

(10) Dredging shall be conducted to a depth not greater than the channel depth at the seaward end.

(11) Dredging is prohibited on herring spawning beds.

(12) Dredging shall be conducted with dredge types that cause the least adverse impact on fish and shellfish and their habitat.

[Statutory Authority: RCW 75.08.080, 87-15-086 (Order 87-48), § 220-110-320, filed 7/20/87. Statutory Authority: RCW 75.20.100 and 75.08.080, 83-09-019 (Order 83-25), § 220-110-320, filed 4/13/83.]

WAC 220-110-340 Informal appeal of adverse administrative decisions. Any person who has received a civil penalty notice of violation of any provision of RCW 75.20.100 or 75.20.103, any person who, upon proper application pursuant to RCW 75.20.100 or 75.20.103, is denied a requested hydraulic project approval, any person who wishes to contest a condition placed in a granted approval, or any person who is aggrieved by a hydraulic project approval or the conditions thereon issued pursuant to RCW 75.20.100 or 75.20.103 may initiate an informal agency review of any such decision by notifying a field representative of the department having jurisdiction over the project site. Upon the receipt of a request for informal agency review, the department having jurisdiction over the site shall coordinate a comprehensive review of the agency decision by the chief of the habitat management division whose ultimate decision shall be approved or disapproved by the director or designee. If, following this informal agency review process, any person still feels aggrieved by the agency decision, a formal appeal may be taken pursuant to WAC 220-110-350. All parties are encouraged to take advantage of this informal appeal process prior to initiating a formal appeal.

[Statutory Authority: RCW 75.08.080, 87-15-086 (Order 87-48), § 220-110-340, filed 7/20/87. Statutory Authority: RCW 75.08.012, 75.08.080 and 75.20.100, 84-04-047 (Order 84-04), § 220-110-340, filed 1/30/84. Statutory Authority: RCW 75.20.100 and 75.08.080, 83-09-019 (Order 83-25), § 220-110-340, filed 4/13/83.]

WAC 220-110-350 Formal appeal of adverse administrative decisions. (1) Any person issued a civil penalty pursuant to RCW 75.20.106 for being in violation of RCW 75.20.100 or 75.20.103, any person denied a hydraulic project approval requested pursuant to RCW 75.20.100, any person wishing to contest a condition placed in an approval granted pursuant to RCW 75.20.100, or any person aggrieved by a hydraulic project approval or the conditions thereon issued pursuant to RCW 75.20.100 is entitled to an opportunity for hearing, pursuant to the Administrative Procedure Act, chapter 34.04 RCW. To obtain a hearing, a written request must be filed with the department that issued or denied the approval or levied the civil penalty. The mailing addresses are: Department of Fisheries, Habitat Management Division, Room 115, General Administration Building, Olympia, WA 98504; Department of Game, Habitat Management Division, 600 North Capitol Way, Olympia, WA 98504. Requests must be received within thirty days from the date of denial of a

hydraulic approval or issuance of an approval with contested conditions. Hearings are conducted pursuant to the Uniform Procedure Rules, chapter 1-08 WAC, unless modified in writing and by agreement of the parties. Ordinarily, it is expected that an aggrieved party seeking administrative review will waive the notice of hearing requirements provided by RCW 34.04.090(1) in order to provide an expeditious decision. An administrative law judge will hear all evidence; subsequently, proposed findings of fact, conclusions of law, proposed order, and exceptions and replies thereto, and written argument, if any, shall be prepared and presented to the director, together with a tape of the contested case hearing, for final decision. All final decisions are appealable as provided by the Administrative Procedure Act, chapter 34.04 RCW. Administrative law judges will be provided by the office of administrative hearings.

(2) Any person denied a hydraulic project approval requested pursuant to RCW 75.20.103, any person wishing to contest a condition or modification of an approval granted pursuant to RCW 75.20.103, or any person aggrieved by a hydraulic project approval or the conditions thereon issued pursuant to RCW 75.20.103 is entitled to an opportunity for hearing before the hydraulic appeals board established in RCW 75.20.130 and outlined in chapter 259-04 WAC.

[Statutory Authority: RCW 75.08.080, 87-15-086 (Order 87-48), § 220-110-350, filed 7/20/87. Statutory Authority: RCW 75.08.012, 75.08.080 and 75.20.100, 84-04-047 (Order 84-04), § 220-110-350, filed 1/30/84. Statutory Authority: RCW 75.20.100 and 75.08.080, 83-09-019 (Order 83-25), § 220-110-350, filed 4/13/83.]

Title 222 WAC FOREST PRACTICES BOARD

Chapters

| | |
|---------------|--|
| 222-08 | Practices and procedures. |
| 222-12 | Policy and organization. |
| 222-16 | Definitions. |
| 222-20 | Application and notification procedures. |
| 222-24 | Road construction and maintenance. |
| 222-30 | Timber harvesting. |
| 222-34 | Reforestation. |
| 222-38 | Forest chemicals. |
| 222-50 | Relationship to other laws and regulations. |

Chapter 222-08 WAC PRACTICES AND PROCEDURES

WAC

| | |
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| 222-08-035 | Continuing review of forest practices regulations. |
| 222-08-040 | Regular meetings. |

WAC 222-08-035 Continuing review of forest practices regulations. *(1) Annual evaluations. The department, after consulting with affected state agencies, Indian tribes, forest landowners, fisheries, wildlife, natural resources, and environmental interest groups, shall beginning July 1, 1988, report annually to the forest

practices board an assessment of how regulations and voluntary processes are working.

(2) Adaptive management. The department is directed to report to the board on opportunities to modify these regulations when baseline data, monitoring, evaluation or the use of interdisciplinary teams show that such adaptive management will better meet the purposes and policies of the Forest Practices Act.

(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 regulations 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.

[Statutory Authority: RCW 76.09.040, 87-23-036 (Order 535), § 222-08-035, filed 11/16/87, effective 1/1/88.]

WAC 222-08-040 Regular meetings. Regular meetings of the forest practices board shall be held quarterly on the second Wednesday of February, May, August and November, at a location to be designated by the forest practices board. Any person may obtain information as to said location and meeting time by contacting the Department of Natural Resources Division of Forest Regulation and Assistance, Olympia, Washington 98504. A schedule of meetings will be published in the Washington Register in January of each year.

[Statutory Authority: RCW 76.09.040, 87-23-036 (Order 535), § 222-08-040, filed 11/16/87, effective 1/1/88. Statutory Authority: RCW 43.21C.120, 76.09.040 and 42.30.075, 84-18-021 (Order 429, Resolution No. 8-8-84), § 222-08-040, filed 8/29/84, effective 10/1/84.]

**Chapter 222-12 WAC
POLICY AND ORGANIZATION**

WAC

- 222-12-030 Classes of forest practices.
- 222-12-040 *Alternate plans.
- 222-12-045 *Adaptive management.
- 222-12-090 Forest practices board manual.

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 regulations.

(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 by the department of the notification.

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

(4) **Class IV forest practices** are divided into "Class IV - special," and "Class IV - general," and require an application to the department which must be approved or disapproved within 30 calendar days, 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: 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. All forest practice operations must comply with the act and further with the rules and regulations promulgated pursuant to the act, unless an alternate plan has been approved by the department. An applicant may submit an alternate plan for any or all of the activities described in the application. The department may approve an application which departs from the specific provisions of chapters 222-24 through 222-38 WAC, provided that the plan must, in the determination of the department, equal or exceed the protection of public resources as provided in the Forest Practices Act and rules and regulations. The department shall provide an opportunity for comment to the departments of fisheries, wildlife, and ecology, other state agencies, and affected Indian tribes prior to approval of any alternate plan.

[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 222-12-045 *Adaptive management. In order to further the purposes of chapter 76.09 RCW the board has adopted a policy of adaptive management designed to modify these regulations and their application based on cooperative research, monitoring, and evaluation. Such adaptive management shall include the measures set out in WAC 222-08-035.

[Statutory Authority: RCW 76.09.040, 87-23-036 (Order 535), § 222-12-045, filed 11/16/87, effective 1/1/88.]

WAC 222-12-090 Forest practices board manual. When approved by the board the manual serves as an advisory technical supplement to these forest practices regulations. The department, in cooperation with the departments of fisheries, 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:

(1) **Temperature sensitive determinations** needed for use with WAC 222-30-040.

(2) **Procedures for leaving** the required 50 percent or 75 percent shade as required in WAC 222-30-040.

(3) A list of "critical wildlife habitats" as established under WAC 222-16-010(11).

(4) The standard methods for measuring channel width, stream gradient and flow which are used in the water typing criteria WAC 222-16-030.

(5) A chart for establishing recommended permanent culvert sizes and associated data.

(6) Guidelines for clearing slash and debris from Type 4 and 5 Waters.

(7) Guidelines for landing location and construction.

(8) Guidelines for determining acceptable stocking levels.

(9) Guidelines for calculating average widths of riparian management zones.

