
*222-16-050	Classes of forest practices.
222-16-051	*Exception to Class IV-Special.
222-16-070	Pesticide uses with the potential for a substantial impact on the environment.
222-16-080	Critical habitats (state) of threatened and endangered species.
222-16-100	Planning options for the northern spotted owl.
222-16-105	Cooperative habitat enhancement agreements.

WAC 222-16-010 General definitions.* Unless otherwise required by context, as used in these rules:

"Act" means the Forest Practices Act, chapter 76.09 RCW.

"Affected Indian tribe" means any federally recognized Indian tribe that requests in writing from the department information on forest practices applications and notification filed on specified areas.

"Alluvial fan" see "sensitive sites" definition.

"Appeals board" means the forest practices appeals board established in the act.

"Aquatic resources" means water quality, fish, the Columbia torrent salamander (*Rhyacotriton kezeri*), the Cascade torrent salamander (*Rhyacotriton cascadae*), the Olympic torrent salamander (*Rhyacotriton olympian*), the Dunn's salamander (*Plethodon dunni*), the Van Dyke's salamander (*Plethodon vandyke*), the Tailed frog (*Ascaphus truei*) and their respective habitats.

"Area of resource sensitivity" means areas identified in accordance with WAC 222-22-050 (2)(d) or 222-22-060(2).

"Bankfull depth" means the average vertical distance between the channel bed and the estimated water surface elevation required to completely fill the channel to a point above which water would enter the floodplain or intersect a terrace or hillslope. In cases where multiple channels exist, the bankfull depth is the average depth of all channels along the cross-section. (See board manual section 2.)

"Bankfull width" means:

(a) For streams - the measurement of the lateral extent of the water surface elevation perpendicular to the channel at bankfull depth. In cases where multiple channels exist, bankfull width is the sum of the individual channel widths along the cross-section (see board manual section 2).

(b) For lakes, ponds, and impoundments - line of mean high water.

(c) For tidal water - line of mean high tide.

(d) For periodically inundated areas of associated wetlands - line of periodic inundation, which will be found by examining the edge of inundation to ascertain where the presence and action of waters are so common and usual, and so long continued in all ordinary years, as to mark upon the soil a character distinct from that of the abutting upland.

"Basal area" means the area in square feet of the cross section of a tree bole measured at 4 1/2 feet above the ground.

"Bedrock hollows" (colluvium-filled bedrock hollows, or hollows; also referred to as zero-order basins, swales, or bedrock depressions) means landforms that are commonly spoon-shaped areas of convergent topography within unchanneled valleys on hillslopes. (See board manual section 16 for identification criteria.)

"Board" means the forest practices board established by the act.

"Bog" means wetlands which have the following characteristics: Hydric organic soils (peat and/or muck) typically 16 inches or more in depth (except over bedrock or hardpan); and vegetation such as sphagnum moss, labrador tea, bog laurel, bog rosemary, sundews, and sedges; bogs may have an overstory of spruce, western Hemlock, lodgepole pine, cedar, whitepine, crabapple, or aspen, and may be associated with open water. This includes nutrient-poor fens. (See board manual section 8.)

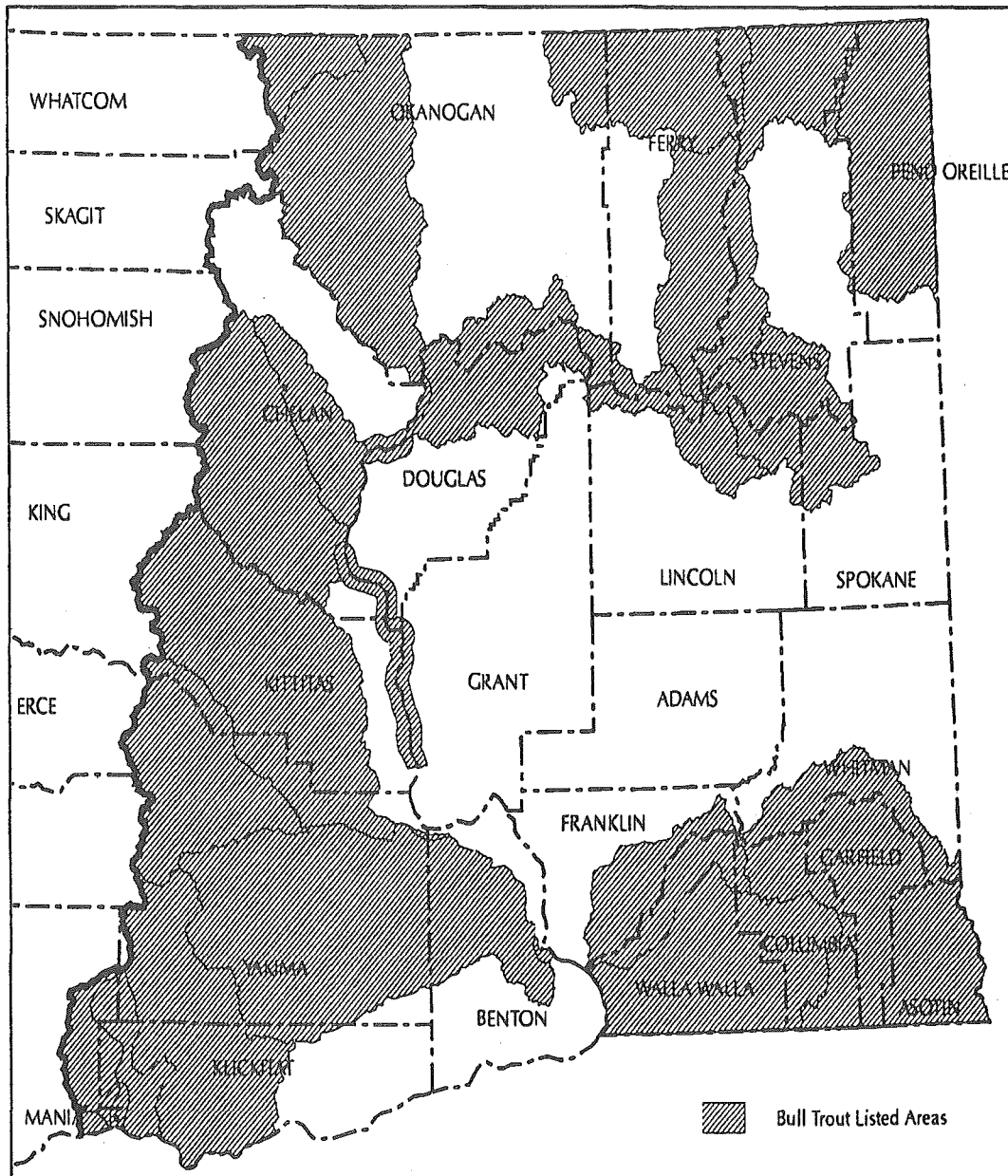
"Borrow pit" shall mean an excavation site outside the limits of construction to provide material necessary to that construction, such as fill material for the embankments.

"Bull trout habitat overlay" means those portions of Eastern Washington streams containing bull trout habitat as identified on the department of fish and wildlife's bull trout map. Prior to the development of a bull trout field protocol and the habitat-based predictive model, the "bull trout habitat overlay" map may be modified to allow for locally-based corrections using current data, field knowledge, and best professional judgment. A landowner may meet with the departments of natural resources, fish and wildlife and, in consultation with affected tribes and federal biologists, determine whether certain stream reaches have habitat conditions that are unsuitable for supporting bull trout. If such a determination is mutually agreed upon, documentation submitted to the department will result in the applicable stream reaches no longer being included within the definition of bull trout habi-

tat overlay. Conversely, if suitable bull trout habitat is discovered outside the current mapped range, those waters will

be included within the definition of "bull trout habitat overlay" by a similar process.

Bull Trout Overlay Map



"Channel migration zone (CMZ)" means the area where the active channel of a stream is prone to move and this results in a potential near-term loss of riparian function and associated habitat adjacent to the stream. (See the board manual section 2 for descriptions and illustrations of CMZs, delineation guidelines), except as modified by a permanent levee or dike. For this purpose, near-term means the time scale required to grow a mature forest.

"Chemicals" means substances applied to forest lands or timber including pesticides, fertilizers, and other forest chemicals.

"Clearcut" means a harvest method in which the entire stand of trees is removed in one timber harvesting operation.

Except as provided in WAC 222-30-110, an area remains clearcut until:

It meets the minimum stocking requirements under WAC 222-34-010(2) or 222-34-020(2); and

The largest trees qualifying for the minimum stocking levels have survived on the area for five growing seasons or, if not, they have reached an average height of four feet.

"Columbia River Gorge National Scenic Area or CRGNSA" means the area established pursuant to the Columbia River Gorge National Scenic Area Act, 16 U.S.C. §544b(a).

"CRGNSA special management area" means the areas designated in the Columbia River Gorge National Scenic Area Act, 16 U.S.C. §544b(a).

nic Area Act, 16 U.S.C. §544b(b) or revised pursuant to 16 U.S.C. §544b(c). For purposes of this rule, the special management area shall not include any parcels excluded by 16 U.S.C. §544f(o).

"CRGNSA special management area guidelines" means the guidelines and land use designations for forest practices developed pursuant to 16 U.S.C. §544f contained in the CRGNSA management plan developed pursuant to 15 U.S.C. §544d.

"Commercial tree species" means any species which is capable of producing a merchantable stand of timber on the particular site, or which is being grown as part of a Christmas tree or ornamental tree-growing operation.

"Completion of harvest" means the latest of:

Completion of removal of timber from the portions of forest lands harvested in the smallest logical unit that will not be disturbed by continued logging or an approved slash disposal plan for adjacent areas; or

Scheduled completion of any slash disposal operations where the department and the applicant agree within 6 months of completion of yarding that slash disposal is necessary or desirable to facilitate reforestation and agree to a time schedule for such slash disposal; or

Scheduled completion of any site preparation or rehabilitation of adjoining lands approved at the time of approval of the application or receipt of a notification: Provided, That delay of reforestation under this paragraph is permitted only to the extent reforestation would prevent or unreasonably hinder such site preparation or rehabilitation of adjoining lands.

"Constructed wetlands" means those wetlands voluntarily developed by the landowner. Constructed wetlands do not include wetlands created, restored, or enhanced as part of a mitigation procedure or wetlands inadvertently created as a result of current or past practices including, but not limited to: Road construction, landing construction, railroad construction, or surface mining.

"Contamination" means introducing into the atmosphere, soil, or water, sufficient quantities of substances as may be injurious to public health, safety or welfare, or to domestic, commercial, industrial, agriculture or recreational uses, or to livestock, wildlife, fish or other aquatic life.

"Convergent headwalls" (or headwalls) means tear-drop-shaped landforms, broad at the ridgetop and terminating where headwaters converge into a single channel; they are broadly concave both longitudinally and across the slope, but may contain sharp ridges separating the headwater channels. (See board manual section 16 for identification criteria.)

"Conversion option harvest plan" means a voluntary plan developed by the landowner and approved by the local government entity indicating the limits of harvest areas, road locations, and open space.

"Conversion to a use other than commercial timber operation" shall mean a bona fide conversion to an active use which is incompatible with timber growing.

"Cooperative habitat enhancement agreement (CHEA)" see WAC 222-16-105.

"Critical habitat (federal)" means the habitat of any threatened or endangered species designated as critical habi-

tat by the United States Secretary of the Interior or Commerce under Sections 3 (5)(A) and 4 (a)(3) of the Federal Endangered Species Act.

"Critical nesting season" means for marbled murrelets - April 1 to August 31.

"Critical habitat (state)" means those habitats designated by the board in accordance with WAC 222-16-080.

"Cultural resources" means archaeological and historic sites and artifacts and traditional religious, ceremonial and social uses and activities of affected Indian tribes.

"Cumulative effects" means the changes to the environment caused by the interaction of natural ecosystem processes with the effects of two or more forest practices.

"Daily peak activity" means for marbled murrelets - one hour before official sunrise to two hours after official sunrise and one hour before official sunset to one hour after official sunset.

"Debris" means woody vegetative residue less than 3 cubic feet in size resulting from forest practice activities which would reasonably be expected to cause significant damage to a public resource.

"Deep-seated landslides" means landslides in which most of the area of the slide plane or zone lies below the maximum rooting depth of forest trees, to depths of tens to hundreds of feet. (See board manual section 16 for identification criteria.)

"Demographic support" means providing sufficient suitable spotted owl habitat within the SOSEA to maintain the viability of northern spotted owl sites identified as necessary to meet the SOSEA goals.

"Department" means the department of natural resources.

"Desired future condition (DFC)" is a reference point on a pathway and not an endpoint for stands. DFC means the stand conditions of a mature riparian forest at 140 years of age, the midpoint between 80 and 200 years. Where basal area is the only stand attribute used to describe 140-year old stands, these are referred to as the "Target Basal Area."

"Diameter at breast height (dbh)" means the diameter of a tree at 4 1/2 feet above the ground measured from the uphill side.

"Dispersal habitat" see WAC 222-16-085(2).

"Dispersal support" means providing sufficient dispersal habitat for the interchange of northern spotted owls within or across the SOSEA, as necessary to meet SOSEA goals. Dispersal support is provided by a landscape consisting of stands of dispersal habitat interspersed with areas of higher quality habitat, such as suitable spotted owl habitat found within RMZs, WMZs or other required and voluntary leave areas.

"Drainage structure" means a construction technique or feature that is built to relieve surface runoff and/or intercepted ground water from roadside ditches to prevent excessive buildup in water volume and velocity. A drainage structure is not intended to carry any typed water. Drainage structures include structures such as: Cross drains, relief culverts, ditch diversions, water bars, or other such structures demonstrated to be equally effective.

"**Eastern Washington**" means the geographic area in Washington east of the crest of the Cascade Mountains from the international border to the top of Mt. Adams, then east of the ridge line dividing the White Salmon River drainage from

the Lewis River drainage and east of the ridge line dividing the Little White Salmon River drainage from the Wind River drainage to the Washington-Oregon state line.

Eastern Washington Definition Map



"**Eastern Washington timber habitat types**" means elevation ranges associated with tree species assigned for the purpose of riparian management according to the following:

Timber Habitat Types	Elevation Ranges
ponderosa pine	0 - 2500 feet
mixed conifer	2501 - 5000 feet
high elevation	above 5000 feet

"**Edge**" of any water means the outer edge of the water's bankfull width or, where applicable, the outer edge of the associated channel migration zone.

"**End hauling**" means the removal and transportation of excavated material, pit or quarry overburden, or landing or road cut material from the excavation site to a deposit site not adjacent to the point of removal.

"**Equipment limitation zone**" means a 30-foot wide zone measured horizontally from the outer edge of the bankfull width of a Type Np or Ns Water. It applies to all perennial and seasonal nonfish bearing streams.

"**Erodible soils**" means those soils that, when exposed or displaced by a forest practice operation, would be readily moved by water.

"**Even-aged harvest methods**" means the following harvest methods:

Clearcuts;

Seed tree harvests in which twenty or fewer trees per acre remain after harvest;

Shelterwood regeneration harvests in which twenty or fewer trees per acre remain after harvest;

Group or strip shelterwood harvests creating openings wider than two tree heights, based on dominant trees;

Shelterwood removal harvests which leave fewer than one hundred fifty trees per acre which are at least five years old or four feet in average height;

Partial cutting in which fewer than fifty trees per acre remain after harvest;

Overstory removal when more than five thousand board feet per acre is removed and fewer than fifty trees per acre at least ten feet in height remain after harvest; and

Other harvesting methods designed to manage for multiple age classes in which six or fewer trees per acre remain after harvest.

Except as provided above for shelterwood removal harvests and overstory removal, trees counted as remaining after harvest shall be at least ten inches in diameter at breast height and have at least the top one-third of the stem supporting green, live crowns. Except as provided in WAC 222-30-110, an area remains harvested by even-aged methods until it meets the minimum stocking requirements under WAC 222-34-010(2) or 222-34-020(2) and the largest trees qualifying for the minimum stocking levels have survived on the area for five growing seasons or, if not, they have reached an average height of four feet.

"**Fen**" means wetlands which have the following characteristics: Peat soils 16 inches or more in depth (except over bedrock); and vegetation such as certain sedges, hardstem bulrush and cattails; fens may have an overstory of spruce and may be associated with open water.

"Fertilizers" means any substance or any combination or mixture of substances used principally as a source of plant food or soil amendment.

"Fill" means the placement of earth material or aggregate for road or landing construction or other similar activities.

"Fish" means for purposes of these rules, species of the vertebrate taxonomic groups of *Cephalospidomorphi* and *Osteichthyes*.

"Fish habitat" means habitat, which is used by fish at any life stage at any time of the year including potential habitat likely to be used by fish, which could be recovered by restoration or management and includes off-channel habitat.

"Flood level - 100 year." Is a calculated flood event flow based on an engineering computation of flood magnitude that has a 1 percent chance of occurring in any given year. For purposes of field interpretation, landowners may use the following methods:

Flow information from gauging stations;

Field estimate of water level based on guidance for "Determining the 100-Year Flood Level" in the forest practices board manual section 2.

The 100-year flood level shall not include those lands that can reasonably be expected to be protected from flood waters by flood control devices maintained by or under license from the federal government, the state, or a political subdivision of the state.

"Forest land" means all land which is capable of supporting a merchantable stand of timber and is not being actively used for a use which is incompatible with timber growing.

"Forest land owner" shall mean any person in actual control of forest land, whether such control is based either on legal or equitable title, or on any other interest entitling the holder to sell or otherwise dispose of any or all of the timber on such land in any manner: Provided, That any lessee or other person in possession of forest land without legal or equitable title to such land shall be excluded from the definition of "forest land owner" unless such lessee or other person has the right to sell or otherwise dispose of any or all of the timber located on such forest land.

"Forest practice" means any activity conducted on or directly pertaining to forest land and relating to growing, harvesting, or processing timber, including but not limited to:

- Road and trail construction;
- Harvesting, final and intermediate;
- Precommercial thinning;
- Reforestation;
- Fertilization;
- Prevention and suppression of diseases and insects;
- Salvage of trees; and
- Brush control.

"Forest practice" shall not include: Forest species seed orchard operations and intensive forest nursery operations; or preparatory work such as tree marking, surveying and road flagging; or removal or harvest of incidental vegetation from forest lands such as berries, ferns, greenery, mistletoe, herbs, mushrooms, and other products which cannot normally be

expected to result in damage to forest soils, timber or public resources.

"Forest road" means ways, lanes, roads, or driveways on forest land used since 1974 for forest practices or forest management activities such as fire control. "Forest roads" does not include skid trails, highways, or county roads except where the county is a forest landowner or operator.

"Forest trees" excludes trees cultivated by agricultural methods in growing cycles shorter than ten years: Provided, That Christmas trees are forest trees and: Provided further, That this exclusion applies only to trees planted on land that was not in forest use immediately before the trees were planted and before the land was prepared for planting the trees.

"Full bench road" means a road constructed on a side hill without using any of the material removed from the hillside as a part of the road. This construction technique is usually used on steep or unstable slopes.

"Green recruitment trees" means those trees left after harvest for the purpose of becoming future wildlife reserve trees under WAC 222-30-020(11).

"Groundwater recharge areas for glacial deep-seated slides" means the area upgradient that can contribute water to the landslide, assuming that there is an impermeable perching layer in or under a deep-seated landslide in glacial deposits. (See board manual section 16 for identification criteria.)

"Headwater spring" means a permanent spring at the head of a perennial channel. Where a headwater spring can be found, it will coincide with the uppermost extent of Type Np Water.

"Herbicide" means any substance or mixture of substances intended to prevent, destroy, repel, or mitigate any tree, bush, weed or algae and other aquatic weeds.

"Historic site" includes:

Sites, areas and structures or other evidence of human activities illustrative of the origins, evolution and development of the nation, state or locality; or

Places associated with a personality important in history; or

Places where significant historical events are known to have occurred even though no physical evidence of the event remains.

"Horizontal distance" means the distance between two points measured at a 0% slope.

"Hyporheic" means an area adjacent to and below channels where interstitial water is exchanged with channel water and water movement is mainly in the downstream direction.

"Identified watershed processes" means the following components of natural ecological processes that may in some instances be altered by forest practices in a watershed:

- Mass wasting;
- Surface and road erosion;
- Seasonal flows including hydrologic peak and low flows and annual yields (volume and timing);
- Large organic debris;
- Shading; and
- Stream bank and bed stability.

"Inner gorges" means canyons created by a combination of the downcutting action of a stream and mass movement on the slope walls; they commonly show evidence of recent movement, such as obvious landslides, vertical tracks of disturbance vegetation, or areas that are concave in contour and/or profile. (See board manual section 16 for identification criteria.)

"Insecticide" means any substance or mixture of substances intended to prevent, destroy, repel, or mitigate any insect, other arthropods or mollusk pests.

"Interdisciplinary team" (ID Team) means a group of varying size comprised of individuals having specialized expertise, assembled by the department to respond to technical questions associated with a proposed forest practice activity.

"Islands" means any island surrounded by salt water in Kitsap, Mason, Jefferson, Pierce, King, Snohomish, Skagit, Whatcom, Island, or San Juan counties.

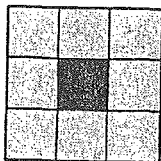
"Limits of construction" means the area occupied by the completed roadway or landing, including the cut bank, fill slope, and the area cleared for the purpose of constructing the roadway or landing.

"Load bearing portion" means that part of the road, landing, etc., which is supportive soil, earth, rock or other material directly below the working surface and only the associated earth structure necessary for support.

"Local government entity" means the governments of counties and the governments of cities and towns as defined in chapter 35.01 RCW.

"Low impact harvest" means use of any logging equipment, methods, or systems that minimize compaction or disturbance of soils and vegetation during the yarding process. The department shall determine such equipment, methods or systems in consultation with the department of ecology.

"Marbled murrelet detection area" means an area of land associated with a visual or audible detection of a marbled murrelet, made by a qualified surveyor which is documented and recorded in the department of fish and wildlife data base. The marbled murrelet detection area shall be comprised of the section of land in which the marbled murrelet detection was made and the eight sections of land immediately adjacent to that section.



■ **Detection Section**
■ **Detection Area**

"Marbled murrelet nesting platform" means any horizontal tree structure such as a limb, an area where a limb branches, a surface created by multiple leaders, a deformity, or a debris/moss platform or stick nest equal to or greater than 7 inches in diameter including associated moss if present, that is 50 feet or more above the ground in trees 32 inches dbh and greater (generally over 90 years of age) and is capable of supporting nesting by marbled murrelets.

"Median home range circle" means a circle, with a specified radius, centered on a spotted owl site center. The radius for the median home range circle in the Hoh-Clearwater/Coastal Link SOSEA is 2.7 miles; for all other SOSEAs the radius is 1.8 miles.

"Merchantable stand of timber" means a stand of trees that will yield logs and/or fiber:

Suitable in size and quality for the production of lumber, plywood, pulp or other forest products;

Of sufficient value at least to cover all the costs of harvest and transportation to available markets.

"Multiyear permit" means a permit to conduct forest practices which is effective for longer than two years but no longer than five years.

"Northern spotted owl site center" means the location of status 1, 2 or 3 northern spotted owls based on the following definitions:

- Status 1: Pair or reproductive - a male and female heard and/or observed in close proximity to each other on the same visit, a female detected on a nest, or one or both adults observed with young.
- Status 2: Two birds, pair status unknown - the presence or response of two birds of opposite sex where pair status cannot be determined and where at least one member meets the resident territorial single requirements.
- Status 3: Resident territorial single - the presence or response of a single owl within the same general area on three or more occasions within a breeding season with no response by an owl of the opposite sex after a complete survey; or three or more responses over several years (i.e., two responses in year one and one response in year two, for the same general area).

In determining the existence, location, and status of northern spotted owl site centers, the department shall consult with the department of fish and wildlife and use only those sites documented in substantial compliance with guidelines or protocols and quality control methods established by and available from the department of fish and wildlife.

"Notice to comply" means a notice issued by the department pursuant to RCW 76.09.090 of the act and may require initiation and/or completion of action necessary to prevent, correct and/or compensate for material damage to public resources which resulted from forest practices.

"Occupied marbled murrelet site" means:

(1) A contiguous area of suitable marbled murrelet habitat where at least one of the following marbled murrelet behaviors or conditions occur:

- (a) A nest is located; or
- (b) Downy chicks or eggs or egg shells are found; or
- (c) Marbled murrelets are detected flying below, through, into or out of the forest canopy; or
- (d) Birds calling from a stationary location within the area; or
- (e) Birds circling above a timber stand within one tree height of the top of the canopy; or

(2) A contiguous forested area, which does not meet the definition of suitable marbled murrelet habitat, in which any of the behaviors or conditions listed above has been documented by the department of fish and wildlife and which is distinguishable from the adjacent forest based on vegetative characteristics important to nesting marbled murrelets.

(3) For sites defined in (1) above, the outer perimeter of the occupied site shall be presumed to be the closer, measured from the point where the observed behaviors or conditions listed in (1) above occurred, of the following:

(a) 1.5 miles from the point where the observed behaviors or conditions listed in (1) above occurred; or

(b) The beginning of any gap greater than 300 feet wide lacking one or more of the vegetative characteristics listed under "suitable marbled murrelet habitat"; or

(c) The beginning of any narrow area of "suitable marbled murrelet habitat" less than 300 feet in width and more than 300 feet in length.

(4) For sites defined under (2) above, the outer perimeter of the occupied site shall be presumed to be the closer, measured from the point where the observed behaviors or conditions listed in (1) above occurred, of the following:

(a) 1.5 miles from the point where the observed behaviors or conditions listed in (1) above occurred; or

(b) The beginning of any gap greater than 300 feet wide lacking one or more of the distinguishing vegetative characteristics important to murrelets; or

(c) The beginning of any narrow area of suitable marbled murrelet habitat, comparable to the area where the observed behaviors or conditions listed in (1) above occurred, less than 300 feet in width and more than 300 feet in length.

(5) In determining the existence, location and status of occupied marbled murrelet sites, the department shall consult with the department of fish and wildlife and use only those sites documented in substantial compliance with guidelines or protocols and quality control methods established by and available from the department of fish and wildlife.

"**Old forest habitat**" see WAC 222-16-085 (1)(a).

"**Operator**" shall mean any person engaging in forest practices except an employee with wages as his/her sole compensation.

"**Ordinary high-water mark**" means the mark on the shores of all waters, which will be found by examining the beds and banks and ascertaining where the presence and action of waters are so common and usual, and so long continued in all ordinary years, as to mark upon the soil a character distinct from that of the abutting upland, in respect to vegetation: Provided, That in any area where the ordinary high-water mark cannot be found, the ordinary high-water mark adjoining saltwater shall be the line of mean high tide and the ordinary high-water mark adjoining freshwater shall be the line of mean high-water.

"**Other forest chemicals**" means fire retardants when used to control burning (other than water), nontoxic repellents, oil, dust-control agents (other than water), salt, and other chemicals used in forest management, except pesticides and fertilizers, that may present hazards to the environment.

"**Park**" means any park included on the parks register maintained by the department pursuant to WAC 222-20-

100(2). Developed park recreation area means any park area developed for high density outdoor recreation use.

"**Partial cutting**" means the removal of a portion of the merchantable volume in a stand of timber so as to leave an uneven-aged stand of well-distributed residual, healthy trees that will reasonably utilize the productivity of the soil. Partial cutting does not include seedtree or shelterwood or other types of regeneration cutting.

"**Pesticide**" means any insecticide, herbicide, fungicide, or rodenticide, but does not include nontoxic repellents or other forest chemicals.

"**Plantable area**" is an area capable of supporting a commercial stand of timber excluding lands devoted to permanent roads, utility rights-of-way, that portion of riparian management zones where scarification is not permitted, and any other area devoted to a use incompatible with commercial timber growing.

"**Power equipment**" means all machinery operated with fuel burning or electrical motors, including heavy machinery, chain saws, portable generators, pumps, and powered backpack devices.

"**Preferred tree species**" means the following species listed in descending order of priority for each timber habitat type:

**Ponderosa pine
habitat type**

all hardwoods
ponderosa pine
western larch
Douglas-fir
western red cedar

**Mixed conifer
habitat type**

all hardwoods
western larch
ponderosa pine
western red cedar
white pine
Douglas-fir
lodgepole pine

"**Public resources**" means water, fish, and wildlife and in addition shall mean capital improvements of the state or its political subdivisions.

"**Qualified surveyor**" means an individual who has successfully completed the marbled murrelet field training course offered by the department of fish and wildlife or its equivalent.

"**Rehabilitation**" means the act of renewing, or making usable and reforesting forest land which was poorly stocked or previously nonstocked with commercial species.

"**Resource characteristics**" means the following specific measurable characteristics of fish, water, and capital improvements of the state or its political subdivisions:

For fish and water:

Physical fish habitat, including temperature and turbidity;

Turbidity in hatchery water supplies; and

Turbidity and volume for areas of water supply.

For capital improvements of the state or its political subdivisions:

Physical or structural integrity.

If the methodology is developed and added to the manual to analyze the cumulative effects of forest practices on other characteristics of fish, water, and capital improvements of the

state or its subdivisions, the board shall amend this list to include these characteristics.

"Riparian function" includes bank stability, the recruitment of woody debris, leaf litter fall, nutrients, sediment filtering, shade, and other riparian features that are important to both riparian forest and aquatic system conditions.

"Riparian management zone (RMZ)" means:

(1) **For Western Washington**

(a) The area protected on each side of a Type S or F Water measured horizontally from the outer edge of the bankfull width or the outer edge of the CMZ, whichever is greater (see table below); and

Site Class	Western Washington Total RMZ Width
I	200'
II	170'
III	140'
IV	110'
V	90'

(b) The area protected on each side of Type Np Waters, measured horizontally from the outer edge of the bankfull width. (See WAC 222-30-021(2).)

(2) **For Eastern Washington**

(a) The area protected on each side of a Type S or F Water measured horizontally from the outer edge of the bankfull width or the outer edge of the CMZ, whichever is greater (see table below); and

Site Class	Eastern Washington Total RMZ Width
I	130'
II	110'
III	90' or 100*
IV	75' or 100*
V	75' or 100*

* Dependent upon stream size. (See WAC 222-30-022.)

(b) The area protected on each side of Type Np Waters, measured horizontally from the outer edge of the bankfull width. (See WAC 222-30-022(2).)

(3) **For exempt 20 acre parcels**, a specified area alongside Type S and F Waters where specific measures are taken to protect water quality and fish and wildlife habitat.

"RMZ core zone" means:

(1) **For Western Washington**, the 50 foot buffer of a Type S or F Water, measured horizontally from the outer edge of the bankfull width or the outer edge of the channel migration zone, whichever is greater. (See WAC 222-30-021.)

(2) **For Eastern Washington**, the 30 foot buffer of a Type S or F Water, measured horizontally from the outer edge of the bankfull width or the outer edge of the channel migration zone, whichever is greater. (See WAC 222-30-022.)

"RMZ inner zone" means:

(1) **For Western Washington**, the area measured horizontally from the outer boundary of the core zone of a Type S or F Water to the outer limit of the inner zone. The outer

limit of the inner zone is determined based on the width of the affected water, site class and the management option chosen for timber harvest within the inner zone. (See WAC 222-30-021.)

(2) **For Eastern Washington**, the area measured horizontally from the outer boundary of the core zone 45 feet (for streams less than 15 feet wide) or 70 feet (for streams more than 15 feet wide) from the outer boundary of the core zone. (See WAC 222-30-022.)

"RMZ outer zone" means the area measured horizontally between the outer boundary of the inner zone and the RMZ width as specified in the riparian management zone definition above. RMZ width is measured from the outer edge of the bankfull width or the outer edge of the channel migration zone, whichever is greater. (See WAC 222-30-021 and 222-30-022.)

"Road construction" means the establishment of any new sub-grade including widening, realignment, or modification of an existing road prism, with the exception of replacing or installing drainage structures, for the purposes of managing forest land under Title 222 WAC.

"Road maintenance" means any road work specifically related to maintaining water control or road safety and visibility (such as; grading, spot rocking, resurfacing, roadside vegetation control, water barring, ditch clean out, replacing or installing relief culverts, cleaning culvert inlets and outlets) on existing forest roads.

"Rodenticide" means any substance or mixture of substances intended to prevent, destroy, repel, or mitigate rodents or any other vertebrate animal which the director of the state department of agriculture may declare by regulation to be a pest.

"Salvage" means the removal of snags, down logs, windthrow, or dead and dying material.

"Scarification" means loosening the topsoil and/or disrupting the forest floor in preparation for regeneration.

"Sensitive sites" are areas near or adjacent to Type Np Water and have one or more of the following:

(1) **Headwall seep** is a seep located at the toe of a cliff or other steep topographical feature and at the head of a Type Np Water which connects to the stream channel network via overland flow, and is characterized by loose substrate and/or fractured bedrock with perennial water at or near the surface throughout the year.

(2) **Side-slope seep** is a seep within 100 feet of a Type Np Water located on side-slopes which are greater than 20 percent, connected to the stream channel network via overland flow, and characterized by loose substrate and fractured bedrock, excluding muck with perennial water at or near the surface throughout the year. Water delivery to the Type Np channel is visible by someone standing in or near the stream.

(3) **Type Np intersection** is the intersection of two or more Type Np Waters.

(4) **Headwater spring** means a permanent spring at the head of a perennial channel. Where a headwater spring can be found, it will coincide with the uppermost extent of Type Np Water.

(5) **Alluvial fan** means an erosional land form consisting of cone-shaped deposit of water-borne, often coarse-sized sediments.

(a) The upstream end of the fan (cone apex) is typically characterized by a distinct increase in channel width where a stream emerges from a narrow valley;

(b) The downstream edge of the fan is defined as the sediment confluence with a higher order channel; and

(c) The lateral margins of a fan are characterized by distinct local changes in sediment elevation and often show disturbed vegetation.

Alluvial fan does not include features that were formed under climatic or geologic conditions which are not currently present or that are no longer dynamic.

"**Shorelines of the state**" shall have the same meaning as in RCW 90.58.030 (Shoreline Management Act).

"**Side casting**" means the act of moving excavated material to the side and depositing such material within the limits of construction or dumping over the side and outside the limits of construction.

"**Site class**" means a grouping of site indices that are used to determine the 50-year or 100-year site class. In order to determine site class, the landowner will obtain the site class index from the state soil survey, place it in the correct index range shown in the two tables provided in this definition, and select the corresponding site class. The site class will then drive the RMZ width. (See WAC 222-30-021 and 222-30-022.)

(1) **For Western Washington**

Site class	50-year site index range (state soil survey)
I	137+
II	119-136
III	97-118
IV	76-96
V	<75

(2) **For Eastern Washington**

Site class	100-year site index range (state soil survey)	50-year site index range (state soil survey)
I	120+	86+
II	101-120	72-85
III	81-100	58-71
IV	61-80	44-57
V	≤60	<44

(3) For purposes of this definition, the site index at any location will be the site index reported by the *Washington State Department of Natural Resources State Soil Survey*, (soil survey) and detailed in the associated forest soil summary sheets. If the soil survey does not report a site index for the location or indicates noncommercial or marginal forest land, or the major species table indicates red alder, the following apply:

(a) If the site index in the soil survey is for red alder, and the whole RMZ width is within that site index, then use site class V. If the red alder site index is only for a portion of the RMZ width, or there is on-site evidence that the site has his-

torically supported conifer, then use the site class for conifer in the most physiographically similar adjacent soil polygon.

(b) In Western Washington, if no site index is reported in the soil survey, use the site class for conifer in the most physiographically similar adjacent soil polygon.

(c) In Eastern Washington, if no site index is reported in the soil survey, assume site class III, unless site specific information indicates otherwise.

(d) If the site index is noncommercial or marginally commercial, then use site class V.

See also section 7 of the board manual.

"**Site preparation**" means those activities associated with the removal of slash in preparing a site for planting and shall include scarification and/or slash burning.

"**Skid trail**" means a route used by tracked or wheeled skidders to move logs to a landing or road.

"**Slash**" means pieces of woody material containing more than 3 cubic feet resulting from forest practice activities.

"**SOSEA goals**" means the goals specified for a spotted owl special emphasis area as identified on the SOSEA maps (see WAC 222-16-086). SOSEA goals provide for demographic and/or dispersal support as necessary to complement the northern spotted owl protection strategies on federal land within or adjacent to the SOSEA.

"**Spoil**" means excess material removed as overburden or generated during road or landing construction which is not used within limits of construction.

"**Spotted owl dispersal habitat**" see WAC 222-16-085(2).

"**Spotted owl special emphasis areas (SOSEA)**" means the geographic areas as mapped in WAC 222-16-086. Detailed maps of the SOSEAs indicating the boundaries and goals are available from the department at its regional offices.

"**Stop work order**" means the "stop work order" defined in RCW 76.09.080 of the act and may be issued by the department to stop violations of the forest practices chapter or to prevent damage and/or to correct and/or compensate for damages to public resources resulting from forest practices.

"**Stream-adjacent parallel roads**" means roads (including associated right-of-way clearing) in a riparian management zone on a property that have an alignment that is parallel to the general alignment of the stream, including roads used by others under easements or cooperative road agreements. Also included are stream crossings where the alignment of the road continues to parallel the stream for more than 250 feet on either side of the stream. Not included are federal, state, county or municipal roads that are not subject to forest practices rules, or roads of another adjacent landowner.

"**Sub-mature habitat**" see WAC 222-16-085 (1)(b).

"**Suitable marbled murrelet habitat**" means a contiguous forested area containing trees capable of providing nesting opportunities:

(1) With all of the following indicators unless the department, in consultation with the department of fish and wildlife, has determined that the habitat is not likely to be occupied by marbled murrelets:

- (a) Within 50 miles of marine waters;
- (b) At least 40% of the dominant and codominant trees are Douglas-fir, western hemlock, western red cedar or sitka spruce;
- (c) Two or more nesting platforms per acre;
- (d) At least 7 acres in size, including the contiguous forested area within 300 feet of nesting platforms, with similar forest stand characteristics (age, species composition, forest structure) to the forested area in which the nesting platforms occur.

"Suitable spotted owl habitat" see WAC 222-16-085(1).

"Temporary road" means a forest road that is constructed and intended for use during the life of an approved forest practices application/notification. All temporary roads must be abandoned in accordance to WAC 222-24-052(3).

"Threaten public safety" means to increase the risk to the public at large from snow avalanches, identified in consultation with the department of transportation or a local government, or landslides or debris torrents caused or triggered by forest practices.

"Threatened or endangered species" means all species of wildlife listed as "threatened" or "endangered" by the United States Secretary of the Interior or Commerce, and all species of wildlife designated as "threatened" or "endangered" by the Washington fish and wildlife commission.

"Timber" shall mean forest trees, standing or down, of a commercial species, including Christmas trees.

"Unconfined avulsing stream" means generally fifth order or larger waters that experience abrupt shifts in channel location, creating a complex flood plain characterized by extensive gravel bars, disturbance species of vegetation of variable age, numerous side channels, wall-based channels, oxbow lakes, and wetland complexes. Many of these streams have dikes and levees that may temporarily or permanently restrict channel movement.

"Water bar" means a diversion ditch and/or hump in a trail or road for the purpose of carrying surface water runoff into the vegetation duff, ditch, or other dispersion area so that it does not gain the volume and velocity which causes soil movement and erosion.

"Watershed administrative unit (WAU)" means an area shown on the map specified in WAC 222-22-020(1).

"Watershed analysis" means, for a given WAU, the assessment completed under WAC 222-22-050 or 222-22-060 together with the prescriptions selected under WAC 222-22-070 and shall include assessments completed under WAC 222-22-050 where there are no areas of resource sensitivity.

"Weed" is any plant which tends to overgrow or choke out more desirable vegetation.

