

WSR 05-24-001
EMERGENCY RULES
DEPARTMENT OF
FISH AND WILDLIFE

[Order 05-268—Filed November 23, 2005, 1:56 p.m., effective November 23, 2005]

Effective Date of Rule: Immediately.

Purpose: Amend wildlife rules.

Citation of Existing Rules Affected by this Order: Repealing WAC 232-12-31500N; and amending WAC 232-12-315.

Statutory Authority for Adoption: RCW 77.12.240.

Under RCW 34.05.350 the agency for good cause finds that immediate adoption, amendment, or repeal of a rule is necessary for the preservation of the public health, safety, or general welfare, and that observing the time requirements of notice and opportunity to comment upon adoption of a permanent rule would be contrary to the public interest.

Reasons for this Finding: Weather conditions have forced deer and elk to lower elevations, where harassment by dogs has been observed. In order to protect deer and elk, it is necessary to allow officers to take dogs into custody, and if necessary destroy dogs. This regulation also adds Lincoln County. There is insufficient time to promulgate permanent rules.

Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 0, Repealed 0; or Recently Enacted State Statutes: New 0, Amended 0, Repealed 0.

Number of Sections Adopted at Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's Own Initiative: New 1, Amended 0, Repealed 1.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 0, Amended 0, Repealed 0.

Number of Sections Adopted Using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0; or Other Alternative Rule Making: New 0, Amended 0, Repealed 0.

Date Adopted: November 23, 2005.

J. P. Koenings
 Director
 by Larry Peck

NEW SECTION

WAC 232-12-31500P Emergency for custody or destruction of dogs harassing deer or elk. Effective immediately until further notice, an emergency is declared in the following Washington State Counties and it is lawful for Fish and Wildlife Officers to take into custody or destroy, if necessary, any dog that is pursuing, harassing, attacking or killing deer or elk.

- (1) Chelan County
- (2) Douglas County
- (3) Ferry County
- (4) Kitittas County
- (5) Lincoln County

- (6) Okanogan County
- (7) Pend Oreille County
- (8) Spokane County
- (9) Stevens County
- (10) Yakima County

Reviser's note: The spelling error in the above section occurred in the copy filed by the agency and appears in the Register pursuant to the requirements of RCW 34.08.040.

REPEALER

The following section of the Washington Administrative Code is repealed:

WAC 232-12-31500N Emergency for custody or destruction of dogs harassing deer or elk. (05-261)

WSR 05-24-038
EMERGENCY RULES
FOREST PRACTICES BOARD

[Filed November 30, 2005, 2:31 p.m., effective November 30, 2005]

Effective Date of Rule: Immediately.

Purpose: To modify forest practices rules affecting northern spotted owl habitat conservation.

Citation of Existing Rules Affected by this Order: Amending WAC 222-16-010 "Northern spotted owl site center" and WAC 222-10-041 (4)(b).

Statutory Authority for Adoption: RCW 34.05.350, 76.09.040, 76.09.050, 43.21C.120.

Under RCW 34.05.350 the agency for good cause finds that immediate adoption, amendment, or repeal of a rule is necessary for the preservation of the public health, safety, or general welfare, and that observing the time requirements of notice and opportunity to comment upon adoption of a permanent rule would be contrary to the public interest.

Reasons for this Finding: Since the Forest Practices Board adopted rules to protect the habitat of the northern spotted owl in 1996, the amount of suitable habitat within spotted owl special emphasis areas, outside areas that are being managed under the aegis of a habitat conservation plan or similar agreement, has declined by an average of 16%. Furthermore, fewer plans to conserve northern spotted owl habitat at a landscape level have been developed than was anticipated when the northern spotted owl rules were adopted. With few landscape-level plans, the forest practices rules continue to rely heavily upon the regulation of timber harvest at individual spotted owl sites to provide habitat conservation. The Forest Practices Board has determined that:

- In light of spotted owl population declines and reductions in the amounts of habitat in areas intended to provide conservation, it is not logical to continue the practice of counting habitat that has actually been harvested when calculating the amount of habitat remaining within a median home range circle (WAC 222-10-041 (4)(b)).
- Habitats recently occupied by spotted owls are potentially important to spotted owl recovery and should be

maintained until a recovery plan has been completed by the United States Fish and Wildlife Service and the board has had the opportunity to consider ramifications of decertifying additional sites in light of recovery strategies and goals (WAC 222-16-010 Northern spotted owl site center).

Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 0, Repealed 0; or Recently Enacted State Statutes: New 0, Amended 0, Repealed 0.

Number of Sections Adopted at Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's Own Initiative: New 0, Amended 2, Repealed 0.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 0, Amended 0, Repealed 0.

Number of Sections Adopted Using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0; or Other Alternative Rule Making: New 0, Amended 2, Repealed 0.

Date Adopted: November 9, 2005.

Pat McElroy
Chair

AMENDATORY SECTION (Amending WSR 02-11-075, filed 5/13/02, effective 6/13/02)

WAC 222-10-041 Northern spotted owls. The following policies shall apply to forest practices subject to SEPA if the forest practices may cause adverse impacts to northern spotted owls.

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

(2) **In SOSEAs or areas of SOSEAs where the goal is dispersal support**, either suitable spotted owl habitat should be maintained to protect the viability of the owl(s) associated with each northern spotted owl site center or dispersal habitat should be managed, over time, to provide the dispersal support for that particular SOSEA as described in the SOSEA goals. Dispersal support is provided by a landscape which includes dispersal habitat at the stand level interspersed with areas of higher quality habitat. Stands of dispersal habitat should be managed to reduce gaps between stands and to maintain a sufficient level of dispersal habitat to meet the SOSEA goals over time.

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

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

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

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

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

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

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

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

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

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

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

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

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

(7) The department shall consider measures to mitigate identified adverse impacts of an applicant's proposal. Mitigation measures must contribute to the achievement of SOSEA

goals or to supporting the viability of impacted northern spotted owl site centers.

AMENDATORY SECTION (Amending WSR 05-12-119, filed 5/31/05, effective 7/1/05)

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

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

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

"Alluvial fan" see "sensitive sites" definition.

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

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

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

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

"Bankfull width" means:

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

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

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

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

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

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

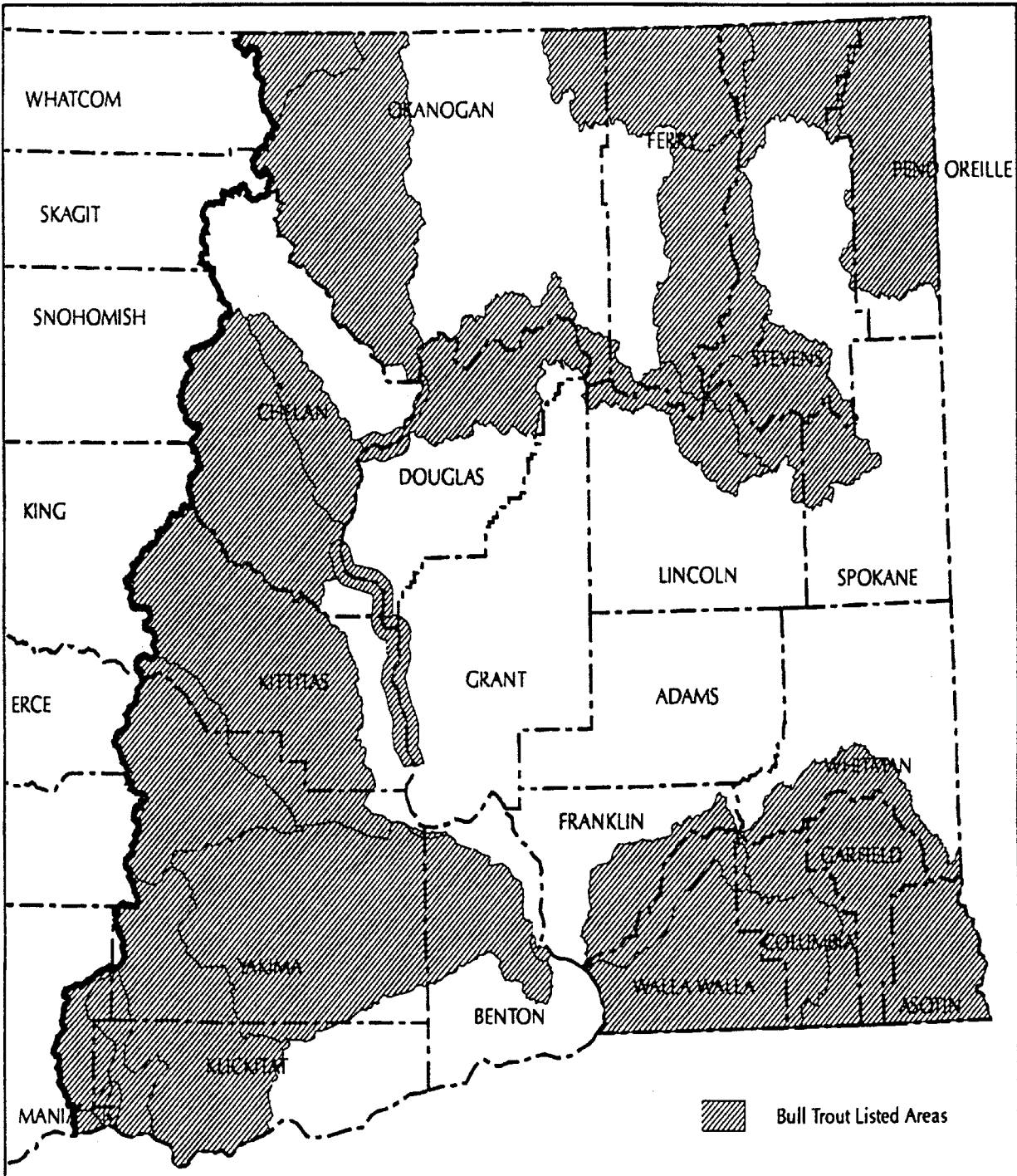
"Board" means the forest practices board established by the act.

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

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

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

Bull Trout Overlay Map



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

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

"Clearcut" means a harvest method in which the entire stand of trees is removed in one timber harvesting operation. Except as provided in WAC 222-30-110, an area remains clearcut until:

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

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

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

"CRGNSA special management area" means the areas designated in the Columbia River Gorge National Scenic Area Act, 16 U.S.C. §544b(b) or revised pursuant to 16 U.S.C. §544b(c). For purposes of this rule, the special management area shall not include any parcels excluded by 16 U.S.C. §544f(o).

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

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

"Completion of harvest" means the latest of:

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

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

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

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

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

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

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

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

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

"Critical habitat (federal)" means the habitat of any threatened or endangered species designated as critical habitat by the United States Secretary of the Interior or Commerce under Sections 3 (5)(A) and 4 (a)(3) of the Federal Endangered Species Act.

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

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

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

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

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

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

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

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

"Department" means the department of natural resources.

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

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

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

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

found within RMZs, WMZs or other required and voluntary leave areas.

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

ditch diversions, water bars, or other such structures demonstrated to be equally effective.

"Eastern Washington" means the geographic area in Washington east of the crest of the Cascade Mountains from the international border to the top of Mt. Adams, then east of the ridge line dividing the White Salmon River drainage from the Lewis River drainage and east of the ridge line dividing the Little White Salmon River drainage from the Wind River drainage to the Washington-Oregon state line.

Eastern Washington Definition Map



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

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

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

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

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

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

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

- Clearcuts;
- Seed tree harvests in which twenty or fewer trees per acre remain after harvest;
- Shelterwood regeneration harvests in which twenty or fewer trees per acre remain after harvest;
- Group or strip shelterwood harvests creating openings wider than two tree heights, based on dominant trees;
- Shelterwood removal harvests which leave fewer than one hundred fifty trees per acre which are at least five years old or four feet in average height;
- Partial cutting in which fewer than fifty trees per acre remain after harvest;
- Overstorey removal when more than five thousand board feet per acre is removed and fewer than fifty trees per acre at least ten feet in height remain after harvest; and

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

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

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

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

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

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

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

"Fish passage barrier" means any artificial instream structure that impedes the free passage of fish.

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

Flow information from gauging stations;

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

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

"Forest land" means all land which is capable of supporting a merchantable stand of timber and is not being actively used for a use which is incompatible with timber growing. For road maintenance and abandonment planning and implementation for small forest landowners, "forest land" excludes any of the following:

(a) Residential home sites. A residential home site may be up to five acres in size, and must have a fixed structure in use as a residence;

(b) Cropfields, orchards, vineyards, pastures, feedlots, fish pens, and the land on which appurtenances necessary to

the production, preparation, or sale of crops, fruit, dairy products, fish, and livestock exist.

"Forest land owner" means 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)~~). However, 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.

(1) "Large forest landowner," for purposes of road maintenance and abandonment planning, means any forest landowner who is not a small forest landowner.

(2) "Small forest landowner" is a forest landowner who at the time of submitting a forest practices application or notification:

(a) Has harvested from his or her own forest lands in Washington state no more than an average timber volume of two million board feet per year during the three years prior to submitting the forest practices application or notification to the department; and

(b) Certifies that he or she does not expect to harvest from his or her own forest lands in the state more than an average timber volume of two million board feet per year during the ten years following the submission of a forest practices application or notification to the department.

(c) A landowner who exceeded the harvest threshold as described above, or expects to exceed the harvest limits during any of the following ten years, will still be considered a "small forest landowner" if:

(i) He or she establishes to the department's reasonable satisfaction that the harvest limits were or will be exceeded in order to raise funds to pay estate taxes; or

(ii) There is an equally compelling and unexpected obligation, such as for a court-ordered judgment or for extraordinary medical expenses.

(d) For the purposes of the forestry riparian easement program, "small forest landowner" is defined in WAC 222-21-010(13).

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

Road and trail construction;

Harvesting, final and intermediate;

Precommercial thinning;

Reforestation;

Fertilization;

Prevention and suppression of diseases and insects;

Salvage of trees; and

Brush control.

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

"Forest road" means ways, lanes, roads, or driveways on forest land used since 1974 for forest practices or forest management activities such as fire control. "Forest roads" does not include skid trails, highways, or county roads except where the county is a forest landowner or operator. "Forest road," as it applies to road maintenance and abandonment planning for small forest landowners, means a road or road segment that crosses forest lands owned by the small forest landowner, but excludes portions of access roads to residential home sites not used as a part of a current forest practice involving harvest or salvage of trees.