[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. |
| 222-16-040 | Repealed. |
| 222-16-050 | Classes of forest practices. |

DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

| | |
|------------|---|
| 222-16-040 | Temperature sensitive waters. [Order 263, § 222-16-040 WRIA Map, filed 6/16/76.] Repealed by 87-23-036 (Order 535), filed 11/16/87, effective 1/1/88. Statutory Authority: RCW 76.09.040. |
|------------|---|

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

(1) "**Act**" means the Forest Practices Act, chapter 76.09 RCW.

(2) "**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.

(3) "**Appeals board**" means the forest practices appeals board established in the act.

(4) "**Board**" means the forest practices board established by the act.

(5) "**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.

(6) "**Chemicals**" means substances applied to forest lands or timber to accomplish specific purposes and includes pesticides, insecticides, rodenticides, plant-growth regulators, fungicides, fertilizers, desiccants, fire retardants when used in controlled burning, repellents, oil, dust-control agents (other than water), salt and other materials that may present hazards to the environment.

(7) "**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.

(8) "**Completion of harvest**" means the latest of:

(a) 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

(b) 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

(c) 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 subsection (c) is permitted only to the extent reforestation would prevent or unreasonably hinder such site preparation or rehabilitation of adjoining lands.

(9) "**Contamination**" means the 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.

(10) "**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.

(11) "**Critical wildlife habitat**" means the habitat of any threatened or endangered species, as such habitat is established by the board in the forest practices board manual, or other situations as identified by the board, after consultation with the department of wildlife, where specific management practices are needed to prevent critical wildlife habitat destruction.

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

(13) "**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.

(14) "**Department**" means the department of natural resources.

(15) "**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.

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

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

(18) "**Flood level - 50 year.**" For purposes of field interpretation of these regulations, the 50-year flood level shall be considered to refer to a vertical elevation measured from the ordinary high-water mark which is 1.25 times the vertical distance between the average stream

bed and the ordinary high-water mark, and in horizontal extent shall not exceed 2 times the channel width measured on either side from the ordinary high-water mark, unless a different area is specified by the department based on identifiable topographic or vegetative features or based on an engineering computation of flood magnitude that has a 2 percent chance of occurring in any given year. The 50-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.

(19) "**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.

(20) "**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.

(21) "**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:

- (a) Road and trail construction;
- (b) Harvesting, final and intermediate;
- (c) Precommercial thinning;
- (d) Reforestation;
- (e) Fertilization;
- (f) Prevention and suppression of diseases and insects;
- (g) Salvage of trees; and
- (h) Brush control.

"Forest practice" shall not include: 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.

(22) "**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.

(23) "**Historic site**" includes:

- (a) Sites, areas and structures or other evidence of human activities illustrative of the origins, evolution and development of the nation, state or locality; or
- (b) Places associated with a personality important in history; or
- (c) Places where significant historical events are known to have occurred even though no physical evidence of the event remains.

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

(25) "**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.

(26) "**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.

(27) "**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.

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

- (a) Suitable in size and quality for the production of lumber, plywood, pulp or other forest products.
- (b) Of sufficient value at least to cover all the costs of harvest and transportation to available markets.

(29) "**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.

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

(31) "**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.

(32) "**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.

(33) "**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.

(34) "**Pesticide**" means any insecticide, herbicide or rodenticide but does not include nontoxic repellents or other chemicals.

(35) "**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.

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

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

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

(39) "**Relief culvert**" means a structure to relieve surface runoff from roadside ditches to prevent excessive buildup in water volume and velocity.

(40) "**Riparian management zone**" means a specified area alongside Type 1, 2 and 3 Waters where specific measures are taken to protect water quality and fish and wildlife habitat.

(41) "**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.

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

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

(44) "**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.

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

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

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

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

(49) "**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.

(50) "**Threatened or endangered species**" applies to all species of wildlife listed as "threatened" or "endangered" by the United States Fish and Wildlife Service, except any species which the Washington department of wildlife determines does not require special protection under the Forest Practices Act because conservation of the species is reasonably assured through a recovery and enhancement program or existence of an adequate population on lands where commercial forestry and land development are prohibited, or through other means. For

this purpose, "wildlife" means all members of the animal kingdom except insects and benthic organisms.

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

(52) "**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.

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

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

[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. The department in cooperation with the departments of fisheries, wildlife and ecology, and in consultation with affected Indian tribes shall classify streams, lakes and ponds and prepare stream classification maps showing the location of Type 1, 2, 3 and 4 Waters within the various forested areas of the state. Such maps shall be available for public inspection at area offices of the department. The waters will be classified using the following criteria, except that these agencies may approve classifications of water segments which do not follow the criteria when substantiated evidence demonstrates that use of the criteria would result in incorrect classification of such water according to the definitions contained in WAC 222-16-020. When so requested by any affected landowners, applicant or aggrieved person, the department shall make available informal conferences, which shall include the departments of fisheries, wildlife and 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.

(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, but not including those waters' associated wetlands.

(2) "**Type 2 Water**" classification shall be applied to segments of natural waters 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 100 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 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 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, trail or other park improvement;

(c) Are used by substantial numbers of anadromous or resident game 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 in width between the ordinary high-water marks and having a gradient of less than 4 percent.

(ii) Impoundments having a surface area of 1 acre or greater at seasonal low water.

(3) "Type 3 Water" classifications shall be applied to segments of natural waters 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 significant numbers of anadromous fish for spawning, rearing or migration. Waters having the following characteristics are presumed to have significant anadromous fish use:

(i) Stream segments having a defined channel of 5 feet or greater in width between the ordinary high-water marks; and having a gradient of less than 12 percent and not upstream of a falls of more than 10 vertical feet.

(ii) Impoundments having a surface area of less than 1 acre at seasonal low water and having an outlet to an anadromous fish stream.

(c) Are used by significant numbers of resident game fish. Waters with the following characteristics are presumed to have significant resident game fish use:

(i) Stream segments having a defined channel of 10 feet or greater in width between the ordinary high-water marks; and a summer low flow greater than 0.3 cubic feet per second; and a gradient of less than 12 percent.

(ii) Impoundments having a surface area greater than 0.5 acre at seasonal low water.

(d) Are highly significant for protection of downstream water quality. Tributaries which contribute greater than 20 percent of the flow to a Type 1 or 2 Water are presumed to be significant for 1,500 feet from their confluence with the Type 1 or 2 Water or until their drainage area is less than 50 percent of their drainage area at the point of confluence, whichever is less.

(4) "Type 4 Water" classification shall be applied to segments of natural waters which are not classified as Type 1, 2 or 3, and for the purpose of protecting water quality downstream are classified as Type 4 Water upstream until the channel width becomes less than 2 feet in width between the ordinary high-water marks.

(5) "Type 5 Water" classification shall be applied to all natural waters not classified as Type 1, 2, 3 or 4; areas of perennial or intermittent seepage, ponds and

drainageways having short periods of spring or storm runoff.

(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 parttime occupancy.

(c) "Resident game fish" means game fish as described in the Washington game code that spend their life cycle in fresh water. Steelhead, searun cutthroat and Dolly Varden trout are anadromous game fish and should not be confused with resident game fish.

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

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

(f) "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.

(g) "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.

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

[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 222-16-040 Repealed. See Disposition Table at beginning of this chapter.

WAC 222-16-050 Classes of forest practices. There are 4 classes of forest practices created by the act. These classes are listed below in the order most convenient for the applicant's use in determining into which class his operations fall. All forest practices (including those in Classes I and II) must be conducted in accordance with the forest practices regulations.

(1) "Class IV - special." 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 to an "area of water supply interest" as determined according to WAC 222-38-020 (5)(i).

(b) Harvesting, road construction, site preparation or aerial application of pesticides:

(i) On lands known to contain a breeding pair or the nest or breeding grounds of any threatened or endangered species; or

(ii) Within the critical habitat designated for such species by the United States Fish and Wildlife Service.

(c) Widespread use of DDT or a similar persistent insecticide.

(d) 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.

* (e) Construction of roads, landings, rock quarries, gravel pits, borrow pits, and spoil disposal areas on slide prone areas as defined in WAC 222-24-020(6) when such slide prone areas occur on an uninterrupted slope above a Type 1, 2, 3 or 4 Water where there is potential for a substantial debris flow or mass failure to cause significant impact to public resources.

(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 222-34-050.)

(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 1, 2, 3 or flowing Type 4 Waters; or (ii) movement of material that has a direct potential for entering Type 1, 2, 3 or flowing Type 4 Waters.

(c) Construction of landings less than 1 acre in size, if not within a shoreline area of a Type 1 Water, the riparian management zone of a Type 2 or 3 Water, or the ordinary high-water mark of a Type 4 Water.

(d) Construction of less than 600 feet of road on a sideslope of 40 percent or less if the limits of construction are not within the shoreline area of a Type 1 Water, the riparian management zone of a Type 2 or Type 3 Water, or the ordinary high-water mark of a Type 4 Water.

(e) Installation or removal of a portable water crossing structure where such installation does not take place within the shoreline area of a Type 1 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.

(j) Tree planting and seeding.

(k) 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.

(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 1 Water, the riparian management zone of any Type 2 or 3 Water, or the ordinary high-water mark of a Type 4 Water.

(o) Ground application of chemicals. (See WAC 222-38-020.)

(p) Aerial application of chemicals (except insecticides) 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.