"Western Washington" means the geographic area of Washington west of the Cascade crest and the drainages defined in Eastern Washington.

"Wetland" means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions, such as swamps, bogs, fens, and similar areas. This includes wetlands created, restored, or

enhanced as part of a mitigation procedure. This does not include constructed wetlands or the following surface waters of the state intentionally constructed from wetland sites: Irrigation and drainage ditches, grass lined swales, canals, agricultural detention facilities, farm ponds, and landscape amenities.

"Wetland functions" include the protection of water quality and quantity, providing fish and wildlife habitat, and the production of timber.

"Wetland management zone" means a specified area adjacent to Type A and B Wetlands where specific measures are taken to protect the wetland functions.

"Wildlife" means all species of the animal kingdom whose members exist in Washington in a wild state. The term "wildlife" includes, but is not limited to, any mammal, bird, reptile, amphibian, fish, or invertebrate, at any stage of development. The term "wildlife" does not include feral domestic mammals or the family Muridae of the order Rodentia (old world rats and mice).

"Wildlife reserve trees" means those defective, dead, damaged, or dying trees which provide or have the potential to provide habitat for those wildlife species dependent on standing trees. Wildlife reserve trees are categorized as follows:

Type 1 wildlife reserve trees are defective or deformed live trees that have observably sound tops, limbs, trunks, and roots. They may have part of the top broken out or have evidence of other severe defects that include: "Cat face," animal chewing, old logging wounds, weather injury, insect attack, or lightning strike. Unless approved by the landowner, only green trees with visible cavities, nests, or obvious severe defects capable of supporting cavity dependent species shall be considered as Type 1 wildlife reserve trees. These trees must be stable and pose the least hazard for workers.

Type 2 wildlife reserve trees are dead Type 1 trees with sound tops, limbs, trunks, and roots.

Type 3 wildlife reserve trees are live or dead trees with unstable tops or upper portions. Unless approved by the landowner, only green trees with visible cavities, nests, or obvious severe defects capable of supporting cavity dependent species shall be considered as Type 3 wildlife reserve trees. Although the roots and main portion of the trunk are sound, these reserve trees pose high hazard because of the defect in live or dead wood higher up in the tree.

Type 4 wildlife reserve trees are live or dead trees with unstable trunks or roots, with or without bark. This includes "soft snags" as well as live trees with unstable roots caused by root rot or fire. These trees are unstable and pose a high hazard to workers.

"Windthrow" means a natural process by which trees are uprooted or sustain severe trunk damage by the wind.

"Yarding corridor" means a narrow, linear path through a riparian management zone to allow suspended cables necessary to support cable logging methods or suspended or partially suspended logs to be transported through these areas by cable logging methods.

"Young forest marginal habitat" see WAC 222-16-085 (1)(b).

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.1050, [76.09.1370, 76.13.120(9), 01-12-042, § 222-16-010, filed 5/30/01, effective 7/1/01. Statutory Authority: RCW 76.09.040 and chapter 34.05 RCW. 98-07-047, § 222-16-010, filed 3/13/98, effective 5/1/98; 97-24-091, § 222-16-010, filed 12/3/97, effective 1/3/98; 97-15-105, § 222-16-010, filed 7/21/97, effective 8/21/97. Statutory Authority: Chapters 76.09 and 34.05 RCW. 96-12-038, § 222-16-010, filed 5/31/96, effective 7/1/96. Statutory Authority: RCW 76.09.040 and chapter 34.05 RCW. 94-17-033, § 222-16-010, filed 8/10/94, effective 8/13/94; 93-12-001, § 222-16-010, filed 5/19/93, effective 6/19/93. Statutory Authority: RCW 76.09.040, 76.09.050 and chapter 34.05 RCW. 92-15-011, § 222-16-010, filed 7/2/92, effective 8/2/92. Statutory Authority: RCW 76.09.040, 76.09.050 and 34.05.350. 92-03-028, § 222-16-010, filed 1/8/92, effective 2/8/92; 91-23-052, § 222-16-010, filed 11/15/91, effective 12/16/91. Statutory Authority: RCW 76.09.040. 88-19-112 (Order 551, Resolution No. 88-1), § 222-16-010, filed 9/21/88, effective 11/1/88; 87-23-036 (Order 535), § 222-16-010, filed 11/16/87, effective 1/1/88. Statutory Authority: RCW 76.09.040 and 76.09.050. 82-16-077 (Resolution No. 82-1), § 222-16-010, filed 8/3/82, effective 10/1/82; Order 263, § 222-16-010, filed 6/16/76.]

WAC 222-16-030 Water typing system. Until the fish habitat water type maps described below are adopted by the board, the Interim Water Typing System established in WAC 222-16-031 will continue to be used. The department in cooperation with the departments of fish and wildlife, and ecology, and in consultation with affected Indian tribes will classify streams, lakes and ponds. The department will prepare water type maps showing the location of Type S, F, and N (Np and Ns) Waters within the forested areas of the state. The maps will be based on a multiparameter, field-verified geographic information system (GIS) logistic regression model. The multiparameter model will be designed to identify fish habitat by using geomorphic parameters such as basin size, gradient, elevation and other indicators. The modeling process shall be designed to achieve a level of statistical accuracy of 95% in separating fish habitat streams and non-fish habitat streams. Furthermore, the demarcation of fish and nonfish habitat waters shall be equally likely to over and under estimate the presence of fish habitat. These maps shall be referred to as "fish habitat water typing maps" and shall, when completed, be available for public inspection at region offices of the department.

Fish habitat water type maps will be updated every five years where necessary to better reflect observed, in-field conditions. Except for these periodic revisions of the maps, on-the-ground observations of fish or habitat characteristics will generally not be used to adjust mapped water types. However, if an on-site interdisciplinary team using nonlethal methods identifies fish, or finds that habitat is not accessible due to naturally occurring conditions and no fish reside above the blockage, then the water type will be immediately changed to reflect the findings of the interdisciplinary team. The finding will be documented on a water type update form provided by the department and the fish habitat water type map will be updated as soon as practicable. If a dispute arises concerning a water type the department shall make available informal conferences, as established in WAC 222-46-020 which shall include the departments of fish and wildlife, and ecology, and affected Indian tribes and those contesting the adopted water types.

The waters will be classified using the following criteria:

***(1) "Type S Water"** means all waters, within their bankfull width, as inventoried as "shorelines of the state" under chapter 90.58 RCW and the rules promulgated pursu-

ant to chapter 90.58 RCW including periodically inundated areas of their associated wetlands.

***(2) "Type F Water"** means segments of natural waters other than Type S Waters, which are within the bankfull widths of defined channels and periodically inundated areas of their associated wetlands, or within lakes, ponds, or impoundments having a surface area of 0.5 acre or greater at seasonal low water and which in any case contain fish habitat or are described by one of the following four categories:

(a) Waters, which are diverted for domestic use by more than 10 residential or camping units or by a public accommodation facility licensed to serve more than 10 persons, where such diversion is determined by the department to be a valid appropriation of water and the only practical water source for such users. Such waters shall be considered to be Type F Water upstream from the point of such diversion for 1,500 feet or until the drainage area is reduced by 50 percent, whichever is less;

(b) Waters, which are diverted for use by federal, state, tribal or private fish hatcheries. Such waters shall be considered Type F Water upstream from the point of diversion for 1,500 feet, including tributaries if highly significant for protection of downstream water quality. The department may allow additional harvest beyond the requirements of Type F Water designation provided the department determines after a landowner-requested on-site assessment by the department of fish and wildlife, department of ecology, the affected tribes and interested parties that:

(i) The management practices proposed by the landowner will adequately protect water quality for the fish hatchery; and

(ii) Such additional harvest meets the requirements of the water type designation that would apply in the absence of the hatchery;

(c) Waters, which are within a federal, state, local, or private campground having more than 10 camping units: Provided, That the water shall not be considered to enter a campground until it reaches the boundary of the park lands available for public use and comes within 100 feet of a camping unit, trail or other park improvement;

(d) Riverine ponds, wall-based channels, and other channel features that are used by fish for off-channel habitat. These areas are critical to the maintenance of optimum survival of fish. This habitat shall be identified based on the following criteria:

(i) The site must be connected to a fish habitat stream and accessible during some period of the year; and

(ii) The off-channel water must be accessible to fish.

***(3) "Type Np Water"** means all segments of natural waters within the bankfull width of defined channels that are perennial nonfish habitat streams. Perennial streams are waters that do not go dry any time of a year of normal rainfall. However, for the purpose of water typing, Type Np Waters include the intermittent dry portions of the perennial channel below the uppermost point of perennial flow. If the uppermost point of perennial flow cannot be identified with simple, nontechnical observations (see board manual, section 23), then Type Np Waters begin at a point along the channel where the contributing basin area is:

(a) At least 13 acres in the Western Washington coastal zone (which corresponds to the Sitka spruce zone defined in Franklin and Dynness, 1973);

(b) At least 52 acres in other locations in Western Washington;

(c) At least 300 acres in Eastern Washington.

(4) **"Type Ns Water"** means all segments of natural waters within the bankfull width of the defined channels that are not Type S, F, or Np Waters. These are seasonal, nonfish habitat streams in which surface flow is not present for at least some portion of a year of normal rainfall and are not located downstream from any stream reach that is a Type Np Water. Ns Waters must be physically connected by an above-ground channel system to Type S, F, or Np Waters.

*(5) For purposes of this section:

(a) "Residential unit" means a home, apartment, residential condominium unit or mobile home, serving as the principal place of residence.

(b) "Camping unit" means an area intended and used for:

(i) Overnight camping or picnicking by the public containing at least a fireplace, picnic table and access to water and sanitary facilities; or

(ii) A permanent home or condominium unit or mobile home not qualifying as a "residential unit" because of part time occupancy.

(c) "Public accommodation facility" means a business establishment open to and licensed to serve the public, such as a restaurant, tavern, motel or hotel.

(d) "Natural waters" only excludes water conveyance systems which are artificially constructed and actively maintained for irrigation.

(e) "Seasonal low flow" and "seasonal low water" mean the conditions of the 7-day, 2-year low water situation, as measured or estimated by accepted hydrologic techniques recognized by the department.

(f) "Channel width and gradient" means a measurement over a representative section of at least 500 linear feet with at least 10 evenly spaced measurement points along the normal stream channel but excluding unusually wide areas of negligible gradient such as marshy or swampy areas, beaver ponds and impoundments. Channel gradient may be determined utilizing stream profiles plotted from United States geological survey topographic maps (see board manual section 23).

(g) "Intermittent streams" means those segments of streams that normally go dry.

(h) "Fish habitat" means habitat which is used by any fish at any life stage at any time of the year, including potential habitat likely to be used by fish which could be recovered by restoration or management and includes off-channel habitat.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.1050, [76.09.1370, 76.13.120(9), 01-12-042, § 222-16-030, filed 5/30/01, effective 7/1/01. Statutory Authority: RCW 76.09.040 and chapter 34.05 RCW. 97-24-091, § 222-16-030, filed 12/3/97, effective 1/3/98. Statutory Authority: RCW 76.09.040, 76.09.170 and chapter 34.05 RCW. 94-01-134, § 222-16-030, filed 12/20/93, effective 1/1/94. Statutory Authority: RCW 76.09.040, 76.09.050 and chapter 34.05 RCW. 92-15-011, § 222-16-030, filed 7/2/92, effective 8/2/92. Statutory Authority: RCW 76.09.040. 87-23-036 (Order 535), § 222-16-030, filed 11/16/87, effective 1/1/88; Order 263, § 222-16-030, filed 6/16/76.]

WAC 222-16-031 Interim water typing system. Until the fish habitat water type maps mentioned above are available, waters will be classified according to the interim water typing system described below. If a dispute arises concerning a water type, the department shall make available informal conferences, which shall include the departments of fish and wildlife, ecology, and affected Indian tribes and those contesting the adopted water types. These conferences shall be established under procedures established in WAC 222-46-020.

For the purposes of this interim water typing system see the following table:

Water Type Conversion Table

Permanent Water Typing	Interim Water Typing
Type "S"	Type 1 Water
Type "F"	Type 2 and 3 Water
Type "Np"	Type 4 Water
Type "Ns"	Type 5 Water

*(1) **"Type 1 Water"** means all waters, within their ordinary high-water mark, as inventoried as "shorelines of the state" under chapter 90.58 RCW and the rules promulgated pursuant to chapter 90.58 RCW, but not including those waters' associated wetlands as defined in chapter 90.58 RCW.

*(2) **"Type 2 Water"** means segments of natural waters which are not classified as Type 1 Water and have a high fish, wildlife, or human use. These are segments of natural waters and periodically inundated areas of their associated wetlands, which:

(a) Are diverted for domestic use by more than 100 residential or camping units or by a public accommodation facility licensed to serve more than 10 persons, where such diversion is determined by the department to be a valid appropriation of water and only considered Type 2 Water upstream from the point of such diversion for 1,500 feet or until the drainage area is reduced by 50 percent, whichever is less;

(b) Are diverted for use by federal, state, tribal or private fish hatcheries. Such waters shall be considered Type 2 Water upstream from the point of diversion for 1,500 feet, including tributaries if highly significant for protection of downstream water quality. The department may allow additional harvest beyond the requirements of Type 2 Water designation provided by the department of fish and wildlife, department of ecology, the affected tribes and interested parties that:

(i) The management practices proposed by the landowner will adequately protect water quality for the fish hatchery; and

(ii) Such additional harvest meets the requirements of the water type designation that would apply in the absence of the hatchery;

(c) Are within a federal, state, local or private campground having more than 30 camping units: Provided, That the water shall not be considered to enter a campground until it reaches the boundary of the park lands available for public use and comes within 100 feet of a camping unit.

(d) Are used by fish for spawning, rearing or migration. Waters having the following characteristics are presumed to have highly significant fish populations:

(i) Stream segments having a defined channel 20 feet or greater within the bankfull width and having a gradient of less than 4 percent.

(ii) Lakes, ponds, or impoundments having a surface area of 1 acre or greater at seasonal low water; or

(e) Are used by fish for off-channel habitat. These areas are critical to the maintenance of optimum survival of fish. This habitat shall be identified based on the following criteria:

(i) The site must be connected to a fish bearing stream and be accessible during some period of the year; and

(ii) The off-channel water must be accessible to fish through a drainage with less than a 5% gradient.

*(3) **"Type 3 Water"** means segments of natural waters which are not classified as Type 1 or 2 Waters and have a moderate to slight fish, wildlife, and human use. These are segments of natural waters and periodically inundated areas of their associated wetlands which:

(a) Are diverted for domestic use by more than 10 residential or camping units or by a public accommodation facility licensed to serve more than 10 persons, where such diversion is determined by the department to be a valid appropriation of water and the only practical water source for such users. Such waters shall be considered to be Type 3 Water upstream from the point of such diversion for 1,500 feet or until the drainage area is reduced by 50 percent, whichever is less;

(b) Are used by fish for spawning, rearing or migration. The requirements for determining fish use are described in the board manual section 13. If fish use has not been determined:

(i) Waters having the following characteristics are presumed to have fish use:

(A) Stream segments having a defined channel of 2 feet or greater within the bankfull width in Western Washington; or 3 feet or greater in width in Eastern Washington; and having a gradient of 16 percent or less.

(B) Stream segments having a defined channel or 2 feet or greater within the bankfull width in Western Washington; or 3 feet or greater within the bankfull width in Eastern Washington, and having a gradient greater than 16 percent and less than or equal to 20 percent, and having greater than 50 acres in contributing basin size in Western Washington or greater than 175 acres contributing basin size in Eastern Washington, based on hydrographic boundaries;

(C) Ponds or impoundments having a surface area of less than 1 acre at seasonal low water and having an outlet to a fish stream;

(D) Ponds of impoundments having a surface area greater than 0.5 acre at seasonal low water.

(ii) The department shall waive or modify the characteristics in (i) of this subsection where:

(A) Waters have confirmed, long term, naturally occurring water quality parameters incapable of supporting fish;

(B) Snowmelt streams have short flow cycles that do not support successful life history phases of fish. These streams typically have no flow in the winter months and discontinue flow by June 1; or

(C) Sufficient information about a geomorphic region is available to support a departure from the characteristics in (i)

of this subsection, as determined in consultation with the department of fish and wildlife, department of ecology, affected tribes and interested parties.

*(4) **"Type 4 Water"** means all segments of natural waters within the bankfull width of defined channels that are perennial nonfish habitat streams. Perennial streams are waters that do not go dry any time of a year of normal rainfall. However, for the purpose of water typing, Type 4 Waters include the intermittent dry portions of the perennial channel below the uppermost point of perennial flow. If the uppermost point of perennial flow cannot be identified with simple, nontechnical observations (see board manual, section 23), then Type 4 Waters begin at a point along the channel where the contributing basin area is:

(a) At least 13 acres in the Western Washington coastal zone (which corresponds to the Sitka spruce zone defined in Franklin and Dyrness, 1973);

(b) At least 52 acres in other locations in Western Washington;

(c) At least 300 acres in Eastern Washington.

*(5) **"Type 5 Waters"** means all segments of natural waters within the bankfull width of the defined channels that are not Type 1, 2, 3, or 4 Waters. These are seasonal, nonfish habitat streams in which surface flow is not present for at least some portion of the year and are not located downstream from any stream reach that is a Type 4 Water. Type 5 Waters must be physically connected by an above-ground channel system to Type 1, 2, 3, or 4 Waters.

*(6) For purposes of this section:

(a) **"Residential unit"** means a home, apartment, residential condominium unit or mobile home, serving as the principal place of residence.

(b) **"Camping unit"** means an area intended and used for:

(i) Overnight camping or picnicking by the public containing at least a fireplace, picnic table and access to water and sanitary facilities; or

(ii) A permanent home or condominium unit or mobile home not qualifying as a "residential unit" because of part time occupancy.

(c) **"Public accommodation facility"** means a business establishment open to and licensed to serve the public, such as a restaurant, tavern, motel or hotel.

(d) **"Natural waters"** only excludes water conveyance systems which are artificially constructed and actively maintained for irrigation.

(e) **"Seasonal low flow"** and **"seasonal low water"** mean the conditions of the 7-day, 2-year low water situation, as measured or estimated by accepted hydrologic techniques recognized by the department.

(f) **"Channel width and gradient"** means a measurement over a representative section of at least 500 linear feet with at least 10 evenly spaced measurement points along the normal stream channel but excluding unusually wide areas of negligible gradient such as marshy or swampy areas, beaver ponds and impoundments. Channel gradient may be determined utilizing stream profiles plotted from United States geological survey topographic maps. (See board manual section 23.)

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-16-031, filed 5/30/01, effective 7/1/01.]

WAC 222-16-035 Wetland typing system. *The department in cooperation with the departments of fish and wildlife, and ecology, and affected Indian tribes shall classify wetlands. The wetlands will be classified in order to distinguish those which require wetland management zones and those which do not. Wetlands which require wetland management zones shall be identified using the following criteria:

*(1) **"Nonforested wetlands"** means any wetland or portion thereof that has, or if the trees were mature would have, a crown closure of less than 30 percent.

(a) **"Type A Wetland"** classification shall be applied to all nonforested wetlands which:

(i) Are greater than 0.5 acre in size, including any acreage of open water where the water is completely surrounded by the wetland; and

(ii) Are associated with at least 0.5 acre of ponded or standing open water. The open water must be present on the site for at least 7 consecutive days between April 1 and October 1 to be considered for the purposes of these rules; or

(b) **"Type B Wetland"** classification shall be applied to all other nonforested wetlands greater than 0.25 acre.

*(2) **"Forested wetland"** means any wetland or portion thereof that has, or if the trees were mature would have, a crown closure of 30 percent or more.

*(3) **"All forested and nonforested bogs" greater than 0.25 acres shall be considered Type A Wetlands.**

*(4) For the purposes of determining acreage to classify or type wetlands under this section, approximate determination using aerial photographs and maps, including the national wetlands inventory, shall be sufficient. In addition, the innermost boundary of the wetland management zone on Type A or B Wetlands may be determined by either of two methods: Delineation of the wetland edge, or identifying the point where the crown cover changes from less than 30 percent to 30 percent or more.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-16-035, filed 5/30/01, effective 7/1/01. Statutory Authority: RCW 76.09.040 and chapter 34.05 RCW. 97-24-091, § 222-16-035, filed 12/3/97, effective 1/3/98; 94-17-033, § 222-16-035, filed 8/10/94, effective 8/13/94. Statutory Authority: RCW 76.09.040, 76.09.170 and chapter 34.05 RCW. 94-01-134, § 222-16-035, filed 12/20/93, effective 1/1/94. Statutory Authority: RCW 76.09.040, 76.09.050 and chapter 34.05 RCW. 92-15-011, § 222-16-035, filed 7/2/92, effective 8/2/92.]

WAC *222-16-036 Wetland mapping. Wetlands mapping is required in connection with any forest practices application where the proposed activities relate to timber harvest or road construction.

*(1) Landowners must map all forested wetlands and Type A and B Wetlands where more than one-tenth (0.1) acre of such wetlands will be impacted by filling and where mitigation for such filling is required.

*(2) Landowners must make an approximate determination of the boundaries and map all forested wetlands (regardless of size) that are in a riparian management zone, including those parts of the forested wetlands that lie within the harvest unit but outside of the riparian management zone. Mapping is not required if entry within the riparian management zone is not proposed as part of the harvest application.

*(3) Landowners must make an approximate determination of the boundaries and map all forested wetlands 3 acres

or more in size within the boundaries of the land to be covered by the application.

*(4) All such mapping must be performed to the wetland delineation and mapping standards outlined in the board manual, section 8.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-16-036, filed 5/30/01, effective 7/1/01.]

WAC *222-16-050 Classes of forest practices. There are 4 classes of forest practices created by the act. All forest practices (including those in Classes I and II) must be conducted in accordance with the forest practices rules.

(1) **"Class IV - special."** Except as provided in WAC 222-16-051, application to conduct forest practices involving the following circumstances requires an environmental checklist in compliance with the State Environmental Policy Act (SEPA), and SEPA guidelines, as they have been determined to have potential for a substantial impact on the environment. It may be determined that additional information or a detailed environmental statement is required before these forest practices may be conducted.

*(a) Aerial application of pesticides in a manner identified as having the potential for a substantial impact on the environment under WAC 222-16-070 or ground application of a pesticide within a Type A or B wetland.

(b) Specific forest practices listed in WAC 222-16-080 on lands designated as critical habitat (state) of threatened or endangered species.

(c) Harvesting, road construction, aerial application of pesticides and site preparation on all lands within the boundaries of any national park, state park, or any park of a local governmental entity, except harvest of less than 5 MBF within any developed park recreation area and park managed salvage of merchantable forest products.

*(d) Timber harvest, or construction of roads, landings, gravel pits, rock quarries, or spoil disposal areas, on potentially unstable slopes or landforms described in (i) below that has the potential to deliver sediment or debris to a public resource or that has the potential to threaten public safety, and which has been field verified by the department (see WAC 222-10-030 SEPA policies for potential unstable slopes and landforms).

(i) For the purpose of this rule, potentially unstable slopes or landforms are one of the following: (See the board manual section 16 for more descriptive definitions.)

(A) Inner gorges, convergent headwalls, or bedrock hollows with slopes steeper than 35 degrees (70%);

(B) Toes of deep-seated landslides, with slopes steeper than 33 degrees (65%);

(C) Ground water recharge areas for glacial deep-seated landslides;

(D) Outer edges of meander bends along valley walls or high terraces of an unconfined meandering stream; or

(E) Any areas containing features indicating the presence of potential slope instability which cumulatively indicate the presence of unstable slopes.

(ii) The department will base its classification of the application/notification on professional knowledge of the area, information such as soils, geologic or hazard zonation

maps and reports or other information provided by the applicant.

(iii) An application would not be classified as Class IV-Special for potentially unstable slopes or landforms under this subsection if:

(A) The proposed forest practice is located within a WAU that is subject to an approved watershed analysis;

(B) The forest practices are to be conducted in accordance with an approved prescription from the watershed analysis (or as modified through the 5-year review process); and

(C) The applicable prescription is specific to the site or situation, as opposed to a prescription that calls for additional analysis. The need for an expert to determine whether the site contains specific landforms will not be considered "additional analysis," as long as specific prescriptions are established for such landforms.

*(e) Timber harvest, in a watershed administrative unit not subject to an approved watershed analysis under chapter 222-22 WAC, construction of roads, landings, rock quarries, gravel pits, borrow pits, and spoil disposal areas on snow avalanche slopes within those areas designated by the department, in consultation with department of transportation and local government, as high avalanche hazard where there is the potential to deliver sediment or debris to a public resource, or the potential to threaten public safety.

(f) Timber harvest, construction of roads, landings, rock quarries, gravel pits, borrow pits, and spoil disposal areas on archaeological or historic sites registered with the Washington state office of archaeology and historic preservation, or on sites containing evidence of Native American cairns, graves, or glyptic records, as provided for in chapters 27.44 and 27.53 RCW. The department shall consult with affected Indian tribes in identifying such sites.

*(g) Forest practices subject to an approved watershed analysis conducted under chapter 222-22 WAC in an area of resource sensitivity identified in that analysis which deviates from the prescriptions (which may include an alternate plan) in the watershed analysis.

*(h) Filling or draining of more than 0.5 acre of a wetland.

(2) **"Class IV - general."** Applications involving the following circumstances are "Class IV - general" forest practices unless they are listed in "Class IV - special." Upon receipt of an application, the department will determine the lead agency for purposes of compliance with the State Environmental Policy Act pursuant to WAC 197-11-924 and 197-11-938(4) and RCW 43.21C.037(2). Such applications are subject to a 30-day period for approval unless the lead agency determines a detailed statement under RCW 43.21C.030 (2)(c) is required. Upon receipt, if the department determines the application is for a proposal that will require a license from a county/city acting under the powers enumerated in RCW 76.09.240, the department shall notify the applicable county/city under WAC 197-11-924 that the department has determined according to WAC 197-11-938(4) that the county/city is the lead agency for purposes of compliance with State Environmental Policy Act.

(a) Forest practices (other than those in Class I) on lands platted after January 1, 1960, or on lands being converted to another use.

(b) Forest practices which would otherwise be Class III, but which are taking place on lands which are not to be reforested because of likelihood of future conversion to urban development. (See WAC 222-16-060 and 222-34-050.)

(3) **"Class I."** Those operations that have been determined to have no direct potential for damaging a public resource are Class I forest practices. When the conditions listed in "Class IV - Special" are not present, these operations may be commenced without notification or application.

(a) Culture and harvest of Christmas trees and seedlings.

*(b) Road maintenance except: (i) Replacement of bridges and culverts across Type S, F or flowing Type Np Waters; or (ii) movement of material that has a direct potential for entering Type S, F or flowing Type Np Waters or Type A or B Wetlands.

*(c) Construction of landings less than 1 acre in size, if not within a shoreline area of a Type S Water, the riparian management zone of a Type F Water, the bankfull width of a Type Np Water, a wetland management zone, a wetland, or the CRGNSA special management area.

*(d) Construction of less than 600 feet of road on a side-slope of 40 percent or less if the limits of construction are not within the shoreline area of a Type S Water, the riparian management zone of a Type F Water, the bankfull width of a Type Np Water, a wetland management zone, a wetland, or the CRGNSA special management area.

*(e) Installation or removal of a portable water crossing structure where such installation does not take place within the shoreline area of a Type S Water and does not involve disturbance of the beds or banks of any waters.

*(f) Initial installation and replacement of relief culverts and other drainage control facilities not requiring a hydraulic permit.

(g) Rocking an existing road.

(h) Loading and hauling timber from landings or decks.

(i) Precommercial thinning and pruning, if not within the CRGNSA special management area.

(j) Tree planting and seeding.

(k) Cutting and/or removal of less than 5,000 board feet of timber (including live, dead and down material) for personal use (i.e., firewood, fence posts, etc.) in any 12-month period, if not within the CRGNSA special management area.

(l) Emergency fire control and suppression.

(m) Slash burning pursuant to a burning permit (RCW 76.04.205).

*(n) Other slash control and site preparation not involving either off-road use of tractors on slopes exceeding 40 percent or off-road use of tractors within the shorelines of a Type S Water, the riparian management zone of any Type F Water, or the bankfull width of a Type Np Water, a wetland management zone, a wetland, or the CRGNSA special management area.

*(o) Ground application of chemicals, if not within the CRGNSA special management area. (See WAC 222-38-020 and 222-38-030.)

*(p) Aerial application of chemicals (except insecticides), outside of the CRGNSA special management area

when applied to not more than 40 contiguous acres if the application is part of a combined or cooperative project with another landowner and where the application does not take place within 100 feet of lands used for farming, or within 200 feet of a residence, unless such farmland or residence is owned by the forest landowner. Provisions of chapter 222-38 WAC shall apply.

(q) Forestry research studies and evaluation tests by an established research organization.

*(r) Any of the following if none of the operation or limits of construction takes place within the shoreline area of a Type S Water or the riparian management zone of a Type F Water, the bankfull width of a Type Np Water or flowing Type Ns Water, or within the CRGNSA special management area and the operation does not involve off-road use of tractor or wheeled skidding systems on a sideslope of greater than 40 percent:

(i) Any forest practices within the boundaries of existing golf courses.

(ii) Any forest practices within the boundaries of existing cemeteries which are approved by the cemetery board.

(iii) Any forest practices involving a single landowner where contiguous ownership is less than two acres in size.

(s) Removal of beaver structures from culverts on active and inactive roads. A hydraulics project approval from the Washington department of fish and wildlife may be required.

(4) "**Class II.**" Certain forest practices have been determined to have a less than ordinary potential to damage a public resource and may be conducted as Class II forest practices: Provided, That no forest practice enumerated below may be conducted as a Class II forest practice if the operation requires a hydraulic project approval (RCW 75.20.100) or is within a "shorelines of the state," or involves owner of perpetual timber rights subject to RCW 76.09.067 (other than renewals). Such forest practices require an application. No forest practice enumerated below may be conducted as a "Class II" forest practice if it takes place on lands platted after January 1, 1960, or on lands being converted to another use. Such forest practices require a Class IV application. Class II forest practices are the following:

(a) Renewal of a prior Class II notification where no change in the nature and extent of the forest practices is required under rules effective at the time of renewal.

(b) Renewal of a previously approved Class III or IV forest practice application where:

(i) No modification of the uncompleted operation is proposed;

(ii) No notices to comply, stop work orders or other enforcement actions are outstanding with respect to the prior application; and

(iii) No change in the nature and extent of the forest practice is required under rules effective at the time of renewal. Renewal of a previously approved multiyear permit for forest practices within a WAU with an approved watershed analysis requires completion of a necessary 5-year review of the watershed analysis.

*(c) Any of the following if none of the operation or limits of construction takes place within the riparian management zone of a Type F Water, within the bankfull width of a

Type Np Water, within a wetland management zone, within a wetland, or within the CRGNSA special management area:

(i) Construction of advance fire trails.

(ii) Opening a new pit of, or extending an existing pit by, less than 1 acre.

*(d) Any of the following if none of the operation or limits of construction takes place within the riparian management zone of a Type F Water, within the bankfull width of a Type Np Water, within a wetland management zone or within a wetland; and if none of the operations involve off-road use of tractor or wheeled skidding systems on a sideslope of greater than 40 percent.

(e) Salvage of logging residue.

*(f) Any of the following if none of the operation or limits of construction takes place within the riparian management zone of a Type F Water, within the bankfull width of a Type Np Water, within a wetland management zone, within a wetland, or within the CRGNSA special management area, and if none of the operations involve off-road use of tractor or wheeled skidding systems on a sideslope of greater than 40 percent, and if none of the operations are located on lands with a likelihood of future conversion (see WAC 222-16-060):

(i) West of the Cascade summit, partial cutting of 40 percent or less of the live timber volume.

(ii) East of the Cascade summit, partial cutting of 5,000 board feet per acre or less.

(iii) Salvage of dead, down, or dying timber if less than 40 percent of the total timber volume is removed in any 12-month period.

(iv) Any harvest on less than 40 acres.

(v) Construction of 600 or more feet of road, provided that the department shall be notified at least 2 business days before commencement of the construction.

(5) "**Class III.**" Forest practices not listed under Classes IV, I or II above are "Class III" forest practices. Among Class III forest practices are the following:

(a) Those requiring hydraulic project approval (RCW 75.20.100).

*(b) Those within the shorelines of the state other than those in a Class I forest practice.

*(c) Aerial application of insecticides, except where classified as a Class IV forest practice.

*(d) Aerial application of chemicals (except insecticides), except where classified as Class I or IV forest practices.

*(e) Harvest or salvage of timber except where classed as Class I, II or IV forest practices.

*(f) All road construction and reconstruction except as listed in Classes I, II and IV forest practices.

(g) Opening of new pits or extensions of existing pits over 1 acre.

*(h) Road maintenance involving:

(i) Replacement of bridges or culverts across Type S, F or flowing Type Np Waters; or

(ii) Movement of material that has a direct potential for entering Type S, F or flowing Type Np Waters or Type A or B Wetlands.

(i) Operations involving owner of perpetual timber rights subject to RCW 76.09.067.

(j) Site preparation or slash abatement not listed in Classes I or IV forest practices.

(k) Harvesting, road construction, site preparation or aerial application of pesticides on lands which contain cultural, historic or archaeological resources which, at the time the application or notification is filed, are:

(i) On or are eligible for listing on the National Register of Historic Places; or

(ii) Have been identified to the department as being of interest to an affected Indian tribe.

(l) Harvesting exceeding 19 acres in a designated difficult regeneration area.

(m) Utilization of an alternate plan. See WAC 222-12-040.

*(n) Any filling of wetlands, except where classified as Class IV forest practices.

*(o) Multiyear permits.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-16-050, filed 5/30/01, effective 7/1/01. Statutory Authority: RCW 76.09.040 and chapter 34.05 RCW. 98-07-047, § 222-16-050, filed 3/13/98, effective 5/1/98; 97-24-091, § 222-16-050, filed 12/3/97, effective 1/3/98; 93-12-001, § 222-16-050, filed 5/19/93, effective 6/19/93. Statutory Authority: RCW 76.09.040, 76.09.050 and chapter 34.05 RCW. 92-15-011, § 222-16-050, filed 7/2/92, effective 8/2/92. Statutory Authority: RCW 76.09.040, 76.09.050 and 34.05.350. 91-23-052, § 222-16-050, filed 11/15/91, effective 12/16/91. Statutory Authority: RCW 76.09.040. 88-19-112 (Order 551, Resolution No. 88-1), § 222-16-050, filed 9/21/88, effective 11/1/88; 87-23-036 (Order 535), § 222-16-050, filed 11/16/87, effective 1/1/88. Statutory Authority: RCW 76.09.040 and 76.09.050. 82-16-077 (Resolution No. 82-1), § 222-16-050, filed 8/3/82, effective 10/1/82; Order 263, § 222-16-050, filed 6/16/76.]

WAC 222-16-051 *Exception to Class IV-Special. An application would not be classified as Class IV-Special based on its potential impact to aquatic resources under any subsection of WAC 222-16-050(1) if the application is consistent with an agreement described in WAC 222-12-041(3) and the agreement addresses the risk to aquatic resources addressed in such subsection of WAC 222-16-050(1). The landowner must identify these subsections at the time of application. Forest practices applications may still be classified as Class IV-Special based upon the potential for impact to other factors listed in any subsection of WAC 222-16-050(1).

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-16-051, filed 5/30/01, effective 7/1/01.]

WAC 222-16-070 Pesticide uses with the potential for a substantial impact on the environment. *To identify forest practices involving pesticide uses that have the potential for a substantial impact on the environment, the department shall apply the process prescribed in this section. See WAC 222-16-050 (1)(a).

(1) Pesticide list - The department shall maintain a list of all pesticides registered under chapter 15.58 RCW for use in forest practices. The department shall conduct, in consultation with the departments of ecology, health, agriculture, and fish and wildlife, an annual review of the list for the purpose of including new pesticides and/or removing those pesticides which have been prohibited from use. The list shall be available to the public at each of the department's offices. A list of the department's offices and their addresses appears at WAC

332-10-030. In preparing the pesticide list, the department shall include information on the following characteristics:

(a) Active ingredients, name brand or trade mark, labeled uses, pesticide type, EPA-registration number;

(b) Toxicity of the pesticide based on the Environmental Protection Agency (EPA) label warning under 40 C.F.R. 156.10 (h)(1), listed as "caution," "warning," "danger," or "danger - poison" except as modified to consider aquatic or mammalian toxicity; and

(c) Whether the pesticide is a state restricted use pesticide for the protection of ground water under WAC 16-228-164(1).

(2) Key for evaluating applications. To determine whether aerial application of a pesticide has the potential for a substantial impact on the environment, the department shall apply the following analysis:

KEY FOR EVALUATION OF SITE SPECIFIC USE OF AERIALLY APPLIED PESTICIDES

Question	Question	Resp	Action
1 (a)	Is the pesticide on the pesticide list (WAC 222-16-070(1))?	Yes No	go to 2 go to 1(b)
1 (b)	Is the pesticide being used under a Dept of Agriculture Experimental Use Permit (WAC 16-228-125)?	Yes No	Class III Class IV Sp
2	Is the toxicity rating for the pesticide to be used "Danger - Poison" as designated in the pesticide list (WAC 222-16-070 (1)(b))?	Yes No	Class IV Sp go to 3(a)
3 (a)	Is <i>Bacillus thuringiensis</i> (BT) the only pesticide being used on this application?	Yes No	go to 3(b) go to 4(a)
3 (b)	Is there a Threatened or Endangered species or the critical habitat (Federal) or critical habitat (State) of a species within the application area that is susceptible to the BT strain being used?	Yes No	Class IV Sp Class III
4 (a)	Is this operation occurring over ground water with a high susceptibility to contamination as specified in EPA 910/ 9-87-189 or in documentation provided by the department of ecology?	Yes No	go to 4(b) go to 5(a)
4 (b)	Is this pesticide a state restricted use pesticide for the protection of ground water under WAC 16-228-164 (1)?	Yes No	Class IV Sp go to 5(a)
5 (a)	Is the operation adjacent (within 100 ft.) of surface water?	Yes No	go to 5(b) go to 5(e)
5 (b)	Determine the toxicity rating from the pesticide list: *Is the toxicity rating "Caution" or "Warning"?	Yes Yes	go to 5(c) go to 5(d)
5 (c)	*Is the toxicity rating "Danger"? Is there a Group A or B water surface water system (WAC 246-290-020) intake OR a fish hatchery intake within one half mile downstream of the operation?	Yes No	Class IV Sp go to 5(e)
5 (d)	Is there a Group A or B water surface system intake OR a fish hatchery intake within 1 mile downstream of the operation?	Yes No	Class IV Sp go to 5(e)
5 (e)	Is the operation within 200 feet of the intake of a Group A or B spring water system?	Yes No	Class IV Sp go to 5(f)
5 (f)	Is the operation applying a pesticide in a Type A or B wetland?	Yes No	Class IV Sp go to 6(a)

KEY FOR EVALUATION OF SITE SPECIFIC USE OF AERIALLY
APPLIED PESTICIDES

Question	Question	Resp	Action
6 (a)	Does any portion of the planned operation cover 240 or more contiguous acres? Pesticide treatment units will be considered contiguous if they are separated by less than 300 feet or treatment dates of adjacent units are less than 90 days apart.	Yes No	Class IV Sp go to 6(b)
6 (b)	Is there a Threatened or Endangered species or the critical habitat (Federal) or critical habitat (State) of a species within the application area?	Yes No	Class IV Sp go to 6(c)
6 (c)	If there is a special concern identified for this pesticide in the Board manual, does it apply to this application?	Yes No	Class IV Sp Class III

(3) Special concerns (see WAC 222-16-070 (2)6(c)) shall be evaluated by the department of agriculture. Information regarding special concerns shall be presented to the board for review. Approved special concerns shall be included in the board manual. Special concerns shall include situations where use of pesticides has the potential for a substantial impact on the environment, beyond those covered specifically in the key in subsection (2) of this section.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-16-070, filed 5/30/01, effective 7/1/01. Statutory Authority: RCW 76.09.040 and chapter 34.05 RCW. 97-24-091, § 222-16-070, filed 12/3/97, effective 1/3/98; 93-12-001, § 222-16-070, filed 5/19/93, effective 6/19/93. Statutory Authority: RCW 76.09.040, 76.09.050 and chapter 34.05 RCW. 92-15-011, § 222-16-070, filed 7/2/92, effective 8/2/92.]