"Forest trees" does not include hardwood trees cultivated by agricultural methods in growing cycles shorter than 15 years if the trees were planted on land that was not in forest use immediately before the trees were planted and before the land was prepared for planting the trees. "Forest trees" includes Christmas trees but does not include Christmas trees that are cultivated by agricultural methods, as that term is defined in RCW 84.33.035.

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

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

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

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

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

"Historic site" includes:

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

Places associated with a personality important in history; or

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

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

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

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

- Mass wasting;
- Surface and road erosion;

Seasonal flows including hydrologic peak and low flows and annual yields (volume and timing);

Large organic debris;

Shading; and

Stream bank and bed stability.

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

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

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

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

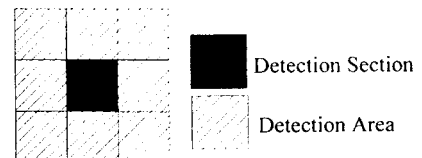
"Limits of construction" means the area occupied by the completed roadway or landing, including the cut bank, fill slope, and the area cleared for the purpose of constructing the roadway or landing.

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

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

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

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



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

greater (generally over 90 years of age) and is capable of supporting nesting by marbled murrelets.

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

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

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

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

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

"Northern spotted owl site center" means:

(1) Until June 30, 2007, the location of northern spotted owls:

(a) Recorded by the department of fish and wildlife as status 1, 2 or 3 on November 1, 2005; or

(b) Newly discovered and recorded by the department of fish and wildlife as status 1, 2 or 3 after November 1, 2005.

(2) After June 30, 2007, the location of status 1, 2 or 3 northern spotted owls based on the following definitions:

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

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

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

"Occupied marbled murrelet site" means:

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

(a) A nest is located; or

(b) Downy chicks or eggs or egg shells are found; or

(c) Marbled murrelets are detected flying below, through, into or out of the forest canopy; or

(d) Birds calling from a stationary location within the area; or

(e) Birds circling above a timber stand within one tree height of the top of the canopy; or

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

(3) For sites defined in (1) and (2) above, the sites will be presumed to be occupied based upon observation of circling described in (1)(e), unless a two-year survey following the 2003 Pacific Seabird Group (PSG) protocol has been completed and an additional third-year of survey following a method listed below is completed and none of the behaviors or conditions listed in (1)(a) through (d) of this definition are observed. The landowner may choose one of the following methods for the third-year survey:

(a) Conduct a third-year survey with a minimum of nine visits conducted in compliance with 2003 PSG protocol. If one or more marbled murrelets are detected during any of these nine visits, three additional visits conducted in compliance with the protocol of the first nine visits shall be added to the third-year survey. Department of fish and wildlife shall be consulted prior to initiating third-year surveys; or

(b) Conduct a third-year survey designed in consultation with the department of fish and wildlife to meet site specific conditions.

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

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

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

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

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

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

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

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

(6) In determining the existence, location and status of occupied marbled murrelet sites, the department shall consult with the department of fish and wildlife and use only those

sites documented in substantial compliance with guidelines or protocols and quality control methods established by and available from the department of fish and wildlife.

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

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

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

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

"Park" means any park included on the parks register maintained by the department pursuant to WAC 222-20-100(2). Developed park recreation area means any park area developed for high density outdoor recreation use.

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

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

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

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

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

| Ponderosa pine habitat type | Mixed conifer habitat type |
|------------------------------------|-----------------------------------|
| all hardwoods | all hardwoods |
| ponderosa pine | western larch |
| western larch | ponderosa pine |
| Douglas-fir | western red cedar |
| western red cedar | western white pine |
| | Douglas-fir |
| | lodgepole pine |

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

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

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

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

For fish and water:

Physical fish habitat, including temperature and turbidity;

Turbidity in hatchery water supplies; and

Turbidity and volume for areas of water supply.

For capital improvements of the state or its political subdivisions:

Physical or structural integrity.

If the methodology is developed and added to the manual to analyze the cumulative effects of forest practices on other characteristics of fish, water, and capital improvements of the state or its subdivisions, the board shall amend this list to include these characteristics.

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

"Riparian management zone (RMZ)" means:

(1) For Western Washington

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

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

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

(2) For Eastern Washington

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

| Site Class | Eastern Washington Total RMZ Width |
|------------|------------------------------------|
| I | 130' |
| II | 110' |
| III | 90' or 100'* |

| | |
|---|------------------------------------|
| Site Class | Eastern Washington Total RMZ Width |
| IV | 75' or 100'* |
| V | 75' or 100'* |
| * Dependent upon stream size. (See WAC 222-30-022.) | |

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

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

"RMZ core zone" means:

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

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

"RMZ inner zone" means:

(1) **For Western Washington**, the area measured horizontally from the outer boundary of the core zone of a Type S or F Water to the outer limit of the inner zone. The outer limit of the inner zone is determined based on the width of the affected water, site class and the management option chosen for timber harvest within the inner zone. (See WAC 222-30-021.)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(1) **For Western Washington**

| Site class | 50-year site index range (state soil survey) |
|------------|---|
| I | 137+ |
| II | 119-136 |
| III | 97-118 |

| Site class | 50-year site index range (state soil survey) |
|------------|---|
| IV | 76-96 |
| V | <75 |

(2) For Eastern Washington

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

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

- (a) If the site index in the soil survey is for red alder, and the whole RMZ width is within that site index, then use site class V. If the red alder site index is only for a portion of the RMZ width, or there is on-site evidence that the site has historically supported conifer, then use the site class for conifer in the most physiographically similar adjacent soil polygon.
- (b) In Western Washington, if no site index is reported in the soil survey, use the site class for conifer in the most physiographically similar adjacent soil polygon.
- (c) In Eastern Washington, if no site index is reported in the soil survey, assume site class III, unless site specific information indicates otherwise.
- (d) If the site index is noncommercial or marginally commercial, then use site class V.

See also section 7 of the board manual.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

"Timber" means forest trees, standing or down, of a commercial species, including Christmas trees. However, timber does not include Christmas trees that are cultivated by agricultural methods, as that term is defined in RCW 84.33-035.

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

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

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

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

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

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

"Wetland" means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions, such as swamps, bogs, fens, and similar areas. This includes wetlands created, restored, or enhanced as part of a mitigation procedure. This does not include constructed wetlands or the following surface waters of the state intentionally constructed from wetland sites: Irrigation and drainage ditches, grass lined swales, canals, agricultural detention facilities, farm ponds, and landscape amenities.

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

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

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

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

Type 1 wildlife reserve trees are defective or deformed live trees that have observably sound tops, limbs, trunks, and roots. They may have part of the top broken out or have evidence of other severe defects that include: "Cat face," animal chewing, old logging wounds, weather injury, insect attack,

or lightning strike. Unless approved by the landowner, only green trees with visible cavities, nests, or obvious severe defects capable of supporting cavity dependent species shall be considered as Type 1 wildlife reserve trees. These trees must be stable and pose the least hazard for workers.

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

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

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

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

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

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

WSR 05-24-080
EMERGENCY RULES
DEPARTMENT OF
FISH AND WILDLIFE

[Order 05-269—Filed December 5, 2005, 3:09 p.m., effective December 5, 2005]

Effective Date of Rule: Immediately.

Purpose: Amend commercial fishing rules.