(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 a bond in lieu of landowners signature (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.
- (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.
- (c) Any of the following if none of the operation or limits of construction takes place within the riparian management zone of a Type 2 or 3 Water, or within the ordinary highwater mark of a Type 4 Water:
 - (i) Construction of advance fire trails.
 - (ii) Opening a new pit of, or extending an existing pit by, less than 1 acre.
 - (iii) The following operations except those involving off-road use of tractor or wheeled skidding systems on a sideslope of greater than 40 percent:
 - (A) Salvage of logging residue.
 - (B) Salvage of dead, down or dying timber if less than 40 percent of the total timber volume is removed in any 12-month period.
 - (C) West of the Cascade summit, partial cutting of 40 percent or less of the live timber volume.
 - (D) East of the Cascade summit, partial cutting of 5,000 board feet per acre or less.
 - (E) Any harvest on less than 40 acres.
 - (F) Construction of 600 or more feet of road, provided that the department shall be renotified 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 1, 2, 3, or flowing Type 4 Waters; or

(ii) Movement of material that has a direct potential for entering Type 1, 2, 3 or flowing Type 4 Waters.

(i) Operations involving an applicant's bond in lieu of a landowner's signature.

(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.

[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.]

Chapter 222-20 WAC APPLICATION AND NOTIFICATION PROCEDURES

WAC

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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 REGULATIONS 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) **Applications and notifications** for operations not converting to another use 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 is familiar with the Forest Practices Act, including the provisions dealing with conversion to another use (RCW 76.09.060(3)). Where the application is not signed by the landowner, the department shall, provided all the other requirements contained in chapter 222-20 WAC are met, approve the application without the signature of the landowner if:

(a) The operator or timber owner provides legal evidence of timber rights, ownership, or other legal rights;

(b) The timber owner or operator posts a bond, in an amount determined by and a form acceptable to the department, securing compliance with the requirements of the forest practices regulations; and

(c) The operator or timber owner provides evidence of reasonably advance notification to the landowner of the proposed forest practice and that the landowner has been requested to sign the application, a copy of which has been made available to the landowner: *Provided*, That in lieu of such evidence the applicant may submit a sworn statement indicating inability to locate the landowner after a reasonable good faith attempt to locate and notify the landowner of the proposed forest practice.

(4) **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.

(5) **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 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 regulations 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.

(6) **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.

(7) **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. An environmental checklist (WAC 197-11-315) is necessary information for all Class IV applications. If a notification or application is delivered in person to the department by the operator or his 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.

[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 222-20-020 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 regulations, 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.

[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 222-20-030 Delivery of notifications and applications—Receipts—File numbers. (1) Notifications and applications should be delivered in person or by registered or certified mail to the department at the appropriate region office. Notifications and applications actually received at the appropriate region office by other means may be accepted or returned to the applicant.

(2) Upon delivery of a notification or application to the appropriate region office, a written receipt for such notification or application shall be issued by the department as follows:

(a) If delivery is in person, a dated receipt shall be issued immediately to the applicant.

(b) If delivery is by registered or certified mail, a dated receipt shall be mailed immediately to the applicant.

(c) If delivery is by other means, a receipt dated on the day the department begins processing the application shall be mailed to the applicant.

(3) Each receipt will indicate the file number assigned to the notification or application.

[Statutory Authority: RCW 76.09.040. 88-19-112 (Order 551, Resolution No. 88-1), § 222-20-030, filed 9/21/88, effective 11/1/88; Order 263, § 222-20-030, 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.

[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 222-20-060 Deviation from prior application or notification. Substantial deviation from a notification or an approved application requires a revised notification or application. Other deviations may be authorized by a supplemental directive, notice to comply or stop work order. The department shall notify the departments of fisheries, wildlife and ecology and affected Indian tribes and the appropriate county of any supplemental directive, notice to comply or stop work order involving a deviation from a prior notification or approved application, except where such notice has been waived.

[Statutory Authority: RCW 76.09.040. 87-23-036 (Order 535), § 222-20-060, filed 11/16/87, effective 1/1/88; Order 263, § 222-20-060, filed 6/16/76.]

WAC 222-20-090 Options for filing applications. Applicants may schedule an early review of a proposed application with the department prior to official filing, or submit an application with a delayed effective date. Such early review or submission will allow the department to review multiple applications and bring other forest practices concerns to the attention of the applicant so that such concerns can be addressed prior to official filing and processing of an application. When submitting an application with a delayed effective date, the applicant shall indicate the date when approval is desired.

[Statutory Authority: RCW 76.09.040. 87-23-036 (Order 535), § 222-20-090, filed 11/16/87, effective 1/1/88; Order 263, § 222-20-090, 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 or archaeological resources as identified by OAHP.

[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.]

WAC 222-20-120 Notice of forest practices to affected Indian tribes. (1) The department shall notify affected Indian tribes of all applications of concern to such tribes, including those involving cultural resources, identified by the tribes.

(2) Where an application involves cultural resources the landowner shall meet with the affected tribe(s) with the objective of agreeing on a plan for protecting the archaeological or cultural value. The department may condition the application in accordance with the plan.

(3) Affected Indian tribes shall determine whether plans for protection of cultural resources will be forwarded to the office of archaeological and historic preservation (OAHP).

[Statutory Authority: RCW 76.09.040, 87-23-036 (Order 535), § 222-20-120, filed 11/16/87, effective 1/1/88.]

Chapter 222-24 WAC

ROAD CONSTRUCTION AND MAINTENANCE

WAC

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|------------|--|
| 222-24-010 | Policy. |
| 222-24-020 | Road location. |
| 222-24-025 | Road design. |
| 222-24-030 | Road construction. |
| 222-24-035 | Landing location and construction. |
| 222-24-040 | Water crossing structures. |
| 222-24-050 | Road maintenance. |
| 222-24-060 | Rock quarries, gravel pits, borrow pits, and spoil disposal areas. |

WAC 222-24-010 Policy. *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. Extra protection is required during road construction and maintenance to protect this habitat and timber growing potential. Landowners and fisheries and wildlife managers are encouraged to cooperate to develop road management and abandonment plans. Landowners are further encouraged to cooperate in sharing roads to minimize road mileage and avoid duplicative road construction. 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 REGULATIONS AND/OR PERMIT REQUIREMENTS MAY APPLY. SEE CHAPTER 222-50 WAC.)

[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 222-24-020 Road location. (1) Fit the road to the topography so that a minimum of alterations to the natural features will occur.

* (2) **Minimize roads** along or within narrow canyons and along riparian management zones, wet meadows and marshes.

(a) Except where crossings are necessary, roads shall not be located within natural drainage channels and riparian management zones when there would be substantial loss or damage to wildlife habitat unless adequate mitigation of damage to public resources is provided and the department has determined that alternatives will cause greater damage to public resources.

(b) Roads shall not be located in marshes or wet meadows when there would be substantial loss or damage to wildlife habitat unless adequate mitigation of damage to public resources is provided and the department has determined that alternatives will cause greater damage to public resources.

* (3) **Minimize the number of stream crossings.**

* (4) **Whenever practical,** cross streams at right angles to the main channel.

(5) **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.

(6) **Where feasible, do not locate roads** on excessively steep or unstable slopes or known slide prone areas as determined by the department. The department shall determine whether slopes are unstable using available soils information, or from evidence of geologically recent slumps or slides, or where the natural slope exceeds the angle of repose for the particular soil types present, or where springs or seeps may indicate unstable conditions are present in or above the construction site.

Essential road construction will be accomplished by end hauling, over hauling, or other special road construction techniques unless the department determines there is potential for damage to public resources under WAC 222-16-050 (1)(e).

[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 Road design. (1) Use the minimum design standard that produces a road sufficient to carry the anticipated traffic load with reasonable safety.

(2) **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.

(3) **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.

(4) **Design or construct** cut and fill slopes to the normal angle of repose for the materials involved, or at a lesser angle whenever practical.

* (5) **All roads** should be outsloped or ditched on the uphill side and appropriate surface drainage shall be

provided by the use of adequate cross drains, ditches, drivable dips, relief culverts, water bars, diversion ditches, or other such structures demonstrated to be equally effective.

***(6) Cross drains,** relief culverts, and diversion ditches shall not discharge onto erodible soils, or over fill slopes unless adequate outfall protection is provided.

***(7) Install** cross drains, culverts, water bars, drivable dips, or diversion ditches on all forest roads to minimize erosion of the road bed, cut bank, and fill slope, or to reduce sedimentation of Type 1, 2, 3 or 4 Water. These drainage structures shall be installed at all natural drainages, all low points in the road gradient and spaced no wider than as follows:

| Grade | Distance Westside | Distance Eastside |
|-----------|-------------------|-------------------|
| 0 to 7% | 1,000 ft. | 1,500 ft. |
| 8% to 15% | 800 ft. | 1,000 ft. |
| over 15% | 600 ft. | 800 ft. |

More frequent culvert spacing or other drainage improvements are required where site specific evidence of peak flows or soil instability makes additional culverts necessary to minimize erosion of the road bed, ditches, cut bank, and fill slope to reduce sedimentation of Type 1, 2, 3 or 4 Waters, or to avoid unreasonable risk to public resources. See Part 5, Table 2 in the forest practices board manual for "Additional culvert spacing recommendations." On request of the applicant, the department may approve less frequent drainage spacing where parent material (e.g. rock, gravel) or topography justify.