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 - 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 - 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 - 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 caribou - 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 - 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 - 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 - 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.

(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 pond turtle - 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.

(j) Marbled murrelet.

(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 out-

side 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 WAC 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 an incidental take statement covering such species approved by the Secretary of the Interior or Commerce pursuant to 16 U.S.C. § 1536 (b) or 1539 (a); 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. section 1533(d); 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;

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

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

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

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.

(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.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-16-080, filed 5/30/01, effective 7/1/01. Statutory Authority: RCW 76.09.040 and chapter 34.05 RCW. 97-24-091, § 222-16-080, filed 12/3/97, effective 1/3/98; 97-15-105, § 222-16-080, filed 7/21/97, effective 8/21/97. Statutory Authority: Chapters 76.09 and 34.05 RCW. 96-12-038, § 222-16-080, filed 5/31/96, effective 7/1/96. Statutory Authority: RCW 76.09.040 and chapter 34.05 RCW. 93-12-001, § 222-16-080, filed 5/19/93, effective 6/19/93. Statutory Authority: RCW 76.09.040, 76.09.050 and chapter 34.05 RCW. 92-15-011, § 222-16-080, filed 7/2/92, effective 8/2/92.]

WAC 222-16-100 Planning options for the northern spotted owl. (1) **Landowner option plans for the northern spotted owl.** Landowner option plans (LOPs) are intended to provide landowners with a mechanism, entered into voluntarily, to contribute to the protection of northern spotted owls by considering the needs of overall population maintenance or dispersal habitat across a defined geographic area. Forest practices applications that are in an area covered by an LOP, and that are consistent with the LOP, will not be classified as Class IV-Special on the basis of critical habitat (state) or critical habitat (federal) for the northern spotted owl. This does not preclude classification as Class IV-Special because of the presence of other factors listed in WAC 222-16-050(1).

(a) **Required elements of LOPs.** The level of detail to be included in a LOP will depend on the area of ownership involved, the time period for which the plan will be in effect, and the complexity of the management strategy. Neverthe-

less, each plan shall contain the elements set forth in this subsection.

(i) **Goals and objectives.** The specific goals and objectives for the landowner's contributions proposed under the LOP shall be developed by the landowner and approved by the department in consultation with the department of fish and wildlife based on the following:

(A) Mitigation under the plan must be reasonable and capable of being accomplished;

(B) To the maximum extent practicable, the plan must minimize and mitigate significant adverse impacts caused by, and identified in, the plan on individual northern spotted owl site centers or the ability of the SOSEA to meet SOSEA goals. Specific short (one to five-year) and long (greater than five-year) term goals and objectives for the LOP should be clearly stated, where applicable; and

(C) LOPs should be designed to achieve an appropriate contribution from nonfederal lands toward meeting SOSEA goals and are intended to be an efficient and effective alternative to site-by-site management planning. In Eastern Washington, LOPs must also consider the need to protect the forests from catastrophic loss from wildfire, insects, and diseases.

(ii) **Other required elements:**

(A) A description of the planning area. The LOP planning area shall include a sufficient amount of the landowner's forest land within the SOSEA to meet the goals and objectives of the plan.

(B) A description of the physical features in the planning area (e.g., geology, topography, etc.).

(C) The current habitat status. Suitable spotted owl habitat should be categorized and mapped as old forest, sub-mature, young forest marginal, or dispersal.

(D) The current species status. All status 1, 2, and 3 northern spotted owl site centers and the associated median home range circles that overlap any of the landowner's ownership within the LOP boundary must be mapped.

(E) Management proposals and relevant operations plans.

(F) Projected suitable habitat development.

(G) A plan for training.

(H) A monitoring program.

(I) Reporting standards.

(J) The conditions under which the LOP may be modified.

(K) The term of the LOP and conditions for termination. The term of the LOP shall be sufficient to meet its goals and objectives. The conditions of the LOP run with the land unless the LOP specifies alternative means to achieve the LOP goals and objectives upon mid-term sale or transfer. In addition to any other termination provisions in the LOP, plans may be terminated by mutual agreement of the landowner and the department.

(b) **Approval of LOPs.** Upon receipt of a landowner option plan, the department shall circulate the plan to the department of fish and wildlife, affected Indian tribes, local government entities, other forest landowners in the SOSEA, and the public for a thirty-day review and comment period. The department may extend this review period for up to thirty additional days. Within ninety days of receipt of the plan, the

department shall review the comments and approve or disapprove the plan or submit the plan to the landowner to revise as appropriate. The department, after consultation with the department of fish and wildlife, shall approve the plan if:

(i) The plan contains all of the elements required under this section;

(ii) The plan is expected to be effective in meeting its goals and objectives;

(iii) The plan will not have a probable significant adverse impact on the ability of the SOSEA to meet its goals; and

(iv) The plan will not appreciably reduce the likelihood of the survival and recovery of the northern spotted owl in the wild.

In making its determination under this subsection, the department shall consider the direct, indirect, and cumulative effects of the plan; both the short-term and long-term effects of the plan; and whether local, state, or federal land management, regulatory, or nonregulatory requirements will mitigate identified significant adverse impacts. If the department does not approve the plan, or approves it over the objections of the department of fish and wildlife, the department shall set forth in writing a concise explanation of the reasons for its action.

(c) **Enforcement of LOPs.** The department shall review all applications and notifications from the landowner, proposed within the plan area, for consistency with the plan. Any applications or notifications found to be inconsistent with the plan shall be returned to the landowner for modification. After landowner review, applications and notifications which are not consistent with the plan shall be classified as Class IV-Special.

(2) See WAC 222-16-105 for CHEAs.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-16-100, filed 5/30/01, effective 7/1/01. Statutory Authority: RCW 76.09.040 and chapter 34.05 RCW. 97-15-105, § 222-16-100, filed 7/21/97, effective 8/21/97. Statutory Authority: Chapters 76.09 and 34.05 RCW. 96-12-038, § 222-16-100, filed 5/31/96, effective 7/1/96.]

WAC 222-16-105 Cooperative habitat enhancement agreements. (1) **Purpose.** A cooperative habitat enhancement agreement (CHEA) is intended to remove disincentives for landowners who create, enhance, or maintain habitat for the northern spotted owl or marbled murrelet by providing them with protection against future spotted owl or marbled murrelet rules caused by their enhancement activities. A CHEA is an agreement between the department and a landowner, developed in cooperation with the department of fish and wildlife, for the purpose of creating, enhancing, or maintaining northern spotted owl habitat and/or marbled murrelet habitat. The agreement will apply only to forest land identified by the landowner:

(a) For northern spotted owls, outside of the median home range circles of northern spotted owl site centers in existence at the time of implementation.

(b) For marbled murrelets, any current unoccupied or potential future habitat.

(2) **Authority.** Outside of the median home range circles of northern spotted owls or an occupied marbled murrelet site, the department, in consultation with the department of fish and wildlife, may enter into agreements with nonfed-

eral landowners to create, enhance, or maintain habitat that the northern spotted owl and/or the marbled murrelet can be expected to utilize. During the term of these agreements, forest practices covered by the agreements shall not be classified as Class IV-Special on the basis of critical habitat (state) or critical habitat (federal) for the northern spotted owl or the marbled murrelet. This does not preclude classification as Class IV-Special because of the presence of other factors listed in WAC 222-16-050(1).

(3) **Baseline.**

(a) Each agreement shall identify a baseline level of habitat, and the department shall not permit forest practices that reduce the habitat below the baseline during the term of the agreement.

(b) For northern spotted owls, the baseline may range from zero habitat to the overall levels of suitable spotted owl habitat and dispersal habitat that existed across the land in question at the time the agreement is entered into.

(c) For marbled murrelets, the baseline may range from zero habitat to the overall levels of suitable marbled murrelet habitat that existed across the land in question at the time the agreement is entered into.

(d) The department shall determine, working with the landowner and in consultation with the department of fish and wildlife, the appropriate baseline, taking into consideration:

(i) The size of the landowner's ownership and the ability of the landowner to maintain habitat conditions across the landscape in question over time;

(ii) The overall benefits of the agreement to the northern spotted owl or marbled murrelet including both the proposed measures to create, enhance, or maintain habitat and the proposed baseline levels; and

(iii) The term of the agreement.

(4) **Form and content of CHEAs.**

(a) The department shall, in consultation with the department of fish and wildlife, have the authority to define the form and content of CHEAs. The form and content may vary among agreements, but each must provide sufficient information for the department, the public, and other reviewers to understand and evaluate the agreement against the standards established under this section.

(b) For northern spotted owls, in addition to the elements required by the department, each agreement shall include a plan to avoid harvesting, road construction, or the aerial application of pesticides, between March 1 and August 31, on the seventy acres of highest quality suitable spotted owl habitat surrounding any known northern spotted owl site centers on lands covered by the agreement.

(5) **Approval of a CHEA.** Upon receipt of a CHEA, the department shall circulate the agreement to the department of fish and wildlife, affected Indian tribes, local government entities, other forest landowners in the SOSEA (if the CHEA is in a SOSEA), and the public for review and comment. Within sixty days of receipt of the agreement, the department shall review the comments and approve or disapprove the agreement or submit the agreement to the landowner to revise as appropriate. The department, after consultation with the department of fish and wildlife, may approve the agreement

if the agreement will create, enhance, or maintain habitat conditions for:

(a) The northern spotted owl in a manner that provides a measurable contribution toward meeting the goals of the SOSEA or a measurable benefit to northern spotted owls outside SOSEAs.

(b) The marbled murrelet in a manner that provides a measurable benefit to the species.

(6) **Enforcement of CHEAs.** The department shall review all applications and notifications from the landowner, proposed within the agreement area, for consistency with the agreement. Any applications or notifications found to be inconsistent with the agreement shall be returned to the landowner for modification. After landowner review, applications and notifications which are not consistent with the agreement shall be classified based on the rules in effect at the time of application and without any of the benefits of the agreement.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-16-105, filed 5/30/01, effective 7/1/01. Statutory Authority: RCW 76.09.040 and chapter 34.05 RCW. 97-15-105, § 222-16-105, filed 7/21/97, effective 8/21/97.]

Chapter 222-20 WAC

APPLICATION AND NOTIFICATION PROCEDURES

WAC

222-20-010	Applications and notifications—Policy.
222-20-015	Multiyear permits.
222-20-020	Application time limits.
222-20-040	Approval conditions.
222-20-050	Conversion to nonforest use.
222-20-055	Continuing forest land obligations.
222-20-070	Emergency forest practices.
222-20-080	Application and notification expiration.
222-20-100	Notice to parks and OAHF.

WAC 222-20-010 Applications and notifications—Policy. (1) **No Class II, III or IV forest practices** shall be commenced or continued unless the department has received a notification for Class II forest practices, or approved an application for Class III or IV forest practices pursuant to the act. Where the time limit for the department to act on the application has expired, and none of the conditions in WAC 222-20-020(1) exist, the operation may commence. (NOTE: OTHER LAWS AND RULES AND/OR PERMIT REQUIREMENTS MAY APPLY. SEE CHAPTER 222-50 WAC.)

(2) **The department shall** prescribe the form and contents of the notification and application, which shall specify what information is needed for a notification, and the information required for the department to approve or disapprove the application.

(3) **Except as provided in subpart (4) below, applications and notifications** shall be signed by the landowner, the timber owner and the operator, or the operator and accompanied by a consent form signed by the timber owner and the landowner. A consent form may be another document if it is signed by the landowner(s) and it contains a statement acknowledging that he/she is familiar with the Forest Practices Act, including the provisions dealing with conversion to another use (RCW 76.09.060(3)).

(4) In lieu of a landowner's signature, where the timber rights have been transferred by deed to a perpetual owner who is different from the forest landowner, the owner of perpetual timber rights may sign a forest practices application or notification for operations not converting to another use and the statement of intent not to convert for a set period of time. The holder of perpetual timber rights shall serve the signed forest practices application or notification and the signed statement of intent on the forest landowner. The forest practices application shall not be considered complete until the holder of perpetual timber rights has submitted evidence acceptable to the department that such service has occurred.

(5) **Where an application** for a conversion is not signed by the landowner or accompanied by a consent form, as outlined in subsection (3) of this section, the department shall not approve the application. Applications and notifications for the development or maintenance of utility rights of way shall not be considered to be conversions.

(6) **Transfer of the** approved application or notification to a new landowner, timber owner or operator requires written notice by the original landowner or applicant to the department and should include the original application or notification number. This written notice shall be in a form acceptable to the department and shall contain an affirmation signed by the new landowner, timber owner, or operator, as applicable, that he/she agrees to be bound by all conditions on the approved application or notification. In the case of a transfer of an application previously approved without the landowner's signature the new timber owner or operator must submit a bond securing compliance with the requirements of the forest practices rules as determined necessary by the department. If an application or notification indicates that the landowner or timber owner is also the operator, or an operator signed the application, no notice need be given regarding any change in subcontractors or similar independent contractors working under the supervision of the operator of record.

(7) **Applications and notifications** must be delivered to the department at the appropriate region office. Delivery should be in person or by registered or certified mail.

(8) **Applications and notifications** shall be considered received on the date and time shown on any registered or certified mail receipt, or the written receipt given at the time of personal delivery, or at the time of receipt by general mail delivery. Applications or notifications that are not complete, or are inaccurate will not be considered officially received until the applicant furnishes the necessary information to complete the application. A review statement from the U.S. Forest Service that evaluates compliance of the forest practices with the CRGNSA special management area guidelines is necessary information for an application or notification within the CRGNSA special management area. The review statement requirement shall be waived if the applicant can demonstrate the U.S. Forest Service received a complete plan application and failed to act within 45 days. An environmental checklist (WAC 197-11-315) is necessary information for all Class IV applications. A local government entity clearing and/or grading permit is necessary information for all Class IV applications on lands that will be converted to a use other than commercial timber production or on lands which have been platted after January 1, 1960, if the local government

entity has jurisdiction and has an ordinance requiring such permit. If a notification or application is delivered in person to the department by the operator or the operator's authorized agent, the department shall immediately provide a dated receipt. In all other cases, the department shall immediately mail a dated receipt to the applicant.

(9) **An operator's name**, if known, must be included on any forest practices application or notification. The landowner or timber owner must provide notice of hiring or change of operator to the department within 48 hours. The department shall promptly notify the landowner if the operator is subject to a notice of intent to disapprove under WAC 222-46-070. Once notified, the landowner will not permit the operator, who is subject to a notice of intent to disapprove, to conduct the forest practices specified in the application or notification, or any other forest practices until such notice of intent to disapprove is removed by the department.

(10) **Financial assurances** may be required by the department prior to the approval of any future forest practices application or notification to an operator or landowner under the provisions of WAC 222-46-090.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-20-010, filed 5/30/01, effective 7/1/01. Statutory Authority: RCW 76.09.040 and chapter 34.05 RCW. 98-07-047, § 222-20-010, filed 3/13/98, effective 5/1/98; 93-12-001, § 222-20-010, filed 5/19/93, effective 6/19/93. Statutory Authority: RCW 76.09.040, 76.09.050 and 34.05.350. 91-23-052, § 222-20-010, filed 11/15/91, effective 12/16/91. Statutory Authority: RCW 76.09.040. 87-23-036 (Order 535), § 222-20-010, filed 11/16/87, effective 1/1/88; 82-18-053 (Resolution No. 82-2), § 222-20-010, filed 8/31/82. Statutory Authority: RCW 76.09.040 and 76.09.050. 82-16-077 (Resolution No. 82-1), § 222-20-010, filed 8/3/82, effective 10/1/82; Order 263, § 222-20-010, filed 6/16/76.]

WAC 222-20-015 Multiyear permits. (1) Where a watershed analysis has been approved for a WAU under WAC 222-22-080, landowner(s) may apply for a multiyear permit. The information provided and level of detail must be comparable to that required for a two-year permit. At a minimum, the application must include:

(a) A description of the forest practices to be conducted during the period requested for the permit, and a map(s) showing their locations; and

(b) Prescriptions must be identified where operations are proposed within or include areas of resource sensitivity.

(2) A landowner may apply for a multiyear permit to perform road maintenance or abandonment if the landowner has an approved road maintenance and abandonment plan where the schedule for implementing the plan is longer than two years. The information provided and level of detail must be comparable to that required for two-year permits under WAC 222-24-050.

(3) A landowner may apply for a multiyear permit to perform an approved alternate plan.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-20-015, filed 5/30/01, effective 7/1/01.]

WAC 222-20-020 Application time limits. (1) **A properly completed application** shall be approved, conditioned or disapproved within 30 calendar days for Class III and Class IV forest practices, except:

(a) To the extent the department is prohibited from approving the application by the act.

(b) For "Class IV" applications when the department or the lead agency has determined that a detailed environmental statement must be made, the application must be approved, conditioned or disapproved within 60 days, unless the commissioner of public lands promulgates a formal order specifying a later date for completion of the detailed environmental statement and final action on the application. At least 10 days before promulgation of such an order extending the time, the applicant shall be given written notice that the department is requesting such extension; giving the reasons the process cannot be completed within such period; and stating that the applicant may comment in writing to the commissioner of public lands or obtain an informal conference with the department regarding the proposed extension.

(c) When they involve lands platted after January 1, 1960, or lands to be converted, the applicable time limit shall be no less than 14 business days from transmittal to the county unless the county has waived its right to object or has consented to approval of the application.

(2) **Unless the county** has waived its rights under the act or consents to approval, the department shall not approve an application involving lands platted after January 1, 1960, in the process of being platted or proposed to be converted to another use until at least 14 business days from the date of transmittal to the county.

(3) **Where a notification** is submitted for operations which the department determines involve Class III or IV forest practices, the department shall issue a stop work order or take other appropriate action. If the operations were otherwise in compliance with the act and forest practices rules, no penalty should be imposed for those operations which occurred prior to the enforcement action: Provided, That no damage to a public resource resulted from such operations, and the operations commenced more than 5 days from receipt by the department of the notification.

(4) **If the department** fails to approve or disapprove an application or any portion thereof within the applicable time limit, the application shall be deemed approved and the operation may commence: Provided, That this provision shall not apply where:

(a) The county objects and the application involves lands platted after January 1, 1960, or lands to be converted where the county's right of objection is 14 business days which may be longer than the approval time limit.

(b) The department is prohibited from approving the application by the act.

(c) Compliance with the State Environmental Policy Act requires additional time.

(5) **If seasonal field** conditions prevent the department from being able to properly evaluate the application, the department may disapprove the application until field conditions allow for an on-site review.

(6) An application for a multiyear permit must be approved, conditioned or disapproved by the department within 45 days of receiving a complete application.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-20-020, filed 5/30/01, effective 7/1/01. Statutory Authority: RCW 76.09.040. 87-23-036 (Order 535), § 222-

20-020, filed 11/16/87, effective 1/1/88. Statutory Authority: RCW 76.09.040 and 76.09.050, 82-16-077 (Resolution No. 82-1), § 222-20-020, filed 8/3/82, effective 10/1/82; Order 263, § 222-20-020, filed 6/16/76.]

WAC 222-20-040 Approval conditions. (1) **Whenever an approved** application authorizes a forest practice which, because of soil condition, proximity to a water course or other unusual factor, has a potential for causing material damage to a public resource, as determined by the department, the applicant shall, when requested on the approved application, notify the department 2 business days before the commencement of actual operations.

(2) **All approvals are** subject to any conditions stipulated on the approved application and to any subsequent additional requirements set forth in a stop work order or a notice to comply.

(3) Local government entity conditions.

(a) RCW 76.09.240(1) allows a local government entity to exercise limited land use planning or zoning authority on certain types of forest practices. This subsection is designed to ensure that local government entities exercise this authority consistent with chapter 76.09 RCW and the rules in Title 222 WAC. The system provided for in this subsection is optional.

(b) This subsection only applies to Class IV general applications on lands that will be converted to a use other than commercial timber production or to Class IV general applications on lands which have been platted after January 1, 1960.

(c) The department shall transmit the applications to the appropriate local government entity within two business days from the date the department receives the application.

(d) The department shall condition the application consistent with the request of the local government entity if:

(i) The local government entity has adopted a clearing and/or grading ordinance that addresses the items listed in (e) of this subsection and requires a permit;

(ii) The local government entity has issued a permit under the ordinance in (i) that contains the requested conditions; and

(iii) The local government entity has entered into an interagency agreement with the department consistent with WAC 222-50-030 addressing enforcement of forest practices.

(e) The local government entity conditions may only cover:

(i) The location and character of open space and/or vegetative buffers;

(ii) The location and design of roads;

(iii) The retention of trees for bank stabilization, erosion prevention, and/or storm water management; or

(iv) The protection of critical areas designated pursuant to chapter 36.70A RCW.

(f) Local government entity conditions shall be filed with the department within twenty-nine days of the filing of the application with the department or within fourteen business days of the transmittal of the application to the local government entity or one day before the department acts on the application, whichever is later.

(g) The department shall incorporate local government entity conditions consistent with this subsection as conditions of the forest practices approval.

(h) Any exercise of local government entity authority consistent with this subsection shall be considered consistent with the forest practices rules in this chapter.

(4) Lead agency mitigation measures.

(a) This subsection is designed to specify procedures for a mitigated DNS process that are consistent with chapters 76.09 and 43.21C RCW and the rules in Title 222 WAC and chapter 197-11 WAC.

(b) This subsection applies to all Class IV applications in which the department is not the lead agency under SEPA. (See WAC 197-11-758.)

(c) The department shall transmit the application to the lead agency within two business days from the date the department receives the application.

(d) The lead agency may specify mitigation measures pursuant to WAC 197-11-350.

(e) The lead agency threshold determination and any mitigation measures must be filed with the department within the later of (i) twenty-nine days of the receipt of the application by the department, (ii) fourteen business days of the transmittal of the application to the lead agency if the lead agency is a local government entity; or (iii) one day before the department acts on the application.

(f) Unless the applicant clarifies or changes the application to include mitigation measures specified by the lead agency, the department must deny the application or require an EIS. (See WAC 197-11-738.)

(g) If the department does not receive a threshold determination from the lead agency by the time it must act on the application, the department shall deny the application.

(5) CRGNSA special management area.

(a) **Policy.** The states of Oregon and Washington have entered into a Compact preauthorized by Congress to implement the CRGNSA Act, 16 U.S.C. §§ 544, et seq. chapter 43.97 RCW, 16 U.S.C. § 544c. The purposes of the CRGNSA Act are:

(i) To establish a national scenic area to protect and provide for the enhancement of the scenic, cultural, recreational, and natural resources of the Columbia River Gorge; and

(ii) To protect and support the economy of the Columbia River Gorge area by encouraging growth to occur in existing urban areas and by allowing future economic development in a manner that is consistent with paragraph (1). 16 U.S.C. § 544a.

The forest practices rules addressing forest practices in the CRGNSA special management area recognize the intent of Congress and the states expressed in the CRGNSA Act and Compact and the intent of the Washington state legislature in the Forest Practices Act. These rules are designed to recognize the public interest in sound natural resource protection provided by the Act and the Compact, including the protection to public resources, recreation, and scenic beauty. These rules are designed to achieve a comprehensive system of laws and rules for forest practices in the CRGNSA special management area which avoids unnecessary duplication, provides for interagency input and intergovernmental and tribal coordination and cooperation, considers reasonable land use

planning goals contained in the CRGNSA management plan, and fosters cooperation among public resources managers, forest landowners, tribes and the citizens.

(b) The CRGNSA special management area guidelines shall apply to all forest practices within the CRGNSA special management area. Other forest practices rules also apply to these forest practices. To the extent these other rules are inconsistent with the guidelines, the more restrictive requirement controls. To the extent there is an incompatibility between the guidelines and another rule, the guidelines control. Copies of the guidelines can be obtained from the department Southeast and Southwest regional offices and Olympia office, as well as from the Columbia River Gorge commission and the U.S. Forest Service.

(c) The department shall review and consider the U.S. Forest Service review statement and shall consult with the U.S. Forest Service and the Columbia River Gorge commission prior to making any determination on an application or notification within the CRGNSA special management area.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-20-040, filed 5/30/01, effective 7/1/01. Statutory Authority: RCW 76.09.040 and chapter 34.05 RCW. 98-07-047, § 222-20-040, filed 3/13/98, effective 5/1/98. Statutory Authority: RCW 76.09.040, 76.09.050 and 34.05.350. 91-23-052, § 222-20-040, filed 11/15/91, effective 12/16/91. Statutory Authority: RCW 76.09.040. 87-23-036 (Order 535), § 222-20-040, filed 11/16/87, effective 1/1/88; Order 263, § 222-20-040, filed 6/16/76.]

WAC 222-20-050 Conversion to nonforest use. (1) If an application to harvest signed by the landowner indicates that within 3 years after completion, the forest land will be converted to a specified active use which is incompatible with timber growing, the reforestation requirements of these rules shall not apply and the information relating to reforestation on the application form need not be supplied. However, if such specified active use is not initiated within 3 years after such harvest is completed, the reforestation requirements (See chapter 222-34 WAC) shall apply and such reforestation shall be completed within 1 additional year.

(2) For Class II, III, and IV special forest practices, if a landowner wishes to maintain the option for conversion to a use other than commercial timber operation the landowner may request the appropriate local government entity to approve a conversion option harvest plan. This plan, if approved by the local government entity and followed by the landowner, shall release the landowner from the six-year moratorium on future development, but does not create any other rights. The conversion option harvest plan shall be attached to the application or notification as a condition. Violation of the conversion option harvest plan will result in the reinstatement of the local government entity's right to the six-year moratorium. Reforestation requirements will not be waived in the conversion option harvest plan. Reforestation rules shall apply at the completion of the harvest operation as required in chapter 222-34 WAC. Nothing herein shall preclude the local government entity from charging a fee to approve such a plan. (See RCW 76.09.060 (3)(b)(i).)

(3) If the application does not state that any land covered by the application will be or is intended to be converted to a specified active use incompatible with commercial timber operations and except as provided in subsection (2) of this

section, the local government entity may, for six years after the date of the application, refuse to accept, process, or approve any or all applications for permits or approvals, including building permits and subdivision approvals, relating to nonforestry uses of the land subject to the application. (See RCW 76.09.060 (3)(b)(i).)

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-20-050, filed 5/30/01, effective 7/1/01. Statutory Authority: RCW 76.09.040, 76.09.050 and 34.05.350. 91-23-052, § 222-20-050, filed 11/15/91, effective 12/16/91; Order 263, § 222-20-050, filed 6/16/76.]

WAC 222-20-055 Continuing forest land obligations.

Continuing forest land obligations include reforestation, road maintenance and abandonment plans, and harvest strategies on perennial nonfish habitat waters in Eastern Washington.

(1) Prior to the sale or transfer of land or perpetual timber rights subject to continuing forest land obligations under the Forest Practices Act and rules, the seller must notify the buyer of the existence and nature of such a continuing obligation and the buyer must sign a notice of continuing forest land obligation indicating the buyer's knowledge of the obligations. The notice must be:

- (a) On a form prepared by the department;
- (b) Sent to the department by the seller at the time of sale or transfer of land or perpetual timber rights; and
- (c) Retained by the department.

(2) If the seller fails to notify the buyer about the continuing forest land obligation, the seller must pay the buyer's costs related to continuing forest land obligations, including all legal costs and reasonable attorneys' fees incurred by the buyer in enforcing the continuing forest land obligation against the seller.

(3) Failure by the seller to send the required notice to the department at the time of sale will be prima facie evidence in an action by the buyer against the seller for costs related to the continuing forest land obligation prior to sale.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-20-055, filed 5/30/01, effective 7/1/01.]

WAC 222-20-070 Emergency forest practices.

No prior notification or application shall be required for emergency forest practices necessitated by and commenced during or immediately after fire, flood, windstorm, earthquake, structural failure or other catastrophic event. Within 48 hours after commencement of such practice, the operator shall submit an application or notification to the department with an explanation why emergency action was necessary. Such emergency forest practices are subject to these rules: Provided, however, That the operator may take any reasonable action to minimize damage to forest lands, timber or public resources from the direct or indirect effects of the catastrophic event and: Provided further, The operator shall comply with any requirements of a notice to comply or stop work order as if conducted pursuant to an approved application.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-20-070, filed 5/30/01, effective 7/1/01; Order 263, § 222-20-070, filed 6/16/76.]

WAC 222-20-080 Application and notification expiration. The approval given by the department to an application to conduct a forest practice shall be effective for a term of two years from the date of approval, with the exception of multiyear permits. Multiyear permits are effective for up to five years. The multiyear permit is not renewable if a five-year watershed analysis review is found necessary by the department and has not been completed. A notification is also effective for a term of two years from the date of receipt.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9), 01-12-042, § 222-20-080, filed 5/30/01, effective 7/1/01. Statutory Authority: RCW 76.09.060, 76.09.040 and chapter 34.05 RCW, 92-23-056, § 222-20-080, filed 11/17/92, effective 12/18/92; Order 263, § 222-20-080, filed 6/16/76.]

WAC 222-20-100 Notice to parks and OAHP. (1) **Notice to parks.** The department shall send to the affected agency, within 2 business days of receipt, a copy of any notification or application for forest practices within 500 feet of the boundary of any park entity registered according to subsection (2) of this section.

(2) **Parks register.** The department shall establish and update every 5 years a parks register listing all publicly owned parks where the affected owner has filed a written request with the department for inclusion on such register. The department shall notify owners of all public parks inventoried on the state comprehensive outdoor recreation plan (SCORP) of the opportunity to register.

(3) **DNR to provide information to OAHP.** The department shall provide the office of archaeology and historic preservation (OAHP) with copies of all applications and notifications for forest practices to be conducted on lands known to contain historic sites or archaeological resources as identified by OAHP.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9), 01-12-042, § 222-20-100, filed 5/30/01, effective 7/1/01. Statutory Authority: RCW 76.09.040, 87-23-036 (Order 535), § 222-20-100, filed 11/16/87, effective 1/1/88. Statutory Authority: RCW 76.09.040 and 76.09.050, 82-16-077 (Resolution No. 82-1), § 222-20-100, filed 8/3/82, effective 10/1/82.]

Chapter 222-21 WAC

SMALL FOREST LANDOWNER FORESTRY RIPARIAN EASEMENT PROGRAM

WAC

222-21-005	Policy.
222-21-010	Definitions.
222-21-020	Criteria for accepting riparian easement.
222-21-030	Document standards.
222-21-035	Description of easement.
222-21-040	Timber cruises.
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222-21-050	Payment of compensation.
222-21-060	Commercially reasonable harvest.
222-21-065	Uneconomic to harvest.
222-21-070	Blowdown and salvage.
222-21-080	Eminent domain.
222-21-090	Internal department of natural resources review of small forest landowner office compensation decisions.

WAC 222-21-005 Policy. The legislature has found that further reduction in harvestable timber owned by small forest landowners as a result of the rules adopted under RCW 76.09.055 or 76.09.370 will further erode small landowners'

economic viability and willingness or ability to keep the lands in forestry use and, therefore, reduce the amount of habitat available for salmon recovery and conservation of other aquatic resources. The legislature addressed these concerns by establishing a forestry riparian easement program to acquire easements from small forest landowners along riparian and other areas of value to the state for protection of aquatic resources.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9), 01-12-042, § 222-21-005, filed 5/30/01, effective 7/1/01.]

WAC 222-21-010 Definitions. The following definitions apply to this chapter:

(1) **"Commercially reasonable harvest unit"** means a harvest area that meets the requirements of WAC 222-21-060.

(2) **"Completion of harvest"** means that the trees have been harvested from an area under an approved forest practices application and that further entry into that area by any type of logging or slash treating equipment or method is not expected.

(3) **"Danger tree"** means any qualifying timber reasonably perceived to pose an imminent danger to life or improved property.

(4) **"Easement premises"** means the geographic area designated in a forestry riparian easement, including the areas in which qualifying timber is located. Easement premises may be categorized as follows:

(a) **Riparian area easement premises** means riparian areas and areas upon which qualifying timber associated with riparian areas are located.

(b) **Other easement premises** means areas of land required to be left unharvested under rules adopted under RCW 76.09.055 or 76.09.370 including areas upon which other qualifying timber outside riparian areas is located and areas of land upon which uneconomic qualifying timber is located.

(5) **"Forestry riparian easement"** means an easement covering qualifying timber granted voluntarily to the state by a small forest landowner.

(6) **"Hazardous substances"** means hazardous substances as defined in RCW 70.102.010(5), and 70.105D.020(7), and solid waste as defined in RCW 70.95.030(22).

(7) **"High impact regulatory threshold"** means the threshold where the value of qualifying timber is greater than 19.1% (for timber in Western Washington) or 12.2% (for timber in Eastern Washington) of the value of the harvested timber and qualifying timber under the approved forest practices application covering the qualifying timber.

(8) **"Qualifying timber"** means those trees covered by a forest practices application that the small forest landowner is required to leave unharvested under rules adopted under RCW 76.09.055 or 76.09.370 or that are made uneconomic to harvest by those rules, and for which the small forest landowner is willing to grant the state a forestry riparian easement. Qualifying timber is timber within or bordering a com-

mercially reasonable harvest unit. Qualifying timber is categorized as follows:

(a) **Permanent qualifying timber** includes trees that shall not be harvested or damaged or removed from the easement premises during the term of the easement.

(i) Where permanent qualifying timber is in areas in which no harvest may take place, the easement shall describe the boundaries of the areas. No harvest of any tree within this area shall take place during the term of the easement.

(ii) Where permanent qualifying timber is located in areas in which selective harvest may take place, the permanent qualifying timber must be tagged for the duration of the easement.

(b) **Reserve qualifying timber** includes trees that may be harvested and removed but only in compliance with the terms of the easement. Reserve qualifying timber shall be identified separately from the permanent qualifying timber.

(c) **Replacement qualifying timber** includes trees which, in the future, will be substituted for the reserve qualifying timber before the reserve qualifying timber may be harvested or removed from the property. Replacement qualifying timber will be selected from time to time pursuant to the provisions of the easement and will be subject to the terms and protections of the easement.

(d) **Uneconomic qualifying timber** includes trees made uneconomical to harvest. The trees are considered permanent qualifying timber and may not be harvested or otherwise damaged during the term of the easement.

(e) **Other qualifying timber outside riparian areas** includes trees that may not be harvested under forest practices rules adopted under RCW 76.09.055 or 76.09.370 for reasons other than protection of riparian functions. It includes without limitation trees that are unharvestable because of public safety concerns. The trees are considered permanent qualifying timber and may not be harvested or otherwise damaged during the term of the easement.

(9) **"Riparian areas"** include the areas designated in a forestry riparian easement. Riparian areas include without limitation all riparian and other special management zones required by the forest practices rules for protection of aquatic resources and includes associated qualifying timber.

(10) **"Riparian function"** includes bank stability, recruitment of woody debris, leaf litter fall, nutrients, sediment filtering, shade, and other riparian features that are important to both riparian forest and aquatic systems conditions.

(11) **"Small forest landowner"** means a forest landowner meeting all of the characteristics in (a) of this subsection unless any of the exceptions in (b) of this subsection are met.

(a) As of the date a forest practices application is received for which the forestry riparian easement is associated, the forest landowner:

(i) Is an individual, partnership, corporate, or other non-governmental legal entity. If a landowner grants timber rights to another entity for less than five years, the landowner may still qualify as a small forest landowner under this section;

(ii) Has a fee interest in the land and timber or has rights to harvest the timber to be included in the forestry riparian

easement that extend at least fifty years from the date the forest practices application associated with the easement is received;

(iii) Has harvested from its own lands in this state during the three years prior to the year of application an average timber volume that would qualify the forest landowner as a small timber harvester under RCW 84.33.073(1); and

(iv) Certifies at the time the forest practices application is received that it does not expect to harvest from its own lands more than the volume allowed by RCW 84.33.073(1) during the ten years following receipt of the application.

(b) At the time the forest practices application is received, a forest landowner whose prior three-year average harvest exceeds the limit of RCW 84.33.073(1), or who expects to exceed this limit during the ten years following receipt of the forest practices application, may still qualify as a small forest landowner if that landowner establishes to the small forest landowner office reasonable satisfaction that the harvest limits were or will be exceeded to raise funds to pay estate taxes or equally compelling and unexpected obligations such as court-ordered judgments or extraordinary medical expenses. (Note: The small forest landowner office will establish a board manual governing these exceptions.)

(12) **"Small forest landowner office"** is an office within the department described in RCW 76.13.110, and it shall be a resource and focal point for small landowner concerns and policies and shall have significant expertise regarding the management of small forest holdings and government programs applicable to such holdings, and the forestry riparian easement program.

(13) **"Uneconomic to harvest"** means that a harvest area meets the requirements of WAC 222-21-065.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-21-010, filed 5/30/01, effective 7/1/01.]

WAC 222-21-020 Criteria for accepting riparian easement. (1) All of the following criteria must be met before the small forest landowner office may acquire a forestry riparian easement:

(a) The easements must include qualifying timber within riparian areas and may include other qualifying timber;

(b) The small forest landowner must be willing to sell or donate such easements to the state;

(c) The small forest landowner has a final, approved forest practices application including qualifying timber on the easement premises;

(d) The small forest landowner has provided a litigation guarantee or similar report from a title company for the property;

(e) Acceptable documents necessary for creation of the easement have been prepared; and

(f) The easement is not subject to unacceptable liabilities in subsection (3) of this section.

(2) Where more than one person has an interest in property to be covered by a forestry riparian easement, all persons holding rights to control or affect the easement premises, qualifying timber, and the riparian functions provided by the qualifying timber during the term of the easement must execute the easement documents or otherwise subordinate their

interest to the easement interest being acquired by the state. This includes tenants in common, joint tenants, holder of reversionary interests, lien holders, and mortgages.

(3) Unacceptable liabilities for the state include, but are not limited to, the following:

(a) Potential liability exposure due to the presence of hazardous substances;

(b) Existing uses of the property that may jeopardize the protection of the easement premises, qualifying timber, and riparian functions;

(c) Any other liability where the liability may jeopardize the protection of the easement premises, qualifying timber, and its riparian functions.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-21-020, filed 5/30/01, effective 7/1/01.]

WAC 222-21-030 Document standards. (1) Riparian easement. The riparian easement document must be substantially in the following form, but may be modified by the small forest landowner office wherever necessary to accomplish the purposes of RCW 76.13.120.

(This version assumes ownership of land and trees)

FORESTRY RIPARIAN EASEMENT

THIS GRANT OF A FORESTRY RIPARIAN EASEMENT is made on this ____ day of ____, 20__, by ____ [a ____ corporation, limited liability company, partnership, limited partnership, limited liability partnership] [husband and wife] [individual][or others as appropriate] having an address at ____ ("Grantor"), to and in favor of the State of Washington, acting by and through the Department of Natural Resources ("Grantee").

1.0 RECITALS AND PURPOSE

1.1 This Easement is intended to implement the goals of the Forest Practices Salmon Recovery Act, ESHB 2091, sections 501 through 504, chapter 4, Laws of 1999 ("Salmon Recovery Act"). The goals include avoiding the further erosion of the small forest landowners' economic viability and willingness or ability to keep the lands in forestry use which would reduce the amount of habitat available for salmon recovery and conservation of other aquatic resources, through the establishment of a forestry riparian easement program to acquire easements from small forest landowners along riparian and other areas of value to the state for protection of aquatic resources.