Citation of Existing Rules Affected by this Order: Repealing WAC 220-44-05000H; and amending WAC 220-44-05000I.

Statutory Authority for Adoption: RCW 77.12.047.

Under RCW 34.05.350 the agency for good cause finds that immediate adoption, amendment, or repeal of a rule is necessary for the preservation of the public health, safety, or general welfare, and that observing the time requirements of notice and opportunity to comment upon adoption of a permanent rule would be contrary to the public interest.

Reasons for this Finding: These rules were adopted by the Pacific Fisheries Management Council and provide harvest of available stocks of bottom fish, while reserving brood stock for future fisheries. There is insufficient time to promulgate permanent rules.

Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 0, Repealed 0; or Recently Enacted State Statutes: New 0, Amended 0, Repealed 0.

Number of Sections Adopted at Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's Own Initiative: New 1, Amended 0, Repealed 1.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 0, Amended 0, Repealed 0.

Number of Sections Adopted Using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0; or Other Alternative Rule Making: New 0, Amended 0, Repealed 0.

Date Adopted: December 5, 2005.

J. P. Koenings
Director

NEW SECTION

WAC 220-44-05000I Coastal bottom fish catch limits. Notwithstanding the provisions of WAC 220-44-050, effective immediately until further notice: (1) It is unlawful to possess, transport through the waters of the state, or land into any Washington port bottom fish taken from Marine Fish-Shellfish Management and Catch Reporting Areas 58B, 59A-1, 59A-2, 60A-1, 60A-2, 61, 62, or 63 in excess of the amounts or less than the minimum sizes, or in violation of any gear, handling or landing requirement, established by the Pacific Fisheries Management Council and published in the Federal Register, Vol. 70, No. 232, published Dec 05, 2005. Therefore, persons must consult the federal regulations, which are incorporated by reference and made a part of Chapter 220-44 WAC. Where rules refer to the fishery management area, that area is extended to include Washington State waters coterminous with the Exclusive Economic Zone. A copy of the federal rules may be obtained by contacting Evan Jacoby at (360) 902-2930.

(a) Effective immediately until further notice, it is unlawful to possess, transport through the waters of the state, or land into any Washington port, walleye pollock taken with trawl gear from Marine Fish-Shellfish Management and Catch Reporting Areas 58B, 59A-1, 59A-2, 60A-1, 60A-2, 61, 62, or 63, except by trawl vessels participating in the directed Pacific whiting fishery and the directed coastal groundfish fishery.

(b) Effective immediately until further notice, it is unlawful for trawl vessels participating in the directed Pacific whiting and/or the directed coastal groundfish fishery to land incidental catches of walleye pollock greater than forty percent of their total landing by weight, not to exceed 10,000 pounds.

(2) At the time of landing of coastal bottom fish into a Washington port, the fish buyer receiving the fish is required to clearly mark on the fish receiving ticket, in the space reserved for dealer's use, all legally defined trawl gear aboard the vessel at the time of delivery. The three trawl gear types are: midwater trawl, roller trawl and small foot rope trawl (foot rope less than eight inches in diameter). The notation of the gear type(s) aboard the vessel is required prior to the signing of the fish receiving ticket by the vessel representative.

(3) Vessels engaged in chartered research for National Marine Fisheries Service (NMFS) may land and sell bottom-

fish caught during that research without the catch being counted toward any trip or cumulative limit for the participating vessel. Vessels that have been compensated for research work by NMFS with an Exempted Fishing Permit (EFP) to land fish as payment for such research may land and sell fish authorized under the EFP without the catch being counted toward any trip or cumulative limit for the participating vessel. Any bottomfish landed during authorized NMFS research or under the authority of a compensating EFP for past chartered research work must be reported on a separate fish receiving ticket and not included on any fish receiving ticket reporting bottomfish landed as part of any trip or cumulative limit. Bottomfish landed under the authority of NMFS research work or an EFP compensating research with fish must be clearly marked "NMFS Compensation Trip" on the fish receiving ticket in the space reserved for dealer's use. The NMFS scientist in charge must sign the fish receiving ticket in the area reserved for dealer's use if any bottomfish are landed during authorized NMFS research. If the fish are landed under the authority of an EFP as payment for research work, the EFP number must be listed in the dealer's use space.

REPEALER

The following section of the Washington Administrative Code is repealed:

WAC 220-44-05000H Coastal bottomfish catch limits. (05-233)

WSR 05-24-087

EMERGENCY RULES

BUILDING CODE COUNCIL

[Filed December 6, 2005, 2:39 p.m., effective December 6, 2005]

Effective Date of Rule: Immediately.

Purpose: To adopt changes to the mechanical efficiency tables and requirements in chapter 51-11 WAC to conform to federal law.

Citation of Existing Rules Affected by this Order: Amending WAC 51-11-0402 and 51-11-1445.

Statutory Authority for Adoption: RCW 19.27A.022, 19.27A.025, and 19.27A.045.

Other Authority: Chapters 19.27 and 34.05 RCW.

Under RCW 34.05.350 the agency for good cause finds that state or federal law or federal rule or a federal deadline for state receipt of federal funds requires immediate adoption of a rule.

Reasons for this Finding: The state Building Code Council (council), based on the following good cause, finds that an emergency affecting the general welfare of the state of Washington exists. The council further finds that immediate amendment of a certain council rule is necessary to comply with federal law and that observing the time requirements of notice and opportunity to comment would be contrary to the public interest.

The declaration of emergency affecting the general welfare of the state of Washington is based on the following findings:

That federal law or federal rule requires immediate adoption of a rule.

The Washington State Energy Code amendments to Sections 402 and 1454 contained herein as adopted by the council under emergency rule making pursuant to RCW 34.05.350, will bring Washington into compliance with the National Appliance Energy Conservation Act. Without this rule change, the code will not comply with federal law.

Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 2, Repealed 0; or Recently Enacted State Statutes: New 0, Amended 0, Repealed 0.

Number of Sections Adopted at Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's Own Initiative: New 0, Amended 2, Repealed 0.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 0, Amended 0, Repealed 0.

Number of Sections Adopted Using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0; or Other Alternative Rule Making: New 0, Amended 0, Repealed 0.

Date Adopted: December 1, 2005.

John Neff
Council Chair

AMENDATORY SECTION (Amending WSR 04-01-106, filed 12/17/03, effective 7/1/04)

WAC 51-11-0402 Systems analysis.

402.1 Special Requirements for All Group R Occupancy:

402.1.1 Energy Budgets: Proposed buildings designed in accordance with this section shall be designed to use no more energy from nonrenewable sources for space heating, and domestic hot water heating than a standard building whose enclosure elements and energy consuming systems are designed in accordance with section 502.2 of this Code for the appropriate climate zone, and heating system type. Energy derived from renewable sources may be excluded from the total annual energy consumption attributed to the alternative building.

402.1.2 Calculation of Energy Consumption: The application for a building permit shall include documentation which demonstrates, using a calculation procedure as listed in Chapter 8, or an approved alternate, that the proposed building's annual space heating energy use does not exceed the annual space heating and water heating energy use of a standard building conforming to Chapter 5 of this Code for the appropriate climate zone. The total calculated annual energy consumption shall be shown in units of kWh/ft²-yr or Btu/ft²-yr of conditioned area.