***(8) Relief culverts** installed on forest roads shall meet the following minimum specifications:

(a) Be at least 12 inches in diameter or equivalent.

(b) Be installed sloping toward the outside edge of the road at a minimum gradient of 3 percent.

***(9) Ditch diversion.** Where roadside ditches slope toward a Type 1, 2, or 3 Water for more than 300 feet and otherwise would discharge into the stream, divert the ditchwater onto the forest floor by relief culvert or other means at the first practical point.

[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.]

WAC 222-24-030 Road construction. (1) **Right of way timber.** Merchantable 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) Debris burial.**

(a) In permanent road construction, do not bury:

(i) Loose stumps, logs or chunks containing more than 5 cubic feet in the load-bearing portion of the road, except as puncheon across swampy ground or for culvert protection.

(ii) Any significant amount of organic debris within the top 2 feet of the load-bearing portion of the road,

except as puncheon across swampy ground or for culvert protection.

(iii) Excessive accumulation of debris or slash in any part of the load-bearing portion of the road fill, except as puncheon across swampy ground or for culvert protection.

(b) In the cases where temporary roads are being constructed across known areas of unstable soils and where possible construction failure would directly impact waters, the requirements in (a), (i), (ii) and (iii) of this subsection shall apply. A temporary road is a roadway which has been opened for the purpose of the forest practice operation in question, and thereafter will be an inactive or abandoned road.

(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.** When soil, exposed by road construction, appears to be unstable or erodible and is so located that slides, slips, slumps, or sediment may reasonably be expected to enter Type 1, 2, 3 or 4 Water and thereby cause damage to a public resource, then such exposed soil areas shall be seeded with grass, clover, or other ground cover, or be treated by erosion control measures acceptable to the department.

***(5) Channel clearance.** Clear stream channel of all debris and slash generated during operations prior to the removal of equipment from the vicinity, or the winter season, whichever is first.

***(6) Drainage.**

(a) All required ditches, culverts, cross drains, drainage dips, water bars, and diversion ditches 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 outsloping or cross draining. Water bars and/or dispersion ditches may also be used to minimize eroding of the construction area and stream siltation.

***(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 side-cast material would rest below the 50-year flood level of a Type 1, 2, 3, or 4 Water 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:

Spoil or other debris shall be deposited above the 50-year flood level of Type 1, 2, 3, or 4 Waters or in other locations so as to prevent damage to public resources.

The material shall be stabilized by erosion control measures as necessary to prevent the material from entering the waters.

[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 damage to public resources. Avoid excessive excavation and filling.

(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 average general slopes exceed 65 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.

[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) Bridge construction.

(a) Bridges are required for new crossings of any Type 1 or 2 Waters regularly used for recreational boating.

(b) Permanent bridges shall not constrict clearly defined channels and shall be designed to pass the 50-year flood level or the road shall be constructed to provide erosion protection from the 50-year flood waters which exceed the water-carrying capacity of the drainage structure.

(c) One end of each new permanent log or wood bridge shall be tied or firmly anchored if any of the bridge structure is within 10 vertical feet of the 50-year flood level.

(d) Excavation for bridges, placement of sills or abutments, and the placement of stringers or girders shall be accomplished from outside the ordinary high-water mark of all waters, except when such operations are authorized by a hydraulic project approval.

(e) Earth embankments constructed for use as bridge approaches shall be protected from erosion by high water. Some examples of protection are: Planted or seeded ground cover, bulkheads, rock riprap, or retaining walls.

(f) When earthen materials are used for bridge surfacing, curbs of sufficient size shall be installed to be above the surface material and prevent such surface material from falling into the stream bed.

***(2) Culvert installation:** All permanent culverts installed in forest roads shall be of a size that is adequate to carry the 50-year flood or the road shall be constructed to provide erosion protection from the 50-year

flood waters which exceed the water-carrying capacity of the drainage structure. Refer to Part 5 "Recommended culvert sizes" in the forest practices board manual for the size of permanent culverts recommended for use in forest roads. If the department determines that because of unstable slopes the culvert size shown on that table is inadequate to protect public resources, it may require culvert sizes in accordance with the nomograph (chart) contained in Part 5 of the forest practices board manual or with other generally accepted engineering principles.

(a) No permanent culverts shall be installed that are smaller than:

(i) 24 inches in diameter or the equivalent for anadromous fish streams.

(ii) 18 inches or the equivalent for the resident game fish streams.

(iii) 12 inches or the equivalent for all other water crossings.

(b) The alignment and slope of the culvert shall parallel the natural flow of the stream whenever possible.

(c) When fish life is present, construct the bottom of the culvert at or below the natural stream bed at the inlet and outlet.

(d) Terminate culverts on materials that will not readily erode, such as riprap, the original stream bed (if stable), or other suitable materials.

(e) If water is diverted from its natural channel, return this water to its natural stream bed via culvert, flume, spillway, or the equivalent.

(f) When flumes, downspouts, downfall culverts, etc., are used to protect fill slopes or to return water to its natural courses, the discharge point shall be protected from erosion by: (i) Reducing the velocity of the water, (ii) use of rock spillways, (iii) riprap, (iv) splash plates, or (v) other methods or structures demonstrated to be equally effective.

(g) 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.

(h) The entrance of all culverts should have adequate catch basins and headwalls to minimize the possibility of erosion or fill failure.

***(3) Culverts in anadromous fish streams.** In addition to the requirements of subsection (2) of this section, in streams used by anadromous fish:

(a) Culverts shall be either open bottomed or have the bottom covered with gravel and installed at least 6 inches below the natural stream bed at the inlet and outlet.

(b) Closed bottom culverts shall not slope more than 1/2 percent; except as provided in (e) of this subsection; open bottom culverts shall not slope more than the natural slope of the stream bed.

(c) Where multiple culverts are used, one culvert shall be at least 6 inches lower than the other(s).

(d) Culverts shall be set to retain normal stream water depth throughout the culvert length. A downstream control may be required to create pooled water back into the culvert and to insure downstream stream bed stability.

(e) Closed bottom culverts, set at existing stream gradients between 1/2 percent and 3 percent slope shall be designed with baffles for water velocity control, or have an approved designed fishway.

(f) The department, after consultation with the departments of fisheries and wildlife, shall impose any necessary limitations on the time of year in which such culverts may be installed to prevent interference with migration or spawning of anadromous fish.

(g) Any of the requirements in (a) through (f) of this subsection may be superseded by a hydraulic project approval.

***(4) Temporary water crossings.**

(a) Temporary bridges and culverts, adequate to carry the highest anticipated flow in lieu of carrying the 50-year flood, may be used:

(i) In the westside region if installed after June 1 and removed by September 30 of the same year.

(ii) In the eastside region if installed after the spring runoff and removed prior to the snow buildup which could feed a heavy runoff.

(iii) At other times, when the department and applicant can agree to specific dates of installation and removal.

(b) Temporary bridges and culverts shall be promptly removed upon completion of use, and the approaches to the crossing shall be water barred and stabilized at the time of the crossing removal.

(5) Properly prepared and maintained fords may be used during periods of low water providing a hydraulic permit is acquired.

[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. *(1) Road maintenance and abandonment plan.

(a) The landowner when notified by the department shall submit a plan for road maintenance and abandonment for those drainages or road systems the department determines based on physical evidence to have a potential to damage public resources. The plan is subject to annual review and shall include:

(i) Ownership maps showing the road or road system;

(ii) Road status, whether active, inactive, abandoned or planned for abandonment;

(iii) Maintenance schedule and priorities for the year; and

(iv) Plan for further maintenance and reconstruction beyond the current year for repair of extensive damage.

(b) The plan shall be submitted to the department region office on or before June 30, 1988, and each June 30th thereafter unless the department agrees that no further plans are necessary.

(c) The department will review the plan annually with the landowner to determine whether it will be effective and is being implemented.

(d) Such plans shall also be reviewed with departments of ecology, fisheries and wildlife and affected Indian tribes, any of whom may request an informal conference with the landowner.

***(2) Active roads.** An active road is a forest road being actively used for hauling of logs, pulpwood, chips, or other major forest products or rock and other road building materials. To the extent necessary to prevent damage to public resources, the following maintenance shall be conducted on such roads:

(a) Culverts and ditches shall be kept functional.

(b) Road surface shall be maintained as necessary to minimize erosion of the surface and the subgrade.

(c) During and on completion of operations, road surface shall be crowned, outsloped, or water barred and berms removed from the outside edge except those intentionally constructed for protection of fills.

***(3) Inactive roads.** An inactive road is a forest road on which commercial hauling is discontinued for 1 or more logging seasons, and the forest landowner desires continuation of access for fire control, forest management activities, Christmas tree growing operations, occasional or incidental use for minor forest products harvesting or similar activities on such inactive roads:

(a) Before the first winter rainy season following termination of active use, nonfunctional ditches and culverts shall be cleared and the road surface shall be crowned, outsloped, water barred or otherwise left in a condition not conducive to accelerated erosion; and

(b) Thereafter, except as provided in (c) of this subsection, the landowner shall clear or repair ditches or culverts which he knows or should know to be nonfunctional and causing or likely to cause material damage to a public resource.