1.2 This Easement is intended to protect the Qualifying Timber and riparian functions associated with the qualifying timber located on the Easement Premises as provided by the terms of this Easement as set forth in Exhibit B while preserving all lawful uses of the Easement Premises by Grantor consistent with the Easement objectives, and to provide Grantee with the ability to enforce the terms thereof.

1.3 The Easement Premises and Qualifying Timber are located, as described in **Exhibit A**; that the encumbrances, if any, are as set forth in **Exhibit A**; that all Exhibits referenced herein and attachments thereto are incorporated into this Easement as part of this Easement; and that the Grantor wishes to execute this Forestry Riparian Easement.

2.0 CONVEYANCE AND CONSIDERATION

2.1 In consideration of the mutual covenants contained herein, including without limitation the monetary consideration set forth in subsection 2.2 below, the Grantor does hereby voluntarily warrant and convey to the Grantee a Forestry Riparian Easement under the Salmon Recovery Act, which Easement shall remain in full force and effect from the date hereof until it expires on (month, date, year) [50 years from the date the complete and accurate forest practices application is submitted], which Easement shall consist of the rights and restrictions expressly set forth herein.

2.2 In consideration of this Easement, Grantee shall pay to Grantor the sum of ____ dollars (\$____.00).

IN WITNESS WHEREOF Grantor and Grantee have executed this instrument on the day and year written.

GRANTOR:

____ Date: _____

By: _____

GRANTEE:

State of Washington

By and Through the Department of
Natural Resources

Date: _____

(Title)

(insert form of acknowledgement, as appropriate)

EXHIBIT A

A1 DESCRIPTION AND LOCATION OF QUALIFYING TIMBER

The Qualifying Timber includes the following categories of trees located within the Easement Premises:

[List the categories relevant to particular Easement, i.e., Permanent, Reserve, Replacement, Uneconomic, or Other Qualifying Timber.] The Qualifying Timber is located as shown in the documentation attached hereto as Attachment A-1.

A2 DESCRIPTION AND LOCATION OF EASEMENT PREMISES

The Easement Premises is *[insert description using the standards developed under Section 504(9)(b) of the Salmon Recovery Act including the categories relevant to particular Easement, i.e., Riparian Area and Other Easement Premises]* as shown in the documentation attached hereto as Attachment A-2 and is located in *[insert legal subdivision/lot, etc., in which the Easement Premises exists.]*

A3 BASELINE IDENTIFICATION, DESCRIPTION AND DOCUMENTATION OF PROPERTY, EASEMENT PREMISES AND QUALIFYING TIMBER

The parties agree that the current use, condition of the Easement Premises and the condition of the Qualifying Timber are documented in the inventory of their relevant features and identified in Attachment A-3 ("Baseline Documentation"), and that this documentation provides, collectively, an accurate representation at the time of this grant and is intended to serve as an objective information baseline for monitoring compliance with the terms of this grant.

EXHIBIT B

FORESTRY RIPARIAN EASEMENT TERMS AND CONDITIONS

B1 DEFINITIONS

The terms used in this Easement, including without limitation the following, are defined by the forest practices rules incorporated in Attachment B-1 to this Exhibit.

"Danger Tree"

"Easement Premises"

"Qualifying Timber"

"Hazard Substances"

"Riparian Areas"

"Riparian Function"

B2 RIGHTS OF GRANTEE ****[Subsection B2.4 should be included only for multiple entry Easements.]****

To accomplish the purposes of this Easement, the following rights are conveyed to Grantee by this Easement:

B2.1 To enforce the terms of this Easement as provided in subsection **B9**.

B2.2 To enter upon the Easement Premises, or to allow Grantee's agents or any experts consulted by Grantee in exercising its rights under this Easement to enter upon the Easement Premises in order to evaluate Grantor's compliance with this Easement, and to otherwise enforce the terms of this Easement.

B2.3 To convey, assign, or otherwise transfer Grantee's interests herein to another agency of the State of Washington, as provided for and limited by Section 504 of the Salmon Recovery Act.

B2.4 Where harvest of Reserve Qualifying Timber is allowed during the term of this Easement, to approve Replacement Qualifying Timber that will be protected by this Easement as provided in subsection **B3.5**.

B3 RESTRICTIONS ON GRANTOR ***[Subsection B3.6 should be included only for multiple entry Easements.]***

B3.1 Inconsistent Uses of Riparian Easement Premises

Any use of, or activity on, the Easement Premises inconsistent with the purposes and terms of this Easement, including without limitation converting to a use incompatible with growing timber, is prohibited, and Grantor acknowledges and agrees that it will not conduct, engage in, or permit any such use or activity.

B3.2 Property Outside the Easement Premises

Grantor may change its use of the property on which the Easement lies to any lawful use. Grantor shall provide Grantee sixty (60) days notice prior to changing the use of the property as a courtesy to Grantee.

B3.3 Qualifying Timber

Grantor shall not engage in any activity which would result in the cutting of Qualifying Timber or the removal of that timber from the Easement Premises, except as provided in this Easement. The parties further agree that use, harvest, and treatment of the Qualifying Timber are restricted according to the forest practices rules in Attachment B-1.

B3.4 Danger Trees and Salvage

Grantor may cut a Danger Tree, which shall be left in place within the Easement Premises or moved by Grantor inside the Easement Premises. Grantor shall notify DNR within seven (7) days that a Danger Tree has been felled. Grantor shall not engage in any activities pertaining to salvage of Qualifying Timber including without limitation blowdown except as provided for in the forest practices rules.

B3.5 Harvest of Reserve Qualifying Timber and Designation of Replacement Qualifying Timber on Riparian Area Easement Premises

Grantor shall not, during the term of this Easement, harvest or remove any Reserve Qualifying Timber except as permitted under the applicable forest practices rules. Grantor shall give Grantee at least thirty (30) days written notice prior to harvest or removal of Reserve Qualifying Timber, except that where a permit or approval is required from any governmental entity, such notice shall be given thirty (30) days before submission of the application for such permit or approval. Grantor shall mark Reserve Qualifying Timber and Replacement Qualifying Timber, where Replacement Qualifying Timber is required, for review by Grantee. Grantor's thirty (30) days written notice to Grantee is effective only after both Reserve Qualifying Timber and Replacement Qualifying Timber (if required) are marked. If Grantee does not object by giving Grantor written notice within thirty (30) days of receipt of Grantor's notice, Grantor may proceed to harvest and remove the Reserve Qualifying Timber. If Grantee does object and gives Grantor written notice thereof within thirty (30) days of receipt of Grantor's notice, Grantor shall not harvest or remove Reserve Qualifying Timber until the objection is resolved. If Reserve Qualifying Timber is to be removed but Replacement Qualifying Timber is required to be left standing for the balance of the term of this Easement, then Grantor shall mark the Replacement Qualifying Timber and, if approved by Grantee, such Timber shall be considered Qualifying Timber under this Easement. A new Exhibit A shall be prepared along with a supplement to this Easement, executed by Grantor and Grantee, and recorded.

B3.6 Multiple Entry Easements

Grantor shall not, during the term of this Easement, make multiple entry harvests except as permitted under the applicable forest practices rules. Grantor shall give Grantee at least thirty (30) days written notice prior to harvest or removal of timber, except that where a permit or approval is required from any government entity, such notice shall be given thirty (30) days before submission of the application for such permit or approval. Grantor shall mark timber to be removed for review by Grantee. Grantor's thirty (30) day written notice to Grantee is effective only after the timber to be removed is marked. If Grantee does not object by giving Grantor written notice within thirty (30) days of receipt of Grantor's notice, Grantor may proceed to harvest. If Grantee does object and gives Grantor notice thereof within thirty (30) days of receipt of Grantor's notice, Grantor shall not harvest until the objection is resolved. Valuation methodology for multiple entry easements shall be in accordance with WAC 222-21-045(3).

B4 RESERVED RIGHTS

Other than specifically provided herein, Grantor is not restricted in its use of the Easement Premises.

B5 PUBLIC ACCESS

No right of public access to or across, or any public use of, the Easement Premises or the property on which it lies is conveyed by this Easement.

B6 COSTS, LIABILITIES, TAXES, AND INDEMNIFICATION**B6.1 Costs, Legal Requirements, and General Liabilities**

Except as is expressly placed on Grantee herein, Grantor retains full responsibility for the Qualifying Timber and Easement Premises. Grantor shall keep the Qualifying Timber and Easement Premises free of any liens arising out of any work performed for, materials furnished to, or obligations incurred by Grantor. Grantor remains responsible for obtaining all permits required by law.

B6.2 Taxes and Obligations

Grantor shall remain responsible for payment of taxes or other assessments imposed on the Easement Premises or the Qualifying Timber. Grantor shall furnish Grantee with satisfactory evidence of payment upon request.

B6.3 Hold Harmless**B6.3.a Grantor**

To the extent permitted by law, Grantor hereby releases and agrees to hold harmless, indemnify, and defend Grantee and its employees, agents, and assigns from and against all liabilities, penalties, costs, charges, losses, damages, expenses, causes of action, claims, demands, orders, judgments, or administrative actions, including without limitation reasonable attorneys' fees arising from or in any way connected with: (a) Injury or death of any person or any physical damage to property resulting from any act or omission, or other matter occurring on or relating to the Easement Premises or Qualifying Timber, caused solely by Grantor; (b) a breach by Grantor of its obligations under subsection **B3**; (c) the violation or alleged violation of, or other failure to comply with, any state, federal, or local law or requirement by Grantor in any way affecting, involving, or relating to the Easement Premises or the Qualifying Timber; (d) the release or threatened release onto the Easement Premises of any substance now or hereinafter classified by state or federal law as a hazardous substance or material caused solely by Grantor.

B6.3.b Grantee

To the extent permitted by law, Grantee hereby releases and agrees to hold harmless, indemnify and defend Grantor and its employees, agents, and assigns from and against all liabilities, penalties, costs, charges, losses, damages, expenses, causes of action, claims, demands, orders, judgments or administrative actions, including without limitation reasonable attorneys' fees arising from or in any way connected with: (a) Injury or death of any person or any physical damage to property resulting from any act or omission, or other matter occurring on or relating to the Easement Premises or Qualifying Timber, caused solely by Grantee; or (b) the release or threatened release onto the Easement Premises of any substance now or hereinafter classified by state or federal law as a hazardous substance or material caused solely by Grantee.

B7 SUBSEQUENT TRANSFERS**B7.1 Grantee**

Grantee may assign, convey, or otherwise transfer its interest as evidenced in this Easement, but only to another agency of the State of Washington under any circumstances in which it determines, in its sole discretion, that such transfer is in the best interests of the state. Grantee shall give written notice to Grantor of the same within thirty (30) days of such conveyance, assignment, or transfer (provided that failure to give such notice shall not affect the validity of the assignment, conveyance, or transfer).

B7.2 Grantor

Grantor may assign, convey, or otherwise transfer without restriction its interest in the Easement Premises or the Qualifying Timber identified in Exhibit A hereto. Grantor agrees to incorporate the restrictions of the Easement in any deed or other legal instrument by which Grantor divests itself of all or a portion of its interests in the Easement Premises or Qualifying Timber. Grantor shall give written notice to the Grantee of the assignment, conveyance, or other transfer of all or a portion of its interest in the Easement Premises or the Qualifying Timber within thirty (30) days of such conveyance, assignment, or transfer (provided that failure to give such notice shall not affect the validity of the assignment, conveyance, or transfer).

B7.3 Termination of Grantor's Rights and Obligations

The Grantor's personal rights and obligations under this Easement terminate upon transfer of the Grantor's interest in the property on which the Easement lies or the Qualifying Timber, except that liability under the Easement for acts or omissions occurring prior to transfer shall survive transfer.

B8 DISPUTE RESOLUTION

The parties may at any time by mutual agreement use any nonbinding alternative dispute resolution mechanism with a qualified third party acceptable to Grantor and Grantee. Grantor and Grantee shall share equally the costs charged by the third party. The existence of a dispute between the parties with respect to this Easement, including without limitation the belief by one party that the other party is in breach of its obligations hereunder, shall not excuse either party from continuing to fully perform its obligations under this Easement. The dispute resolution provided for in this subsection is optional, not obligatory, and shall not be required as a condition precedent to any remedies for enforcement of this Easement.

B9 ENFORCEMENT**B9.1 Remedies**

Either party may bring any action in law or in equity in the superior court for the county in which the Easement Premises are located or in Thurston County (subject to venue change under law) to enforce any provision of this Easement, including without limitation, injunctive relief (permanent, temporary, or ex parte, as appropriate) to prohibit a breach of this Easement, enforce the rights and obligations of this Easement, restore Qualifying Timber cut or removed in violation of this Easement or for damages. Grantee may elect to pursue some or all of the remedies provided herein.

B9.1.a Damages and Restoration

If Grantor cuts or removes (or causes another to cut or remove) Qualifying Timber from the Easement Premises in violation of this Easement, Grantee shall be entitled to damages, or restoration. Damages for the cutting of Qualifying Timber or the removal of Qualifying Timber from the Easement Premises in violation of the terms of this Easement may be up to triple stumpage value times the proportion of the original compensation. The maximum amount of damages shall be calculated according to the following formula:

Where:

Sv = The stumpage value of the Qualifying Timber that is cut or removed from the Easement Premises at the time the damage was done;

C = The compensation paid by the state to the Grantor at the time the Easement became effective;

Vq = The original value of Qualifying Timber at the time the Easement became effective as calculated in WAC 222-21-050.

Maximum Damages = $3 * Sv * (C / Vq)$

In addition the Grantor shall pay interest on the amount of the damages at the maximum interest rate allowable by law.

Grantee's rights to damages under this section shall survive termination. Restoration of Qualifying Timber may include either replanting or replacing trees or both, as determined by Grantee, in its sole discretion, to be appropriate. Replanting shall be by nursery transplant seedlings approved by Grantee with subsequent silvicultural treatment including without limitation weed control and fertilization approved by Grantee. Replacing trees shall be accomplished by designation of replacement trees of the size and species acceptable to Grantee. If replacement trees are designated to replace the Qualifying Timber cut or removed in violation of the terms of this Easement, the designated trees shall be thereafter treated as Qualifying Timber under this Easement.

B9.1.b Injunctive Relief. Grantor agrees that Grantee's remedies at law for any violation of the terms of this Easement may be inadequate and that Grantee may be entitled to injunctive relief, both prohibitive and mandatory, in addition to other relief to which Grantee may be entitled, including specific performance of the terms of this Easement, without the necessity of providing either actual damages or the inadequacy of otherwise available legal remedies.

B9.1.c Relationship to Remedies in Other Laws. The remedies provided for in this section are in addition to whatever other remedies the state may have under other laws including without limitation the Forest Practices Act. Nothing in this Easement shall be construed to enlarge, diminish or otherwise alter the authority of the state to administer state law.

B9.2 Costs of Enforcement

The costs, including reasonable attorneys' fees, of enforcing this Easement shall be borne by Grantee unless Grantee prevails in a judicial action to enforce the terms of this Easement, in which case costs shall be borne by Grantor, provided that nothing herein shall make Grantor liable for costs incurred by Grantee in taking enforcement actions pursuant to other state laws.

B9.3 Forbearance/Waiver

Enforcement of this Easement against the Grantor is at the sole discretion of the Grantee, and vice versa. Any forbearance by either party to exercise its rights hereunder in the event of a breach by the other party shall not be deemed a waiver by the forbearing party of the term being breached or of a subsequent breach of that term or any other term or of any other of the forbearing party's rights under this Easement.

B9.4 Waiver of Certain Defenses

Grantor hereby waives any defense of laches, estoppel, or prescription.

B9.5 Acts Beyond Grantor's Control

Nothing herein shall be construed to entitle Grantee to bring any action or claim against Grantor on account of any change in the condition of the Easement Premises or of the Qualifying Timber that was not within Grantor's control, including without limitation fire, flood, storms, insect and disease outbreaks, earth movement, or acts of trespassers, that Grantor could not reasonably have anticipated and prevented, or from any prudent action taken by Grantor under emergency conditions to prevent, abate, or mitigate significant injury to the Easement Premises or Qualifying Timber resulting from such causes. In the event the terms of this Easement are violated by acts of trespassers that Grantor could not reasonably have anticipated or prevented, Grantor agrees, at Grantee's option, to join in any suit, to assign its right of action to Grantee, or to appoint Grantee its attorney in fact, for the purpose of pursuing enforcement action against the responsible parties.

B10 CONSTRUCTION AND INTERPRETATION

B10.1 Controlling Law

Interpretation and performance of this Easement shall be governed by the laws of the State of Washington.

B10.2 Liberal Construction

Any general rule of construction to the contrary notwithstanding, this Easement shall be liberally construed in favor of the grant to effect the purposes of this Easement. If any provision in this instrument is found to be ambiguous, an interpretation consistent with the purposes of this Easement that would render the provision valid shall be favored over any interpretation that would render it invalid. The parties acknowledge that each has had an opportunity to have this Easement reviewed by an attorney and agree that the terms shall not be presumptively construed against either party.

B10.3 Captions

The captions in this instrument have been inserted solely for convenience of reference and are not a part of this instrument and shall have no effect upon construction or interpretation.

B11 AMENDMENT

This Easement may be jointly amended. The amendments shall be in writing and signed by authorized representatives. Grantee shall record any such amendments in a timely fashion in the official records of ____ County, Washington. All amendments shall be consistent with the purposes of this Easement.

B12 TERMINATION

Grantee may unilaterally terminate this Easement if it determines, in its sole discretion, that termination is in the best interest of the State of Washington. Grantee shall provide thirty (30) days written notice to Grantor of such termination.

B13 EXTINGUISHMENT

If circumstances arise that render the purpose of this Easement impossible to accomplish, this Easement can only be extinguished, in whole or in part, by mutual agreement of the parties or through judicial proceedings brought by one of the parties. Grantee shall be entitled to the value of the Easement as such value is determined pursuant to forest practices rules governing extinguishment or eminent domain, if no rule for extinguishment exists.

B14 CONDEMNATION

If the Easement is taken, in whole or in part, by exercise of the power of eminent domain, or acquired by purchase in lieu of condemnation, Grantee shall be entitled to compensation in accordance with the forest practices rules.

B15 NOTICE

Notices given pursuant or in relation to this Easement shall be in writing and delivered personally or by first class mail (postage prepaid), addressed as follows:

(a) If to Grantor:

(b) If to Grantee:

Washington State Department of Natural Resources
Small Forest Landowner Office
DNR-Forest Practices Division
P.O. Box 47012
Olympia, WA 98504-7012

If either party's address changes during the term of this Easement, that party shall notify the other party of the change.

Any notice required to be given hereunder is considered as being received: (i) If delivery in person, upon personal receipt by the person to whom it is being given; or (ii) if delivered by first class U.S. mail and properly addressed, three (3) days after deposit into the U.S. mail; or (iii) if sent by U.S. mail registered or certified, upon the date receipt is acknowledged by the recipient.

B16 RECORDATION

Grantee shall record this instrument in timely fashion in the official records of ____ County, Washington and may rerecord it at any time as may be required to preserve its rights in this Easement.

B17 GENERAL PROVISIONS

B17.1 Severability

If any provision in this Easement, or the application hereof to any person or circumstance, is found to be invalid, the remainder of this Easement, or the application hereof to other persons or circumstances shall not be affected thereby and shall remain in full force and effect.

B17.2 Entire Agreement

This instrument sets forth the entire agreement of the parties with respect to the Easement. This instrument supersedes all other and prior discussions, negotiations, understandings, or agreements of the parties. No alteration or variation of this instrument shall be binding unless set forth in an amendment to this instrument consistent with subsection **B11**.

B17.3 Successors and Assigns

The covenants, terms, conditions, and restrictions of this Easement shall be binding upon and inure to the benefit of the Grantor, Grantee, and their respective successors and assigns and shall continue as a servitude running with the property on which the Easement lies for the term of this Easement set forth in subsection **2.1**.

B17.4 No Forfeiture

Nothing contained herein will result in a forfeiture or reversion of Grantor's title in any respect.

B17.5 Counterparts

The parties may execute this instrument in two or more counterparts which shall, in the aggregate, be signed by both parties. Each counterpart shall be deemed an original as against the party that has signed it. In the event of any disparity between counterparts produced, the recorded counterpart shall be controlling.

B17.6 References to Statutes and Rules

Except as otherwise specifically provided, any references in this Easement to any statute or rule shall be deemed to be a reference to such statute or rule in existence at the time the action is taken or the event occurs.

B17.7 Adherence to Applicable Law

Any activity pertaining to or use of the Easement Premises or Qualifying Timber shall be consistent with applicable federal, state, or local law including chapter 76.09 RCW, the Forest Practices Act, chapter 36.70A RCW, the Growth Management Act, chapter 90.58 RCW, the Shoreline Management Act, chapter 75.20 RCW, Construction Projects in State Waters Act ("Hydraulics Code"), the Endangered Species Act (16 U.S.C. Sec. 1531, et seq.), and the Clean Water Act (33 U.S.C. Sec. 1251, et seq.), and rules adopted pursuant to these statutes (including all rules adopted under Section 4(d) of the Endangered Species Act).

(2) **Forestry riparian easement application.** The following items are required for a complete forestry riparian easement application:

(a) A certification by the small forest landowner that he or she meets the qualifications of a small forest landowner;

(b) The small forest landowners' timber tax identification number and permission to access harvest information at the department of revenue;

(c) All forest practices application numbers for the commercially reasonable harvest units and the associated qualifying timber on the property;

(d) The dates and areas of all planned future harvest entries on the easement premises;

(e) A preliminary litigation guarantee or similar report from a title company for the tax parcels that contain the easement premises;

(f) A description of past and current uses of the easement premises;

(g) Any information not specifically listed that the small forest landowner office needs to evaluate the easement and eligibility of the small forest landowner.

(3) **Baseline documentation.** The baseline documentation must describe the features and current uses on the easement premises and the qualifying timber. The information provided by the small forest landowner in subsection (2) of this section is considered part of the baseline documentation. In addition, the department will provide documentation that includes, but is not limited to:

(a) Cruise information consistent with the standards and methods in WAC 222-21-040;

(b) An assessment to determine site condition and potential liabilities associated with the proposed riparian easement (see the board manual on procedures for conducting assessment); and

(c) A description of the easement consistent with WAC 222-21-035.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-21-030, filed 5/30/01, effective 7/1/01.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

WAC 222-21-035 Description of easement. The easement premises and qualifying timber must be described as follows:

(1) Range, township, section, and parcel number;

(2) Forest practice base map of proposed harvest, other forest practice activities and easement;

(3) 1:400 map of the easement premises indexed either to (1) legal land survey point or (2) geopositional system points; and

(4) Traverse of the easement premises tied to subsection (3) of this section. (See the board manual section 17 for standards of traverse.)

(5) Where the department does not have satisfactory access to the easement premises, the landowner must designate the access route on the forest practice application base map.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-21-035, filed 5/30/01, effective 7/1/01.]

WAC 222-21-040 Timber cruises. (1) This section is designed to establish methods and standards for cruises of qualifying timber for the proposed forestry riparian easements for purposes of establishing the compensation. It applies only to the department, small forest landowners, and the small forest landowner office in connection with the forestry riparian easement program.

(2) The following standards will be used for the timber cruises:

(a) The purpose of the timber cruise is to determine the volume by species and grade sufficient to value the qualifying timber.

(b) Additional trees left voluntarily by the small forest landowner may be noted, but are not included in the cruise volume.

(c) The cruise method will be a 100 percent inventory of qualifying timber on the proposed easement premises. The inventory will include species, diameter class, grade, and any other information necessary to determine valuation of the easement. (See the board manual for specific cruise standards.)

(d) A sampling cruise method may be used for easement premises under certain circumstances. (See the board manual for standards for sampling cruise method.)

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-21-040, filed 5/30/01, effective 7/1/01.]

WAC 222-21-045 Valuation. (1) This section is designed to establish methods and standards for valuation of forestry riparian easements for purposes of establishing the compensation. It applies only to the department, small forest landowners, and the small forest landowner office in connection with the forestry riparian easement program.

(2) **The small forest landowner office will calculate the fair market value** of the forestry riparian easement as of the date of receipt of the forest practices application associated with the qualifying timber. Data obtained or maintained by the department of revenue under RCW 84.33.074 and 84.33.091 will be used and adjusted to the date of receipt of the forest practices application associated with the qualifying timber. The small forest landowner must indicate whether valuation will be calculated using method (a) or (b) of this subsection. In either, the time adjustment index will be based on log price changes. The small forest landowner office will determine the specific log species and/or sorts and the log price reporting service to use after consultation with the small forest landowner advisory committee established under RCW 76.13.110(4) and the department of revenue. The small forest landowner office will generate an index that reflects the time adjustments using information and data obtained from a log price reporting service determined by the department in consultation with the small forest landowner committee.

(a) **Stumpage value determination.** The small forest landowner office will create and maintain value tables to determine stumpage value of the qualifying timber. These tables will be created using a method coordinated with the department of revenue. The values will closely approximate the stumpage value for logs that would be sold in the ordinary course of business for the date of receipt of the forest practices application. The landowner must provide the small forest landowner office with:

(i) The reference for the stumpage value table and any other needed information for use of the table (see the board manual section 17 for details); and

(ii) Any information the small forest landowner would like the department to consider in its cruise and valuation of the qualifying timber.

(b) **Small harvester tax return.** The landowner must provide mill or buyer information to the department on the sale breakdown. This includes:

(i) The volume and scaling bureau log grades of each species harvested;

(ii) The amount received for each species; and

(iii) The actual harvesting and marketing costs as defined in the department of revenue small harvester instructions.

The price received for the timber is adjusted to the date of receipt of the forest practices application using the time adjustment index and then the average logging and hauling cost per MBF is subtracted to arrive at the stumpage value. The value of the qualifying timber is determined by multiplying the time adjusted stumpage value of each species in the harvest unit by the net volume for each corresponding species in the inventory of qualifying timber. A residual value approach is used to determine the value of species in the easement, which are not present in the harvest area. The prices for species not present in the harvest unit are based on the delivered log price report approved by the small forest landowner office that corresponds closest to the date of the forest practices application, minus the average logging and hauling costs.

(3) Reduced valuation.

(a) For an easement that allows one or more harvests of qualifying timber during the term of the easement, a reduced valuation rate will be applied to the values obtained using either method in subsection (2) of this section. The reduced rate adjusts the values for reserve and replacement qualifying timber. The rate is based on the proportionate economic value lost to the small forest landowner from the regulatory requirements and adjusted for future harvest options during the term of the easement.

(b) The value of the qualifying timber that may be harvested during the term of the easement will be reduced based on the following formula. Variables will include:

(i) The 29 or more trees in the inner zone;

(ii) The outer zone leave trees;

(iii) Other regulatory requirements.

$$\text{Reduced valuation rate} = \frac{1 - \left(\frac{1}{(1 + I)^N} \right)}{1 - \left(\frac{1}{(1 + I)^{50}} \right)}$$

Where:

- I — Is the rate of return on 30 year treasury bills, as reported by the Federal Reserve Statistical Release H15 less the rate of increase in the Consumer Price Index for all urban consumers as published by the U.S. Department of Labor Bureau of Labor Statistics for the previous 12 months less the anticipated rate of growth expected on the portion of the easement subject to reentry, but not less than zero or greater than 6 percent.
- N — The single time limit established by the small forest landowner office.

(c) The reduced rate will not be applied to the department of revenue tax data values if the landowner does not intend to reenter the easement area during the length of the 50 year easement. The harvest at the time of the reentry is not required to meet the requirements in WAC 222-21-060 (5) and (6).

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9), 01-12-042, § 222-21-045, filed 5/30/01, effective 7/1/01.]

WAC 222-21-050 Payment of compensation. (1) The compensation offered to the small forest landowner will be 50% of the fair market value of the qualifying timber established under the process described in WAC 222-21-045, subject to the following exceptions:

(a) If the high impact regulatory threshold is exceeded for an area covered by an approved forest practices application, then the compensation offered will be increased to 100% for the value of the qualifying timber where the high impact regulatory threshold is exceeded. Use the following calculation:

Where:

Vq = value of qualifying timber;

Vh = value of harvested timber;

t = high impact of regulatory threshold (19.1% for Western Washington, 12.2% for Eastern Washington);

TV = total value of all timber covered under FPA = Vq + Vh; and

HIO - high impact override = (Vq/TV)-t;

$$\text{Compensation for easement} = (\text{HIO} * \text{TV}) + \left(\frac{t * \text{TV}}{2} \right)$$

See Section 17 of board manual for example.

(2) All compensation is subject to available funding.

(3) If funding is not available, the small forest landowner office will maintain a priority list for compensation. Priority will be based on (a) date of receipt of forest practice application and (b) date of receipt of completed postharvest questionnaire.

(4) The small forest landowner office will send the small forest landowner a notice of compensation decision within 60 days of completion of the timber cruise.

(5) Compensation will not be paid until:

(a) The department has documented completion of harvest;

(b) The department has verified that there has been compliance with the rules requiring leave trees in the easement area;

(c) Any dispute over the amount of compensation or eligibility or other matter involving the forestry riparian easement has been resolved; and

(d) The forestry riparian easement has been executed and delivered to the department.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-21-050, filed 5/30/01, effective 7/1/01.]

WAC 222-21-060 Commercially reasonable harvest.

The small forest landowner office will use the following criteria to determine if an area covered by a forest practices application involves a commercially reasonable harvest. The proposed harvest must meet all of the following requirements:

(1) The harvest unit includes or borders a riparian area;

(2) The application is for a Class III or Class IV Special forest practice or a Class II that is a renewal of a Class III or Class IV Special;

(3) The harvest is not a Class IV General conversion or covered by a conversion option harvest plan;

(4) The landowner is not eligible for the 20 acre exemption under WAC 222-30-023;

(5) The value of the timber in the harvest unit, excluding qualifying timber, is equal to or exceeds the minimum required by department of revenue for taxing purposes (\$1000); and

(6) The taxable harvest equals or exceeds the value of the qualifying timber established under WAC 222-21-045, unless otherwise approved by the small forest landowner office. (See the board manual.)

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-21-060, filed 5/30/01, effective 7/1/01.]

WAC 222-21-065 Uneconomic to harvest. The small forest landowner office will use the following criteria to determine whether timber is qualifying timber because it is rendered uneconomic to harvest by rules adopted under RCW 76.09.055 or 76.09.370. The proposed harvest must meet all of the following requirements:

(1) The timber could have been included in a commercially reasonable harvest unit by the small forest landowner if there were no additional requirements imposed by rules adopted under RCW 76.09.055 or 76.09.370.

(2) The area is not reasonably accessible because of requirements imposed by rules adopted under RCW 76.09.055 or 76.09.370.

(3) The unit must have no reasonable unit size alternative which if used would make the area economical to harvest.

(4) The cost to access the harvest unit plus the cost to harvest must equal or exceed 35% of the stumpage value in the portion of the unit considered to be uneconomic. The small forest landowner office will determine costs and values consistent with WAC 222-21-045. Costs include harvest,

construction of nonpermanent roads and/or water crossing structures, and associated expenses. When using the small harvester method to calculate stumpage values and allowable costs, the landowner may include actual timber appraisal and sale layout costs incurred, as part of the cost calculations.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-21-065, filed 5/30/01, effective 7/1/01.]

WAC 222-21-070 Blowdown and salvage. After execution of a forestry riparian easement, qualifying timber may not be salvaged, including removal of blowdown, without prior written permission from the department. Prior to removal, the small forest landowner office and the small forest landowner must negotiate the terms of removal and reimbursement to the state, if any. Qualifying timber that blows down off the easement premises that presents a nuisance may be moved back onto the easement premises without permission from the department.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-21-070, filed 5/30/01, effective 7/1/01.]

WAC 222-21-080 Eminent domain. If a forestry riparian easement is taken, in whole or in part, by exercise of the power of eminent domain, or acquired by purchase in lieu of condemnation, the state will receive compensation for its remaining interest in the easement based upon the following formula:

Where:

C - Is the compensation to the department for the state's remaining interest in the easement;

O - Is the original compensation for the easement paid to the small forest landowner by the state;

P - Is the proportion of the forestry riparian easement extinguished or terminated;

CPI_O - Is the U.S. Consumer Price Index all urban consumers as published by the Bureau of Labor Statistics for the month in which the original compensation was determined;

CPI_C - Is the U.S. Consumer Price Index all urban consumers as published by the Bureau of Labor Statistics for the most recent month available at the time the easement is terminated or extinguished;

I - Is the rate of return on 30 year treasury bonds, as reported by the Federal Reserve Statistical Release H15 less the rate of increase in the Consumer Price Index for all Urban Consumers as published by the U.S. Department of Labor Bureau of Labor Statistics for the previous 12 months;

R - Is the number of years remaining on the easement at the time of extinguishment or termination.

$$C = O * P * (CPI_C / CPI_O) * (1 - (1 / (1 + I)^R)) / (1 - 1 / (1 + I)^{50})$$

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-21-080, filed 5/30/01, effective 7/1/01.]

WAC 222-21-090 Internal department of natural resources review of small forest landowner office compensation decisions. Within 30 days after the date of the

notice of compensation decision, the small forest landowner may submit a written request for review to the supervisor of the department or his or her designee. The request for review must identify the issue being raised and provide any supporting documentation. The supervisor will issue a written response within 30 days.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-21-090, filed 5/30/01, effective 7/1/01.]

Chapter 222-22 WAC WATERSHED ANALYSIS

WAC

222-22-070	Prescription recommendation.
222-22-075	Monitoring.
222-22-076	*Restoration.
222-22-080	*Approval of watershed analysis.
222-22-090	Use and review of watershed analysis.
222-22-100	Application review prior to watershed analysis.

WAC 222-22-070 Prescription recommendation. *(1)

For each WAU for which a watershed analysis is undertaken, the department, or forest land owner acting under WAC 222-22-040(3), shall assemble a team of field managers qualified under WAC 222-22-030(1). The team shall include persons qualified in the disciplines indicated as necessary in watershed analysis methods, and shall generally include persons qualified in:

- (a) Forest resource management;
- (b) Forest harvest and road systems engineering;
- (c) Forest hydrology; and
- (d) Fisheries science or management.

Any owner, and any cooperating group of owners, of ten percent or more of the nonfederal forest land acreage in the WAU and any affected Indian tribe shall be entitled to include one qualified individual to participate on the team at its own expense.

*(2) Each forest land owner in a WAU shall have the right to submit to the department or the forest land owner conducting the watershed analysis prescriptions for areas of resource sensitivity on its land. If these prescriptions are received within the time period described in subsection (4) of this section, they shall be considered for inclusion in the watershed analysis.

*(3) For each identified area of resource sensitivity, the field managers' team shall, in consultation with the level 1 and level 2 teams, if any, select and recommend to the department prescriptions. These prescriptions shall be reasonably designed to minimize, or to prevent or avoid, as set forth in table 1 in WAC 222-22-050 (2)(d), the likelihood of adverse change and deliverability that has the potential to cause a material, adverse effect to resource characteristics in accordance with the following:

(a) The prescriptions shall be designed to provide forest land owners and operators with as much flexibility as is reasonably possible while addressing the area of resource sensitivity. The prescriptions should, where appropriate, include, but not be limited to, plans for road abandonment, orphaned roads, and road maintenance and plans for applying prescriptions to recognized land features identified in the WAU as areas of resource sensitivity but not fully mapped;

(b) Restoration opportunities may be included as voluntary prescriptions where appropriate;

(c) Each set of prescriptions shall provide for an option for an alternate plan under WAC 222-12-040, which the applicant shows meets or exceeds the protection provided by the other prescriptions approved for a given area of resource sensitivity; and

(d) The rules of forest practices and cumulative effects under this chapter shall not require mitigation for activities or events not regulated under chapter 76.09 RCW. Any hazardous condition subject to forest practices identified in a watershed analysis requiring corrective action shall be referred to the department for consideration under RCW 76.09.300 et seq.

(e) The forests and fish riparian permanent rules, when effective, supersede all existing watershed analysis riparian prescriptions with the exception of riparian management zones for exempt 20-acre parcels, when watershed analysis prescriptions were in effect before January 1, 1999. (See WAC 222-30-021, 222-30-022, and 222-30-023.) No new riparian prescriptions will be written after completion of the riparian management zone assessment report during a watershed analysis.

*(4) The field managers' team shall submit the recommended prescriptions to the department within 30 days of the submission to the department of the level 2 assessment under WAC 222-22-060 or within 21 days of the submission to the department of the level 1 assessment under WAC 222-22-050.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-22-070, filed 5/30/01, effective 7/1/01. Statutory Authority: RCW 76.09.040, 76.09.170 and chapter 34.05 RCW. 94-01-134, § 222-22-070, filed 12/20/93, effective 1/1/94. Statutory Authority: RCW 76.09.040, 76.09.050 and chapter 34.05 RCW. 92-15-011, § 222-22-070, filed 7/2/92, effective 8/2/92.]

WAC 222-22-075 Monitoring. *In connection with any watershed analysis that is not a revision (WAC 222-22-090(4)), the monitoring module will be required to be completed but implementation of monitoring recommendations would be voluntary unless otherwise required by existing laws and rules, or required by an HCP implementation agreement. Implementation of the monitoring recommendations will be encouraged when needed as part of the statewide effectiveness monitoring program.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-22-075, filed 5/30/01, effective 7/1/01.]

WAC 222-22-076 *Restoration. Restoration opportunities will also be identified based on the watershed resource assessment. Implementation of restoration opportunities will be voluntary.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-22-076, filed 5/30/01, effective 7/1/01.]

WAC 222-22-080 *Approval of watershed analysis.

(1) Upon receipt of the recommended prescriptions resulting from a level 2 assessment under WAC 222-22-060 or a level 1 assessment under WAC 222-22-050 where a level 2 assess-

ment will not be conducted, the department shall select prescriptions. The department shall circulate the draft watershed analysis to the departments of ecology, fish and wildlife, affected Indian tribes, local government entities, forest land owners in the WAU, and the public for review and comment. The prescriptions recommended by the field managers' team shall be given substantial weight. Within thirty days of receipt of the prescriptions, the department shall review comments, revise the watershed analysis as appropriate, and approve or disapprove the watershed analysis for the WAU.

*(2) The department should notify any governmental agency or Indian tribe having jurisdiction over activities which are not regulated under chapter 76.09 RCW but which are identified in the draft analysis as having a potential for an adverse impact on identified fish, water, and capital improvements of the state or its political subdivisions.

*(3) The department shall approve the draft watershed analysis unless it finds:

(a) For any level 1 assessment or level 2 assessment, that:

(i) The team failed in a material respect to apply the methodology, indices of resource condition, or checklists set forth in the manual; or

(ii) A team meeting the criteria promulgated by the department and using the defined methodologies, indices of resource conditions, and checklists set forth in the manual could not reasonably have come to the conclusions identified in the draft level 1 or level 2 assessment; and

(b) For the prescriptions, that they will not accomplish the purposes and policies of this chapter and of the Forest Practices Act, chapter 76.09 RCW.

(c) In making its findings under this subsection, the department shall take into account its ability to revise assessments under WAC 222-22-090(3).

*(4) If the department does not approve the draft watershed analysis, it shall set forth in writing a detailed explanation of the reasons for its disapproval.

(5) All watershed analyses must be reviewed under SEPA on a nonproject basis. SEPA review may take place concurrently with the public review in subsection (1) of this section. (See WAC 222-10-035.)