402.1.3 Input Values: The following standardized input values shall be used in calculating annual space heating budgets:

| PARAMETER | VALUE |
|---------------------------------------|---|
| Thermostat set point, heating | 65° F |
| Thermostat set point, cooling | 78° F |
| Thermostat night set back | 65° F |
| Thermostat night set back period | 0 hours |
| Internal gain | |
| R-3 and R-4 units | 3000 Btu/hr |
| R-1 and R-2 units | 1500 Btu/hr |
| Domestic Hot Water Heater Setpoint | 120° F |
| Domestic Hot Water Consumption | 20 gallons/person/day. |
| Minimum heat storage | Calculated using standard engineering practice for the actual building or as approved. |
| Site weather data | Typical meteorological year (TMY) or ersatz TMY data for the closest appropriate TMY site or other sites as approved. |
| Heating equipment efficiency | |
| ((Electric resistance heat | 1.00 |
| Heat Pumps | 6.80 HSPF. |
| Other Fuels | 0.78 AFUE.)) |
| | <u>Equipment shall comply with Section 1411.</u> |

The standard building shall be modeled with glazing area distributed equally among the four cardinal directions. Parameter values that may be varied by the building designer to model energy saving options include, but are not limited to, the following:

1. Overall thermal transmittance, U_o, of building envelope or individual building components;
2. Heat storage capacity of building;
3. Glazing orientation; area; and solar heat coefficients;
4. Heating system efficiency.

402.1.4 Solar Shading and Access: Building designs using passive solar features with eight percent or more south facing equivalent glazing to qualify shall provide to the building official a sun chart or other approved documentation depicting actual site shading for use in calculating compliance under this section. The building shall contain at least forty-five Btu/°F for each square foot of south facing glass.

402.1.5 Infiltration: Infiltration levels used shall be set at 0.35 air changes per hour for thermal calculation purposes only.

402.1.6 Heat Pumps: The heating season performance factor (HSPF) for heat pumps shall be calculated using procedures consistent with section 5.2 of the U.S. Department of Energy Test Procedure for Central Air Conditioners, including heat pumps published in the December 27, 1979 Federal Register Vol. 44, No. 24.10 CFR 430. Climate data as specified above, the proposed buildings overall thermal performance value (Btu/°F) and the standardized input assumptions specified above shall be used to model the heat pumps HSPF.

402.2 Energy Analysis: Compliance with this chapter will require an analysis of the annual energy usage, hereinafter called an annual energy analysis.

EXCEPTIONS: Chapters 5, and 6 of this Code establish criteria for different energy-consuming and enclosure elements of the building which, will eliminate the requirement for an annual systems energy analysis while meeting the intent of this Code.

A building designed in accordance with this chapter will be deemed as complying with this Code if the calculated annual energy consumption is not greater than a similar building (defined as a "standard design") whose enclosure elements and energy-consuming systems are designed in accordance with Chapter 5.

For an alternate building design to be considered similar to a "standard design," it shall utilize the same energy source(s) for the same functions and have equal floor area and the same ratio of envelope area to floor area, environmental requirements, occupancy, climate data and usage operational schedule.

402.3 Design: The standard design, conforming to the criteria of Chapter 5 and the proposed alternative design shall be designed on a common basis as specified herein:

The comparison shall be expressed as kBtu or kWh input per square foot of conditioned floor area per year at the building site.

402.4 Analysis Procedure: The analysis of the annual energy usage of the standard and the proposed alternative building and system design shall meet the following criteria:

a. The building heating/cooling load calculation procedure used for annual energy consumption analysis shall be detailed to permit the evaluation of effect of factors specified in section 402.5.

b. The calculation procedure used to simulate the operation of the building and its service systems through a full-year operating period shall be detailed to permit the evaluation of the effect of system design, climatic factors, operational char-

acteristics, and mechanical equipment on annual energy usage. Manufacturer's data or comparable field test data shall be used when available in the simulation of systems and equipment. The calculation procedure shall be based upon eight thousand seven hundred sixty hours of operation of the building and its service systems.

402.5 Calculation Procedure: The calculation procedure shall cover the following items:

a. Design requirements—Environmental requirements as required in Chapter 3.

b. Climatic data—Coincident hourly data for temperatures, solar radiation, wind and humidity of typical days in the year representing seasonal variation.

c. Building data—Orientation, size, shape, mass, air, moisture and heat transfer characteristics.

d. Operational characteristics—Temperature, humidity, ventilation, illumination, control mode for occupied and unoccupied hours.

e. Mechanical equipment—Design capacity, part load profile.

f. Building loads—Internal heat generation, lighting, equipment, number of people during occupied and unoccupied periods.

EXCEPTION: Group R Occupancy shall comply with calculation procedures in Chapter 8, or an approved alternate.

402.6 Documentation: Proposed alternative designs, submitted as requests for exception to the standard design criteria, shall be accompanied by an energy analysis comparison report. The report shall provide technical detail on the two building and system designs and on the data used in and resulting from the comparative analysis to verify that both the analysis and the designs meet the criteria of Chapter 4 of this Code.

AMENDATORY SECTION (Amending WSR 05-01-013, filed 12/2/04, effective 7/1/05)

WAC 51-11-1454 Pool covers. Heated pools shall be equipped with a vapor retardant pool cover on or at the water surface. Pools heated to more than 90 degrees F shall have a pool cover with a minimum insulation value of R-12.

**Table 14-1A
Unitary Air Conditioners and Condensing Units, Electrically Operated, Minimum Efficiency Requirements**

| Equipment Type | Size Category | Sub-Category or Rating Condition | Minimum Efficiency ^b | Test Procedure ^a |
|------------------------------|---------------------|--|--------------------------------------|-----------------------------|
| Air Conditioners, Air Cooled | < 65,000 Btu/h((#)) | Split System ((Before January 23, 2006)) | 10.0 SEER | ARI 210/240 |
| | | <u>On or After January 23, 2006^d</u> | ((12.0)) <u>13.0</u> SEER | |
| | | Single Package | | |

| Equipment Type | Size Category | Sub-Category or Rating Condition | Minimum Efficiency ^b | Test Procedure ^a | |
|---|-------------------------------------|---|---|-----------------------------|-------------|
| | | ((Before January 23, 2006)) On or After January 23, 2006 ^d | 9.7 SEER ((12.0)) 13.0 SEER | | |
| | ≥ 65,000 Btu/h and < 135,000 Btu/h | Split System and Single Package | 10.3 EER ^c | | |
| | ≥ 135,000 Btu/h and < 240,000 Btu/h | Split System and Single Package | 9.7 EER ^c | | ARI 340/360 |
| | ≥ 240,000 Btu/h and < 760,000 Btu/h | Split System and Single Package | 9.5 EER ^c 9.7 IPLV ^c | | |
| | ≥ 760,000 Btu/h | Split System and Single Package | 9.2 EER ^c 9.4 IPLV ^c | | |
| Through-the-Wall, Air Cooled | < 30,000 Btu/h((4)) | Split System ((Before January 23, 2006)) On or After January 23, 2006 ^d | 10.0 SEER 10.9 SEER | ARI 210/240 | |
| | | Single Package ((Before January 23, 2006)) On or After January 23, 2006 ^d | 9.7 SEER 10.6 SEER | | |
| | | | | | |
| ((Small-Duct High-Velocity, Air Cooled | < 65,000 Btu/h (4) | Split System | 10.0 SEER | ARI 210/240)) | |
| Air Conditioners, Water and Evaporatively Cooled | < 65,000 Btu/h | Split System and Single Package | 12.1 EER | ARI 210/240 | |
| | ≥ 65,000 Btu/h and < 135,000 Btu/h | Split System and Single Package | 11.5 EER ^c | | |
| | ≥ 135,000 Btu/h and ≤ 240,000 Btu/h | Split System and Single Package | 11.0 EER ^c | ARI 340/360 | |
| | > 240,000 Btu/h | Split System and Single Package | 11.0 EER ^c 10.3 IPLV ^c | | |
| Condensing Units, Air Cooled | ≥ 135,000 Btu/h | | 10.1 EER 11.2 IPLV | ARI 365 | |
| | | | 13.1 EER 13.1 IPLV | | |
| Condensing Units, Water or Evaporatively Cooled | ≥ 135,000 Btu/h | | 13.1 EER 13.1 IPLV | | |