(c) The landowner shall not be liable for penalties or monetary damages, under the act, for damage occurring from a condition brought about by public use, unless he fails to make repairs as directed by a notice to comply.

***(4) Additional culverts/maintenance.** If the department determines based on physical evidence that the above maintenance has been or will be inadequate to protect public resources and that additional measures will provide adequate protection it shall require the landowner or operator to either elect to:

(a) Install additional or larger culverts or other drainage improvements as deemed necessary by the department; or

(b) Agree to an additional road maintenance program. Such improvements in drainage or maintenance may be required only after a field inspection and opportunity for an informal conference.

***(5) Abandoned roads.** An abandoned road is a forest road which the forest landowner has abandoned in accordance with procedures of (a) through (e) of this subsection. Roads are exempt from maintenance 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

(b) Ditches are left in a suitable condition to reduce erosion; and

(c) The road is blocked so that four wheel highway vehicles can not pass the point of closure at the time of abandonment; and

(d) Bridges, culverts, and fills on all waters are removed, except where the department determines other measures would provide adequate protection to public resources.

(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 shall within thirty days notify the landowner in writing that the road is officially abandoned.

***(6) Brush control.** Chemical control of roadside brush shall not be done where chemicals will directly enter any Type 1, 2, or 3 or flowing Type 4 or 5 Water. Refer to WAC 222-38-020 for additional information.

***(7) 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.

(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) When cleaning out chemical storage tanks or the application equipment tanks used for storage and application of road treatment materials, dispose of the rinse water fluids on the road surface or in a place safe from potential contamination of water.

(f) The use of dry road chemicals shall be in compliance with WAC 222-38-020.

[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 222-24-060 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 50-year flood level.

***(2) Location of spoil disposal areas.** Except as approved by the department, spoil disposal areas shall be located:

(a) Above the 50-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 soil erosion and mass soil movement is minimal.

(e) All spoils shall be placed to allow drainage without additional water ponding.

***(3) Pit drainage.** During construction and use of rock quarries, gravel pits, or borrow pits, runoff water shall be either diverted onto 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 unreforested 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 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: 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. |
| 222-30-030 | Stream bank integrity. |
| 222-30-040 | Temperature control. |
| 222-30-050 | Felling and bucking. |
| 222-30-060 | Cable yarding. |
| 222-30-070 | Tractor and wheeled skidding systems. |
| 222-30-090 | Postharvest site preparation. |
| 222-30-100 | Slash disposal. |

WAC 222-30-010 Policy—Timber harvesting. This section 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 practical the department shall coordinate the activities on a multiple disciplinary planning approach. The riparian

management zone requirements specified in this section are designed to provide protection for water quality and fisheries and wildlife habitat through ensuring present and future supplies of large organic debris for streams, snags, canopy cover, and a multistoried diverse forest adjacent to Type 1, 2 and 3 Waters. (NOTE: OTHER LAWS OR REGULATIONS AND/OR PERMIT REQUIREMENTS MAY APPLY. SEE CHAPTER 222-50 WAC.)

[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 yarding or skidding can be economically accomplished in compliance with these regulations.

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

(3) 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 average general slopes exceed 65 percent, fill material used in construction of landings shall be free of 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 or fire trails shall be outsloped 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 below the ordinary high-water mark of any stream or the 50-year flood level of Type 1, 2, 3 or 4 Water.

*(4) **Riparian management zones.** For the purpose of riparian management zone design the state shall be divided along an administrative line which approximates the change from the Western Washington timber types to the Eastern Washington timber types described as follows:

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 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 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 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 SE corner of Section 33, T. 7N, R. 11E.,

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

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

(5) **Western Washington riparian management zones.** These zones shall be measured horizontally from the ordinary high-water mark of Type 1, 2 or 3 Water and extend to the line where vegetation changes from wetland to upland plant community, but shall not be less than 25 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 swamps, bogs, marshes or ponds adjacent to the stream.

(a) Harvest units shall be designed so that felling, bucking, yarding or skidding, and reforestation can be accomplished in accordance with these regulations, including those regulations relating to stream bank integrity and temperature control. 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, there shall be trees 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.

| 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 |
| 1 & 2 Water 75' & over | 100' | representative of stand | 50 trees | 25 trees |
| 1 & 2 Water under 75' | 75' | representative of stand | 100 trees | 50 trees |
| 3 Water 5' & over | 50' | 2 to 1/12" or next largest available | 75 trees | 25 trees |
| 3 Water less than 5' | 25' | 1 to 1/6" or next largest available | 25 trees | 25 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 1, 2 or 3 Waters shall have the same leave tree requirements as boulder/bedrock streams.

(d) For wildlife habitat within the riparian management zone, leave an average of 5 undisturbed and uncut wildlife trees per acre at the ratio of 1 deciduous tree to 1 conifer tree equal in size to the largest existing trees of those species within the zone. Where the 1 to 1 ratio is not possible, then substitute either species present. Forty percent or more of the leave trees shall be live and undamaged on completion of harvest. Wildlife trees shall be left in clumps whenever possible.

(e) When 10 percent or more of the harvest unit lies within the riparian management zone of Type 1, 2 or 3 Waters and the harvest unit is a clearcutting of 30 acres or less, leave not less than 50 percent of the trees required in (c) of this subsection.

***(6) Eastern Washington riparian management zones.** These zones shall be measured horizontally from the ordinary high-water mark of Type 1, 2 or 3 Waters and extend to the line where vegetation changes from wetland to upland plant community, 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 swamps, bogs, marshes, or ponds adjacent to the stream.

(a) Harvest units shall be designed so that felling, bucking, yarding or skidding, and reforestation can be accomplished in accordance with these regulations, including those regulations relating to stream bank integrity and temperature control. 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, there shall be trees 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(33) Partial cutting. When the adjacent unit harvest type is:

Partial cutting - The riparian management zone width shall be a minimum of 30 feet to a maximum of 50 feet on each side of the stream.

Other harvest types - The riparian management zone shall average 50 feet in width on each side of the stream with a minimum width of 30 feet and a maximum of 300 feet on each side of the stream.

(ii) Leave tree requirements within the riparian management zones of Type 1, 2 or 3 Waters:

(A) Leave all trees 12 inches or less in diameter breast height (dbh); and

(B) Leave all snags within the riparian management zone that do not violate the state safety regulations (chapter 296-54 WAC department of labor and industries, safety division); and

(C) Leave 16 live conifer trees/acre between 12 inches dbh and 20 inches dbh distributed by size, as representative of the stand; and

(D) Leave 3 live conifer trees/acre 20 inches dbh or larger and the 2 largest live deciduous trees/acre 16 inches dbh or larger. Where these deciduous trees do not exist, and where 2 snags/acre 20 inches or larger do not exist, substitute 2 live conifer trees/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/acre; and

(E) Leave 3 live deciduous trees/acre between 12 inches and 16 inches dbh where they exist.

(iii) Minimum leave tree requirements per acre for Type 1, 2 and 3 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/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 135 trees/acre 4 inches dbh or larger.

(C) On lakes or ponds the minimum leave tree requirement shall be 75 trees/acre 4 inches dbh or larger.

Note: (See the Forest Practices Board Manual for assistance in calculating trees/acre and average RMZ widths.)

(d) When 10 percent or more of the harvest unit lies within the riparian management zone of Type 1, 2 or 3 Waters and either the harvest unit is a clearcutting of 30 acres or less or the harvest unit is a partial cutting of 80 acres or less, leave not less than 50 percent of the trees required in (c) of this subsection. (See WAC 222-16-010(33) Partial cutting.)

(7) **Type 4 Water riparian leave tree areas.** The department will require trees to be left along Type 4 Water where such practices are necessary to protect public resources. Where such practices are necessary leave at least 25 conifer or deciduous trees, 6 inches in diameter or larger, on each side of every 1000 feet of stream length within 25 feet of the stream. The leave trees may be arranged to accommodate the operation.

(8) **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.

(9) **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 wildlife to identify critical wildlife habitats as defined by the board. Where these habitats are known to the applicant, they shall be identified in the application or notification.

(b) Where a critical wildlife habitat has been identified the applicant shall consider reasonable means of protection thereof as part of the proposed harvesting operation.

(c) 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.

(d) In areas where this will not create a significant fire or safety 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), a reasonable number of snags will be left to protect habitat for cavity nesting wildlife.

[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 222-30-030 Stream bank integrity. *In the riparian management zone along all Type 1, 2 and 3 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: 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 Temperature control. *(1) Determination of temperature sensitivity for Type 1, 2 and 3 Waters shall be based upon field data or records, from a verified water temperature model or method acceptable to the department, that demonstrate significant adverse water temperature impacts following the proposed timber harvest and shade removal. Any designation as to whether or not waters are temperature sensitive shall be made by the department prior to the deadline for approval or disapproval of the application for harvest.