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-22-080, filed 5/30/01, effective 7/1/01. Statutory Authority: RCW 76.09.040 and chapter 34.05 RCW. 97-24-091, § 222-22-080, filed 12/3/97, effective 1/3/98. Statutory Authority: RCW 76.09.040, 76.09.170 and chapter 34.05 RCW. 94-01-134, § 222-22-080, filed 12/20/93, effective 1/1/94. Statutory Authority: RCW 76.09.040, 76.09.050 and chapter 34.05 RCW. 92-15-011, § 222-22-080, filed 7/2/92, effective 8/2/92.]

WAC 222-22-090 Use and review of watershed analysis. *(1) Where a watershed analysis has been completed for a WAU under this chapter:

(a) Any landowner within the WAU may apply for a multiyear permit to conduct forest practices according to the watershed analysis prescriptions. This permit is not renewable if a five-year review is found necessary by the department and has not been completed.

(b) Nonmultiyear forest practices applications and notifications submitted to the department shall indicate whether an area of resource sensitivity will be affected and, if so, which

prescription the operator, timber owner, or forest land owner shall use in conducting the forest practice in the area of resource sensitivity;

(c) The department shall assist operators, timber owners, and forest land owners in obtaining governmental permits required for the prescription (see WAC 222-50-020 and 222-50-030);

(d) The department shall confirm that the prescription selected under (a) of this subsection was one of the prescriptions approved for the area of resource sensitivity under WAC 222-22-080 and shall require the use of the prescription; and

(e) The department shall not further condition forest practice applications and notifications in an area of resource sensitivity in a WAU where the applicant will use a prescription contained in the watershed analysis nor shall the department further condition forest practice applications and notifications outside an area of resource sensitivity in a WAU, except for reasons other than the watershed processes and fish, water, and capital improvements of the state or its political subdivisions analyzed in the watershed analysis in the WAU, and except to correct mapping errors, misidentification of soils, landforms, vegetation, or stream features, or other similar factual errors.

*(2) Pending completion of a watershed analysis for a WAU, the department shall process forest practices notifications and applications in accordance with the other chapters of this title, except that applications and notifications received for forest practices on a WAU after the date notice is mailed under WAC 222-22-040(4) commencing a watershed analysis on the WAU shall be conditioned to require compliance with interim, draft, and final prescriptions, as available.

Processing and approval of applications and notifications shall not be delayed by reason of review, approval, or appeal of a watershed analysis.

*(3) The board encourages cooperative and voluntary monitoring. Evaluation of resource conditions may be conducted by qualified specialists, analysts, and field managers as determined under WAC 222-22-030. Subsequent watershed analysis and management strategies in response to areas where recovery is not occurring shall be conducted in accordance with this chapter.

*(4) Where the condition of resource characteristics in a WAU are fair or poor, the department shall evaluate the effectiveness of the prescriptions applied under this chapter to the WAU in providing for the protection and recovery of the resource characteristic. If the department finds that the prescriptions are not providing for such protection and recovery over a period of 3 years, the department shall repeat the watershed analysis in the WAU. Aside from the foregoing, once a watershed analysis is completed on a WAU, it shall be revised in whole or in part upon the earliest of the following to occur:

(a) Five years after the date the watershed analysis is final, if necessary;

(b) The occurrence of a natural disaster having a material adverse effect on the resource characteristics of the WAU;

(c) Deterioration in the condition of a resource characteristic in the WAU measured over a 12-month period or no improvement in a resource characteristic in fair or poor con-

dition in the WAU measured over a 12-month period unless the department determines, in cooperation with the departments of ecology, fish and wildlife, affected Indian tribes, forest land owners, and the public, that a longer period is reasonably necessary to allow the prescriptions selected to produce improvement; or

(d) The request of an owner of forest land in the WAU, which wishes to conduct a watershed analysis at its own expense.

Revision of an approved watershed analysis shall be conducted in accordance with the processes, methods, and standards set forth in this chapter, except that the revised watershed analysis shall be conducted only on the areas affected in the case of revisions under (b) or (c) of this subsection, and may be conducted on areas smaller than the entire WAU in the case of revisions under (a) and (d) of this subsection. The areas on which the watershed analysis revision is to be conducted shall be determined by the department and clearly delineated on a map before beginning the assessment revision. Forest practices shall be conditioned under the current watershed analysis pending the completion of any revisions.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-22-090, filed 5/30/01, effective 7/1/01. Statutory Authority: RCW 76.09.040 and chapter 34.05 RCW. 97-24-091, § 222-22-090, filed 12/3/97, effective 1/3/98. Statutory Authority: RCW 76.09.040, 76.09.170 and chapter 34.05 RCW. 94-01-134, § 222-22-090, filed 12/20/93, effective 1/1/94. Statutory Authority: RCW 76.09.040, 76.09.050 and chapter 34.05 RCW. 92-15-011, § 222-22-090, filed 7/2/92, effective 8/2/92.]

WAC 222-22-100 Application review prior to watershed analysis. *The watershed analysis system established in this chapter is a principal methodology for assessing the effects on fish, water, and capital improvements of the state or its political subdivisions of two or more forest practices. Recognizing that it will not be possible to achieve statewide implementation of the analysis process for all WAUs for some time, the board hereby establishes certain interim regulatory measures pending watershed analysis on a given WAU. These measures are designed to ensure use of the best available analysis techniques and existing authorities to protect fish, water, and capital improvements of the state or its political subdivisions.

*(1) The department shall continue to use its implementation and enforcement authority to prevent damage to fish, water, and capital improvements of the state or its political subdivisions. See chapter 222-46 WAC.

*(2) The department shall condition the size of clearcut harvest applications in the significant rain-on-snow zone where the department determines, using local evidence, that peak flows have resulted in material damages to public resources. The department may prepare conditioning guidelines to assess and condition applications located in a significant rain-on-snow zone.

(a) Each year not later than August 31, the department shall provide a summary report of actions taken under rain-on-snow conditioning or conditioning guidelines to the appropriate board committee.

(b) Such conditioning authority shall expire upon completion of watershed analysis in a WAU.

(c) Nothing in this section shall require a watershed analysis to develop harvest size recommendations.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-22-100, filed 5/30/01, effective 7/1/01. Statutory Authority: RCW 76.09.040, 76.09.170 and chapter 34.05 RCW. 94-01-134, § 222-22-100, filed 12/20/93, effective 1/1/94. Statutory Authority: RCW 76.09.040, 76.09.050 and chapter 34.05 RCW. 92-15-011, § 222-22-100, filed 7/2/92, effective 8/2/92.]

Chapter 222-23 WAC RIPARIAN OPEN SPACE PROGRAM

WAC

222-23-010	Policy and definitions.
222-23-020	Submitting and processing of applications for the riparian open space program.
222-23-025	Priorities for conveyances—Use of lands conveyed.
222-23-030	Conveyance forms and procedure.

WAC 222-23-010 Policy and definitions. (1) Policy. The legislature determined that it is in the public interest to acquire (by purchase or donation) an interest in lands within unconfined avulsing channel migration zones that are offered for acquisition by the landowner, and therefore established a riparian open space program in RCW 76.09.040 to be administered by the department. The purpose of the acquisition is to provide for ecological protection and fisheries enhancement. The department may acquire either the fee interest in or a permanent conservation easement over such lands. This chapter implements the riparian open space program.

(2) Definitions. As used in this chapter, the following terms shall have the following meanings:

(a) "Qualifying CMZ land(s)." See WAC 222-23-020(1).

(b) An "unconfined avulsing channel migration zone" means the area within which the active channel of an unconfined avulsing stream is prone to move and where the movement would result in a potential near-term loss of riparian forest adjacent to the stream. Sizeable islands with productive timber may exist within the zone and are considered a part of the channel migration zone. The unconfined avulsing channel migration zone does not include areas that are permanently restricted from channel movement by a dike or levee.

(c) An "unconfined avulsing stream" is defined in WAC 222-16-010.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-23-010, filed 5/30/01, effective 7/1/01.]

WAC 222-23-020 Submitting and processing of applications for the riparian open space program. (1) Qualifying CMZ land(s). Lands that qualify for the riparian open space program are those lands located within an unconfined avulsing channel migration zone and are, as of the date an application is submitted to the department under this section, identified in records of the applicable county assessor as being classified or designated as forest land under chapter 84.33 RCW or as being subject to current use taxation as forest land under chapter 84.34 RCW. Qualifying CMZ lands may be placed in the riparian open space program whether they represent all or just a portion of the lands within the channel migration zone along a particular stream segment. That is, the lands to be placed in the program may include all

of a landowner's lands located within the channel migration zone up to the boundary between that zone and the RMZ core area, or lands to be included may include only a portion of a landowner's lands within an unconfined avulsing channel migration zone of a given stream segment. Likewise, where more than one landowner owns land within the channel migration zone of a given stream segment, any landowner may elect to participate in the riparian open space program without regard to participation of neighboring landowners.

Land does not qualify for the riparian open space program where the department has determined that:

(a) The lack of legal access to the land is likely to materially impair the department's ability to administer the riparian open space program with respect to the land;

(b) All persons having an interest of any description in the land, including, but not limited to, joint tenancy, tenancy in common, holder of easement, or holder of lien or security interest, have not agreed to convey or subordinate such interests to the state to the extent deemed necessary by the state to transfer the fee or easement free of or superior to any such interest;

(c) The land is subject to unacceptable liabilities as defined in WAC 222-23-20(4) [222-23-020(4)]; or

(d) There is any other circumstance making the land unsuitable for fisheries enhancement or ecological protection.

(2) **Application.** An owner or owners of qualifying CMZ lands may apply to the department to place the lands within the riparian open space program. Applications for the riparian open space program may, at the landowners' option, be submitted at the same time as a forest practices application for adjoining or nearby forestlands, or may be submitted separately (and without reference to or the requirement of a current forest practices application). The application for the riparian open space program shall be in writing on a form provided by the department and shall contain the following information:

(a) Name, address, and telephone number of applicant(s);

(b) Contact name and telephone number for questions concerning the application;

(c) Location and description of the land proposed for inclusion in the program, including estimated acreage, a description of the methods used by the landowner to determine that the land is qualifying CMZ land and a map showing the approximate boundary between the channel migration zone and the adjoining RMZ core area (and in situations where the latter is not applicable, a description of the process the landowner used to determine that the qualifying CMZ land is within an unconfined avulsing stream channel migration zone);

(d) Tax parcel identification number(s) that contain the qualifying CMZ land;

(e) List of all persons having any right or interest in the land covered by the application for the riparian open space program and a description of such right or interest;

(f) The stumpage value area and hauling zone in which the qualifying lands lie (see map at WAC 458-40-640).

(g) A map of the qualifying CMZ land;

(h) A statement indicating the landowner's desire to place the land covered by the application within the riparian open space program and whether the landowner wishes to convey the qualifying land in fee or convey only a conservation easement;

(i) Whether the landowner wishes to receive the statutory compensation for the conveyance or wishes to donate the qualifying CMZ land;

(j) Whether the landowner representative submitting the application is aware of the presence of any hazardous substances on the lands;

(k) Description and documentation of the legal and physical access to the land being acquired;

(l) The type of boundary description proposed by landowner (survey or other description); and

(m) Any other information DNR determines is necessary to assess whether the land qualifies for the riparian open space program.

(3) Review and processing of application. Within ninety days of receipt of a complete and accurate application for the riparian open space program, the department shall preliminarily determine (and advise the applicant) whether lands proposed for the riparian open space program appear to meet the requirements of this chapter and of RCW 76.09.040 (3) and (4), and, if so, whether there is funding available for the purchase. This determination is subject to subsequent confirmation of all information required for the program and eligibility of the land as qualifying for the program. If the preliminary determination is that the land qualifies for the program and if funding is available for the proposed purchase, then the following shall occur within the ninety days following notice to the landowner of the preliminary determination:

(a) The landowner, in cooperation with the department, shall delineate on the ground the boundary line between the CMZ and the RMZ core area; following which,

(b) The department shall verify the appropriateness of that delineation, determine the standards for the boundary description (i.e., a survey or other), make a final determination whether there are any unacceptable liabilities on the lands proposed for inclusion in the program, and communicate the foregoing to the landowner.

If the department determines there are no unacceptable liabilities on the lands, the landowner shall mark the boundary (as verified) using tree tags or other long-term boundary marking methods specified by the department.

(4) Unacceptable liabilities. As used in this section, unacceptable liabilities are created by the presence of hazardous substances on the qualifying CMZ lands or by other condition that creates such a liability to the department that may jeopardize the department's ability to maintain fisheries enhancement or the ecological protection of the qualifying CMZ lands, and with respect to which liability the applicant is unwilling or unable to provide reasonable indemnification to the department. If the department finds unacceptable liabilities with respect to qualifying CMZ lands, the department may reject the landowner's application.

(5) Preparation of conveyance documents. Within ninety days following placement in the field of the long-term boundary between the CMZ and the RMZ core area as provided for in subsection (3) of this section, the following shall occur:

(a) The landowner shall:

(i) Traverse the boundary to determine the acreage of the qualifying lands;

(ii) Either perform a legal land survey or otherwise document the boundaries consistent with the requirements of WAC 222-23-030(3), as applicable; and

(iii) Prepare a map of the qualifying CMZ lands suitable for recording.

(b) The department shall:

(i) Conduct and finalize a cruise of the timber on the qualifying CMZ lands;

(ii) Determine the statutory compensation to be paid to the landowner;

(iii) Prepare conveyance documents consistent with this chapter; and

(iv) Prepare any other documents necessary for closing and recording the conveyance, including without limitation a real estate excise tax affidavit.

(6) **Timber cruise.** The timber cruise will be conducted by the department using a cruiser acceptable to the department and the landowner and using generally accepted cruise methodology and sampling intensity acceptable to both parties. The timber cruise shall measure all trees within the lands to be conveyed that contain measurable log volume and develop all information (species and grade) with respect to those trees necessary to apply the stumpage tables developed by the department of revenue pursuant to RCW 84.33.091; this includes volume by species and grade sufficient to apply the department of revenue stumpage tables in WAC 458-40-640, 458-40-650 and 458-40-660 (1) and (2). The department will provide the cruise data to the landowner; within thirty days thereafter, the landowner shall advise the department whether the cruise results are acceptable. The landowner or the department may, at their option, perform a check cruise.

(7) **Compensation for conveyances.** RCW 76.09.040(3) specifies the compensation the department shall pay for purchases of qualifying CMZ lands, unless the landowner chooses to donate the property in fee or donate a conservation easement.

(a) Fee interests. For conveyances of fee interests, the department shall pay for both the land value and the timber value, as determined in this subsection. The land value component shall be the acreage of qualifying CMZ lands to be conveyed multiplied by the average per acre value of all commercial forest land in Western Washington or the average for Eastern Washington, whichever average is applicable to the qualifying CMZ lands. The department shall determine the Western and Eastern Washington averages based on the land value tables established by RCW 84.33.120 and revised annually by the department of revenue (see WAC 458-40-540). The timber value component of the compensation shall be based on the cruise volume multiplied by the appropriate department of revenue stumpage values from the stumpage value table for the applicable stumpage value area and hauling distance zone. The stumpage value tables to be applied are those found in WAC 458-40-660(2). Except as provided in (c) of this subsection, the tables applied shall be those in effect as of the date the application under this section is submitted to the department by the landowner.

(b) Conservation easements. Conservation easements shall be perpetual and not for a term of years. For conveyances of a conservation easement in which the landowner conveys an interest in the trees only, the compensation shall only include the timber value component, determined as set forth in subsection (7)(a) of this section. For conveyances of a conservation easement in which the landowner conveys interests in both land and trees, the compensation shall include the timber value component plus such portion of the land value component as determined just and equitable by the department.

(c) Adjustment in compensation. Where the department does not complete its duties as required in subsections (3) through (5) of this section within the required time period or the department is unable to complete the acquisition because of a lack of funds or other reason, the landowner has the option to require that the department recompute the compensation based on the most recently published land value and stumpage value tables.

(8) Alternative management options. In any circumstance where qualifying CMZ lands are not acquired by the department in fee or through a conservation easement, the landowner may elect to develop an alternative management option for the lands in cooperation with the department, other agencies and affected Indian tribes.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-23-020, filed 5/30/01, effective 7/1/01.]

WAC 222-23-025 Priorities for conveyances—Use of lands conveyed. (1) Priorities for conveyances. The legislature recognized, in RCW 77.85.180(4), that the adoption of forest practices rules consistent with the forests and fish report will impose substantial burdens on forest landowners. The purpose of this program, which will be administered by the department, is to compensate landowners and provide for ecological protection and fisheries enhancement. The department shall prioritize applications under this section based on the following criteria (not in priority order): Order of receipt, ecological value (including importance to salmonids, water quality benefits, quality of habitat, site significance, etc.), and immediacy of need. If funding is or becomes unavailable to consummate a conveyance with respect to otherwise qualifying CMZ lands, the application may (at the landowner's option) be kept on file at the department pending the future availability of funding. The department will consult with representatives of affected Indian tribes, department of fish and wildlife, and department of ecology as necessary for technical expertise. The board will include, in its reports to the legislature required in RCW 76.09.380, a review of this program with recommended amendments, as necessary, to accomplish the goals of this program.

(2) Use and management of lands and easement interests acquired under riparian open space program. Subject to the exceptions set forth in this subsection (or as otherwise provided in the conveyance or easement documents), the lands conveyed or subject to the conservation easements under this chapter shall be managed by the department only in a manner necessary for ecological protection or fisheries enhancement. The conveyance of lands under the riparian open space pro-

gram shall not create a right of public access to the conveyed lands across adjoining or other lands owned by the landowner conveying property or an easement under the riparian open space program.

(3) Transfer of fee or easement interest or management responsibility. After acquisition of a fee or easement interest in qualifying CMZ lands, the department may transfer its interest in such lands by a recorded instrument to another state agency, a local government within which the lands lie, or a private nonprofit nature conservation corporation (as defined in RCW 64.04.130). Alternatively, the department may contract with one or more of the foregoing entities to exercise the department's management authority over the qualifying CMZ lands. Any such contract will include provisions fully advising the contracting party of the rights of the landowner under this chapter and the conveyance instrument. The department shall notify the landowner of any transfer of its interest in the qualifying CMZ lands or any transfer of management responsibilities over those lands, provided that failure to so notify the landowner shall not affect the validity of the transfer.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-23-025, filed 5/30/01, effective 7/1/01.]

WAC 222-23-030 Conveyance forms and procedure.

(1) **Fee interest.** Conveyance of a fee interest in qualifying lands shall be by deed with limited warranties. Deeds will include terms reasonably necessary and appropriate to the circumstances of the particular lands involved and shall be in a form acceptable to the department and the landowner. Prior to closing, the landowner shall procure a title report or title history for the lands being conveyed, provided that in the case of qualifying CMZ land being donated to the department, the department shall pay the cost of the report.

(2) **Conservation easement.** Conveyances of a conservation easement shall be through execution by the landowner and the department of a conservation easement in a form acceptable to the department and the landowner. The easement will include terms reasonably necessary and appropriate to the circumstances of the particular lands involved. Prior to closing, the landowner shall procure a litigation guarantee or title history from a title company, provided that in the case of an easement being donated to the department, the department shall pay the cost of the guarantee or other report.

(3) **Description standards.** The description of the qualifying lands being conveyed shall be a legal land survey description or, if a survey is not being performed, the description shall include the township, range, section, and legal subdivision, and utilize a map at a scale of 1:400 indexed either to one legal land survey point or two geopositional system points plus a GPS traverse of the boundary between the CMZ and the RMZ core area, tied to one legal land survey point or two geopositional system points, or other description acceptable to the department.

(4) **Closing and recording.** Upon execution of the conveyance documents and other documents required for closing, the department shall pay any compensation owed to the landowner and record the conveyance documents. The department shall pay the recording fees. No compensating

taxes under chapters 84.33 and 84.34 RCW shall be owed. Any real estate excise tax owed shall be paid by the landowner conveying the property or easement.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-23-030, filed 5/30/01, effective 7/1/01.]

Chapter 222-24 WAC

ROAD CONSTRUCTION AND MAINTENANCE

WAC

222-24-010	Policy.
222-24-015	Construction in wetlands.
222-24-020	Road location and design.
222-24-025	Repealed.
*222-24-026	Temporary roads.
222-24-030	Road construction.
222-24-035	Landing location and construction.
222-24-040	Water crossing structures.
222-24-050	*Road maintenance and abandonment.
*222-24-051	Road maintenance schedule.
222-24-052	Road maintenance.
222-24-060	Rock quarries, gravel pits, borrow pits, and spoil disposal areas.

DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

222-24-025	Road design. [Statutory Authority: RCW 76.09.040, 76.09.170 and chapter 34.05 RCW. 94-01-134, § 222-24-025, filed 12/20/93, effective 1/1/94. Statutory Authority: RCW 76.09.040, 76.09.050 and chapter 34.05 RCW. 92-15-011, § 222-24-025, filed 7/2/92, effective 8/2/92. Statutory Authority: RCW 76.09.040, 87-23-036 (Order 535), § 222-24-025, filed 11/16/87, effective 1/1/88. Statutory Authority: RCW 76.09.040 and 76.09.050. 82-16-077 (Resolution No. 82-1), § 222-24-025, filed 8/3/82, effective 10/1/82.] Repealed by 01-12-042, filed 5/30/01, effective 7/1/01. Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9).]
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WAC 222-24-010 Policy. *(1) A well designed, located, constructed, and maintained system of forest roads is essential to forest management and protection of the public resources. Riparian areas contain some of the more productive conditions for growing timber, are heavily used by wildlife and provide essential habitat for fish and wildlife and essential functions in the protection of water quality. Wetland areas serve several significant functions in addition to timber production: Providing fish and wildlife habitat, protecting water quality, moderating and preserving water quantity. Wetlands may also contain unique or rare ecological systems.

*(2) To protect water quality and riparian habitat, roads must be constructed and maintained in a manner that will prevent potential or actual damage to public resources. This will be accomplished by constructing and maintaining roads so as not to result in the delivery of sediment and surface water to any typed water in amounts, at times or by means, that preclude achieving desired fish habitat and water quality by:

- Providing for fish passage at all life stages (see Washington state department of fish and wildlife hydraulic code Title 220 WAC);
- Preventing mass wasting;
- Limiting delivery of sediment and surface runoff to all typed waters; and
- Avoiding capture and redirection of surface or ground water. This includes retaining streams in their natural drain-

ages and routing subsurface flow captured by roads and road ditches back onto the forest floor;

- Divert most road runoff to the forest floor;
- Provide for the passage of some woody debris;
- Protect stream bank stability;
- Minimizing the construction of new roads;
- Assure that there is no net loss of wetland function.

The road construction and maintenance rules in this chapter must be applied in achieving these goals. Additional guidance is identified in the board manual, section 3. If these goals are not achieved using the rules and the applied guidance, additional management strategies must be employed.

*(3) Extra protection is required during road construction and maintenance to protect public resources and timber growing potential. Landowners and fisheries and wildlife managers are encouraged to cooperate in the development of road management and abandonment plans. Landowners are further encouraged to cooperate in sharing roads to minimize road mileage and avoid duplicative road construction.

*(4) This section covers the location, design, construction, maintenance and abandonment of forest roads, bridges, stream crossings, quarries, borrow pits, and disposal sites used for forest road construction and is intended to assist landowners in proper road planning, construction and maintenance so as to protect public resources.

(Note: Other laws and rules and/or permit requirements may apply. See chapter 222-50 WAC.)

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-24-010, filed 5/30/01, effective 7/1/01. Statutory Authority: RCW 76.09.040, 76.09.170 and chapter 34.05 RCW. 94-01-134, § 222-24-010, filed 12/20/93, effective 1/1/94. Statutory Authority: RCW 76.09.040, 76.09.050 and chapter 34.05 RCW. 92-15-011, § 222-24-010, filed 7/2/92, effective 8/2/92. Statutory Authority: RCW 76.09.040. 87-23-036 (Order 535), § 222-24-010, filed 11/16/87, effective 1/1/88. Statutory Authority: RCW 76.09.040 and 76.09.050. 82-16-077 (Resolution No. 82-1), § 222-24-010, filed 8/3/82, effective 10/1/82; Order 263, § 222-24-010, filed 6/16/76.]

WAC 222-24-015 Construction in wetlands. *(1) In order to assure that there is no net loss of wetland function, all road and landing construction near or within wetlands must be conducted so that selection of choices are made in the following order with avoidance being the most preferred and replacement being the least preferred alternative:

- (a) Avoid impacts by selecting the least environmentally damaging landing location, road location and road length. Landowners must attempt to minimize road length concurrently with the attempt to avoid wetlands; or
- (b) Minimize impacts by reducing the subgrade width, fill acreage and spoil areas; or
- (c) Restore affected areas by removing temporary fills or road sections upon the completion of the project; or
- (d) Reduce or eliminate impacts over time by preserving or maintaining areas; or
- (e) Replace affected areas by creating new wetlands or enhancing existing wetlands.

*(2) **An accurate delineation** of wetland boundaries will not be required under this section except where necessary to determine acreage of road or landing construction which fills or drains more than (0.1) one tenth acre of a wetland. All such mapping must follow the delineation and mapping standards outlined in the board manual, section 8.

*(3) Approximate determination of wetland boundaries, following the guidelines in the board manual, shall be required for the purpose of avoidance during design and construction of roads. Landowners must attempt to minimize road length concurrently with the attempt to avoid wetlands. Delineation, following the guidelines in the board manual, shall be required to determine the length of road constructed within a wetland in order to determine acreage when replacement by substitution or enhancement of a wetland is required. The requirement for accurate delineation shall be limited to the area of the wetland proposed to be filled.

*(4) **Filling or draining** more than 0.5 acre of a wetland requires replacement by substitution or enhancement of the lost wetland functions. (See the board manual, section 9.) The objective of successful replacement by substitution of lost wetland area will be generally on a two-for-one basis and of the same type and in the same general location. The objective of enhancing wetlands function is to provide for an equivalent amount of function to replace that which is lost. See WAC 222-16-050 (1)(h).

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-24-015, filed 5/30/01, effective 7/1/01.]

WAC 222-24-020 Road location and design. (1) **Fit the road to the topography** so that a minimum of alterations to the natural features will occur.

*(2) Except for crossings, new stream-adjacent parallel roads shall not be located within natural drainage channels, channel migration zones, sensitive sites, equipment limitation zones, and riparian management zones when there would be substantial loss or damage to fish or wildlife habitat unless the department has determined that other alternatives will cause greater damage to public resources. Proposals with new stream-adjacent parallel roads will require an on-site review by an interdisciplinary team. The appropriate federal representative(s) will be invited to attend the interdisciplinary team to determine if the proposal is in compliance with the Endangered Species Act.

*(3) Roads shall not be constructed in bogs or low nutrient fens.

*(4) Roads shall not be located in wetlands if there would be substantial loss or damage to wetland functions or acreage, unless the department has determined that alternatives will cause greater damage to public resources.

*(5) **Minimize the number of stream crossings.**

*(6) Where stream crossings are necessary:

- (a) Design stream crossings to minimize alterations to natural features;
- (b) Locate and design culverts to minimize sediment delivery; and
- (c) **Whenever practical**, cross streams at right angles to the main channel.

*(7) **Avoid duplicative roads** by keeping the total amount of construction to a minimum. Use existing roads whenever practical and avoid isolating patches of timber which, when removed, may require unnecessary road construction.

*(8) **All new road construction** on side slopes that exceed 60 percent, which have the potential to deliver sedi-

ment to any typed water or wetland must utilize full bench construction techniques, including end hauling, over hauling or other special techniques. The department may waive the full bench construction requirement if a site review is conducted and the absence of delivery potential to any typed water or wetlands is determined.

(9) Use the minimum design standard that produces a road sufficient to carry the anticipated traffic load with reasonable safety.

*(10) **Subgrade width** should average not more than 32 feet for double lane roads and 20 feet for single lane roads, exclusive of ditches, plus any additional width necessary for safe operations on curves and turnouts. Where road location in wetlands is unavoidable (see WAC 222-24-015 (1)(b)), minimize subgrade width.

(11) **Balance excavation** and embankments so that as much of the excavated material as is practical will be deposited in the roadway fill sections. Where full bench construction is necessary, design suitable embankments so that the excavated material may be end hauled to appropriate deposit areas.

(12) Cut and fill slopes must be designed and constructed in a manner that will assure a high likelihood of remaining stable throughout the life of the road.

*(13) **All roads** shall be outsloped or ditched on the uphill side and appropriate surface drainage shall be provided by the use of adequate drainage structures such as: Cross drains, ditches, drivable dips, relief culverts, water bars, diversion ditches, or other such structures demonstrated to be equally effective.

*(14) Drainage structures shall not discharge onto erodible soils, or over fill slopes unless adequate outfall protection is provided.

*(15) **Relief culverts** installed on forest roads shall meet the following minimum specifications: (See the board manual, section 3 for culvert spacing.)

(a) Be at least 18 inches in diameter or equivalent in western Washington and 15 inches in diameter or equivalent in eastern Washington.

(b) Be installed in a manner that efficiently captures ditchline flow and passes it to the outside of the road.

*(16) **Ditch diversion.** Where roadside ditches slope toward any typed water, or Type A or B Wetland, a ditch relief structure must be located as close to the stream crossing or wetland as possible so it drains off before reaching the stream. On stream-adjacent parallel roads, relief culverts shall be located at maximum distances from stream channels to minimize sediment delivery. The relief structure must allow the sediment to be deposited onto the forest floor and not carry surface water or sediment into the stream channel or wetland.

*(17) **Outslope the road surface** where practical. Where outsloping is not practical, provide a ditch with drainage structure on the inside of the road, except where roads are constructed in rock or other materials not readily susceptible to erosion.

*(18) **Crown or slope** the road to prevent the accumulation of water on the road surface.

*(19) **Install rock armor** headwall inlets on all stream-crossing culverts where the stream gradient above the crossing is greater than 6 percent.

*(20) **Install rock armored headwalls** and rock armored ditchblocks for drainage structure culverts located on erodible soils or where the affected road has a gradient greater than 6 percent.

*(21) **Install drainage structures** at locations where **seeps and springs** are known or discovered during construction to route accumulated surface water across the road prism. The water from the seeps and springs must be returned to the forest floor as close to the point of origin as reasonably practicable.

*(22) **The department may require additional information** for proposed road construction as part of a complete application, including:

(a) A map with detailed topographic information showing the location and alignment of the road in relation to all typed water and wetlands as required in WAC 222-16-035;

(b) Location, size, alignment and number of water crossing and drainage structures;

(c) Detailed plans for bridges, large culverts or other complex elements of the proposal; and

(d) Other information identified by the department.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-24-020, filed 5/30/01, effective 7/1/01. Statutory Authority: RCW 76.09.040, 76.09.050 and chapter 34.05 RCW. 92-15-011, § 222-24-020, filed 7/2/92, effective 8/2/92. Statutory Authority: RCW 76.09.040. 87-23-036 (Order 535), § 222-24-020, filed 11/16/87, effective 1/1/88. Statutory Authority: RCW 76.09.040 and 76.09.050. 82-16-077 (Resolution No. 82-1), § 222-24-020, filed 8/3/82, effective 10/1/82; Order 263, § 222-24-020, filed 6/16/76.]

WAC 222-24-025 Repealed. See Disposition Table at beginning of this chapter.

WAC *222-24-026 Temporary roads. Temporary roads as defined in WAC 222-16-010 shall:

(1) Be constructed in a manner to facilitate closure and abandonment when the intended use is completed.

(2) Be designed to provide the same level of protection for public resources as provided by the rules during the length of its use.

(3) Be identified on the forest practices application or notification, along with an abandonment date. Abandonment must be accomplished under WAC 222-24-052*(3) to the specifications approved by the department by the date specified in the approved forest practices application.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-24-026, filed 5/30/01, effective 7/1/01.]

WAC 222-24-030 Road construction. (1) **Right of way timber** shall be removed or decked in suitable locations where the decks will not be covered by fill material or act as support for the fill or embankment.

*(2) **In permanent road construction, do not bury:**

(a) Loose stumps, logs or chunks if they will contribute more than 5 cubic feet in the load-bearing portion of the road.

(b) Any significant amount of organic debris within the top 2 feet of the load-bearing portion of the road.

(c) Excessive accumulation of debris or slash in any part of the load-bearing portion of the road fill.

(3) **Compact fills.** During road construction, fills or embankments shall be built up by layering. Each layer shall be compacted by operating the tractor or other construction equipment over the entire surface of the layer. Chemical compacting agents may be used in accordance with WAC 222-38-020.

*(4) **Stabilize soils.** Erodible soil disturbed during road construction and located where it could reasonably be expected to enter the stream network must be seeded with noninvasive plant species. The use of local area native species, adapted for rapid revegetation is preferred. Treatment with other erosion control measures may be approved by the department.

*(5) **Channel clearance.** Within 50 feet upstream from a culvert inlet clear stream channel of all debris and slash generated by the operations that reasonably may be expected to plug the culvert prior to the removal of equipment from the vicinity, or the winter season, whichever is first. (See the board manual, section 4 for debris removal guidelines.)

*(6) **Drainage.**

(a) All required ditches and drainage structures shall be installed concurrently with the construction of the roadway.

(b) Uncompleted road construction to be left over the winter season or other extended periods of time shall be drained by outsliping or drainage structures. Water bars and/or dispersion ditches may also be used to minimize eroding of the construction area and stream siltation. Water movement within wetlands must be maintained.

*(7) **Moisture conditions.** Construction shall be accomplished when moisture and soil conditions are not likely to result in excessive erosion and/or soil movement, so as to avoid damage to public resources.

*(8) **End haul/sidecasts.** End haul or overhaul construction is required where significant amounts of sidecast material would rest below the 100-year flood level of any typed water, within the boundary of a Type A or Type B Wetland or wetland management zones or where the department determines there is a potential for mass soil failure from overloading on unstable slopes or from erosion of side cast material causing damage to the public resources.

*(9) **Waste disposal.** When spoil, waste and/or other debris is generated during construction, this material shall be deposited or wasted in suitable areas or locations and be governed by the following:

(a) Spoil or other debris shall be deposited above the 100-year flood level of any typed waters or in other suitable locations to prevent damage to public resources. The material shall be stabilized using the recommended schedule and procedures found in the board manual, section 3.

(b) All spoils shall be located outside of Type A and Type B Wetlands and their wetland management zones. Spoils shall not be located within the boundaries of forested wetlands without written approval of the department and unless a less environmentally damaging location is unavailable. No spoil area greater than 0.5 acre in size shall be

allowed within wetlands. (See WAC 222-24-015, Construction in wetlands.)

(10) **Disturbance avoidance for northern spotted owls.** Road construction, operation of heavy equipment and blasting within a SOSEA boundary shall not be allowed within 0.25 mile of a northern spotted owl site center between March 1 and August 31, 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.**

(a) Road construction and 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; and

(b) Blasting shall not be allowed within 0.25 mile of an occupied marbled murrelet site during the critical nesting season.

(c) Provided that, these restrictions 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: Chapter 34.05 RCW, RCW 76.09.040, [76.09.050, [76.09.370, 76.13.120(9). 01-12-042, § 222-24-030, filed 5/30/01, effective 7/1/01. Statutory Authority: RCW 76.09.040 and chapter 34.05 RCW. 97-24-091, § 222-24-030, filed 12/3/97, effective 1/3/98; 97-15-105, § 222-24-030, filed 7/21/97, effective 8/21/97. Statutory Authority: Chapters 76.09 and 34.05 RCW. 96-12-038, § 222-24-030, filed 5/31/96, effective 7/1/96. Statutory Authority: RCW 76.09.060, 76.09.040 and chapter 34.05 RCW. 92-23-056, § 222-24-030, filed 11/17/92, effective 12/18/92. Statutory Authority: RCW 76.09.040, 76.09.050 and chapter 34.05 RCW. 92-15-011, § 222-24-030, filed 7/2/92, effective 8/2/92. Statutory Authority: RCW 76.09.040. 87-23-036 (Order 535), § 222-24-030, filed 11/16/87, effective 1/1/88. Statutory Authority: RCW 76.09.040 and 76.09.050. 82-16-077 (Resolution No. 82-1), § 222-24-030, filed 8/3/82, effective 10/1/82; Order 263, § 222-24-030, filed 6/16/76.]

WAC 222-24-035 Landing location and construction.

*(1) **Landing location:**

Locate landings to prevent potential or actual damage to public resources. Avoid excessive excavation and filling. Landings shall not be located within natural drainage channels, channel migration zones, RMZ core and inner zones, Type Np RMZs, sensitive sites, equipment limitation zones, and Type A or B Wetlands or their wetland management zones. Minimize placement and size of landings within forested wetlands. (See WAC 222-24-015, Construction in wetlands.)

(2) **Landing construction.**

(a) Landings requiring sidecast or fill shall be no larger than reasonably necessary for safe operation of the equipment expected to be used.

*(b) Where the slopes exceed 60 percent, fill material used in construction of landings shall be free from loose stumps and excessive accumulations of slash and shall be mechanically compacted where necessary and practical in layers by tractor to prevent soil erosion and mass soil movement. Chemical compacting agents may be used in accordance with WAC 222-38-020.

*(c) Truck roads, skid trails, and fire trails shall be out-sloped or cross drained uphill of landings and the water diverted onto the forest floor away from the toe of any landing fill.

*(d) Landings shall be sloped to minimize accumulation of water on the landing.

*(e) Excavation material shall not be sidecast where there is high potential for material to enter wetland management zones or within the bankfull width of any stream or the 100-year flood level of any typed water.

*(f) All spoils shall be located outside of Type A and Type B Wetlands and their wetland management zones. Spoils shall not be located within the boundaries of forested wetlands without written approval of the department and unless a less environmentally damaging location is unavailable. No spoil area greater than 0.5 acre in size shall be allowed within wetlands. (See WAC 222-24-015, Construction in wetlands.)

***(3) Temporary landings.**

(a) A temporary landing is intended for use during the life of an approved application/notification.

(b) It must be constructed to facilitate abandonment when the intended use is complete or upon seasonal shutdown, whichever is sooner.

(c) It must be designed to provide the same level of protection for public resources as provided by the rules during the length of its intended use.

(d) Temporary landings must be identified on the forest practices application or notification, along with an abandonment date.

(e) Temporary landings must be abandoned to the specifications approved by the department by the date specified on the approved forest practices application.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.050, [76.09.050, 76.13.120(9). 01-12-042, § 222-24-035, filed 5/30/01, effective 7/1/01. Statutory Authority: RCW 76.09.040, 76.09.050 and chapter 34.05 RCW. 92-15-011, § 222-24-035, filed 7/2/92, effective 8/2/92. Statutory Authority: RCW 76.09.040, 87-23-036 (Order 535), § 222-24-035, filed 11/16/87, effective 1/1/88. Statutory Authority: RCW 76.09.040 and 76.09.050. 82-16-077 (Resolution No. 82-1), § 222-24-035, filed 8/3/82, effective 10/1/82.]

WAC 222-24-040 Water crossing structures. *(1) General provisions for all typed waters.

In addition to the applicable general provisions below, installation, maintenance and removal of water crossing structures in or across the bankfull width of Type S or F Waters are subject to hydraulic code rules, chapter 220-110 WAC, and require hydraulic project approval (HPA) issued by the department of fish and wildlife. HPAs may be required on Type Ns and Np Waters.

(a) Bridges are required for new crossings and reconstructed crossings of any typed waters regularly used for recreational boating.

(b) Structures containing concrete must be sufficiently cured prior to contact with water.

(c) One end of each new or reconstructed permanent log or wood bridge shall be tied or firmly anchored if any of the bridge structure is within 10 vertical feet of the 100-year flood level.

(d) Alterations or disturbance of the stream bed, bank or bank vegetation must be limited to that necessary to construct the project. All disturbed areas must be stabilized and restored according to the recommended schedule and procedures found in section 3 of the board manual. This requirement may be modified or waived by the department, in consultation with the department of fish and wildlife, if precluded by engineering or safety factors.