^a Reserved.
^b IPLVs are only applicable to equipment with capacity modulation.
^c Deduct 0.2 from the required EERs and IPLVs for units with a heating section other than electric resistance heat.
^d Date of manufacture for single-phase air-cooled air-conditioners < 65,000 Btu/h (~~(4)~~), as regulated by NAECA. SEER values are those set by NAECA.

**Table 14-1B
Unitary and Applied Heat Pumps, Electrically Operated, Minimum Efficiency Requirements**

| Equipment Type | Size Category | Sub-Category or Rating Condition | Minimum Efficiency ^b | Test Procedure ^a |
|----------------------------|----------------------------------|--|---------------------------------|-----------------------------|
| Air Cooled, (Cooling Mode) | < 65,000 Btu/h((4)) | Split System ((Before January 23, 2006)) | 10.0 SEER | ARI 210/240 |

| Equipment Type | Size Category | Sub-Category or Rating Condition | Minimum Efficiency ^b | Test Procedure ^a |
|---|---|--|---|-----------------------------|
| | | <u>On or After</u> January 23, 2006 ^d | ((12.0)) <u>13.0</u> SEER | ARI 340/360 |
| | | Single Package ((Before January 23, 2006)) | 9.7 SEER | |
| | | <u>On or After</u> January 23, 2006 ^d | ((12.0)) <u>13.0</u> SEER | |
| | ≥ 65,000 Btu/h and < 135,000 Btu/h | Split System and Single Package | 10.1 EER ^c | |
| | ≥ 135,000 Btu/h and < 240,000 Btu/h | Split System and Single Package | 9.3 EER ^c | |
| | ≥ 240,000 Btu/h | Split System and Single Package | 9.0 EER ^c 9.2 IPLV ^c | |
| Through-the-Wall (Air Cooled, Cooling Mode) | < 30,000 Btu/h(^e) | Split System | | ARI 210/240 |
| | | ((Before January 23, 2006)) | 10.0 SEER | |
| | | <u>On or After</u> January 23, 2006 ^d | 10.9 SEER | |
| | | Single Package ((Before January 23, 2006)) | 9.7 SEER | |
| | | <u>On or After</u> January 23, 2006 ^d | 10.6 SEER | |
| ((Small-Duct High-Velocity (Air Cooled, Cooling Mode)) | < 65,000 Btu/h^e | Split System | 10.0 SEER | ARI 210/240)) |
| Water-Source (Cooling Mode) | < 17,000 Btu/h | 86°F Entering Water | 11.2 EER | ARI/ISO-13256-1 |
| | ≥ 17,000 Btu/h and < 65,000 Btu/h | 86°F Entering Water | 12.0 EER | ARI/ISO-13256-1 |
| | ≥ 65,000 Btu/h and < 135,000 Btu/h | 86°F Entering Water | 12.0 EER | ARI/ISO-13256-1 |
| Groundwater-Source (Cooling Mode) | < 135,000 Btu/h | 59°F Entering Water | 16.2 EER | ARI/ISO-13256-1 |
| Ground Source (Cooling Mode) | < 135,000 Btu/h | 77°F Entering Water | 13.4 EER | ARI/ISO-13256-1 |
| Air Cooled (Heating Mode) | < 65,000 Btu/h(^e) (Cooling Capacity) | Split System | | ARI 210/240 |
| | | ((Before January 23, 2006)) | 6.8 HSPF | |
| | | <u>On or After</u> January 23, 2006 ^d | ((7.4)) <u>7.7</u> HSPF | |
| | | Single Package ((Before January 23, 2006)) | 6.6 HSPF | |
| | | <u>On or After</u> January 23, 2006 ^d | ((7.4)) <u>7.7</u> HSPF | |

| Equipment Type | Size Category | Sub-Category or Rating Condition | Minimum Efficiency ^b | Test Procedure ^a |
|---|---|---|---------------------------------|-----------------------------|
| | ≥ 65,000 Btu/h and < 135,000 Btu/h (Cooling Capacity) | 47°F db/43°F wb Outdoor Air 17°F db/15°F wb Outdoor Air | 3.2 COP 2.2 COP | |
| | ≥ 135,000 Btu/h (Cooling Capacity) | 47°F db/43°F wb Outdoor Air 17°F db/15°F wb Outdoor Air | 3.1 COP 2.0 COP | ARI 340/360 |
| Through-the-Wall (Air Cooled, Heating Mode) | < 30,000 Btu/h((a)) | Split System ((Before January 23, 2006)) On or After January 23, 2006 ^d | 6.8 HSPF 7.1 HSPF | ARI 210/240 |
| | | Single Package ((Before January 23, 2006)) On or After January 23, 2006 ^d | 6.6 HSPF 7.0 HSPF | |
| | | | | |
| ((Small-Duct High-Velocity (Air Cooled, Heating Mode)) | < 65,000 Btu/h | Split System | 6.8 HSPF | ARI 210/240)) |
| Water-Source (Heating Mode) | < 135,000 Btu/h (Cooling Capacity) | 68°F Entering Water | 4.2 COP | ARI/ISO-13256-1 |
| Groundwater-Source (Heating Mode) | < 135,000 Btu/h (Cooling Capacity) | 50°F Entering Water | 3.6 COP | ARI/ISO-13256-1 |
| Ground Source (Heating Mode) | < 135,000 Btu/h (Cooling Capacity) | 32°F Entering Water | 3.1 COP | ARI/ISO-13256-1 |
| ^a Reserved. ^b IPLVs and part load rating conditions are only applicable to equipment with capacity modulation. ^c Deduct 0.2 from the required EERs and IPLVs for units with a heating section other than electric resistance heat. ^d <u>Date of manufacture for single-phase air-cooled heat pumps < 65,000 Btu/h ((are)), as regulated by NAECA. SEER and HSPF values are those set by NAECA.</u> | | | | |