*(2) **Shade requirements.** Within the riparian management zone along those Type 1, 2 and 3 Waters designated as temperature sensitive, unless a waiver is granted by the department under subsection (3) of this section, the operator shall:

(a) Leave all nonmerchantable vegetation which provides mid-summer and mid-day shade of the water surface; and

(b) Leave sufficient merchantable timber, if any, necessary to retain 50 percent of the summer mid-day shade of the water surface, provided that the department shall require leaving 75 percent of the shade where it determines that the mean of the maximum summer daily ambient water temperatures, for a 7-day period, exceeds 60 degrees before logging. (See the forest practices board manual part 2 for methods of shade determination.)

*(3) **Waivers.** The department may waive or modify the shade requirements where the applicant:

(a) Shows a high probability of windthrow and agrees to replant the riparian management zone within the first planting season after harvest; or

(b) Agrees to a staggered setting program producing equal or greater temperature control; or

(c) Provides alternative means of stream temperature control satisfactory to the department.

[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 222-30-050 Felling and bucking. *(1) **Felling along water.**

(a) No trees will be felled into Type 1, 2 and 3 Waters, except trees which cannot practically and safely be felled outside the stream, lake or pond using techniques

in general use and these trees must then be removed promptly.

Such felling and removing in Type 1, 2 or 3 Waters shall comply with the hydraulic project approval of the departments of fisheries or wildlife.

(b) Within the riparian management zone 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 falling techniques are encouraged.

(c) Trees may be felled into Type 4 Water if logs are removed as soon thereafter as practical. See forest practices board manual guidelines for clearing slash and debris from Type 4 and 5 Water.

***(2) Bucking in water.**

(a) No bucking or limbing shall be done on trees or portions thereof lying between the banks of Type 1, 2 or 3 Waters, except as necessary to remove the timber from the water.

(b) Where bucking or limbing is done between the banks of a Type 4 Water, care shall be taken to minimize accumulation of slash in the water.

***(3) Falling near riparian management zone and setting boundaries.** Reasonable care shall be taken to avoid felling trees into riparian 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.

[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 1, 2 and 3 Waters. No timber shall be cable yarded in or across a Type 1, 2 or 3 Waters except where the logs will not materially damage the bed of waters, banks or riparian management zones and removals from Type 1, 2 or 3 Water have hydraulic project approval of the departments of fisheries or wildlife.

***(2) Deadfalls.** Any logs which are firmly embedded in the bed of a Type 1, 2, 3 and 4 Waters shall not be removed or unnecessarily disturbed without approval of the departments of fisheries or wildlife.

***(3) Yarding in riparian management zone.** Where timber is yarded from or across a riparian management zone, reasonable care shall be taken to minimize damage to the vegetation providing shade to the stream 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 1, 2 and 3 Waters until clear of the riparian management zone.

(4) 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 1, 2 or 3 Water channel below the 50-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.**

[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 Tractor and wheeled skidding systems. *(1) Type 1, 2, 3 and 4 Waters.

(a) Tractor and wheeled skidders shall not be used in Type 1, 2 or 3 Water, except with approval by the department and with a hydraulic project approval of the departments of fisheries or wildlife.

(b) Skidding across any flowing Type 4 Water shall be minimized and when done, temporary stream crossings shall be used, if necessary, to maintain stream bed integrity.

(c) Whenever skidding in or across any type water, the direction of log movement between stream banks shall be as close to right angles to the stream channel as is practical.

***(2) Riparian management zone.**

(a) Logging will be permitted within the zone. However, any use of tractors, wheeled skidders, or other yarding machines within the zone must be as described in an approved forest practices application or otherwise approved in writing by the department.

(b) Where skidding in or through the riparian management zone is necessary, the number of skidding routes through the zone shall be minimized.

(c) Logs shall be skidded 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) **Deadfalls.** Logs firmly embedded in the bed or bank of Type 1, 2, 3 or 4 Waters shall not be removed or unnecessarily disturbed without hydraulic project approval of the departments of fisheries or wildlife.

***(4) Moisture conditions.** Tractor and wheeled skidders shall not be used on exposed erodible soils when soil moisture content is so high that unreasonable soil disturbance, or stream, lake or pond siltation would result.

(5) **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.

***(6) Skid trail construction.**

(a) Skid trails shall be kept to the minimum feasible width.

(b) Reasonable care shall be taken to minimize the amount of sidecast required and shall only be permitted above the 50-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.

***(7) Skid trail maintenance.** 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.

*** (8) Slope restrictions.** Tractor and wheeled skidders shall not be used on slopes where in the opinion of the department this method of operation would cause unnecessary or material damage to a public resource.

[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 222-30-090 Postharvest site preparation. Unless the application or notification indicates that the landowner or forest landowner specifically agrees to assume responsibility for compliance with this section, the operator shall leave the site in a condition suitable for reforestation following any clear cutting, or any partial cutting west of the summit of the Cascades where 80 percent or more of the cubic volume is removed within any 5 consecutive years unless the department determines that the live trees remaining will reasonably utilize the timber growing capacity of the soils. Lands being converted to another use or classified as urban development lands under WAC 222-34-050 are exempt.

The following site preparation is required when necessary to establish a condition suitable for reforestation:

(1) Cutting, slashing, or other treatment of all non-commercial tree species, other competing vegetation, and nonmerchantable size trees commonly known as "whips" which will not reasonably utilize the growing capacity of the soil except in the riparian management zone; or

(2) Pile or windrow slash; or

(3) Mechanically scatter slash; or

(4) Leave the cutover area in a condition for controlled broadcast burning, and subsequently burn.

[Statutory Authority: RCW 76.09.040. 87-23-036 (Order 535), § 222-30-090, 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), § 222-30-090, filed 8/3/82, effective 10/1/82; Order 263, § 222-30-090, filed 6/16/76.]

WAC 222-30-100 Slash disposal. (1) **Slash disposal techniques:**

(a) Except in riparian management zones and on sites where the department determines that a particular method would cause unreasonable risk to public resources or unreasonably damage site productivity, any conventional method of slash disposal may be used, such as: 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 zones, slash disposal shall be by hand, unless approved by the department.

(b) All slash burning requires a burning permit from the department which provides for compliance with the

smoke management plan and reasonable care to prevent damage to riparian management zones, soil, residual timber, public resources, and other property.

*** (c) Location of slash piles.** Except where burning will be completed before the next ordinary high-water season, slash shall not be piled or windrowed below the 50-year flood level of any Type 1, 2, 3 or 4 Water or in locations from which it could be expected to enter any stream, lake or pond.

(2) **Slash isolation, reduction, or abatement** is required when the department determines there is an extreme fire hazard according to law (see WAC 332-24-360).

(3) **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.

*** (4) 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 1, 2, 3 or 4 Waters, to above the 50-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 50-year flood level of Type 1, 2, 3 or 4 Waters, slash disposal is required. See the forest practices board manual for "Guidelines for clearing slash and debris from Type 4 and 5 Waters."

*** (5) Fire trails.**

(a) Construct dips, water bars, cross drainage and ditches 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 50-year flood level.

[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.]

Chapter 222-34 WAC REFORESTATION

WAC

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| 222-34-010 | Required reforestation—West of Cascades Summit. |
| 222-34-020 | Required reforestation—East of Cascades Summit. |
| 222-34-030 | Reforestation—Plans—Reports—Inspections. |
| 222-34-040 | Site preparation and rehabilitation. |
| 222-34-050 | Urban and other lands exempted from the reforestation requirements. |

WAC 222-34-010 Required reforestation--West of Cascades Summit. (1) **Reforestation - where required.**

(a) Unless the harvest application indicates that the land will be converted to another use, or the lands are identified in WAC 222-34-050 as having a likelihood of conversion to urban uses, reforestation is required for forest lands harvested after January 1, 1975 in the following instances:

(i) Clearcutting; or

(ii) Partial cutting where 50 percent or more of the timber volume is removed within any 5-year period, unless the department determines that the live trees remaining will reasonably utilize the timber growing capacity of the soils.

(b) Reforestation is not required where:

(i) Individual dead, dying, down or windthrown trees are salvaged; or

(ii) A tree or trees not constituting a merchantable stand are removed from lands in actual use for other purposes; for example, removal of individual trees from lands used for farming or grazing; or

(iii) Trees are removed under a thinning program reasonably expected to maximize the long-term production of commercial timber; or

(iv) A minimum of 190 vigorous, undamaged, well-distributed seedlings per acre of a commercial tree species are established on the area harvested and not more than 20 percent of the harvested area has from 150 to 190 seedlings per acre; or

(v) A minimum of 100 vigorous, undamaged, well-distributed saplings or merchantable trees per acre of a commercial species or combinations thereof, remain on the area harvested.

(2) **Acceptable stocking.** Stocking levels are acceptable if a minimum of 190 well-distributed, vigorous, undamaged seedlings per acre of commercial tree species or such lesser number as the department determines will reasonably utilize the timber growing capacity of the site, have survived on the site at least 1 growing season. "Well-distributed" means that not more than 20 percent of the harvested area contains less than a minimum of 150 seedlings per acre as determined by the department.