(e) When earthen materials are used for bridge surfacing, only clean sorted gravel may be used, a geotextile lining must be installed and curbs of sufficient size shall be installed to a height above the surface material to prevent surface material from falling into the stream bed.

(f) Wood removed from the upstream end of culverts and bridges will be placed at the downstream end of such culverts and bridges in such a way as to minimize obstruction of fish passage and to the extent practical while avoiding significant disturbance of sediment, in connection with maintenance activities.

***(2) Bridges over Type Np and Ns Waters.** In addition to the applicable general provisions above, installation, maintenance, and removal of permanent bridges in or across Type Np and Ns Waters are subject to the following:

(a) Permanent bridges must not constrict clearly defined channels and must be designed and installed to pass the 100-year flood. The bridge and its associated embankments and fills must provide sufficient erosion protection to withstand a 100-year flood event.

(b) Excavation for and placement of the bridge foundation and superstructure must be located and conducted from outside the outer edge of the bankfull width. This requirement may be waived by the department, in consultation with the department of fish and wildlife, if it can be demonstrated that these activities may be conducted in such a manner to prevent damage to public resources.

(c) Earthen embankments constructed for use as bridge approaches must be provided with sufficient erosion protection to withstand a 100-year flood event.

***(3) Culvert installation for Type Np and Ns Waters.** In addition to applicable general provisions above, installation, maintenance and removal of permanent culverts in or across Type Np and Ns Waters are subject to the following provisions:

(a) All permanent culverts must be designed to pass the 100-year flood event with consideration for the passage of debris likely to be encountered.

(b) The culvert and its associated embankments and fills must have sufficient erosion protection to withstand the 100-year flood event. Erosion protection may include armored overflows or the use of clean coarse fill material.

(c) If the department determines that because of unstable slopes the culvert size shown in the board manual, section 3, "Determining Culvert Size, Method A" would be inadequate to protect public resources, it may require a larger culvert designed using generally accepted engineering principles that meet the standards in (a) and (b) of this subsection.

(d) No permanent culverts shall be installed that are smaller than:

(i) 24 inches for Type Np Waters.

(ii) 18 inches for Type Ns Waters in western Washington.

(iii) 15 inches for Type Ns Waters in eastern Washington.

(e) The alignment and slope of the culvert shall parallel the natural flow of the stream whenever possible.

(f) Culverts must be designed and installed so they will not cause scouring of the stream bed and erosion of the banks in the vicinity of the project.

(g) When the department determines that installing a culvert in a flowing stream will result in excessive siltation and turbidity, and siltation and turbidity would be reduced if stream flow were diverted, the department shall require the stream flow be diverted using a bypass flume or culvert, or by pumping the stream flow around the work area. This may include culvert installations that are within 0.25 miles of a Type S or F Water or within two miles of a hatchery intake in consultation with the department of fish and wildlife.

(h) Fill associated with culvert installation must have sufficient erosion protection to withstand the 100-year flood.

(i) Stream beds shall be cleared for a distance of 50 feet upstream from the culvert inlet of such slash or debris that reasonably may be expected to plug the culvert.

(j) The entrance of all culverts shall have adequate catch basins and headwalls to minimize the possibility of erosion or fill failure.

***(4) Temporary water crossings in Type Np and Ns Waters.** In addition to the applicable general provisions above, installation, maintenance and removal of temporary bridges or other structures in or across Type Np and Ns Waters are subject to the following:

(a) A temporary water crossing is intended for use during the life of an approved application/notification.

(b) It must be constructed to facilitate abandonment when the intended use is complete or upon seasonal shut-down, whichever is sooner.

(c) Temporary water crossings must be identified on the forest practices application or notification, along with an abandonment date.

(d) Temporary water crossings may be used:

(i) In western Washington if installed after June 1 and removed by September 30 of the same year.

(ii) In eastern Washington if installed after the spring runoff and removed prior to October 15th.

(iii) At other times, when the department and applicant can agree to specific dates of installation and removal and the extended dates result in equivalent levels of resource protection.

(e) Temporary water crossings must be designed to pass the highest peak flow event expected to occur during the length of its intended use.

(f) When the department determines that installing a culvert in a flowing stream will result in excessive siltation and turbidity, and siltation and turbidity would be reduced if stream flow were diverted, the department shall require the stream flow be diverted using a bypass flume or culvert, or by pumping the stream flow around the work area. This may include culvert installations that are within 0.25 miles of a Type S or F Water or within two miles of a hatchery intake, in consultation with the department of fish and wildlife.

(g) Temporary water crossings shall be promptly removed and abandoned to the specifications approved by the department upon completion of use or by the date specified in the approved forest practices application, whichever is earlier. Approaches to the crossing shall be water barred and stabilized at the time of the crossing removal. The department may waive removal of the water crossing if the applicant secures an amended forest practices application, and the structure and its approaches meet all of the requirements of a permanent water crossing structure.

(h) Temporary wetland crossings shall be abandoned and restored based on a written plan approved by the department prior to construction.

(i) Temporary water crossings must be designed to provide the same level of protection for public resources as provided by rules during the length of its use.

***(5) Properly prepared and maintained fords may be used in Type Np and Ns Waters during periods of low water.**

(a) Entry and exit points for each ford must be located as close to perpendicular along the stream as possible, but will not exceed 100 feet upstream or downstream of each other. Approaches to the ford will not run adjacent to the stream.

(b) Ford locations must be shown on the forest practices application.

(c) Best management practices for construction, maintenance and use will be utilized as appropriate or as required by conditions on the approved forest practices application.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9), 01-12-042, § 222-24-040, filed 5/30/01, effective 7/1/01. Statutory Authority: RCW 76.09.040 and chapter 34.05 RCW. 97-24-091, § 222-24-040, filed 12/3/97, effective 1/3/98. Statutory Authority: RCW 76.09.040, 76.09.170 and chapter 34.05 RCW. 94-01-134, § 222-24-040, filed 12/20/93, effective 1/1/94. Statutory Authority: RCW 76.09.060, 76.09.040 and chapter 34.05 RCW. 92-23-056, § 222-24-040, filed 11/17/92, effective 12/18/92. Statutory Authority: RCW 76.09.040, 76.09.050 and chapter 34.05 RCW. 92-15-011, § 222-24-040, filed 7/2/92, effective 8/2/92. Statutory Authority: RCW 76.09.040, 87-23-036 (Order 535), § 222-24-040, filed 11/16/87, effective 1/1/88. Statutory Authority: RCW 76.09.040 and 76.09.050, 82-16-077 (Resolution No. 82-1), § 222-24-040, filed 8/3/82, effective 10/1/82; Order 263, § 222-24-040, filed 6/16/76.]

WAC 222-24-050 *Road maintenance and abandonment. The goals for road maintenance are established in WAC 222-24-010. All forest roads must be improved and maintained to the standards of this chapter within 15 years of the effective date of these rules. Guidelines for how to meet these goals and standards are in the board manual, section 3. Work performed toward meeting the standards must generally be even flow over the 15-year period with priorities for achieving the most benefit to public resources early in the period. Replacement will not be required for existing culverts functioning with little risk to public resources or for culverts installed under an approved forest practices application or notification if they have been properly maintained and are capable of passing fish, until the end of the culvert's functional life.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9), 01-12-042, § 222-24-050, filed 5/30/01, effective 7/1/01. Statutory Authority: RCW 76.09.040 and chapter 34.05 RCW. 97-24-091, § 222-24-050, filed 12/3/97, effective 1/3/98; 93-12-001, § 222-24-050, filed 5/19/93, effective 6/19/93. Statutory Authority: RCW 76.09.040, 76.09.050 and chapter 34.05 RCW. 92-15-011, § 222-24-050, filed 7/2/92, effective 8/2/92. Statutory Authority: RCW 76.09.040, 87-23-036 (Order

535), § 222-24-050, filed 11/16/87, effective 1/1/88. Statutory Authority: RCW 76.09.040 and 76.09.050. 82-16-077 (Resolution No. 82-1), § 222-24-050, filed 8/3/82, effective 10/1/82; Order 263, § 222-24-050, filed 6/16/76.]

WAC *222-24-051 Road maintenance schedule. All forest roads must be covered under an approved road maintenance and abandonment plan within 5 years of the effective date of this rule or by December 31, 2005. This includes all roads that were constructed or used for forest practices after 1974. Inventory and assessment of orphan roads must be included in the road maintenance and abandonment plans as specified in WAC 222-24-052(4).

*(1) Landowners with 500 acres or more of forest land in a DNR region must maintain a schedule of submitting plans to the department that cover 20% of their roads or land base each year.

*(2) Landowners with less than 500 acres of forest land in a DNR region must submit with their first forest practice application or notification a road maintenance and abandonment plan covering the roads that will be used by the application. Within one year of the date of submittal of the first forest practices application or notification or before the end of 2005, whichever comes first, the landowner must submit a road maintenance and abandonment plan for the rest of their ownership in that region. Once the plan is approved, the landowner must attach or reference the approved road maintenance and abandonment plan when submitting subsequent applications.

(3) For those portions of their ownership that fall within a watershed administrative unit covered by an approved watershed analysis plan, chapter 222-22 WAC, landowners may follow the watershed administrative unit-road maintenance plan, providing the roads they own are covered by the plan. A proposal to update the road plan to meet the current road maintenance standards must be submitted to the department for review on or before the next scheduled road maintenance plan review. If annual reviews are not required as part of the watershed analysis road plan, the plan must be updated by October 1, 2005. All roads in the planning area must be in compliance with the current rules by the end of calendar year 2015. See the board manual section 3 for road maintenance and abandonment plan outline.

*(4) Plans will be submitted by landowners on a priority basis. Road systems or drainages in which improvement, abandonment or maintenance have the highest potential benefit to the public resource are the highest priority. Based upon a "worst first" principle, work on roads that affect the following are presumed to be the highest priority:

(a) Basins containing, or road systems potentially affecting, waters which either contain a listed threatened or endangered fish species under the federal or state law or a water body listed on the current 303(d) water quality impaired list for road related issues.

(b) Basins containing, or road systems potentially affecting, sensitive geology/soils areas with a history of slope failures.

(c) Road systems or basins where other restoration projects are in progress or may be planned coincident to the implementation of the proposed road plan.

(d) Road systems or basins likely to have the highest use in connection with future forest practices.

*(5) Based upon a "worst first" principle, road maintenance and abandonment plans must pay particular attention to:

- (a) Roads that block fish passage;
- (b) Roads that deliver sediment to typed water;
- (c) Roads with evidence of existing or potential instability that could adversely affect public resources;
- (d) Roads or ditchlines that intercept ground water; and
- (e) Roads or ditches that deliver surface water to any typed waters.

*(6) Road maintenance and abandonment plans must include:

- (a) Ownership maps showing all forest roads, including orphan roads; planned and potential abandonment, all typed water, Type A and B Wetlands that are adjacent to or crossed by roads, stream adjacent parallel roads and an inventory of the existing condition; and
- (b) Detailed description of the first years work with a schedule to complete the entire plan within fifteen years; and
- (c) Standard practices for routine road maintenance; and
- (d) Storm maintenance strategy that includes prestorm planning, emergency maintenance and post storm recovery; and

(e) Inventory and assessment of the risk to public resources or public safety of orphaned roads; and

(f) The landowner or landowner representative's signature.

*(7) Priorities for road maintenance work within plans are:

(a) Removing blockages to fish passage beginning on roads affecting the most habitat first, generally starting at the bottom of the basin and working upstream;

(b) Preventing or limiting sediment delivery (areas where sediment delivery or mass wasting will most likely affect bull trout habitat will be given the highest priority);

(c) Correcting drainage or unstable sidecast in areas where mass wasting could deliver to public resources or threaten public safety;

(d) Disconnecting road drainage from typed waters;

(e) Repairing or maintaining stream-adjacent parallel roads with an emphasis on minimizing or eliminating water and sediment delivery;

(f) Improving hydrologic connectivity by minimizing the interruption of surface water drainage, interception of subsurface water, and pirating of water from one basin to another; and

(g) Repair or maintenance work which can be undertaken with the maximum operational efficiency.

*(8) Initial plans for landowners with 500 acres or more of forest land in a DNR region must be submitted to the department during the year 2001 as scheduled by the department.

*(9) Each year on the anniversary date of the plan's submittal, landowners must report work accomplished for the previous year and submit to the department a detailed description of the upcoming year's work including modifications to the existing work schedule.

The department's review and approval will be conducted in consultation with the department of ecology, the department of fish and wildlife, affected tribes and interested parties. The department will:

(a) Review the progress of the plans annually with the landowner to determine if the plan is being implemented as approved; and

(b) The plan will be reviewed by the department and approved or returned to the applicant with concerns that need to be addressed within forty-five days of the plan's submittal.

(c) Additional plans will be signed by the landowner or the landowner's representative.

*(10) The department will facilitate an annual water resource inventory area (WRIA) meeting with landowners, the department of fish and wildlife, the department of ecology, affected tribes, the National Marine Fisheries Service, the U.S. Fish and Wildlife Service, affected counties, local U.S. Forest Service, watershed councils, and other interested parties. The purpose of the meeting is to:

(a) Suggest priorities for road maintenance and abandonment planning; and

(b) Exchange information on road maintenance and stream restoration projects.

*(11) A forest practice application with a detailed one to five year work plan associated with a submitted road maintenance and abandonment plan will be treated as a multiyear permit. The application will be reviewed, approved, conditioned and/or disapproved within 45 days of acceptance. The application will be reviewed in consultation with the department of ecology, department of fish and wildlife, affected tribes and interested parties.

*(12) Regardless of the schedule for plan development, roads that are currently used or proposed to be used for timber hauling must be maintained in a condition that prevents potential or actual damage to public resources. If the department determines that log haul on such a road will cause or has the potential to cause material damage to a public resource, the department may require the applicant to submit a plan to address specific issues or segments on the haul route.

*(13) If a landowner is found to be out of compliance with the work schedule of an approved road maintenance and abandonment plan and the department determines that this work is necessary to prevent potential or actual damage to public resources, then the department will exercise its authority under WAC 222-46-030 (notice to comply) and WAC 222-46-040 (stop work order) to restrict use of the affected road segment.

(a) The landowner may submit a revised maintenance plan for maintenance and abandonment and request permission to use the road for log haul.

(b) The department must approve use of the road if the revised maintenance plan provides protection of the public resource and maintains the overall schedule of maintenance of the road system or basin.

*(14) If a landowner is notified by the department that their road(s) has the potential to damage public resources, the landowner must, within 90 days, submit to the department for review and approval a plan or plans for those drainages or road systems within the area identified by the department.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-24-051, filed 5/30/01, effective 7/1/01.]

WAC 222-24-052 Road maintenance. *(1) **Forest roads.** Forest roads are defined in WAC 222-16-010. To the extent necessary to prevent potential or actual damage to public resources, the following maintenance shall be conducted on forest roads, except as addressed in subsections *(5) and *(6) of this section:

(a) Drainage structures shall be kept functional.

(b) Ground water that has been captured by ditchline must be diverted onto stable portions of the forest floor by using ditchouts, culverts or drivable dips.

(c) Road surface must be maintained as necessary to:

(i) Minimize erosion of the surface and the subgrade; and

(ii) Minimize direct delivery of surface water to typed water; and

(iii) Minimize sediment entry to typed water; and

(iv) Direct any ground water that is captured by the road surface onto stable portions of the forest floor.

(d) During and on completion of the following operations, the road surface shall be crowned, outsloped, or water barred and berms removed from the outside edge except those intentionally constructed for protection of fills:

(i) Log, pulp, chip, or specialized forest product haul;

(ii) Rock haul; and

(iii) Road building.

(e) Before the first winter rainy season following termination of operations, drainage structures must be cleared and the road surface must be crowned, outsloped, water barred or otherwise left in a condition which prevents accelerated erosion, interruption of water movement within wetlands, mass wasting, or direct delivery of water or sediment to a typed water. (See the board manual section 3 for specific guidance.)

(f) Thereafter, except as provided in (d) of this subsection, the landowner must clear or repair ditches or drainage structures that are known or should be known to be nonfunctional and causing or likely to cause material damage to a public resource.

(g) The landowner will not be liable for penalties or monetary damages, under the act, for damage occurring from a condition brought about by public use, unless the landowner fails to make repairs as directed by a notice to comply.

(h) During the regular course of road maintenance on stream-adjacent parallel roads, down wood that is blocking vehicle passage shall be placed on the side of the road closest to the adjacent water.

*(2) **Additional drainage structure maintenance.** If the department determines, based on a field inspection and physical evidence, that the above road maintenance has been or will be inadequate to protect public resources, and that additional measures will provide adequate protection, the department will require the landowner or operator to install additional or larger drainage structures or other drainage improvements identified as necessary by the department.

*(3) **Abandoned roads.** An abandoned road is a road which the forest landowner has abandoned in accordance with procedures of (a) through (e) of this subsection. Roads

are exempt from maintenance under this section only after (e) of this subsection is completed.

(a) Roads are outsloped, water barred, or otherwise left in a condition suitable to control erosion and maintain water movement within wetlands and natural drainages;

(b) Ditches are left in a suitable condition to reduce erosion;

(c) The road is blocked so that four wheel highway vehicles cannot pass the point of closure at the time of abandonment;

(d) Water crossing structures and fills on all typed waters are removed, except where the department determines other measures would provide adequate protection to public resources; and

(e) The department shall determine whether the road has been abandoned according to procedures of this subsection. If the department determines the road is properly abandoned, it must notify the landowner in writing within thirty days that the road is officially abandoned.

***(4) Orphaned roads.** An orphaned road is a road or railroad grade that the forest landowner has not used for forest practices activities since 1974. Many of these roads are overgrown or closed off, but have not satisfied the abandonment process.

(a) An inventory and assessment, of the risk to public resources, or public safety must be completed by the landowner in conjunction with the road maintenance and abandonment plan.

(b) Five years after the effective date of this rule, when the extent of any problems associated with the orphaned roads is known, the hazard-reduction statute will be evaluated to determine if it is still needed and if funds for cost-sharing are needed to effect repair or abandonment of orphan roads. See RCW 76.09.300.

(c) Landowners are not obligated under this rule to repair or abandon such roads before the end of the five year period, but they can voluntarily take this action.

***(5) Brush control.** Chemical control of roadside brush will be done in accordance with WAC 222-38-020.

***(6) Road surface treatment.**

(a) Apply oil to the road surface only when the temperature is above 55 degrees F and during the season when there is a minimal chance of rain for the next 48 hours. Use of waste oil is subject to RCW 70.951.060(5).

(b) Water the road surface prior to application of oil to assist in penetration.

(c) Construct a temporary berm along the road shoulder wherever needed to control runoff of the applied chemical.

(d) Take extreme care to avoid excess application of road chemicals. Shut off the flow at all bridges.

(e) Dispose of the rinse water fluids on the road surface or in a place safe from potential contamination of water when cleaning out chemical storage and application equipment tanks used for storage and application of road treatment materials.

(f) Comply with WAC 222-38-020 when using dry road chemicals.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-24-052, filed 5/30/01, effective 7/1/01.]

WAC 222-24-060 Rock quarries, gravel pits, borrow pits, and spoil disposal areas. Not covered by the Surface Mine Reclamation Act of 1971 (chapter 78.44 RCW).

***(1) Location of pits.** Except as approved by the department, rock quarries and gravel pits opened after January 1, 1975 shall be located above the 100-year flood level.

***(2) Location of spoil disposal areas.** Except as approved by the department, spoil disposal areas shall be located:

(a) Above the 100-year flood level.

(b) Where the final slope after disposal will be no steeper than 1 1/2:1.

(c) Where practical, on areas having low potential timber productivity.

(d) Where the risk of sediment delivery from soil erosion and/or mass soil movement is minimal.

(e) All spoils shall be placed to allow drainage without additional water ponding.

(f) All spoils shall be located outside of Type A and Type B Wetlands and their wetland management zones. Spoils shall not be located within the boundaries of forested wetlands without written approval of the department and unless a less environmentally damaging location is unavailable. No spoil area greater than 0.5 acre in size shall be allowed within wetlands. (See WAC 222-24-015.)

***(3) Pit drainage.** During construction and use of rock quarries, gravel pits, or borrow pits, runoff water shall be either diverted onto a stable portion of the forest floor or be passed through one or more settling basins as approved by the department.

***(4) Rehabilitation required.** All rock quarries, gravel pits, spoil disposal areas and borrow pits used after January 1, 1975 shall be reclaimed within 2 years from the time the rock or gravel source is either exhausted or abandoned.

***(5) Rehabilitation standards.** Where rehabilitation is required:

(a) Remove all deleterious material that has potential for damaging the public resource, the soil productivity, or that would prevent reforestation of an otherwise plantable area.

(b) Grade slopes to less than the angle of repose unless otherwise approved.

(c) Reforest in accordance with chapter 222-34 WAC to the extent practical.

(d) Seed nonforested exposed erodible soils with grass, clover or other ground cover.

***(6) Major spoil disposal operations.** Where a spoil disposal operation involves more than 1,000 cubic yards of spoils:

(a) The spoils shall be placed to provide drainage onto a stable portion of the forest floor without water ponding within the disposal area;

(b) The site shall be reforested in accordance with chapter 222-34 WAC to the extent practical; and

(c) If significant erosion of the spoils develops, the eroding areas shall be water barred and any unreforested areas shall be matted, mulched, or seeded with grass or ground cover.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-24-060, filed 5/30/01, effective 7/1/01. Statutory Authority: RCW 76.09.040, 76.09.050 and chapter 34.05

RCW 92-15-011, § 222-24-060, filed 7/2/92, effective 8/2/92. Statutory Authority: RCW 76.09.040, 87-23-036 (Order 535), § 222-24-060, filed 11/16/87, effective 1/1/88; Order 263, § 222-24-060, filed 6/16/76.]

Chapter 222-30 WAC TIMBER HARVESTING

WAC

222-30-010	Policy—Timber harvesting.
*222-30-020	Harvest unit planning and design.
*222-30-021	Western Washington riparian management zones.
222-30-022	*Eastern Washington riparian management zones.
222-30-023	Riparian management zones for exempt 20-acre parcels.
222-30-025	Even-aged harvest—Size and timing.
222-30-030	Stream bank integrity.
222-30-040	Shade requirements to maintain water temperature.
222-30-045	Salvage logging within riparian management zones.
222-30-050	Felling and bucking.
222-30-060	Cable yarding.
222-30-070	Ground-based logging systems.
222-30-100	Slash disposal or prescribed burning.
222-30-110	Timber harvesting on islands.

WAC 222-30-010 Policy—Timber harvesting. *(1)

This chapter covers all removal of timber from forest lands in commercial operations, commercial thinning, salvage of timber, relogging merchantable material left after prior harvests, postharvest cleanup, and clearing of merchantable timber from lands being converted to other uses. It does not cover removal of incidental vegetation or removal of firewood for personal use. To the extent practicable, the department shall coordinate activities using a multiple disciplinary planning approach.

*(2) The goal of riparian rules is to protect aquatic resources and related habitat to achieve restoration of riparian function; and the maintenance of these resources once they are restored.

*(3) The rules provide for the conversion and/or treatment of riparian forests which may be understocked, overstocked or uncharacteristically hardwood dominated while maintaining minimum acceptable levels of function on a landscape scale. The diversity of riparian forests across the landscapes is addressed by tailoring riparian prescriptions to the site productivity and tree community at any site.

*(4) Wetland areas serve several significant functions in addition to timber production: Providing fish and wildlife habitat, protecting water quality, moderating and preserving water quantity. Wetlands may also contain unique or rare ecological systems. The wetland management zone and wetland requirements specified in this chapter are designed to protect these wetland functions when measured over the length of a harvest rotation, although some of the functions may be reduced until the midpoint of the timber rotation cycle. Landowners are encouraged to voluntarily increase wetland acreage and functions over the long-term. Other laws or rules and/or permit requirements may apply. See chapter 222-50 WAC.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9), 01-12-042, § 222-30-010, filed 5/30/01, effective 7/1/01. Statutory Authority: RCW 76.09.040, 76.09.050 and chapter 34.05 RCW. 92-15-011, § 222-30-010, filed 7/2/92, effective 8/2/92. Statutory Authority: RCW 76.09.040, 88-19-112 (Order 551, Resolution No. 88-1), § 222-30-010, filed 9/21/88, effective 11/1/88. Statutory Authority: RCW 76.09.040 and 76.09.050. 82-16-077 (Resolution No. 82-1), § 222-30-010, filed 8/3/82, effective 10/1/82; Order 263, § 222-30-010, filed 6/16/76.]

WAC *222-30-020 Harvest unit planning and design.

(1) **Logging system.** The logging system 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.

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

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

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

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

*(6) **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 (30 to 70%) 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)(e) of this section) are modified as follows: For purposes of distribution, no point within the harvest unit shall be more than 1000 feet from a wildlife reserve tree and green recruitment tree retention area.

(e) Approximate determination of the boundaries of forested wetlands greater than 3 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.

*(7) **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 75 trees per acre of WMZ greater than 6 inches dbh in Western Washington and greater than 4 inches dbh in Eastern Washington, 25 of which shall be greater than 12 inches dbh including 5 trees greater than 20 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 100 feet as measured parallel to the wetland edge. Openings within WMZs shall be no closer than 200 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 10% or more of a harvest unit lies within a wetland management zone and either the harvest unit is a clearcut of 30 acres or less or the harvest unit is a partial cut of 80 acres or less, leave not less than 50% of the trees required in (b) of this subsection.

*(8) **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 nonforested 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.

(9) **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.

(10) **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 insure 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.

(11) **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 3 wildlife reserve trees, 2 green recruitment trees, and 2 down logs shall be left. In Eastern Washington for each acre harvested 2 wildlife reserve trees, 2 green recruitment trees, and 2 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 2 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 10 or more feet in height and 12 or more inches dbh shall be counted toward wildlife reserve tree retention requirements. In Eastern Washington, only those wildlife reserve trees 10 or more feet in height and 10 or more inches dbh shall be counted toward wildlife reserve tree retention requirements. Green recruitment trees, 10 or more inches dbh and 30 or more feet in height and with at least 1/3 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 12 inches and a length greater than or equal to 20 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 800 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.

***(12) 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), 222-30-045(2), and chapter 220-110 WAC (Hydraulic code rules).

(13) 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 *(5)(a), 222-24-060(1), and chapter 220-110 WAC (Hydraulic code rules). No salvage may take place within the bankfull width of any typed water (see WAC 222-30-045).

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9), 01-12-042, § 222-30-020, filed 5/30/01, effective 7/1/01. Statutory Authority: RCW 76.09.040 and chapter 34.05 RCW. 97-24-091, § 222-30-020, filed 12/3/97, effective 1/3/98; 97-15-105, § 222-30-020, filed 7/21/97, effective 8/21/97; 94-17-033, § 222-30-020, filed 8/10/94, effective 8/13/94; 93-12-001, § 222-30-020, filed 5/19/93, effective

6/19/93. Statutory Authority: RCW 76.09.060, 76.09.040 and chapter 34.05 RCW. 92-23-056, § 222-30-020, filed 11/17/92, effective 12/18/92. Statutory Authority: RCW 76.09.040, 76.09.050 and chapter 34.05 RCW. 92-15-011, § 222-30-020, filed 7/2/92, effective 8/2/92. Statutory Authority: RCW 76.09.040, 88-19-112 (Order 551, Resolution No. 88-1), § 222-30-020, filed 9/21/88, effective 11/1/88; 87-23-036 (Order 535), § 222-30-020, filed 11/16/87, effective 1/1/88; Order 263, § 222-30-020, filed 6/16/76.]

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 the 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 the 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 140 years old.

Site Class	Desired future condition target basal area per acre (at 140 years)
I	285 sq. ft.
II	275 sq. ft.
III	258 sq. ft.
IV	224 sq. ft.
V	190 sq. ft.

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 the 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 57 conifer trees per acre 8 inches or larger dbh in the conversion area;
- There are fewer than 100 conifer trees per acre larger than 4 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 500 feet above and below 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 75-foot buffer with trees at least 40 feet tall on both sides of the stream for 500 feet above and below the proposed harvest unit (or the length of the stream, if less);
- The landowner has performed post-harvest treatment to the satisfaction of the department on previously converted hardwood-dominated stands.

(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 500 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 50% 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 75-foot buffer of trees at least 40 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 75-foot buffer of trees at least 40 feet tall.

- Not more than 25% 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 20 inches dbh shall not be harvested;

- Not more than 10% of the conifer stems greater than 8 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 8 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 150 conifer trees greater than 8 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:

No inner zone management RMZ widths for Western Washington

Site Class	RMZ width	Core zone width (measured from outer edge of bank-full width or outer edge of CMZ of water)	Inner zone width (measured from outer edge of core zone)		Outer zone width (measured from outer edge of inner zone)	
			stream width ≤10'	stream width >10'	stream width ≤10'	stream width >10'
I	200'	50'	83'	100'	67'	50'
II	170'	50'	63'	78'	57'	42'
III	140'	50'	43'	55'	47'	35'
IV	110'	50'	23'	33'	37'	27'
V	90'	50'	10'	18'	30'	22'

(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 75 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 57.

Option 1. Thinning from below.

Site class	RMZ width	Core zone width (measured from outer edge of bank-full width or outer edge of CMZ of water)	Inner zone width (measured from outer edge of core zone)		Outer zone width (measured from outer edge of inner zone)	
			stream width ≤10'	stream width >10'	stream width ≤10'	stream width >10'
I	200'	50'	83'	100'	67'	50'
II	170'	50'	63'	78'	57'	42'
III	140'	50'	43'	55'	47'	35'
IV	110'	50'	23'	33'	37'	27'
V	90'	50'	10'	18'	30'	22'

(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 10 feet wide and RMZs in site class I and II for streams greater than 10 feet wide. Harvest must comply with the following:

- Harvest is not permitted within 30 feet of the core zone for streams less than or equal to 10 feet wide and harvest is not permitted within 50 feet of the core zone for streams greater than 10 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 20 conifers per acre, with a minimum 12-inch dbh, will be retained in any portion of the inner zone where harvest occurs. These riparian leave trees will not be counted or considered towards meeting applicable stand requirements nor can the number be reduced below 20 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 10 trees per acre.

Option 2. Leaving trees closest to water.

Site class	RMZ width	Core zone width (measured from outer edge of bankfull width or outer edge of CMZ of water)	Inner zone width				Outer zone width (measured from outer edge of inner zone)	
			stream width ≤10'	stream width ≤10'	stream width >10'	stream width >10'	stream width ≤10'	stream width >10'
				minimum floor distance		minimum floor distance		
			(measured from outer edge of core zone)	(measured from outer edge of core zone)	(measured from outer edge of core zone)	(measured from outer edge of core zone)		
I	200'	50'	84'	30'	84'	50'	66'	66'
II	170'	50'	64'	30'	70'	50'	56'	50'
III	140'	50'	44'	30'	**	**	46'	**

** 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 10 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 20 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:

Outer zone riparian leave tree requirements

Application	Leave tree spacing	Tree species	Minimum dbh required
Outer zone	Dispersed	Conifer	12" dbh or greater
Outer zone	Clumped	Conifer	12" dbh or greater
Protection of sensitive features	Clumped	Trees representative of the overstory including both hardwood and conifer	8" dbh or greater

The 20 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 12 inches or greater, must be left dispersed approximately evenly throughout the outer zone. If riparian leave trees of 12" 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 8 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) Archeological or historical sites registered with the Washington state office of archeology and historic preservation. See WAC 222-16-050 (1)(g); or

(VII) Sites containing evidence of Native American cairns, graves or glyptic records. 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 12 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 the 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 10 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 6" dbh will offset conifer in the outer zone at a one-to-one ratio.

(III) Hardwood in a CMZ equal to or greater than 10" dbh will offset hardwood in the outer zone at a one-to-one ratio.

(IV) Hardwood in a CMZ equal to or greater than 10" 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 30-foot wide zone measured horizontally from the outer edge of the bank-full 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 10% 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 50-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:

Required no-harvest, 50-foot buffers on Type Np Waters.

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

(ii) No timber harvest is permitted in an area within 50 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 50 feet of the outer perimeter of a soil zone perennially saturated from a side-slope seep.

(iv) No timber harvest is permitted within a 56-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 56-foot radius buffer patch centered on a headwater spring or, in the absence of a headwater spring, on a point at the upper most 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 50% 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 100 feet in length. If an operating area is located more than 500 feet upstream from the confluence of a Type S or F Water and the Type Np Water is more than 1,000 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

Total length of a Type Np Water upstream from the confluence of a Type S or F Water	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
1000 feet or less	Refer to table in this subsection (i) above
1001 - 1300 feet	19%
1301 - 1600 feet	27%
1601 - 2000 feet	33%
2001 - 2500 feet	38%
2501 - 3500 feet	42%
3501 - 5000 feet	44%
Greater than 5000 feet	45%

The landowner must select the necessary priority areas for additional 2-sided buffers according to the following priorities:

- (A) Low gradient areas;
- (B) Perennial water reaches of nonsedimentary rock with gradients greater than 20% in the tailed frog habitat range;
- (C) Hyporheic and ground water 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.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-30-021, filed 5/30/01, effective 7/1/01.]

WAC 222-30-022 *Eastern Washington riparian management zones. For eastside forests, riparian management is intended to provide stand conditions that vary over time. It is designed to mimic eastside disturbance regimes within a range that meets functional conditions and maintains general forest health. These desired future conditions are a reference point on the pathway to restoration of riparian functions, not an end point of riparian stand development. These rules apply to all typed waters on forest land in Eastern 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 the following section.

Eastern Washington RMZ for streams with bankfull width of less than or equal to 15 feet wide

Site Class	Total RMZ Width	Core Zone Width From outer edge of bankfull width or outer edge of CMZ, whichever is greater	Inner Zone Width	Outer Zone Width
I	130'	30'	45'	55'
II	110'	30'	45'	35'
III	90'	30'	45'	15'
IV	75'	30'	45'	0'
V	75'	30'	45'	0'

Eastern Washington RMZ for streams with bankfull width of greater than 15 feet wide

Site Class	Total RMZ Width	Core Zone Width From outer edge of bankfull width or outer edge of CMZ, whichever is greater	Inner Zone Width	Outer Zone Width
I	130'	30'	70'	30'
II	110'	30'	70'	10'
III	100'	30'	70'	0'
IV	100'	30'	70'	0'
V	100'	30'	70'	0'

***(1) Eastern Washington RMZs on Type S and F Waters** have three zones: The core zone is nearest to the edge of the bankfull width or outer edge of the CMZ, whichever is greater. The inner zone is the middle zone, and the outer zone is furthest from the water. Permitted forest practices vary by timber habitat type and site class.

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 accordance with WAC 222-24-030 and 222-24-050, or the creation and use of yarding corridors in accordance with 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 the board manual, section 1.

(a) **Core zones.** The core zone extends 30 feet measured horizontally from the edge of the bankfull width or outer edge of the CMZ, whichever is greater, for all timber habitat types. No harvest or construction is allowed in the core zone except

as detailed in subsection (1) of this section. Any trees cut for or damaged by yarding corridors must be left on 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 replacement strategy.

(b) **Inner zones.** Width and leave tree requirements of the inner zone vary by timber habitat type as outlined below.

(i) Ponderosa pine timber habitat type.

(A) The width of the inner zone is 70 feet measured horizontally from the outer edge of the core zone on streams greater than 15 feet bankfull width or 45 feet measured horizontally from the outer edge of the core zone on streams with a bankfull width of 15 feet or less.

(B) No harvest is allowed in the inner zone except as described in (C) or (D) below, and as allowed for stream crossings and yarding corridors as described above in subsection (1).

(C) **Stands with a high basal area:** Harvest is permitted in the inner zone if the basal area in the inner zone is greater than 110 square feet per acre for conifer and hardwood trees equal to or greater than 6 inches dbh. The harvest must leave at least 50 trees per acre AND subject to subclause (III) below, a basal area of at least 60 square feet per acre. The trees to be left shall be selected as follows:

(I) The 21 largest trees per acre must be left; and

(II) An additional 29 trees per acre that are 10-inch dbh or greater must be left. If there are less than 29 10-inch dbh or greater trees per acre, leave the 29 largest trees. If there are more than 29 10-inch dbh or greater trees per acre, leave 29 10-inch dbh or greater trees per acre based on the following priority order:

- Trees that provide shade to water;
- Trees that lean towards the water;
- Trees of the preferred species, as defined in WAC 222-16-010;

• Trees that are evenly distributed across the inner zone.

(III) If more than 50 trees per acre are needed to meet the minimum basal area of 60 square feet per acre, then all trees greater than 6-inch dbh must be left. The minimum basal area to be left in the inner zone will be 60 square feet per acre provided that if the minimum basal area cannot be met with fewer than 100 trees of at least 6 inches dbh, then no more than 100 trees per acre will be required to be left regardless of the basal area.

(D) **Stands with low basal areas and high density:** Thinning is permitted if the basal area of all species is less than 60 square feet per acre AND there are more than 100 trees per acre. The thinning must leave a minimum of 100 trees per acre. The trees to be left must be selected as follows:

(I) The 50 largest trees per acre must be left; and

(II) An additional 50 trees per acre that are greater than 6 inches dbh must be left. If there are not 50 6-inch dbh or greater trees per acre, then all 6-inch dbh or greater trees per acre must be left plus the largest remaining trees to equal 50 trees per acre. Select the additional 50 trees based on the following priority order:

- Trees that provide shade to water;
- Trees that lean towards the water;
- Trees of the preferred species, as defined in WAC 222-16-010;

- Trees that are evenly distributed across the inner zone.

(E) To the extent down wood is available on site prior to harvest, at least twelve tons of down wood per acre must be left following harvest as follows:

(I) Six pieces greater than 16 inches diameter and 20 feet in length; and

(II) Four pieces greater than 6 inches in diameter and 20 feet in length.

(III) Landowner/operator is not required to create down wood.

(F) See **stream-adjacent parallel roads for all timber habitat types** in (iv) of this subsection if there is a stream-adjacent parallel road in this zone.

(ii) **Mixed conifer timber habitat type.**

(A) The width of the inner zone is 70 feet measured horizontally from the outer edge of the core zone on streams greater than 15 feet bankfull width or 45 feet measured horizontally from the outer edge of the core zone on streams with a bankfull width of 15 feet or less.

(B) No harvest is allowed in the inner zone except as described in (C) or (F) below, and as allowed for stream crossings and yarding corridors as described above in subsection (1).

(C) **Stands with a high basal area:** Harvest is permitted in the inner zone if the combined conifer and hardwood basal area for trees greater than 6 inches dbh is:

(I) Greater than 110 square feet per acre on low site indexes (site index less than 90); or

(II) Greater than 130 square feet per acre on medium site indexes (site index between 90 and 110); or

(III) Greater than 150 square feet per acre on high site indexes (site index greater than 110).

(D) The harvest must leave at least 50 trees per acre AND a basal area of at least:

(I) 70 square feet per acre on low site indexes; or

(II) 90 square feet per acre on medium site indexes; or

(III) 110 square feet per acre on high site indexes.

(E) The trees to be left shall be selected as follows:

(I) The 21 largest trees per acre must be left; and

(II) An additional 29 trees per acre that are 10-inch dbh or greater must be left. If there are less than 29 10-inch dbh or greater trees per acre, leave the 29 largest trees. If there are more than 29 10-inch dbh or greater trees per acre, leave 29 10-inch dbh trees per acre based on the following priority order:

- Trees that provide shade to water;

- Trees that lean towards the water;

- Trees of the preferred species, as defined in WAC 222-16-010; or

- Trees that are evenly distributed across the inner zone.