**Table 14-1C
Water Chilling Packages, Minimum Efficiency Requirements**

| Equipment Type | Size Category | Sub-Category or Rating Condition | Minimum Efficiency ^b | Test Procedure ^a |
|--|----------------|----------------------------------|---------------------------------|-----------------------------|
| Air Cooled, With Condenser, Electrically Operated | All Capacities | | 2.80 COP 3.05 IPLV | ARI 550/590 |
| Air Cooled, Without Condenser, Electrically Operated | All Capacities | | 3.10 COP 3.45 IPLV | |
| Water Cooled, Electrically Operated, Positive Displacement (Reciprocating) | All Capacities | | 4.20 COP 5.05 IPLV | ARI 550/590 |
| Water Cooled, Electrically Operated, Positive Displacement (Rotary Screw and Scroll) | < 150 Tons | | 4.45 COP 5.20 IPLV | ARI 550/590 |

| Equipment Type | Size Category | Sub-Category or Rating Condition | Minimum Efficiency ^b | Test Procedure ^a |
|---|---------------------------|----------------------------------|---------------------------------|-----------------------------|
| Air Cooled, With Condenser, Electrically Operated | All Capacities | | 2.80 COP 3.05 IPLV | ARI 550/590 |
| | ≥ 150 Tons and < 300 Tons | | 4.90 COP 5.60 IPLV | |
| | ≥ 300 Tons | | 5.50 COP 6.15 IPLV | |
| Water Cooled, Electrically Operated, Centrifugal | < 150 Tons | | 5.00 COP 5.25 IPLV | ARI 550/590 |
| | ≥ 150 Tons and < 300 Tons | | 5.55 COP 5.90 IPLV | |
| | ≥ 300 Tons | | 6.10 COP 6.40 IPLV | |
| Air Cooled Absorption Single Effect | All Capacities | | 0.60 COP | ARI 560 |
| Water Cooled Absorption Single Effect | All Capacities | | 0.70 COP | |
| Absorption Double Effect, Indirect-Fired | All Capacities | | 1.00 COP 1.05 IPLV | |
| Absorption Double Effect, Direct-Fired | All Capacities | | 1.00 COP 1.00 IPLV | |

^a Reserved.

^b The chiller equipment requirements do not apply for chillers used in low temperature applications where the design leaving fluid temperature is less than or equal to 40°F.

Table 14-1D

Packaged Terminal Air Conditioners, Packaged Terminal Heat Pumps, Room Air Conditioners, and Room Air Conditioner Heat Pumps, Electrically Operated, Minimum Efficiency Requirements

| Equipment Type | Size Category (Input) | Sub-Category or Rating Condition | Minimum Efficiency ^b | Test Procedure ^a |
|---|-----------------------|----------------------------------|--|-----------------------------|
| PTAC (Cooling Mode) New Construction | All Capacities | 95°F db Outdoor Air | 12.5 - (0.213 x Cap/1000) ^b EER | ARI 310/380 |
| PTAC (Cooling Mode) Replacements ^c | All Capacities | 95°F db Outdoor Air | 10.9 - (0.213 x Cap/1000) ^b EER | |
| PTHP (Cooling Mode) New Construction | All Capacities | 95°F db Outdoor Air | 12.3 - (0.213 x Cap/1000) ^b EER | |
| PTHP (Cooling Mode) Replacements ^c | All Capacities | 95°F db Outdoor Air | 10.8 - (0.213 x Cap/1000) ^b EER | |
| PTHP (Heating Mode) New Construction | All Capacities | | 3.2 - (0.026 x Cap/1000) ^b COP | |
| PTHP (Heating Mode) Replacements ^c | All Capacities | | 2.9 - (0.026 x Cap/1000) ^b COP | |
| SPVAC (Cooling Mode) | All Capacities | 95°F db/75°F wb Outdoor Air | 8.6 EER | ARI-390 |
| SPVHP (Cooling Mode) | All Capacities | 95°F db/75°F wb Outdoor Air | 8.6 EER | |
| SPVAC (Heating Mode) | All Capacities | 47°F db/43°F wb Outdoor Air | 2.7 COP | |
| Room Air Conditioners, with Louvered Sides | < 6,000 Btu/h | | 9.7 EER | ANSI/AHAM RAC-1 |

| Equipment Type | Size Category (Input) | Sub-Category or Rating Condition | Minimum Efficiency ^b | Test Procedure ^a |
|--|-----------------------------------|----------------------------------|---------------------------------|-----------------------------|
| | ≥ 6,000 Btu/h and < 8,000 Btu/h | | 9.7 EER | |
| | ≥ 8,000 Btu/h and < 14,000 Btu/h | | 9.8 EER | |
| | ≥ 14,000 Btu/h and < 20,000 Btu/h | | 9.7 EER | |
| | ≥ 20,000 Btu/h | | 8.5 EER | |
| Room Air Conditioners, without Louvered Sides | < 8,000 Btu/h | | 9.0 EER | |
| | ≥ 8,000 Btu/h and < 20,000 Btu/h | | 8.5 EER | |
| | ≥ 20,000 Btu/h | | 8.5 EER | |
| Room Air Conditioner Heat Pumps with Louvered Sides | < 20,000 Btu/h | | 9.0 EER | |
| | ≥ 20,000 Btu/h | | 8.5 EER | |
| Room Air Conditioner Heat Pumps without Louvered Sides | < 14,000 Btu/h | | 8.5 EER | |
| | ≥ 14,000 Btu/h | | 8.0 EER | |
| Room Air Conditioner, Casement Only | All Capacities | | 8.7 EER | |
| Room Air Conditioner, Casement – Slider | All Capacities | | 9.5 EER | |

^a Reserved.

^b Cap means the rated cooling capacity of the product in Btu/h. If the unit's capacity is less than 7000 Btu/h, use 7000 Btu/h in the calculation. If the unit's capacity is greater than 15,000 Btu/h, use 15,000 Btu/h in the calculation.

^c Replacement units must be factory labeled as follows: "MANUFACTURED FOR REPLACEMENT APPLICATIONS ONLY; NOT TO BE INSTALLED IN NEW CONSTRUCTION PROJECTS." Replacement efficiencies apply only to units with existing sleeves less than 16-in. high and less than 42-in. wide.

^d Casement room air conditioners are not separate product classes under current minimum efficiency column.

^e New room air conditioner standards, covered by NAECA became effective October 1, 2000.

Table 14-1E

Warm Air Furnaces and Combination Warm Air Furnaces/Air-Conditioning Units, Warm Air Duct Furnaces and Unit Heaters, Minimum Efficiency Requirements

| Equipment Type | Size Category (Input) | Sub-Category or Rating Condition | Minimum Efficiency ^b | Test Procedure ^a |
|-----------------------------------|-------------------------|--|---|------------------------------------|
| Warm Air Furnace, Gas-Fired | < 225,000 Btu/h (66 kW) | | 78% AFUE or 80% E _t ^c | DOE 10 CFR Part 430 or ANSI Z21.47 |
| | ≥ 225,000 Btu/h (66 kW) | Maximum Capacity ^c Minimum Capacity ^c | 80% E _c ^f | ANSI Z21.47 |
| Warm Air Furnace, Oil-Fired | < 225,000 Btu/h (66 kW) | | 78% AFUE or 80% E _t ^c | DOE 10 CFR Part 430 or UL 727 |
| | ≥ 225,000 Btu/h (66 kW) | Maximum Capacity ^b Minimum Capacity ^b | 81% E _t ^g — | UL 727 |
| Warm Air Duct Furnaces, Gas-Fired | All Capacities | Maximum Capacity ^b Minimum Capacity ^b | 80% E _c ^e — | ANSI Z83.9 |

| Equipment Type | Size Category (Input) | Sub-Category or Rating Condition | Minimum Efficiency ^b | Test Procedure ^a |
|----------------------------------|-----------------------|--|--------------------------------------|-----------------------------|
| Warm Air Unit Heaters, Gas-Fired | All Capacities | Maximum Capacity ^b Minimum Capacity ^b | 80% E _c ^c — | ANSI Z83.8 |
| Warm Air Unit Heaters, Oil-Fired | All Capacities | Maximum Capacity ^b Minimum Capacity ^b | 80% E _c ^c — | UL 731 |

^a Reserved.