(3) **Competing vegetation.** Competing vegetation shall be controlled to the extent necessary to allow establishment, survival, and growth by commercial species.

(4) **Artificial regeneration standards.**

(a) **Satisfactory reforestation - clearcuts.** Satisfactory reforestation of a clearcut harvest occurs if within 3 years of completion of harvest, or a period of from 1 to 10 years as determined by the department in the case of a natural regeneration plan, the site is restocked to at least the acceptable stocking levels described in subsection (2) of this section: *Provided*, That regeneration failures from causes beyond the applicant's control will not result in violation of this section, but supplemental planting or reforestation may be required except in riparian management zones (see WAC 222-34-030(4)).

The department may grant an extension of time for planting or seeding if suitable seedlings or seeds are unavailable, or if weather conditions or other circumstances beyond the forest land owner's control require delay in planting or seeding.

(i) **Reforestation species.** Where the species proposed for reforestation after timber harvesting differs from the removed stand, the department may approve use of the proposed species where the reforestation plan reveals that the proposed species is preferable from any of the following standpoints:

(A) Site data indicates better potential production for the proposed species than the existing species.

(B) Control of forest insects or diseases.

(C) Greater economic return.

(ii) **Seedling or seeding standards.** Except as approved by the department to qualify as acceptable reforestation, the seedlings or seeds must be from an appropriate seed source zone. The department shall establish seed zones and guidelines for their use.

(b) **Satisfactory reforestation - partial cuts.** Where reforestation is required in connection with a partial cut, the harvest application shall include a plan for stocking improvement. The plan shall be approved unless the department determines that it will not reasonably utilize the timber growing capacity of the site.

(5) **Natural regeneration standards.** A natural regeneration plan may be approved as acceptable reforestation if:

(a) A seed source of well formed trees of commercial tree species, capable of seed production is available.

(b) The owner of the seed source agrees in writing not to harvest the seed source for the time period specified in the plan, or until issuance of a satisfactory reforestation inspection report.

(c) The seed source must consist of:

(i) Seed blocks of sizes and locations shown on the plan and satisfactory to the department; or

(ii) An average of at least 8 individually marked, well-distributed, undamaged, vigorous, windfirm seed trees per acre of plantable area and no inadequately stocked area is more than 400 feet from the nearest seed tree; and

(iii) Competing vegetation shall be controlled to the extent necessary to allow establishment, survival, and growth by commercial species.

(6) **Any alternate plan** for natural reforestation may be approved if it provides a practical method of achieving acceptable stocking levels as described in subsection (2) of this section within a period of 1 to 10 years.

[Statutory Authority: RCW 76.09.040, 87-23-036 (Order 535), § 222-34-010, filed 11/16/87, effective 1/1/88; 86-21-040 (Resolution No. 86-2), § 222-34-010, filed 10/10/86, effective 12/1/86. Statutory Authority: RCW 76.09.040 and 76.09.050, 82-16-077 (Resolution No. 82-1), § 222-34-010, filed 8/3/82, effective 10/1/82; Order 263, § 222-34-010, filed 6/16/76.]

WAC 222-34-020 Required reforestation--East of Cascades Summit. (1) Reforestation - where required.

(a) Unless the harvest application indicates that the land will be converted to another use, or the lands are identified in WAC 222-34-050 as having a likelihood of conversion to urban use, reforestation is required for forest lands harvested after January 1, 1975 in the following instances:

(i) Clearcutting; or

(ii) Partial cutting where 50 percent or more of the timber volume is removed within any 5-year period, unless the department determines that the live trees remaining will reasonably utilize the timber growing capacity of the soils.

(b) Reforestation is not required where:

(i) Individual dead, dying, down or windthrown trees are salvaged; or

(ii) A tree or trees not constituting a merchantable stand are removed from lands in actual use for other purposes, for example, removal of individual trees from lands used exclusively for farming or cultivated pasture; or

(iii) Trees are removed under a thinning program reasonably expected to maximize the long-term production of commercial timber; or

(iv) A minimum of 150 vigorous, undamaged, well-distributed seedlings per acre of a commercial tree species are established on the area harvested and not more than 20 percent of the harvested area has from 120 to 150 seedlings per acre; or

(v) A minimum of 100 vigorous, undamaged, well-distributed advanced regeneration, saplings or merchantable trees per acre of a commercial tree species or combinations thereof, remain on the area harvested.

(2) **Acceptable stocking.** Stocking levels are acceptable if a minimum of 150 well-distributed, vigorous, undamaged seedlings per acre of commercial tree species or such lesser number as the department determines will reasonably utilize the timber growing capacity of the site have survived on the site at least 1 growing season. "Well-distributed" means that not more than 20 percent of the harvested area contains less than a minimum of 120 trees per acre as determined by the department.

(3) **Competing vegetation.** Competing vegetation shall be controlled to the extent necessary to allow establishment survival and growth by commercial species.

(4) **Artificial regeneration standards.**

(a) **Satisfactory reforestation - clearcuts.** Satisfactory reforestation of a clearcut harvest occurs if within 3 years of completion of harvest or a period of from 1 to 10 years as determined by the department in the case of a natural regeneration plan, the site is restocked to at least the acceptable stocking levels described in subsection (2) of this section: *Provided*, That regeneration failures from causes beyond the applicant's control will not result in a violation of this section, but supplemental planting may be required except in riparian management zones (see WAC 222-34-030(4)).

The department may grant an extension of time for planting or seeding if suitable seedlings or seeds are unavailable, or if weather conditions or other circumstances beyond the forest landowner's control require delay in planting or seeding.

(i) **Reforestation species.** Where the species proposed for reforestation after timber harvesting differs from the removed stand, the department may approve use of the proposed species where the reforestation plan reveals that the proposed species is preferable from any of the following standpoints:

(A) Site data indicates better potential production for the proposed species than the existing species.

(B) Control of forest insects or diseases.

(C) Greater economic return.

(ii) **Seedling and seed standards.** Except as approved by the department to qualify as acceptable reforestation, the seedlings and seed must be from an appropriate seed source zone. The department shall establish seed zones and guidelines for their use.

(b) **Satisfactory reforestation - partial cuts.** Partial cuts not meeting the specifications of subsection (1)(b)(iv) or (v) of this section shall have a seed source as required in subsection (5)(c)(ii) of this section.

(5) **Natural regeneration standards.** A natural regeneration plan may be approved by the department as acceptable reforestation if:

(a) A seed source of well-formed, vigorous trees of commercial tree species capable of seed production is available.

(b) The owner of the seed source agrees in writing not to harvest the seed source for the time period specified in the plan or until issuance of a satisfactory reforestation inspection report.

(c) The seed source consists of one of the following, or combinations thereof:

(i) Seed blocks which total a minimum of 5 percent of the area of each 40 acre subdivision or portion thereof harvested: *Provided*, That the seed block should be reasonably windfirm, at least 1/2 acre in size, and reserved in locations shown on the plan and approved by the department; or

(ii) A minimum of 4 undamaged seed trees per acre, well distributed over each 40 acre subdivision or portion thereof harvested: *Provided*, That the distance from seed trees of harvested areas that are not adequately stocked should not be more than 200 feet. Seed trees shall be of commercial tree species, vigorous and of seed-bearing age and size.

(6) Any alternate plan for natural reforestation may be approved if it provides a practical method of achieving acceptable stocking levels as described in subsection (2) of this section within a period of 1 to 10 years.

[Statutory Authority: RCW 76.09.040, 87-23-036 (Order 535), § 222-34-020, filed 11/16/87, effective 1/1/88; 86-21-040 (Resolution No. 86-2), § 222-34-020, filed 10/10/86, effective 12/1/86. Statutory Authority: RCW 76.09.040 and 76.09.050, 82-16-077 (Resolution No. 82-1), § 222-34-020, filed 8/3/82, effective 10/1/82; Order 263, § 222-34-020, filed 6/16/76.]

WAC 222-34-030 Reforestation--Plans--Reports--Inspections. (1) **Reforestation plans.** Reforestation plans must be submitted with the application or notification except where no reforestation is required. The department shall designate difficult regeneration areas utilizing silvicultural information. When a forest practice is proposed for such an area, the department may require additional information regarding harvest systems and post harvest site preparation, as well as regeneration. The department shall approve the reforestation plan for difficult regeneration areas if it determines that such a plan will achieve acceptable stocking according to WAC 222-34-010 and 222-34-020.

(2) **Reforestation reports.** The landowner, forest landowner, or his designee shall file a report with the department either at the time of completion of planting or reforestation or at the end of the normal planting season. When artificial seeding is used the report shall be filed 2 growing seasons after seeding.

(3) **The reports in subsection (2) of this section must contain at least the following:**

(a) The original forest practice application or notification number.

(b) Species reforested, planted, or seeded.

(c) Age of stock planted or seed source zone.

(d) Description of actual area reforested, planted, or seeded.

(4) **Inspection; supplemental planting or reforestation directives.**

(a) Within 12 months after a reforestation report is received, the department shall inspect the reforested lands. The department shall issue written notice to the landowner, forest landowner, or his designee stating whether supplemental planting or reforestation or further inspection is required within 30 days after the deadline for inspection or the reforestation shall be deemed satisfactory.