(III) If more than 50 trees per acre are needed to meet the minimum basal area for the site index, then all trees greater than 6 inches dbh must be left. The minimum basal area to be left in the inner zone will be 60 square feet per acre provided, that if the minimum basal area cannot be met with fewer than 100 trees at least 6 inches dbh, then no more than 100 trees per acre will be required to be left regardless of the basal area.

(F) **Stands with low basal areas and high density:** Thinning is permitted if the basal area of all species is less

than the minimum requirements for the site index in (C) of this subsection AND there are more than 120 trees per acre. The thinning must leave a minimum of 120 trees per acre. The trees to be left shall be selected as follows:

(I) The 50 largest trees per acre must be left; and

(II) An additional 70 trees per acre greater than 6 inches dbh must be left. If there are not 70 6-inch dbh or greater trees per acre, then all 6-inch dbh or greater trees per acre must be left plus the largest remaining trees to equal 70 trees per acre. Select the additional 70 trees based on the following priority order:

- Trees that provide shade to water;

- Trees that lean towards the water;

- Trees of the preferred species, as defined in WAC 222-16-010; or

- Trees that are evenly distributed across the inner zone.

(G) To the extent down wood is available on site prior to harvest, 20 tons of down wood per acre is required to be left following harvest as follows:

(I) 8 pieces greater than 16 inches diameter and 20 feet in length; and

(II) 8 pieces greater than 6 inches in diameter and 20 feet in length.

(III) Landowner/operator is not required to create down wood.

(H) See **stream-adjacent parallel roads for all timber habitat types** in (iv) of this subsection if there is a parallel road in this zone.

(iii) **High elevation timber habitat type.**

(A) The width of the inner zone is 45 feet measured horizontally from the outer edge of the core zone on streams equal to or less than 15 feet bankfull width or 70 feet measured horizontally from the outer edge of the core zone on streams with a bankfull width of greater than 15 feet.

(B) Follow stand requirements for Western Washington riparian management zones, WAC 222-30-021 (1)(b).

Note: Option 2 is not permitted for eastside use, because of the minimum floor (100') constraint..

(C) To the extent down wood is available prior to harvest, 30 tons per acre of down wood per acre must be left following harvest as follows:

(I) 8 pieces greater than 16 inches diameter and 20 feet in length; and

(II) 8 pieces greater than 6 inches in diameter and 20 feet in length.

(III) Landowner/operator is not required to create down wood.

(D) See **stream-adjacent parallel roads for all timber habitat types** in (iv) of this subsection if there is a parallel road in this zone.

(iv) **Stream-adjacent parallel roads for all timber habitat types in the inner zone.** The shade rule, WAC 222-30-040, must be met whether or not the inner zone includes a stream-adjacent parallel road. Where a stream-adjacent parallel road exists in the inner zone and the minimum required basal area cannot be met due to the presence of the road, then the location of the road determines the allowable operations as follows:

(A) For streams with a bankfull width that is greater than 15 feet:

(I) If the edge of the road closest to the stream is 75 feet or more from the outer edge of bankfull width of the stream or outer edge of CMZ, whichever is greater, **no harvest is permitted in the inner zone.** This includes trees within the inner zone on the uphill side of the road.

(II) No harvest is permitted within the inner zone on the streamside of the road. If the edge of the road closest to the stream is less than 75 feet from the outer edge of bankfull width of the stream or outer edge of CMZ, whichever is greater then:

- Additional leave trees equal in total basal area to the trees lost due to the road must be left near the streams in or adjacent to the unit to be harvested; (See the board manual section 7.)

- Where the additional leave trees providing fish habitat for water quality function are determined to be not available or not practical by the department, landowners and operators may alternatively employ site specific management activities to replace lost riparian functions that may include placement of large woody debris in streams. (See the board manual section 7.)

(B) For streams with a bankfull width less than 15 feet:

(I) If the edge of the road closest to the stream is 50 feet or more from the outer edge of bankfull width or outer edge of CMZ, whichever is greater, no harvest is permitted in the inner zone. This includes trees within the inner zone on the uphill side of the road.

(II) No harvest is permitted within the inner zone on the stream side of the road. If the edge of the road closest to the stream is less than 50 feet from the bankfull width or CMZ, whichever is greater then:

- Additional leave trees equal in total basal area to the trees lost due to the road must be left near the streams in or adjacent to the unit to be harvested. (See the board manual section 7.)

- Where the additional leave trees providing fish habitat for water quality function are determined to be not available or not practical by the department, landowners and operators may alternatively employ site specific management activities to replace lost riparian functions that may include placement of large woody debris in streams. (See the board manual section 7.)

(C) **Wildlife reserve trees.** Leave all wildlife reserve trees within the inner zone of the riparian management zone where operations in the vicinity do not violate the safety regulations (chapter 296-54 WAC and chapter 49-17 RCW administered by the department of labor and industries, safety division). Live wildlife reserve trees will contribute to the basal area requirements for inner zone leave trees and to leave tree counts if they are among the 21 largest trees per acre; or meet the requirement of an additional 29 leave trees per acre as per (E) above.

(c) **Outer zones.** This zone has three categories based on timber habitat type: Ponderosa pine, mixed conifer and high elevation. The width of this zone is 0 to 55 feet measured horizontally from the outer edge of the inner zone depending on the site class and stream width. (See WAC 222-16-010 definition of "RMZ outer zone.")

(i) Tree counts that must be left per acre, regardless of the presence of an existing stream-adjacent parallel road in the zone, are:

(A) Ponderosa pine habitat type - 10 dominant or codominant trees.

(B) Mixed conifer habitat type - 15 dominant or codominant trees.

(C) High elevation habitat type - See requirements for Western Washington RMZs in WAC 222-30-021 (1)(c).

(ii) Outer zone leave tree requirements in section (i) above may be reduced to 5 trees per acre in the ponderosa pine zone, 8 trees per acre in the mixed forest habitat type and 10 trees per acre in the high elevation habitat type, if the landowner voluntarily implements a LWD placement plan consistent with board manual section 26. If this strategy is chosen, a complete forest practices application must include a copy of the WDFW-approved hydraulics project approval (HPA) permit.

***(2) Eastern Washington protection along Type Np and Ns Waters.**

(a) An **equipment limitation zone** is a 30-foot wide zone measured horizontally from the outer edge of bankfull width of a Type Np or Ns Water where equipment is limited. It applies to all perennial and seasonal streams.

(i) On-site mitigation is required if any of the following activities exposes the soil more than 10% 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) Type Np Waters.

Within 50 horizontal feet of the outer edge of bankfull width of the stream, the landowner must identify either a partial cut and/or clearcut strategy for each unit to be harvested:

Once approved by the department, the selected strategy will remain in effect until July 1, 2051. If a landowner transfers title of the harvest unit, the landowner must provide written notice of this continuing obligation to the new owner and send a copy to the department. See WAC 222-20-055.

(i) For partial cuts:

(A) Basal areas requirements are the same as those specified for the timber habitat type in the Eastern Washington RMZ inner zone.

(B) Where a stream-adjacent parallel road exists, the basal area required in (A) of this subsection is required to be left. (See stream-adjacent parallel roads for Type Np Waters in (c) below.)

(C) The trees to be included in the basal area determination and left after harvest must include:

(I) The 10 largest trees per acre;

(II) Up to an additional 40 trees per acre greater than or equal to 10 inches dbh must be left. If all or some of the trees are not at least 10 inches dbh, then the largest of the remaining trees must be left. Select trees based on the following priority order:

- Provide streambank stability;
- Provide shade to water;
- Lean towards the water;
- Preferred species, as defined in WAC 222-16-010; or
- Evenly distributed; and

If the basal area target has not been met with the trees required above, up to an additional 50 trees are required greater than 6 inches in dbh based on the above priority order.

(D) Side slope seeps must be protected with a 50-foot partial cut buffer that meets the basal area and leave tree requirements of (A), (B), and (C) above. The buffer shall be measured from the outer perimeter of the perennially saturated soil zone.

(ii) **For clearcuts:**

When the clearcut strategy in this subsection is selected, the landowner must simultaneously designate a 2-sided no-harvest 50-foot buffer along the stream reach in the harvest unit that:

(A) Is equal in total length to the clearcut portion of the stream reach in the harvest unit; and

(B) Meets the upper end of basal area requirements for each respective timber habitat type in the Eastern Washington RMZ inner zone. See WAC 222-30-022 (1)(b)(i), (ii) or (iii).

(C) The streamside boundary of all clearcuts must:

(I) Not exceed in total 30% of the length of the stream reach in the harvest unit;

(II) Not exceed 300 continuous feet in length;

(III) Not be located within 500 feet of the intersection of a Type S or F Water; and

(IV) Not occur within 50 feet of the following sensitive sites as defined in WAC 222-16-010:

- The outer perimeter of a soil zone perennially saturated from a headwall seep;
- The outer perimeter of a soil zone perennially saturated from a side-slope seep;
- The center of a headwater spring;
- An alluvial fan;
- The center point of intersection of two or more Type Np Waters.

(c) **Stream-adjacent parallel roads for Type Np Waters.** If a road exists in a Type Np RMZ and the basal area required to be left cannot be met within 50 feet of the outer edge of bankfull width of the stream measured horizontally due to the presence of the road, then the distance of the road to the stream determines the allowable operations as follows:

(i) A road that is within 30 to 49 feet measured horizontally from the outer edge of bankfull width of the stream requires:

(A) A total of 100 feet of riparian management zone measured horizontally (both sides of the stream count towards the total) must be left in a manner to provide maximum functions for nonfish use streams. If harvest is taking place on only one side of the stream, then 50 feet of RMZ

width must be left, regardless of presence of a stream-adjacent parallel road. The width of the road is not counted as part of the total width of the RMZ.

(B) The location of the riparian management zone required in (A) of this subsection shall be based on the following priority order:

(I) Preferred: The area between the stream and the stream side edge of the road.

(II) The area that provides the most shade to the channel.

(III) The area that is most likely to deliver large woody debris to the channel.

(ii) A road that is within less than 30 feet from the outer edge of bankfull width of the stream measured horizontally requires, in addition to (c)(i)(A) and (B) of this subsection, that all trees between the stream and the streamside edge of the road must be left.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9), 01-12-042, § 222-30-022, filed 5/30/01, effective 7/1/01.]

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

Note: Compliance with this section does not insure 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. As required by RCW 76.13.130, these landowners are subject to the permanent riparian management zone rules and watershed analysis prescriptions in effect as of January 1, 1999, plus an additional fifteen percent volume requirement where watershed analysis prescriptions are not in effect.

***(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 (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 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 (d) 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 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 75' & over	115'	representative of stand	58 trees	29 trees
S or F Water under 75'	86'	representative of stand	115 trees	60 trees
F Water 5' & over	58'	2 to 1/12" or next largest available*	86 trees	29 trees
F Water less than 5'	29'	1 to 1/6" or next largest available*	29 trees	29 trees

* "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 sizes specified.

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

(d) Landowners must meet shade rule in effect January 1, 1999, (WAC 222-30-040).

(e) 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.

(f) 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 (c) of this subsection.

***(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: Chapter 34.05 RCW, RCW 76.09.040, [76.09.1050, [76.09.1370, 76.13.120(9), 01-12-042, § 222-30-023, filed 5/30/01, effective 7/1/01.]

WAC 222-30-025 Even-aged harvest—Size and timing. Except as provided in WAC 222-30-110, unit size and timing of timber harvesting by even-aged harvest methods is subject to the following requirements:

(1) Timber harvest which would result in an area larger than one hundred twenty acres and smaller than or equal to two hundred forty acres harvested by even-aged harvest methods on land owned or controlled by one landowner shall be reviewed by an interdisciplinary team, if the department determines that review is necessary. The area harvested by even-aged harvest methods, for the purposes of this subsection, shall be determined in accordance with subsection (3) of this section.

(2) Timber harvest which would result in an area larger than two hundred forty acres harvested by even-aged harvest methods on land owned or controlled by one landowner shall be prohibited. The area harvested by even-aged harvest

method for the purposes of this subsection shall be determined in accordance with subsection (3) of this section.

(3) In calculating areas harvested by even-aged harvest methods, the area harvested by even-aged harvest methods shall include the acreage of that harvest unit and, all contiguous acreage harvested by even-aged harvest methods which is owned or controlled by the same landowner, except that acreage harvested by even-aged harvest methods sharing 10% or less of the common perimeter with the harvest unit under consideration shall not be considered contiguous for the purposes of this section.

(4) Harvest units shall be designed so that each harvest unit meets at least one of the following criteria:

(a) At least thirty percent of the unit's perimeter is in stands of trees that are thirty years of age or older;

(b) At least sixty percent of the unit's perimeter is in stands of trees that are fifteen years of age or older; or

(c) At least ninety percent of the unit's perimeter is in stands of trees that have survived on site a minimum of five growing seasons or, if not, have reached an average height of four feet.

Evaluation of unit perimeters is subject to the conditions specified in subsection (6) of this section.

(5) The requirements of subsections (2), (3), and (4) of this section shall apply only to timber harvest by even-aged harvest methods and shall not apply to timber harvest to salvage timber damaged by wind, disease, insects, fire, or other natural causes or to forest practices involving the clearing of land of brush or understocked hardwoods to convert to managed hardwoods or conifers.

(6) In evaluating the perimeters of harvest units pursuant to subsection (4) of this section, the following conditions shall apply:

(a) The following shall be treated as fully stocked, mature stands that will not be counted as contiguous acreage harvested by even-aged methods for the purposes of subsections (1) and (2) of this section and which will be counted as thirty-year-old stands for the purposes of subsection (4) of this section:

(i) In Western Washington, a wetland management zone that is twice the width required by WAC 222-30-021 and 222-30-023(1) along Type S or F Waters;

(ii) In Eastern Washington, wetland management zone that is the width required by WAC 222-30-022 and 222-30-023(2);

(iii) Designated upland management areas;

(iv) Lands in a shoreline of statewide significance where harvest is limited under RCW 90.58.150;

(v) The portions of a perimeter consisting of land in uses other than forest land, such as land in agricultural or residential use and natural openings, and land not owned or controlled by the landowner who has proposed the harvest unit subject to the application under consideration;

*(vi) Along Type S and F Waters, a continuous buffer meeting the requirements of WAC 222-30-021 and 222-30-022;

*(vii) Along Type Np Waters, a continuous 50-foot wide no-harvest, no-salvage buffer.

(b) A stand of trees other than those described in (a) of this subsection shall be treated as a certain age class only if the stand is at least three hundred feet wide;

(c) Timber harvest units subject to an approved application or a notification for timber harvesting shall be treated as if the timber harvesting operation proposed in the application or notification were completed and regeneration not yet established.

(7) This section shall not apply to notifications or applications approved before July 1, 1992, or to one renewal of those applications, and shall not apply to timber that the landowner or operator demonstrated to the department is subject to a cutting right created by written contract before July 1, 1992, which cutting right would expire before all the timber subject to it could reasonably be harvested.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-30-025, filed 5/30/01, effective 7/1/01. Statutory Authority: RCW 76.09.040, 76.09.050 and chapter 34.05 RCW. 92-15-011, § 222-30-025, filed 7/2/92, effective 8/2/92.]

WAC 222-30-030 Stream bank integrity. *In the RMZ core zone for Type S and F Waters and RMZs for Type Np Waters, the operator shall:

(1) **Avoid disturbing brush** and similar understory vegetation;

(2) **Avoid disturbing stumps** and root systems and any logs embedded in the bank;

(3) **Leave high stumps** where necessary to prevent felled and bucked timber from entering the water;

(4) **Leave trees** which display large root systems embedded in the bank.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-30-030, filed 5/30/01, effective 7/1/01. Statutory Authority: RCW 76.09.040, 87-23-036 (Order 535), § 222-30-030, filed 11/16/87, effective 1/1/88; Order 263, § 222-30-030, filed 6/16/76.]

WAC 222-30-040 Shade requirements to maintain water temperature. *(1) Within the bull trout overlay, all available shade will be retained within 75 feet from the edge of the bankfull width or the outer edge of the CMZ (whichever is greater) along Type S or F Waters. (See board manual, section 1.)

*(2) Determination of adequate shade outside the bull trout overlay. The temperature prediction method mentioned in subsections (2) and (3) of this section shall be used to determine appropriate shade levels along Type S and F Waters to prevent excessive water temperatures, which may have detrimental impact on aquatic resources. No tree may be harvested within 75 feet from the edge of the bankfull width or the outer edge of the CMZ (whichever is greater) of any Type S or F Water if, according to the methodology, that tree is providing shade to the stream necessary to maintain compliance with temperature standards. If a landowner elects to remove any tree within 75 feet of any Type S or F Water, the landowner must demonstrate, using the methods in the board manual section 1, that the removal of the tree would not be contrary to the restrictions of this subsection.

*(3) **Temperature prediction method.** In addition to the riparian management zone requirements, leave trees shall

be retained in riparian management zones on 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.

*(4) **Leave tree requirements for shade.** The method described in subsection (3) of this section must be used to establish the minimum required 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.

*(5) **Shade requirements must be satisfied whether or not the inner zone includes a stream-adjacent parallel road.** Nothing will preclude or limit the harvest of shade trees in connection with the construction and maintenance of road crossings or the creation and use of yarding corridors. (See WAC 222-30-060(1).)

*(6) **Waivers.** The department may waive or modify the shade requirements where:

The temperature method indicates that additional shade will not affect water temperature.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-30-040, filed 5/30/01, effective 7/1/01. Statutory Authority: RCW 76.09.040 and chapter 34.05 RCW. 93-12-001, § 222-30-040, filed 5/19/93, effective 6/19/93. Statutory Authority: RCW 76.09.040, 76.09.050 and chapter 34.05 RCW. 92-15-011, § 222-30-040, filed 7/2/92, effective 8/2/92. Statutory Authority: RCW 76.09.040, 87-23-036 (Order 535), § 222-30-040, filed 11/16/87, effective 1/1/88. Statutory Authority: RCW 76.09.040 and 76.09.050. 82-16-077 (Resolution No. 82-1), § 222-30-040, filed 8/3/82, effective 10/1/82; Order 263, § 222-30-040, filed 6/16/76.]

WAC 222-30-045 Salvage logging within riparian management zones. Salvage logging within a riparian management zone is based upon the zone (core, inner or outer) in which the tree was originally located, applicable riparian stand requirements and the extent of previous harvest activities in the zone.

*(1) **Salvage logging within the outer edge of bankfull width of any typed water.** No salvage may take place within the outer edge of bankfull width of any typed water.

(2) **Salvage logging in a core zone or channel migration zone.** No salvage may take place within the RMZ core zone or a channel migration zone, including any portion of those trees that may have fallen outside of these zones.

(3) **Salvage logging in the inner zone.** Salvage may not take place within the inner zone if the stand requirements cannot be met by the residual stand. If the proposed salvage involves down tree(s) that originated from the inner zone, salvage of down wood may only be permitted if the down wood was not needed to meet stand requirements in the inner zone. Salvage of any existing down wood may not take place if the unremoved balance of down wood is insufficient to meet the regional down wood guidelines in (a) and (b) of this subsection. Salvage within the inner zone must be conducted to protect residual undamaged trees within the inner zone. Down wood guidelines for salvage in RMZ inner zones are:

(a) **In Western Washington:**

Logs with a solid core	< 1 foot diameter	1-2 foot diameter	> 2 foot diameter	Total
Number of logs/acre	85	83	26	194

(b) **In Eastern Washington** ponderosa pine, mixed conifer, and high elevation habitat types:

Follow the down wood requirements for each habitat type in WAC 222-30-022.

(4) **Salvage logging in the outer zone.** Salvage may not take place within the outer zone if the riparian leave tree requirements cannot be met by the residual standing or down trees. If the proposed salvage involves tree(s) that are down that originated from the outer zone, salvage may only be permitted of down wood if the down wood was not needed to meet riparian leave tree requirements in the outer zone.

(5) Salvage logging in sensitive sites or Type Np riparian management zones. No salvage may take place within a sensitive site or a Type Np RMZ.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-30-045, filed 5/30/01, effective 7/1/01.]

WAC 222-30-050 Felling and bucking. *(1) Falling along water.

(a) No trees will be felled into Type S and F Waters RMZ core zones, sensitive sites, or Type A or B Wetlands except trees which cannot practically and safely be felled outside these areas using techniques in general use.

Such felling and removing in Type S or F Waters shall comply with the hydraulic project approval of the department of fish and wildlife.

(b) Within RMZ inner and outer zones, and wetland management zones, fall trees favorable to the lead consistent with safety standards to yard or skid away from the waters. The use of directional falling, lining, jacking and staged fall-ing techniques are required.

(c) Trees may be felled into Type Np Water if logs are removed as soon thereafter as practical. See forest practices board manual section 4 guidelines for clearing slash and debris from Type Np and Ns Water.

***(2) Bucking or limbing along water.**

No bucking or limbing shall be done on trees or portions thereof lying within the bankfull width of Type S, F or Np Waters, in the RMZ core zones, in sensitive sites, or in open water areas of Type A Wetlands. Such bucking or limbing in Type S or F Waters shall comply with the hydraulic project approval of the department of fish and wildlife.

***(3) Falling near riparian management zones, wetland management zones and setting boundaries.** Reasonable care shall be taken to avoid felling trees into riparian management zones, wetland management zones and areas outside the harvest unit.

(4) **Falling in selective and partial cuts.** Reasonable care shall be taken to fall trees in directions that minimize damage to residual trees.

(5) **Disturbance avoidance for northern spotted owls.** Felling and bucking within a SOSEA boundary shall not be allowed within 0.25 mile of a northern spotted owl site center

between March 1 and August 31 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).

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

WAC 222-30-060 Cable yarding. *(1) Type S and F Waters and sensitive sites. No timber shall be cable yarded in or across Type S or F Waters except where the logs will not materially damage the bed of waters, banks of sensitive sites, or riparian management zones. If yarding across Type S or F Waters is permitted, then yarding is limited to cable or other aerial logging methods. Any work in or above Type S or F Waters requires a hydraulics project approval (HPA). Any work in or above a Type Np or Ns Water may require a HPA. Logs must be fully suspended above the water unless otherwise allowed in the applicable HPA. Yarding corridors must be no wider or more numerous than necessary to accommodate safe and efficient transport of logs. Generally, yarding corridors should be located no closer to each other than 150 feet (measured edge to edge) and should be no wider than 30 feet. Safety is a prime consideration in the location of yarding corridors. Total openings resulting from yarding corridors must not exceed 20% of the stream length associated with the forest practices application. When changing cable locations, care must be taken to move cables around or clear of the riparian vegetation to avoid damage to riparian vegetation.

***(2) Type A or B Wetlands.** No timber shall be cable yarded in or across Type A or B Wetlands without written approval from the department and may require a hydraulic project approval from the department of fish and wildlife.

***(3) Deadfalls.** Logs which are firmly embedded in the bed or bank of Type S or F Waters shall not be removed or disturbed without hydraulic project approval from the department of fish and wildlife. Such activities in Type Np or Ns Waters may require a hydraulic project approval.

***(4) Yarding in riparian management zones, sensitive sites, and wetland management zones.** Where timber is yarded from or across a riparian management zone, sensitive

site, or wetland management zone reasonable care shall be taken to minimize damage to the vegetation providing shade to the stream or open water areas and to minimize disturbance to understory vegetation, stumps and root systems. Where practical and consistent with good safety practices, logs shall be yarded in the direction in which they lie and away from Type A or B Wetlands or Type S, F or Np Waters until clear of the wetland management zone or riparian management zone.

(5) Direction of yarding.

(a) Uphill yarding is preferred.

(b) Where downhill yarding is used, reasonable care shall be taken to lift the leading end of the log to minimize downhill movement of slash and soils.

*(c) When yarding parallel to a Type S or F Water channel below the 100-year flood level or within the riparian management zone, reasonable care shall be taken to minimize soil disturbance and to prevent logs from rolling into the stream, lake, pond, or riparian management zone.

(6) 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 1 and August 31 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).

(7) Disturbance avoidance for marbled murrelets.

Yarding or 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: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9), 01-12-042, § 222-30-060, filed 5/30/01, effective 7/1/01. Statutory Authority: RCW 76.09.040 and chapter 34.05 RCW. 97-24-091, § 222-30-060, filed 12/3/97, effective 1/3/98; 97-15-105, § 222-30-060, filed 7/21/97, effective 8/21/97. Statutory Authority: Chapters 76.09 and 34.05 RCW. 96-12-038, § 222-30-060, filed 5/31/96, effective 7/1/96. Statutory Authority: RCW 76.09.040, 76.09.050 and chapter 34.05 RCW. 92-15-011, § 222-30-060, filed 7/2/92, effective 8/2/92. Statutory Authority: RCW 76.09.040. 87-23-036 (Order 535), § 222-30-060, filed 11/16/87, effective 1/1/88. Statutory Authority: RCW 76.09.040 and 76.09.050. 82-16-077 (Resolution No. 82-1), § 222-30-060, filed 8/3/82, effective 10/1/82; Order 263, § 222-30-060, filed 6/16/76.]

WAC 222-30-070 Ground-based logging systems.

***(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 and with a hydraulic project approval issued by the department of fish and wildlife.

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. A hydraulic project approval issued by the depart-

ment of fish and wildlife may be required for ground-based equipment in Type Np or Ns Waters.

(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 the board manual section 3.

***(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(7).

(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 hydraulic project approval from the department of fish and wildlife. Such activities in Type Np or Ns Waters may require a hydraulic project approval.

***(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 minimized widespread soil compaction or, operations 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 30 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 200 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 1 and August 31, 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: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 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. 97-24-091, § 222-30-070, filed 12/3/97, effective 1/3/98; 97-15-105, § 222-30-070, filed 7/21/97, effective 8/21/97. Statutory Authority: Chapters 76.09 and 34.05 RCW. 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. 92-15-011, § 222-30-070, filed 7/2/92, effective 8/2/92. Statutory Authority: RCW 76.09.040, 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. 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.]

WAC 222-30-100 Slash disposal or prescribed burning. (1) **Slash disposal or prescribed burning are prohibited in the core zone.**

(2) Slash disposal techniques:

***(a)** Any conventional method of slash disposal may be used, except in Type A or B Wetlands, wetland management zones, and RMZ core and inner zones, Type Np RMZs, sensitive sites, and on sites where the department determines that a particular method would cause unreasonable risk to leave trees, public resources or site productivity. Conventional methods of slash disposal include the following: Controlled broadcast burning; pile or windrow and burn; pile or windrow without burning; mechanical scatter and compaction; scarification; chip, mulch or lop and scatter; burying; and physical removal from the forest lands: Provided, That on land shown to have low productivity potential the landowner or operator shall obtain the department's approval of its regeneration plan prior to utilizing controlled broadcast burning as a slash disposal technique. In riparian management inner zones, slash disposal shall be by hand, unless approved by the department. Slash disposal methods that employ machine piling, mechanical scatter and/or compaction, scarification or other techniques that result in soil disturbance shall not be allowed in equipment limitation zones. Scarification shall not be allowed within wetlands. Machine piling is not allowed in Type A and B Wetlands. Department approval, through a burning permit, is required for burning within an equipment limitation zone.

(b) All slash burning requires a burning permit from the department which provides for compliance with the smoke management plan and reasonable care to protect Type A and B Wetlands, wetland management zones, riparian management zones, equipment limitation zones, soil, residual timber, public resources, and other property.

(3) **Slash isolation, reduction, or abatement** is required when the department determines there is an extreme fire hazard according to law (see chapter 332-24 WAC).

(4) **Slash disposal** is required where the forest landowner has applied for and been granted an extension of time

for reforestation on the grounds that slash disposal is necessary or desirable before reforestation.

***(5) Removing slash and debris from streams.**

"Slash" or "debris" which can reasonably be expected to cause significant damage to the public resource shall be removed from Type S, F or Np Waters, to above the 100-year flood level and left in a location or manner minimizing risk of re-entry into the stream, lake or pond and if substantial accumulations of slash exist below the 100-year flood level of Type S, F or Np Waters, slash disposal is required. See the forest practices board manual section 4 for "Guidelines for clearing slash and debris from Type Np and Ns Waters."

***(6) Fire trails.**

(a) Construct drainage structures as needed to control erosion.

(b) Reasonable care shall be taken to minimize excavation during fire trail construction and sidecast shall only be permitted above the 100-year flood level.

(c) Fire trails shall not be located within Type A or B Wetlands, wetland management zones, equipment limitation zones or riparian zones without prior written approval of the department. Hand constructed fire trails are preferred within forested wetlands. When machine built fire trails are necessary for control of burning, trail width and excavation shall be minimized.

(7) Disturbance avoidance for northern spotted owls. Burning within a SOSEA boundary shall not be allowed within 0.25 mile of a northern spotted owl site center between March 1 and August 31, 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).

(8) Disturbance avoidance for marbled murrelets. Slash disposal or prescribed burning shall not be allowed within 0.25 mile of an occupied marbled murrelet site during 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: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-30-100, filed 5/30/01, effective 7/1/01. Statutory Authority: RCW 76.09.040 and chapter 34.05 RCW. 97-24-091, § 222-30-100, filed 12/3/97, effective 1/3/98; 97-15-105, § 222-30-100, filed 7/21/97, effective 8/21/97. Statutory Authority: Chapters 76.09 and 34.05 RCW. 96-12-038, § 222-30-100, filed 5/31/96, effective 7/1/96. Statutory Authority: RCW 76.09.040, 76.09.050 and chapter 34.05 RCW. 92-15-011, § 222-30-100, filed 7/2/92, effective 8/2/92. Statutory Authority: RCW 76.09.040. 87-23-036 (Order 535), § 222-30-100, filed 11/16/87, effective 1/1/88. Statutory Authority: RCW 76.09.040 and 76.09.050. 82-16-077 (Resolution No. 82-1), § 222-30-100, filed 8/3/82, effective 10/1/82; Order 263, § 222-30-100, filed 6/16/76.]

WAC 222-30-110 Timber harvesting on islands. On an island:

(1) A landowner shall not harvest by clearcut so that more than forty contiguous acres of that landowner's forest land are in a clearcut condition;

(2) Forest land harvested by clearcut remains in the clearcut condition until it has reached canopy closure or it has been reforested for at least ten years;

(3) Clearcut harvest units are contiguous unless separated by a buffer at least two hundred feet wide that has reached canopy closure, has been reforested for at least ten years, or is in a land use other than timber production.

(4) Within two hundred feet of the bankfull width of salt-water timber harvest shall be by selective harvest only, so that no more than thirty percent of the merchantable trees are harvested in any ten-year period: Provided, That other timber harvesting methods may be permitted in those limited instances where the topography, soil conditions, or silvicultural practices necessary for regeneration render selective harvest ecologically detrimental: Provided further, That harvest by clearcut on lands being converted to another use may be approved.

(5) The requirements of this section shall not apply to timber harvest or salvage timber damaged by wind, disease, insects, fire, or other natural causes.

(6) This section shall not apply to notifications or applications approved before July 1, 1992, or to one renewal of those applications, and shall not apply to timber that the landowner or operator demonstrated to the department is subject to a cutting right created by written contract before July 1, 1992, which cutting right would expire before all the timber subject to it could reasonably be harvested.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-30-110, filed 5/30/01, effective 7/1/01. Statutory Authority: RCW 76.09.040, 76.09.050 and chapter 34.05 RCW. 92-15-011, § 222-30-110, filed 7/2/92, effective 8/2/92.]

Chapter 222-34 WAC REFORESTATION

WAC

222-34-040

Site preparation and rehabilitation.

WAC 222-34-040 Site preparation and rehabilitation. *(1) Heavy equipment. Heavy equipment shall not be used in connection with site preparation or rehabilitation work:

(a) When, because of soil moisture conditions or the type of soils, undue compaction or unnecessary damage to soil productivity would occur or erosion would result in damage to water quality; or

(b) Within riparian management zones, Type A and B Wetlands, wetland management zones, or within equipment limitation zones of Type Np and Ns Waters on slopes of 30 percent or less. On slopes greater than 30 percent heavy equipment shall not operate within 50 feet of Type S through Ns Waters unless a site specific plan has been approved by the department.

*(2) Surface water drainage. Where site preparation or rehabilitation involves contouring or terracing of slopes, drainage ditches, or similar work:

(a) The gradient of ditches or other artificial water courses in erodible soils shall not cause significant stream, lake, pond, or wetland siltation.

(b) Ditches and other artificial water courses shall not discharge onto any road, landing or fill.

(c) Ditches and other artificial water courses shall not be constructed to discharge onto the property of other parties without their consent.

*(3) Stream channel realignment. Where work involves deepening, widening, straightening or relocating the channel; or bulkheading, riprapping or otherwise stabilizing the banks of a Type S or F Water, a hydraulic project approval is always required, and the work shall be done only:

(a) After consultation with any party having an appropriation permit or registered right to appropriate waters from the affected stream segment in cases of streams used for domestic water supplies.

(b) Where no significant adverse effects on either the peak or minimum water levels or flows downstream can be expected.

(c) In a manner not expected to result in long-term damage to public resources or to adjacent or downstream property.

(NOTE: OTHER LAWS AND RULES AND/OR PERMIT REQUIREMENTS MAY APPLY. SEE CHAPTER 222-50 WAC.)

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9), 01-12-042, § 222-34-040, filed 5/30/01, effective 7/1/01. Statutory Authority: RCW 76.09.040 and chapter 34.05 RCW. 93-12-001, § 222-34-040, filed 5/19/93, effective 6/19/93. Statutory Authority: RCW 76.09.040, 76.09.050 and chapter 34.05 RCW. 92-20-021, § 222-34-040, filed 9/28/92, effective 10/29/92. Statutory Authority: RCW 76.09.040, 87-23-036 (Order 535), § 222-34-040, filed 11/16/87, effective 1/1/88. Statutory Authority: RCW 76.09.040 and 76.09.050. 82-16-077 (Resolution No. 82-1), § 222-34-040, filed 8/3/82, effective 10/1/82; Order 263, § 222-34-040, filed 6/16/76.]

Chapter 222-38 WAC FOREST CHEMICALS

WAC

222-38-010	Policy—Forest chemicals.
222-38-020	Handling, storage, and application of pesticides.
222-38-030	Handling, storage, and application of fertilizers.
222-38-040	Handling, storage, and application of other forest chemicals.

WAC 222-38-010 Policy—Forest chemicals. *(1) Chemicals perform important functions in forest management. The purpose of these regulations is to regulate the handling, storage and application of chemicals in such a way that the public health, lands, fish, wildlife, aquatic habitat, wetland and riparian management zone vegetation will not be significantly damaged, and water quality will not be endangered by contamination. This section in no way modifies the state department of agriculture regulations governing chemicals.

*(2) These rules are intended to implement best management practices designed to eliminate the direct entry of pesticides to water. Best management also includes minimizing the entry of forest chemicals into channel migration zones, wetland management zones, sensitive sites, or the core or inner zones of riparian management zones and buffers on Type Np Waters. Significant damage for purposes of this section includes any damage that would inhibit or preclude the existing vegetation from protecting public resources.

(NOTE: OTHER LAWS AND RULES AND/OR PERMIT REQUIREMENTS MAY APPLY. SEE CHAPTER 222-50 WAC.)

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9), 01-12-042, § 222-38-010, filed 5/30/01, effective 7/1/01. Statutory Authority: RCW 76.09.040, 76.09.050 and chapter 34.05 RCW. 92-15-011, § 222-38-010, filed 7/2/92, effective 8/2/92. Statutory Authority: RCW 76.09.040 and 76.09.050. 82-16-077 (Resolution No. 82-1), § 222-38-010, filed 8/3/82, effective 10/1/82; Order 263, § 222-38-010, filed 6/16/76.]

WAC 222-38-020 Handling, storage, and application of pesticides. *(1) No pesticide leakage, contamination, pollution.

Transportation, handling, storage, loading, application, and disposal of pesticides shall be consistent with applicable label requirements and other state and federal requirements.

*(2) Mixing and loading areas.

(a) Mix pesticides and clean tanks and equipment only where any accidental spills would not enter surface water, channel migration zone or wetlands.

(b) Storage and loading areas should be located where accidental spillage of pesticides will not enter surface water or wetlands. If any pesticide is spilled, immediate appropriate procedures should be taken to contain it.

(c) Use devices or procedures to prevent "back siphoning" such as providing an air gap or reservoir between the water source and the mixing tank.

*(3) **Riparian management and wetland management zones.** Pesticide treatments within the RMZ core or inner zones, Type Np RMZs, sensitive sites or wetland management zones shall be by hand unless the department has approved a site specific plan with another method of treatment.

*(4) Aerial application of pesticides.

(a) To keep pesticides out of the water and wetlands, a buffer will be maintained during operations on all Type S and F Waters and Type Np and Ns surface waters and Type A and B Wetlands, as set forth in (a)(i) of this subsection. To protect riparian vegetation, pesticides must not be applied to the core and inner zone, channel migration zone of any Type S or F Waters, to Type Np RMZ's, to sensitive site buffers, or to Type A or B Wetland management zones. In addition, operators must maintain an offset from the outer edge of the inner zone and wetland management zones as set forth in (a)(i) and (ii) of this subsection. (See the board manual, section 12 for a detailed example.) Where the buffer and offset widths overlap, the distance of offset must be whichever distance is greater from Type S or F Waters or Type A or B Wetlands for the applicable conditions. Aerial applications of pesticides in and around Type Np or Ns Waters with surface water and Type B Wetlands must be buffered according to (a)(iii) of this subsection. (Note: These application requirements do not apply to B.t. (*Bacillus thuringiensis*). When applying B.t., the operator must meet all label requirements.)

(i) Buffers on Type S and F Waters.

		DETERMINING WIND FACTOR (See the board manual section 12 for detailed examples.)			
		Favorable		Calm or Unfavorable	
NOZZLE TYPE	APPLICATION HEIGHT	BUFFER ON WATER	OFFSET FROM INNER ZONE	BUFFER ON WATER	OFFSET FROM INNER ZONE
Regular Nozzle*	Low (≤ 16 ft.)	Width of the inner zone	As needed for safety	100 ft., or the inner zone, whichever is greater	50 ft.
	Medium (17-50 ft.)	Width of the inner zone	As needed for safety	250 ft.	N/A
	High (51-65 ft.)	Width of the inner zone	As needed for safety	325 ft.	N/A
Raindrop Nozzle (or other nozzles that result in the same size spray droplets)**	Low (≤ 16 ft.)	Width of the inner zone	As needed for safety	Width of inner zone	20 ft.
	Medium (17-50 ft.)	Width of the inner zone	As needed for safety	Width of inner zone	20 ft.
	High (51-65 ft.)	Width of the inner zone	As needed for safety	125 ft. or the inner zone, whichever is greater	20 ft.

* Coarse spray droplets = approximately 9% of spray-droplet volume ≤ 150 u

** Ultra coarse spray droplets = approximately 1% of spray-droplet volume ≤ 150 u

(ii) Buffers on Type A and B Wetlands.

		DETERMINING WIND FACTOR (See the board manual section 12 for detailed examples.)			
		Favorable		Calm or Unfavorable	
NOZZLE TYPE	APPLICATION HEIGHT	BUFFER ON WET-LAND	OFFSET FROM WMZ	BUFFER ON WET-LAND	OFFSET FROM WMZ
Regular Nozzle*	Low (≤ 16 ft.)	Width of the WMZ	As needed for safety	150 ft.	N/A
	Medium (17-50 ft.)	Width of the WMZ	As needed for safety	250 ft.	N/A
	High (51-65 ft.)	Width of the WMZ	As needed for safety	325 ft.	N/A
Raindrop Nozzle (or other nozzles that result in the same size spray droplets)**	Low (≤ 16 ft.)	Width of the WMZ	As needed for safety	Width of WMZ	20 ft.
	Medium (17-50 ft.)	Width of the WMZ	As needed for safety	Width of WMZ	20 ft.
	High (51-65 ft.)	Width of the WMZ	As needed for safety	125 ft. or the width of the WMZ, whichever is greater	20 ft.

* Coarse spray droplets = approximately 9% of spray-droplet volume ≤ 150 u

** Ultra coarse spray droplets = approximately 1% of spray-droplet volume ≤ 150 u

(iii) Buffers on Type Np or Ns Waters with surface water present and Type B Wetlands less than 5 acres.

		DETERMINING WIND FACTOR (See the board manual section 12 for detailed examples.)	
		Favorable	Calm or Unfavorable
Nozzle Type		Buffer	Buffer
Regular Nozzle		50 ft.	100 ft.
Raindrop Nozzle (or other nozzles that result in the same size spray droplets)*		50 ft.	70 ft.

* Coarse spray droplets = approximately 9% of spray-droplet volume ≤ 150 u

** Ultra coarse spray droplets = approximately 1% of spray-droplet volume ≤ 150 u

(b) The initial swath of aerial pesticides must be applied parallel to the applicable buffer strip identified in (a) of this subsection unless a deviation is approved in advance by the department. Drift control agents shall be required adjacent to buffer strips. Operators applying aerial pesticides must avoid applications that might result in drift causing direct entry of pesticides into riparian management core and inner zones, channel migration zones, sensitive sites, Type A and B Wetlands, wetland management zones, and all typed waters, except segments of Type Np and Ns Waters with no surface water present.

(c) Operators applying aerial pesticides must use a bucket or spray device capable of immediate shutoff.

(d) Operators applying aerial pesticides must shut off spray equipment during turns and over open water.

(e) Operators applying aerial pesticides near residences or agricultural land must either:

(i) Leave at least a 200 foot no application buffer strip around residences and 100 foot no application buffer strip adjacent to lands used for agriculture; or

(ii) Apply the pesticides using the widest buffer for the applicable wind conditions as determined by the applicable tables in (a) of this subsection. These provisions do not apply where the residences or agricultural land that could be affected by drift from the aerial application of the pesticide is owned by the forest landowner or where the aerial application is acceptable to the resident or landowner.

(f) The landowner shall identify for the operator the units to be sprayed and the untreated areas within the units with appropriately marked aerial photos or detailed planimetric maps. Before application of the pesticide an over-flight of the area shall be made by the pilot with the marked photos or maps. Stream and wetland buffers required under (a) of this subsection must be clearly visible from the air. The department may require additional field delineation of buffers where the operation is dependent on the use of ground cover features to determine unit area locations and where such ground cover is not readily distinguished from the no spray buffer areas.

(g) Aerial chemical application areas shall be posted by the landowner by signing at significant points of regular access at least 5 days prior to treatment. Posting shall remain at least 15 days after the spraying is complete. The department may require an extended posting period in areas where human use or consumption of plant materials is probable. Posting at formal, signed trailheads that are adjacent to aerially treated units is required. The signs will contain the name of the product used, date of treatment, a contact telephone number, and any applicable restrictions.

***(5) Ground application of pesticides with power equipment.**

Ground application of pesticides with power equipment is prohibited within the core and inner zone, channel migration zone of Type S and F Waters, unless necessary to meet requirements for noxious weed control. In addition, operators shall maintain a 25 foot no application buffer strip around Type A or B Wetlands and on all sides of all other surface waters. Provided, however, That dry stream segments (i.e., channels with no surface water at the time of application) do not require a buffer.

***(6) Hand application of pesticides.**

Pesticides being applied by hand must only be applied to specific targets, such as vegetation, trees, stumps, and burrows, or as bait or in traps. No pesticides may be applied by hand within the core zone, channel migration zone of Type S and F Waters unless necessary to meet requirements for noxious weed control.

***(7) Limitations on application.** Pesticides shall be applied only in accordance with all limitations:

(a) Printed on the United States Environmental Protection Agency container registration label, and/or

(b) Established by regulation of the state department of agriculture.

(c) Established by state and local health departments (in municipal watersheds).

(d) Established by the Federal Occupational Safety and Health Administration, or the state department of labor and industries, as they relate to safety and health of operating personnel and the public.

(e) The department or the department of agriculture may suspend further use of any equipment responsible for chemical leakage until the deficiency has been corrected to the satisfaction of the department suspending its usage.

***(8) Container disposal.** Pesticide containers shall be either:

(a) Removed from the forest and disposed of in the manner consistent with label directions; or

(b) Removed and cleaned for reuse in a manner consistent with any applicable regulations of the state department of agriculture or the state or local health departments.

***(9) Daily records - aerial application of pesticides.** On all aerial applications of pesticides, the operator shall maintain for 7 years daily records of spray operations as required by the state department of agriculture WAC 16-228-1320.

***(10) Reporting of spills.** All potentially damaging chemical spills shall be immediately reported to the department of ecology. Emergency telephone numbers for reporting spills shall be available at the department's regional offices.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-38-020, filed 5/30/01, effective 7/1/01. Statutory Authority: RCW 76.09.040 and chapter 34.05 RCW. 97-24-091, § 222-38-020, filed 12/3/97, effective 1/3/98; 93-12-001, § 222-38-020, filed 5/19/93, effective 6/19/93. Statutory Authority: RCW 76.09.040, 76.09.050 and chapter 34.05 RCW. 92-15-011, § 222-38-020, filed 7/2/92, effective 8/2/92. Statutory Authority: RCW 76.09.040. 88-19-112 (Order 551, Resolution No. 88-1), § 222-38-020, filed 9/21/88, effective 11/1/88; 87-23-036 (Order 535), § 222-38-020, filed 11/16/87, effective 1/1/88. Statutory Authority: RCW 76.09.040 and 76.09.050. 82-16-077 (Resolution No. 82-1), § 222-38-020, filed 8/3/82, effective 10/1/82; Order 263, § 222-38-020, filed 6/16/76.]

WAC 222-38-030 Handling, storage, and application of fertilizers. ***(1) Storage and loading areas.** Storage and loading areas should be located where accidental spillage of fertilizers will not enter surface water or wetlands. If any fertilizer is spilled, immediate appropriate procedures shall be taken to contain it.

***(2) Riparian management zone and wetland management zone.** Fertilizer treatments within a riparian man-

agement zone or wetland management zone shall be by hand unless the department has approved a site specific plan with another method of treatment.

***(3) Aerial application of fertilizer.**

(a) Proposed fertilization units shall be planned to avoid and to minimize the direct or indirect introduction of fertilizer into waters and wetlands.

(b) Leave a 25 foot buffer from the edge of the channel migration zone on all Type S and F Waters, except as noted in (f) of this subsection.

(c) When the helicopter flight path during fertilizer application is parallel to a water course or the WMZ edge, the centerline of the initial swath should be adjusted to prevent direct application within the buffers or WMZs.

(d) Leave at least a 200 foot buffer strip around residences and a 100 foot buffer strip adjacent to lands used for agriculture unless such residence or farmland is owned by the forest landowner or the aerial application is acceptable to the resident or landowner.

(e) The landowner shall identify for the operator the units to be fertilized and the untreated areas within the units with appropriately marked aerial photos or detailed planimetric maps. Before application of the fertilizer, an over-flight of the area shall be made by the pilot with the marked photos or maps.

(f) Where the department has been provided information by the department of ecology indicating that water quality in downstream waters is likely to be impaired by entry of fertilizer into waters, such waters shall be protected by site specific conditioning.

***(4) Ground and hand application of fertilizers.** Prevent fertilizer from entering Type A and B Wetlands and all typed waters, except segments of Type Np and Ns Waters with no surface water present.

***(5) Reporting of fertilizer spills.** All fertilizer spills involving streams, lakes, wetlands, or other waters of the state shall be immediately reported to the department of ecology. Emergency telephone numbers for reporting spills shall be available at the department's regional offices.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-38-030, filed 5/30/01, effective 7/1/01. Statutory Authority: RCW 76.09.040 and chapter 34.05 RCW. 93-12-001, § 222-38-030, filed 5/19/93, effective 6/19/93. Statutory Authority: RCW 76.09.040, 76.09.050 and chapter 34.05 RCW. 92-15-011, § 222-38-030, filed 7/2/92, effective 8/2/92.]

WAC 222-38-040 Handling, storage, and application of other forest chemicals. ***(1) Waters and wetlands.** Do not allow direct entry of other forest chemicals into any water or Type A or B Wetlands, except segments of Type Np and Ns Waters with no surface water present.

***(2) Storage, mixing, and loading areas.**

(a) Mix other forest chemicals and clean tanks and equipment only where any accidental spills would not enter surface water or wetlands.

(b) Storage and loading areas should be located where accidental spillage of other forest chemicals will not enter surface water or wetlands. If any chemical is spilled, immediate appropriate procedures should be taken to contain it.

(c) Use devices or procedures to prevent "back siphoning" such as providing an air gap or reservoir between the water source and the mixing tank.

(d) Water protection requirements in subsection (1) of this section may be waived when emergency use of fire retardants is necessary to control wildfire.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-38-040, filed 5/30/01, effective 7/1/01. Statutory Authority: RCW 76.09.040, 76.09.050 and chapter 34.05 RCW. 92-15-011, § 222-38-040, filed 7/2/92, effective 8/2/92.]

Chapter 222-46 WAC

CONSULTATION AND ENFORCEMENT

WAC

222-46-012	Representatives on inspections.
222-46-030	Notice to comply.
222-46-040	Stop work orders.
222-46-060	Civil penalties.
222-46-070	Injunctions, civil suits, disapprovals.
222-46-090	Financial assurances.

WAC 222-46-012 Representatives on inspections. In connection with any watershed analysis, any review of a pending application by an interdisciplinary team appointed by the department, any compliance studies, any effectiveness monitoring, or other research that has been agreed to by a landowner, the department will invite representatives of other agencies necessary to provide specific expertise to resolve issues that have been raised, tribes, and interest groups to accompany a department representative and, at the landowner's election, the landowner, on any such inspections. Reasonable efforts must be made by the department to notify the landowner of the persons being invited onto the property and the purposes for which they are being invited.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-46-012, filed 5/30/01, effective 7/1/01.]

WAC 222-46-030 Notice to comply. If a violation, a deviation, material damage or potential for material damage to a public resource has occurred and the department determines that a stop work order is unnecessary, then the department shall issue and serve upon the operator and/or landowner a notice.

(1) The notice shall clearly set forth:

(a) **The specific** nature, extent, and time of failure to comply with the approved application; or identifying the damage or potential damage; and/or

(b) The relevant provisions of the Forest Practices Act or of the forest practices rules relating thereto;

(c) **The right** of the operator, landowner, or timber owner to a hearing before the department; and

(d) **The specific** course of action ordered by the department to be followed by the operator to correct such failure to comply and to prevent, correct and/or compensate for material damage to public resources which resulted from any violation, unauthorized deviation, or willful or negligent disregard for potential damage to a public resource; and/or those courses of action necessary to prevent continuing damage to public resources where the damage is resulting from the for-

est practice activities but has not resulted from any violation, unauthorized deviation, or negligence.

(2) **Local government entity conditions.** If the notice to comply involves a condition imposed pursuant to WAC 222-20-040(3), then the specific course of action ordered by the department shall include a requirement that the operator obtain approval of the local government entity of the action to be taken.

(3) **The department** shall mail a copy of the notice to comply to the forest landowner and the timber owner at the addresses shown on the application, showing the date of service upon the operator. The department shall also mail a copy to the local government entity if a condition imposed pursuant to WAC 222-20-040(3) is involved.

(4) **Such notice to comply shall become a final order** of the department: Provided, That no direct appeal to the appeals board will be allowed from such final order. Such operator shall undertake the course of action so ordered by the department unless, within fifteen days after the date of service of such notice to comply, the operator, forest landowner, or timber owner, shall request the department in writing to schedule a hearing. If so requested, the department shall schedule a hearing on a date not more than twenty days after receiving such request. The local government entity shall participate in the hearing if a condition imposed pursuant to WAC 222-20-040(3) is involved. Within ten days after such hearing, the department shall issue a final order either withdrawing its notice to comply or clearly setting forth the specific course of action to be followed by such operator. Such operator shall undertake the course of action so ordered by the department unless within thirty days after the date of such final order, the operator, forest landowner, or timber owner appeals such final order to the appeals board. No person shall be under any obligation under this section to prevent, correct, or compensate for any damage to public resources which occurs more than one year after the date of completion of the forest practices operations involved exclusive of reforestation, unless such forest practices were not conducted in accordance with forest practices rules: Provided, That this provision shall not relieve the forest landowner from any obligation to comply with forest practices rules pertaining to providing continuing road maintenance. No action to recover damages shall be taken under this section more than two years after the date the damage involved occurs.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9), 01-12-042, § 222-46-030, filed 5/30/01, effective 7/1/01. Statutory Authority: RCW 76.09.040 and chapter 34.05 RCW. 97-24-091, § 222-46-030, filed 12/3/97, effective 1/3/98. Statutory Authority: RCW 76.09.040, 76.09.170 and chapter 34.05 RCW. 94-01-134, § 222-46-030, filed 12/20/93, effective 1/1/94. Statutory Authority: RCW 76.09.040, 76.09.050 and 34.05.350. 91-23-052, § 222-46-030, filed 11/15/91, effective 12/16/91; Order 263, § 222-46-030, filed 6/16/76.]

WAC 222-46-040 Stop work orders. (1) **The department** shall have the authority to serve upon an operator a stop work order which shall be a final order of the department if:

- (a) There is any violation of the provisions of the Forest Practices Act or these rules; or
- (b) There is a deviation from the approved application; or

(c) Immediate action is necessary to prevent continuation of or to avoid material damage to a public resource.

(2) **The stop work order** shall set forth:

(a) The specific nature, extent, and time of the violation, deviation, damage, or potential damage;

(b) An order to stop all work connected with the violation, deviation, damage, or potential damage;

(c) The specific course of action needed to correct such violation or deviation or to prevent damage and to correct and/or compensate for damage to public resources which has resulted from any violation, unauthorized deviation, or willful or negligent disregard for potential damage to a public resource. The stop work order shall also set forth those courses of action necessary to prevent continuing damage to public resources where the damage is resulting from the forest practice activities but has not resulted from any violation, unauthorized deviation, or negligence. If the stop work order involves a condition imposed pursuant to WAC 222-20-040(3), then the specific course of action ordered by the department shall include a requirement that the operator obtain approval of the local government entity of the action to be taken.

(d) The stop work order shall also set forth the right of the operator to a hearing before the appeals board.

(3) The department shall immediately file a copy of such order with the appeals board and mail a copy thereof to the timber owner and forest landowner at the addresses shown on the application. The department shall also mail a copy to the local government entity if a condition imposed pursuant to WAC 222-20-040(3) is involved.

(4) The operator, timber owner, or forest landowner may commence an appeal to the appeals board within fifteen days after service upon the operator. If such appeal is commenced, a hearing shall be held not more than twenty days after copies of the notice of appeal were filed with the appeals board. Such proceeding shall be a contested case within the meaning of chapter 34.05 RCW.

(5) The operator shall comply with the order of the department immediately upon being served, but the appeals board if requested shall have authority to continue or discontinue in whole or in part the order of the department under such conditions as it may impose pending the outcome of the proceeding.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9), 01-12-042, § 222-46-040, filed 5/30/01, effective 7/1/01. Statutory Authority: RCW 76.09.040, 76.09.170 and chapter 34.05 RCW. 94-01-134, § 222-46-040, filed 12/20/93, effective 1/1/94. Statutory Authority: RCW 76.09.040, 76.09.050 and 34.05.350. 91-23-052, § 222-46-040, filed 11/15/91, effective 12/16/91; Order 263, § 222-46-040, filed 6/16/76.]

WAC 222-46-060 Civil penalties. (1) **Amount of penalty.** Every person who violates any provisions of RCW 76.09.010 through 76.09.280 or of the forest practices rules adopted pursuant thereto, or who converts forest land to a use other than commercial timber operation within three years after completion of the forest practice without the consent of the county, city, or town, shall be subject to a penalty in an amount of not more than ten thousand dollars for each such violation. Each and every such violation shall be a separate and distinct violation. In case of a failure to comply with a

stop work order, every day's continuance thereafter shall be a separate and distinct violation.

(2) **Penalty assessments** shall consider the following:

(a) Repairability of the adverse effect from the violation;
(b) Whether the violation of the act or rules was intentional;

(c) Cooperation with the department;

(d) Previous violation history;

(e) Severity of the impact or the potential for material damage to public resources; and

(f) The extent to which a penalty to be imposed on a forest landowner for a forest practice violation committed by another should be reduced because the owner was unaware of the violation and did not receive substantial economic benefits from the violation.

(3) **Calculation of penalty.** The department shall evaluate any violation to determine if a civil penalty is warranted. When penalties are to be assessed they shall be calculated using the following process:

(a) Determine the base penalty; see WAC 222-46-065.

(b) The penalty may be adjusted using factors specific to the incident and the site. The following additional factors will be independently considered and added to the base penalty to calculate the civil penalty:

(i) Repairability:

Repairability shall be based on the length of time natural restoration or implementation of a restoration plan will take and whether repair can be achieved. The penalty will be substantially increased when natural restoration will not occur within three years and the damage cannot be effectively corrected. For this factor, up to double the base penalty may be added to the penalty.

(ii) Intention:

In making a determination of intent, the department shall consider, but not be limited to, the following considerations: The foreseeability of the violation; whether precautions were taken to avoid the violation; whether an informal conference or enforcement action was served on the violator prior to the violation. For this factor, up to double the base penalty may be added to the penalty.

(iii) Cooperation:

The department shall consider whether the violator did or did not make any attempt to correct the problem. Timeliness of action(s) and/or ignoring or evading agency contacts or directives shall determine if the penalty shall be increased. For this factor, up to double the base penalty may be added to the penalty.

(iv) Previous violation(s):

The department shall consider whether the violator has previous violations of a forest practice rule or regulation as documented in an enforcement action. The department may consider company organizations and assignment of operational responsibilities when evaluating previous violations. A history of violations with adverse impacts or potential for adverse impacts or that shows a pattern of ignoring the rules or the act, shall result in a substantially larger penalty.

Enforcement actions for the purposes of this section shall include notices to comply, stop work orders, civil penalties, and criminal citations when those enforcement actions are

associated with forest practice violations. For this factor, up to quadruple the base penalty may be added to the penalty.

(v) Severity:

The department shall adjust the penalty based on the extent and magnitude of the damage or potential damage to public resources. For this factor, up to quadruple the base penalty may be added to the penalty.

(vi) Landowner involvement:

If in the opinion of the department, the landowner exercised reasonable prudence in the development of timber sale contracts or supervision of the forest practice operations, was unaware of the forest practice violation, and the landowner received no substantial economic benefit from the violation, then the landowner generally would not be assessed a civil penalty.

(c) In accordance with RCW 76.09.170, the penalty may not exceed ten thousand dollars for each and every violation.

(d) The department shall determine whether all or a portion of the penalty should be assessed against the operator, landowner, and/or timber owner. The department should consider the responsible party, the degree of control, the sophistication of the party and whether different parties conducted different violations.

(4) **Other participants.** Every person who through an act of commission or omission procures, aids or abets in the violation shall be considered to have violated the provisions of this section and shall be subject to the penalty provided for in this section.

(5) **Government employees.** No penalty shall be imposed under this section upon any governmental official, an employee of any governmental department, agency, or entity, or a member of any board created by the act for any act or omission in his/her duties in the administration of the act or of these rules.

(6) **Written notice.** The penalty shall be imposed by a notice in writing, either by certified mail with return receipt requested or by personal service, to the person incurring the same from the department describing the violation with reasonable particularity.

(7) **Remission or mitigation.** Within fifteen days after the notice is received, the person incurring the penalty may apply in writing to the supervisor of the department or his or her designee for the remission or mitigation of such penalty. Upon receipt of the application, the department may remit or mitigate the penalty upon whatever terms the department in its discretion deems proper: Provided, That the department deems such remission or mitigation to be in the best interests of carrying out the purposes of the act. The department shall have authority to ascertain the facts regarding all such applications in such reasonable manner and under such rules as they may deem proper. The reviewer may reduce, dismiss or not change the civil penalty.

(8) **Right of appeal.** Any person incurring any penalty hereunder may appeal the same to the forest practices appeals board. Such appeals shall be filed within thirty days of receipt of notice imposing any penalty unless an application for remission or mitigation is made to the department. When such an application for remission or mitigation is made, such appeals shall be filed within thirty days of receipt of notice from the department setting forth the disposition of the appli-

cation for remission or mitigation. Concurrently with the filing of any appeal to the forest practices appeals board as provided in this section, the appellant shall file a copy of the appeal with the department region from which the penalty was issued and a copy with the office of the attorney general.

(9) **Penalties due.** The penalty imposed under this section shall become due and payable thirty days after receipt of a notice imposing the same unless application for remission or mitigation is made or an appeal is filed. When such an application for remission or mitigation is made, any penalty incurred under this section shall become due and payable thirty days after receipt of notice setting forth the disposition of such application unless an appeal is filed from such disposition. Whenever an appeal of the penalty incurred is filed, the penalty shall become due and payable only upon completion of all administrative and judicial review proceedings and the issuance of a final order or decision confirming the penalty in whole or in part.

(10) **Enforcement.** If the amount of any penalty is not paid to the department within thirty days after it becomes due and payable, the attorney general, upon the request of the department, shall bring an action in the name of the state of Washington in the superior court of Thurston county or of any county in which such violator may do business, to recover such penalty, interest, costs, and attorneys' fees. In all such actions the procedure and rules of evidence shall be the same as an ordinary civil action except as otherwise provided in the Forest Practices Act. In addition to or as an alternative to seeking enforcement of penalties in superior court, the department may bring an action in district court as provided in Title 3 RCW, to collect penalties, interest, costs, and attorneys' fees.

(11) **Liens.** Penalties imposed under this section for violations associated with a conversion to a use other than commercial timber operation shall be a lien upon the real property of the person assessed the penalty. The department may collect such amounts in the same manner provided in chapter 60.04 RCW for mechanics' liens.

(12) Any person incurring a penalty is also responsible for the payment of all costs and attorneys' fees incurred with the penalty as well as interest accruing on the unpaid penalty amount.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-46-060, filed 5/30/01, effective 7/1/01. Statutory Authority: RCW 76.09.040, 76.09.170 and chapter 34.05 RCW. 94-01-134, § 222-46-060, filed 12/20/93, effective 1/1/94; Order 263, § 222-46-060, filed 6/16/76.]

WAC 222-46-070 Injunctions, civil suits, disapprovals. (1) **The department** may take any necessary action to enforce any final order or final decision.

(2)(a) The department may disapprove any forest practices application or notification submitted by any person who has failed to comply with a final order or decision as set forth in RCW 76.09.080, 76.09.090, or 76.09.110, or has failed to pay any civil penalties as provided in RCW 76.09.170. This disapproval will last for up to one year from the issuance of a notice of intent to disapprove notifications and applications under this section, or until the violator pays all outstanding civil penalties and complies with all validly issued and out-

standing notices to comply and stop work orders, whichever is longer.

(b) For purposes of this subsection, "validly issued" means a stop work order or notice to comply for which no appeal or request for hearing has been filed; or if appealed, it has not been declared invalid by a final order or decision and all appeals are exhausted.

(c) The department shall provide written notice of its intent to disapprove future applications or notifications, and shall forward copies of such notice to any affected landowner, timber owner or operator. The disapproval period shall run from thirty days following the date of actual notice or from the date all appeals, if any, have been exhausted.

(d) Any person provided notice of intent to disapprove an application or notification may seek review from the forest practices appeals board within thirty days of the date of notice.

(e) While the notice of intent to disapprove is in effect, the violator(s) may not serve as a person in charge of, be employed by, manage, or otherwise participate to any degree in forest practices.

(3) **A county** may bring injunctive, declaratory, or other actions for enforcement for forest practice activities within its jurisdiction in the superior court as provided by law against the department, the forest landowner, timber owner or operator to enforce the forest practices regulations or any final order of the department or the appeals board. No civil or criminal penalties shall be imposed for past actions or omissions if such actions or omissions were conducted pursuant to an approval or directive of the department. A county may not commence injunctions, declaratory actions, or other actions for enforcement under this subsection unless the department fails to take appropriate actions after ten days' written notice to the department by the county of a violation of the forest practices rules or final orders of the department or the appeals board.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-46-070, filed 5/30/01, effective 7/1/01. Statutory Authority: RCW 76.09.040, 76.09.170 and chapter 34.05 RCW. 94-01-134, § 222-46-070, filed 12/20/93, effective 1/1/94; Order 263, § 222-46-070, filed 6/16/76.]

WAC 222-46-090 Financial assurances. (1) The purpose in requiring financial assurances is to ensure that the landowner or operator has sufficient resources to cover any penalties and mitigation measures, which might be assessed.

(2) The department may require financial assurance prior to the conduct of any further forest practices from an operator or landowner who within the preceding three-year period has:

(a) Operated without an approved forest practices application, other than an unintentional operation in connection with an approved application outside the approved boundary of such an application;

(b) Continued to operate in breach of, or failed to comply with, the terms of an effective stop work order or notice to comply; or

(c) Failed to pay any civil or criminal penalty.

(3) The department must deny any application or notification for failure to submit financial assurances as required.

(4) In deciding whether to require financial assurances, the department shall consider:

- (a) The organizational size of the operator or landowner;
- (b) Whether the violation was self-reported;
- (c) The cooperation exhibited when the violation was discovered; and
- (d) Any other factors the department believes indicate that financial assurances are, or are not, warranted.

(5) When the department determines that a financial assurance is required, a notice will be issued to the landowner or operator with violations listed above. The notice cannot be appealed. The financial assurances will be required with all future forest practices activities submitted within the time frame indicated in the notice. The notice shall include the following:

(a) A reference to subsection (6) of this section which identifies the criteria for establishing the amount of the financial assurance;

(b) The types of financial assurance which can be submitted;

(c) The time period during which financial assurances will be required with every future application **or notification**;

(d) A statement that the department must deny any application or notification from a landowner or operator who submits an application **or notification** without their required financial assurance;

(e) A statement that an application **or notification** can be appealed pursuant to RCW 76.09.220 (8)(a), and the requirement to submit financial assurances may be challenged at that time.

(6) The amount shall be set by the department within 10 days of receipt of a Class III or IV application, or within 3 days of receipt of a Class II notification. Applicants who have been notified of a financial assurance requirement are encouraged to use the early review process for applications outlined in WAC 222-20-090. In establishing the amount of the financial assurances to be required, the department shall begin with the following base amounts:

Class II Notifications - \$10,000

Class III Applications - \$30,000

Class IV General Applications - \$20,000

Class IV Special Applications - \$50,000

The base amounts listed above are **based** on an estimate of the potential for civil penalties, fees and required mitigation that could result from noncompliance with forest practices rules and department directives on forest practices applications **or notifications** of that classification. The base amounts can be increased or decreased depending on application specific factors including, but not limited to, size of the proposed harvest area, miles of new road construction and road maintenance, proximity to water, proximity to unstable soils, proximity to threatened or endangered species, and types of violations committed by the applicant in the past. In addition, the department should consider the risk to the state of the applicant being unable to pay civil penalties or perform required mitigation work. In weighing this risk, the department should consider the applicant's past history of payment to the department, and any other financial information the

applicant chooses to submit to the department. The base amount of financial assurance to be required may be increased or decreased depending on the department's assessment of this risk.

(7) The financial assurance provided shall protect the department and the state from the risk that the landowner or operator may be financially unable to pay civil penalties, fees and/or perform mitigation work required by the department, including mitigation work performed by the department pursuant to RCW 76.09.120, because of violations of the Forest Practices Act or rules. The department may, for any reason, refuse any financial assurance not deemed adequate. The financial assurance provided may be in the following form:

(a) Bank letter of credit;

(b) Cash deposit;

(c) Savings account assignment; **or**

(d) Corporate surety bond executed in favor of the department.

(8) The department may obtain compensation from a financial assurance whenever the landowner or operator has failed to pay a civil penalty that is due and owing or has failed to complete mitigation as required. Payment for a specific civil penalty or mitigation does not relieve the surety, operator or landowner of financial responsibility for any other civil penalty or mitigation.

(9) Liability under the financial assurance shall be maintained until all forest practices under the forest practices notification or application issued by the department are completed or until the notification or application expires, and all of the landowner or operator's obligations under the Forest Practices Act and rules are completed to the satisfaction of the department including payment of civil penalties and completion of required mitigation work. Liability under the financial assurance may be released only upon written notification by the department. Notification shall be given upon completion of compliance or acceptance of a substitute financial assurance.

(10) Financial assurances are estimates only. Nothing in this section shall be construed to limit the department's authority to assess and collect civil penalties and fees and to require mitigation work in amounts that exceed existing financial assurances.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-46-090, filed 5/30/01, effective 7/1/01.]

Chapter 222-50 WAC

RELATIONSHIP TO OTHER LAWS AND REGULATIONS

WAC

222-50-010

222-50-020

222-50-030

222-50-040

222-50-050

222-50-060

Policy.

Other agency requirements.

Interagency agreements.

Safety and health.

Forest fire prevention and suppression.

Other regulatory programs administered by the department.

WAC 222-50-010 Policy. A major policy of the Forest Practices Act and the board is to work toward a comprehensive, statewide system of laws and rules for forest practices

which avoids unnecessary duplication and provides for inter-agency input and cooperation to the extent that can be accomplished without interfering with the authority of the affected federal, state, regional and local agencies.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-50-010, filed 5/30/01, effective 7/1/01; Order 263, § 222-50-010, filed 6/16/76.]

WAC 222-50-020 Other agency requirements. (1) Many other laws and rules apply to the conduct of forest practices. Other agencies administer some of these other regulatory programs. Permits may be required by such agencies prior to the conduct of certain forest practices. The department will maintain a list for distribution of state, regional and local regulatory programs that apply to forest practice operations. Affected parties are urged to consult with the specified agencies and independent experts with respect to the regulatory requirements shown on the list.

(2) **Hydraulics project approval law**, chapter 77.55 RCW. A hydraulics project approval must be obtained from the department of fish and wildlife prior to constructing any form of hydraulic project or other work that will use, divert, obstruct, or change the natural flow or bed of any river or stream or that will utilize any of the waters of the state or materials from the stream beds. See chapter 77.55 RCW and WAC 232-14-010.

*(3) **Compliance with the Shoreline Management Act**, chapter 90.58 RCW, is required. The Shoreline Management Act is implemented by the department of ecology and the applicable local governmental entity. A substantial development permit must be obtained prior to conducting forest practices which are "substantial developments" within the "shoreline" area as those terms are defined by the Shoreline Management Act.

(4) Nothing in these rules is intended to interfere with any authority of the department of fish and wildlife to protect wildlife under any other statutes or regulations, or under any agreements with landowners.

(5) Federal Endangered Species Act, 16 U.S.C. 1531 et seq., and other federal laws. The federal Endangered Species Act and other federal laws may impose certain obligations on persons conducting forest practices. Compliance with the Forest Practices Act or these rules does not ensure compliance with the Endangered Species Act or other federal laws.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-50-020, filed 5/30/01, effective 7/1/01. Statutory Authority: RCW 76.09.040 and chapter 34.05 RCW. 97-24-091, § 222-50-020, filed 12/3/97, effective 1/3/98; 93-12-001, § 222-50-020, filed 5/19/93, effective 6/19/93. Statutory Authority: RCW 76.09.040. 88-19-112 (Order 551, Resolution No. 88-1), § 222-50-020, filed 9/21/88, effective 11/1/88. Statutory Authority: RCW 76.09.040 and 76.09.050. 82-16-077 (Resolution No. 82-1), § 222-50-020, filed 8/3/82, effective 10/1/82; Order 263, § 222-50-020, filed 6/16/76.]

WAC 222-50-030 Interagency agreements. The board recommends that the department negotiate interagency agreements with other governmental agencies. The board further recommends that such agreements include, to the extent acceptable to the other agency, provisions specifying:

(1) **The law and rules covered;**

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(2) **Any geographical** or other limits on the authority and responsibility under the agreement;

(3) **Priorities** and standards for resolution of any conflicts between such laws and regulations and the act and these rules;

(4) **Procedures** for administrative appeals of actions taken;

(5) **Provisions for** continuing cooperation between the department and the other agency or agencies regarding interpretation of the laws and regulations involved;

(6) **Procedures for** termination of the interagency agreement; and

(7) **Procedures for** processing applications and notifications.

The department is directed to provide copies of all such agreements to the board, and to make known to the public that such interagency agreements exist.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-50-030, filed 5/30/01, effective 7/1/01. Statutory Authority: RCW 76.09.040, 76.09.050 and 34.05.350. 91-23-052, § 222-50-030, filed 11/15/91, effective 12/16/91; Order 263, § 222-50-030, filed 6/16/76.]

WAC 222-50-040 Safety and health. The forest practices rules contained in chapters 222-24 through 222-38 WAC are automatically superseded to the extent inconsistent with any applicable safety regulations, or with any orders or directives having the force of law and based on any applicable safety regulations, including:

(1) **Chapter 296-54 WAC** (safety standards for logging operations, department of labor and industry's division of safety).

(2) **Chapter 296-24 WAC** (general safety and health standards, department of labor and industry's division of safety).

(3) **All applicable** Federal Occupational Safety and Health Administration regulations.

(4) **Regarding aircraft**, chapters 12-24, 12-28, and 12-32 WAC (Washington aeronautics commission).

(5) **Regarding explosives**, chapter 296-52 WAC (department of labor and industry) and all applicable federal regulations.

(6) **Regarding chemicals**, chapter 16-228 WAC (department of agriculture) and all applicable federal regulations.

(7) **All applicable** state and local sanitation regulations relating to municipal watersheds and sources of domestic water supply.

In such cases of conflict, the department is authorized to seek from other agencies such waivers or modifications in the applicable safety and health regulations as may be necessary for the department to be able to fully enforce the forest practices rules contained in chapters 222-24 through 222-38 WAC.

Applicants are cautioned that there may be additional safety and health laws and regulations that may be applicable in addition to those specifically listed above.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-50-040, filed 5/30/01, effective 7/1/01; Order 263, § 222-50-040, filed 6/16/76.]

WAC 222-50-050 Forest fire prevention and suppression. All laws and rules relating to forest fire prevention and suppression apply in addition to these forest practices rules and, in cases of conflict, supersede the forest practices rules contained in chapters 222-24 through 222-38 WAC.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9), 01-12-042, § 222-50-050, filed 5/30/01, effective 7/1/01; Order 263, § 222-50-050, filed 6/16/76.]

WAC 222-50-060 Other regulatory programs administered by the department. The board recommends that, to the extent permitted by law and when necessary the department adopt rules and policies under which approved applications and notifications can serve to eliminate or reduce the need for separate permits and approvals under regulatory programs administered by the department (such as the power driven machinery permits, RCW 76.04.275, dumping mill waste and forest debris permit, RCW 76.04.242, and surface mining permits, chapter 78.44 RCW) as applied to forest practices. The department is directed to notify the public of the existence of such rules and policies.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9), 01-12-042, § 222-50-060, filed 5/30/01, effective 7/1/01. Statutory Authority: RCW 76.09.040 and 76.09.050. 82-16-077 (Resolution No. 82-1), § 222-50-060, filed 8/3/82, effective 10/1/82; Order 263, § 222-50-060, filed 6/16/76.]

230-02-364

230-02-366

230-02-530

230-02-535

230-02-540

9.46.075. 96-24-008 (Order 303), § 230-02-362, filed 11/21/96, effective 12/22/96.] Repealed by 01-05-020 (Order 397), filed 2/9/01, effective 4/1/01. Statutory Authority: RCW 9.46.070.

Secondary market area defined. [Statutory Authority: RCW 9.46.070, 9.46.0209, 9.46.0237, 9.46.0205 and 9.46.075. 96-24-008 (Order 303), § 230-02-364, filed 11/21/96, effective 12/22/96.] Repealed by 01-05-020 (Order 397), filed 2/9/01, effective 4/1/01. Statutory Authority: RCW 9.46.070.

Impact market area defined. [Statutory Authority: RCW 9.46.070, 9.46.0209, 9.46.0237, 9.46.0205 and 9.46.075. 96-24-008 (Order 303), § 230-02-366, filed 11/21/96, effective 12/22/96.] Repealed by 01-05-020 (Order 397), filed 2/9/01, effective 4/1/01. Statutory Authority: RCW 9.46.070.

Circumstances outside the control of the licensee—Defined. [Statutory Authority: RCW 9.46.070, 9.46.0209, 9.46.0237, 9.46.0205 and 9.46.075. 96-24-008 (Order 303), § 230-02-530, filed 11/21/96, effective 12/22/96.] Repealed by 01-05-020 (Order 397), filed 2/9/01, effective 4/1/01. Statutory Authority: RCW 9.46.070.

Permanent interruption of customer flow—Defined. [Statutory Authority: RCW 9.46.070, 9.46.0209, 9.46.0237, 9.46.0205 and 9.46.075. 96-24-008 (Order 303), § 230-02-535, filed 11/21/96, effective 12/22/96.] Repealed by 01-05-020 (Order 397), filed 2/9/01, effective 4/1/01. Statutory Authority: RCW 9.46.070.

Temporary interruption of customer flow—Defined. [Statutory Authority: RCW 9.46.070, 9.46.0209, 9.46.0237, 9.46.0205 and 9.46.075. 96-24-008 (Order 303), § 230-02-540, filed 11/21/96, effective 12/22/96.] Repealed by 01-05-020 (Order 397), filed 2/9/01, effective 4/1/01. Statutory Authority: RCW 9.46.070.

WAC 230-02-138 Repealed. See Disposition Table at beginning of this chapter.

WAC 230-02-362 Repealed. See Disposition Table at beginning of this chapter.

WAC 230-02-364 Repealed. See Disposition Table at beginning of this chapter.

WAC 230-02-366 Repealed. See Disposition Table at beginning of this chapter.

WAC 230-02-530 Repealed. See Disposition Table at beginning of this chapter.

WAC 230-02-535 Repealed. See Disposition Table at beginning of this chapter.

WAC 230-02-540 Repealed. See Disposition Table at beginning of this chapter.

Title 230 WAC

GAMBLING COMMISSION

Chapters

230-02	General provisions and definitions.
230-04	Licensing.
230-08	Records and reports.
230-12	Rules of general applicability.
230-20	Bingo, raffles and amusement games.
230-30	Punch boards and pull-tabs.
230-40	Card games.
230-50	Hearings—Practice and procedure.

Chapter 230-02 WAC

GENERAL PROVISIONS AND DEFINITIONS

WAC

230-02-138	Repealed.
230-02-362	Repealed.
230-02-364	Repealed.
230-02-366	Repealed.
230-02-530	Repealed.
230-02-535	Repealed.
230-02-540	Repealed.

DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

230-02-138	Positive cash flow from the bingo operation—Defined. [Statutory Authority: RCW 9.46.070, 9.46.0209, 9.46.0237, 9.46.0205 and 9.46.075. 96-24-008 (Order 303), § 230-02-138, filed 11/21/96, effective 12/22/96.] Repealed by 01-09-022 (Order 397-A), filed 4/9/01, effective 5/10/01. Statutory Authority: RCW 9.46.070 and 34.05.354.
230-02-362	Primary market area defined. [Statutory Authority: RCW 9.46.070, 9.46.0209, 9.46.0237, 9.46.0205 and

Chapter 230-04 WAC LICENSING

WAC

230-04-140	Licensing of public card room employees—Procedures—Exceptions.
230-04-142	Notification to the commission upon beginning, terminating, or changing employment—Public card room employees.
230-04-190	Issuance of license—Expiration—Restrictions.
230-04-202	Fees—Bona fide charitable/nonprofit organizations.
230-04-203	Fees—Commercial stimulant and other business organizations.
230-04-204	Fees—Individuals.
230-04-207	House-banked card games—Additional requirements.