(b) If the inspection shows that acceptable stocking levels have not been achieved, the department shall direct the forest landowner to perform supplemental planting in accordance with the planting standards of WAC 222-34-010 (3) and (4)(a)(ii), 222-34-020 (3) and (4)(a)(ii): *Provided, That:*

(i) In lieu of such supplemental planting, the department and the forest landowner may agree on a supplemental reforestation plan.

(ii) Supplemental planting or reforestation shall not be required where in the opinion of the department planting or reforestation is not feasible due to rocky ground, dry conditions, excessively high water table or other adverse site factors and the department determines that there is little probability of significantly increasing the stocking level.

(iii) Where supplemental planting or reforestation has been required by the department, the landowner, forest landowner, or his designee shall file a report of supplemental planting or reforestation upon completion.

(iv) Except where stocking improvement is necessary to protect public resources and is feasible, further supplementary planting shall not be required where acceptable stocking levels have not been achieved after two properly performed supplemental plantings.

(c) Within 12 months after a supplemental planting or reforestation report is received, the department shall inspect the reforested lands.

(d) **Evidence of compliance.** The department shall within 30 days after the deadline for inspection or reinspection and when requested by the forest landowner confirm in writing whether acceptable stocking levels have been achieved, provided field conditions do not prevent the department from properly evaluating the reforestation.

(e) Where a natural regeneration plan has been approved by the department, the department may allow up to 10 years to achieve acceptable stocking levels.

[Statutory Authority: RCW 76.09.040. 87-23-036 (Order 535), § 222-34-030, filed 11/16/87, effective 1/1/88; 86-21-040 (Resolution No. 86-2), § 222-34-030, filed 10/10/86, effective 12/1/86. Statutory Authority: RCW 76.09.040 and 76.09.050. 82-16-077 (Resolution No. 82-1), § 222-34-030, filed 8/3/82, effective 10/1/82; Order 263, § 222-34-030, filed 6/16/76.]

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 or within 10 feet of the ordinary high-water mark of Type 4 and 5 Waters on slopes of 30 percent or less. On slopes greater than 30 percent heavy equipment shall not operate within 50 feet of Type 1 through 5 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 or pond 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 alignment.** Where work involves deepening, widening, straightening or relocating the channel; or bulkheading, riprapping or otherwise stabilizing the banks of a Type 1, 2 or 3 Water, 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 REGULATIONS AND/OR PERMIT REQUIREMENTS MAY APPLY. SEE CHAPTER 222-50 WAC.)

[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.]

WAC 222-34-050 Urban and other lands exempted from the reforestation requirements. (1) **Those lands which** an applicant has declared are to be converted to a nonforest use and are in fact converted within 3 years of completion of harvest.

(2) **Those lands** the department determines should be exempted in whole or in part where the forest land has the likelihood of future conversion to urban development and where:

(a) They have the likelihood of development within a 10 year period, and

(b) The development is for urban use, and

(c) The development contemplated would be consistent with any local or regional land use plans or ordinances, and

(d) Said lands have not been classified or designated reforestation lands under chapter 84.28 RCW, forest land under chapter 84.33 RCW or timber lands under chapter 84.34 RCW (Open space law).

(3) **Utility rights of way.** Reforestation is not required for initial clearing or reclearing of utility rights of way in actual use for utility purposes or scheduled for construction of utility facilities within 10 years from the date of completion of harvest, provided that if the scheduled facility is not completed, the area shall be reforested within 1 year.

(4) **Public lands.** Reforestation is not required on the following lands, unless required by regulation of the agency owning or acquiring the lands:

(a) Lands owned in fee by a public agency which has budgeted for construction within 10 years a specific project inconsistent with commercial timber production.

(b) Lands being acquired by public agency for construction within 10 years of a project inconsistent with timber production, if at the time of completion of harvest the public agency has entered into a binding contract for the purchase of the lands or initiated legal proceedings for the condemnation of the lands.

[Statutory Authority: RCW 76.09.040, 88-19-112 (Order 551, Resolution No. 88-1), § 222-34-050, filed 9/21/88, effective 11/1/88; 86-21-040 (Resolution No. 86-2), § 222-34-050, filed 10/10/86, effective 12/1/86; Order 263, § 222-34-050, filed 6/16/76.]

Chapter 222-38 WAC FOREST CHEMICALS

WAC

222-38-020 Handling, storage, application.

WAC 222-38-020 Handling, storage, application.

* (1) No pesticide leakage, contamination, pollution.

(a) No person shall transport, handle, store, load, apply, or dispose of any pesticide, pesticide container or apparatus in such a manner as to pollute water supplies or waterways, or cause damage or injury to land, including humans, desirable plants, and animals.

(b) 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.

* (2) **Streams, lakes and public waters.** No person shall pollute streams, lakes, and other public water supplies in their pesticide loading and mixing operation. 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) Mixing and landing areas.

(a) Mix chemicals and clean tanks and equipment only where any accidental spills would not enter any water types.

(b) Landing areas should be located where accidental spillage of chemicals will not cause them to become a

contaminant. If any chemical is spilled, immediate appropriate procedures should be taken to contain or neutralize it.

* (4) **Riparian management zone.** Chemical treatments within the riparian management zone shall be by hand unless the department has approved a site specific plan with another method of treatment.

* (5) Aerial application.

(a) To keep chemicals out of the water, leave a 50 foot buffer strip on Type 1, 2, 3 and flowing Type 4 and 5 Waters and other areas of open water, such as ponds or sloughs. Do not spray chemicals in buffer strips or riparian management zones. Provided that fertilizers may be applied to within 25 feet of the water.

(b) Apply the initial swath parallel to the buffer strip in (a) of this subsection on Type 1, 2, 3 or flowing Type 4 and 5 Waters. Parallel flight adjacent to all buffer strips shall be required unless a deviation is approved in advance by the department. Drift control agents shall be required adjacent to buffer strips.

(c) Use a bucket or spray device capable of immediate shutoff.

(d) Shut off chemical application during turns and over open water.

(e) Do not allow direct entry of chemicals into any Type 1, 2, 3 or flowing Type 4 and 5 Waters.

(f) Leave at least 200 foot buffer strip around residences and 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.

(g) The landowner shall identify for the operator the units to be sprayed and the untreated areas within the units so they are visible from the air. Before application of the chemical an over-flight of the area shall be made by the pilot and a responsible agent of the landowner.

(h) 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. 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, and a contact telephone number.

(i) Any water purveyor of a certified Class 1, 2 or 3 system, as defined in WAC 248-54-015, may request the department to designate lands within the watershed upstream of the surface water intake of the affected water supply as an "area of water supply interest." Prior to requesting such designation, the purveyor shall personally or by certified mail deliver to each landowner of record within such area, a copy of the request, a map showing proposed area boundaries and the name and address of the purveyor. The department may designate an "area of water supply interest" in such area(s) where it determines that the aerial application of pesticides may adversely impact the affected water supply. Where the department has designated an "area of water supply interest," it shall notify the purveyor of any Class IV Forest Practices for the aerial application of pesticides.

***(6) Stream protection - ground application with power equipment.**

- (a) Leave a 10 foot buffer strip on each side of every Type 1 and 2 Water and each flowing Type 3 Water.
- (b) Do not allow entry of chemicals into any water.
- (c) Do not exceed allowable dosages.

***(7) Stream protection - hand application.**

Apply only to specific targets, such as a stump, burrow, bait or trap.

***(8) Limitations on application.** Chemicals 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.

***(9) Container disposal.** Chemical 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 not inconsistent with any applicable regulations of the state department of agriculture or the state or local health departments.

***(10) Daily records - aerial application of pesticides.** On all aerial applications of pesticides, the operator shall maintain for 3 years daily records of spray operations as required by the state department of agriculture WAC 16-228-190.

***(11) Reporting of spills.** All potentially damaging chemical spills shall be immediately reported to the department of ecology.

[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.]

**Chapter 222-50 WAC
RELATIONSHIP TO OTHER LAWS AND REGULATIONS**

WAC
222-50-020 Other agency requirements.

WAC 222-50-020 Other agency requirements. (1) Many other laws and regulations 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, RCW 75.20.100. A hydraulics project approval must be obtained from the department of fisheries and the department of 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 RCW 75.20.100 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 regulations is intended to interfere with any authority of the department of wildlife to protect wildlife under any other statutes or regulations, or under any agreements with landowners.

[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.]

**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.
- 230-25 Fund raising events.
- 230-30 Punchboards and pull tabs.
- 230-40 Card games.
- 230-46 Unlicensed activities.

**Chapter 230-02 WAC
GENERAL PROVISIONS AND DEFINITIONS**

WAC
230-02-125 Adjusted net gambling receipts defined.
230-02-280 Identification and inspection services stamps.
230-02-290 Records entry labels.
230-02-350 Commercial stimulant defined.

WAC 230-02-125 Adjusted net gambling receipts defined. "Adjusted net gambling receipts" means the combined income from all gambling activities that are compared to gross sales for determination of commercial stimulant compliance. Adjusted net gambling receipts are determined by deducting the following expenses from net gambling receipts, when they are supported by