^b Minimum and maximum ratings as provided for and allowed by the unit's controls.

^c Combination units not covered by NAECA (3-phase power or cooling capacity greater than or equal to 65,000 Btu/h [19 kW]) may comply with either rating.

^d E_t = Thermal efficiency. See test procedure for detailed discussion.

^e E_c = Combustion efficiency (100% less flue losses). See test procedure for detailed discussion.

^f E_c = Combustion efficiency. Units must also include an IID, have jacket losses not exceeding 0.75% of the input rating, and have either power venting or a flue damper. A vent damper is an acceptable alternative to a flue damper for those furnaces where combustion air is drawn from the conditioned space.

^g E_t = Thermal efficiency. Units must also include an IID, have jacket losses not exceeding 0.75% of the input rating, and have either power venting or a flue damper. A vent damper is an acceptable alternative to a flue damper for those furnaces where combustion air is drawn from the conditioned space.

**Table 14-1F
Boilers, Gas- and Oil-Fired, Minimum Efficiency Requirements**

| Equipment Type ^f | Size Category | Sub-Category or Rating Condition | Minimum Efficiency ^b | Test Procedure |
|-----------------------------|---------------------------------------|----------------------------------|---------------------------------|---------------------|
| Boilers, Gas-Fired | < 300,000 Btu/h | Hot Water | 80% AFUE | DOE 10 CFR Part 430 |
| | | Steam | 75% AFUE | |
| | ≥ 300,000 Btu/h and ≤ 2,500,000 Btu/h | Maximum Capacity ^b | 75% E _t | H.I. Htg Boiler Std |
| | | > 2,500,000 Btu/h ^f | Hot Water | |
| Boilers, Oil-Fired | < 300,000 Btu/h | | 80% AFUE | DOE 10 CFR Part 430 |
| | | Maximum Capacity ^b | 78% E _t | |
| | ≥ 300,000 Btu/h and ≤ 2,500,000 Btu/h | Hot Water | 83% E _c | H.I. Htg Boiler Std |
| | | Steam | 83% E _c | |
| Oil-Fired (Residual) | ≥ 300,000 Btu/h and ≤ 2,500,000 Btu/h | Maximum Capacity ^b | 78% E _t | H.I. Htg Boiler Std |
| | > 2,500,000 Btu/h ^f | Hot Water | 83% E _c | |
| | > 2,500,000 Btu/h ^f | Steam | 83% E _c | |

^a Reserved.

^b Minimum and maximum ratings as provided for and allowed by the unit's controls.

^c E_c = Combustion efficiency (100% less flue losses). See reference document for detailed information.

^d E_t = Thermal efficiency. See reference document for detailed information.

^e Alternate test procedures used at the manufacturer's option are ASME PTC-4.1 for units over 5,000,000 Btu/h input, or ANSI Z21.13 for units greater than or equal to 300,000 Btu/h and less than or equal to 2,500,000 Btu/h input.

^f These requirements apply to boilers with rated input of 8,000,000 Btu/h or less that are not packaged boilers, and to all packaged boilers. Minimum efficiency requirements for boilers cover all capacities of packaged boilers.

**Table 14-1G
Performance Requirements for Heat Rejection Equipment**

| Equipment Type | Total System Heat Rejection Capacity at Rated Conditions | Sub-Category or Rating Condition | Minimum Efficiency ^b | Test Procedure ^c |
|---------------------------------------|--|---|---------------------------------|-----------------------------|
| Propeller or Axial Fan Cooling Towers | All | 95°F (35°C) Entering Water 85°F (29°C) Leaving Water 75°F (24°C) wb Outdoor Air | ≥38.2 gpm/hp | CTI ATC-105 and CTI STD-201 |
| Centrifugal Fan Cooling Towers | All | 95°F (35°C) Entering Water 85°F (29°C) Leaving Water 75°F (24°C) wb Outdoor Air | ≥ 20.0 gpm/hp | CTI ATC-105 and CTI STD-201 |
| Air Cooled Condensers | All | 125°F (52°C) Condensing Temperature R22 Test Fluid 190°F (88°C) Entering Gas Temperature 15°F (8°C) Subcooling 95°F (35°C) Entering Drybulb | ≥176,000 Btu/h•hp | ARI 460 |

^a For purposes of this table, cooling tower performance is defined as the maximum flow rating of the tower divided by the fan nameplate rated motor power.

^b For purposes of this table air-cooled condenser performance is defined as the heat rejected from the refrigerant divided by the fan nameplate rated motor power.

^c Reserved.

TABLE 14-2 RESERVED

TABLE 14-3 RESERVED

**TABLE 14-4
Energy Efficient Electric Motors
Minimum Nominal Full-Load Efficiency**

| Synchronous Speed (RPM) | Open Motors | | | Closed Motors | | |
|-------------------------|-------------|------------|------------|---------------|------------|------------|
| | 3,600 | 1,800 | 1,200 | 3,600 | 1,800 | 1,200 |
| HP | Efficiency | Efficiency | Efficiency | Efficiency | Efficiency | Efficiency |
| 1.0 | - | 82.5 | 80.0 | 75.5 | 82.5 | 80.0 |
| 1.5 | 82.5 | 84.0 | 84.0 | 82.5 | 84.0 | 85.5 |
| 2.0 | 84.0 | 84.0 | 85.5 | 84.0 | 84.0 | 86.5 |
| 3.0 | 84.0 | 86.5 | 86.5 | 85.5 | 87.5 | 87.5 |
| 5.0 | 85.5 | 87.5 | 87.5 | 87.5 | 87.5 | 87.5 |
| 7.5 | 87.5 | 88.5 | 88.5 | 88.5 | 89.5 | 89.5 |
| 10.0 | 88.5 | 89.5 | 90.2 | 89.5 | 89.5 | 89.5 |
| 15.0 | 89.5 | 91.0 | 90.2 | 90.2 | 91.0 | 90.2 |
| 20.0 | 90.2 | 91.0 | 91.0 | 90.2 | 91.0 | 90.2 |
| 25.0 | 91.0 | 91.7 | 91.7 | 91.0 | 92.4 | 91.7 |
| 30.0 | 91.0 | 92.4 | 92.4 | 91.0 | 92.4 | 91.7 |
| 40.0 | 91.7 | 93.0 | 93.0 | 91.7 | 93.0 | 93.0 |
| 50.0 | 92.4 | 93.0 | 93.0 | 92.4 | 93.0 | 93.0 |
| 60.0 | 93.0 | 93.6 | 93.6 | 93.0 | 93.6 | 93.6 |

| Synchronous Speed (RPM) | Open Motors | | | Closed Motors | | |
|-------------------------|-------------|------------|------------|---------------|------------|------------|
| | 3,600 | 1,800 | 1,200 | 3,600 | 1,800 | 1,200 |
| HP | Efficiency | Efficiency | Efficiency | Efficiency | Efficiency | Efficiency |
| 75.0 | 93.0 | 94.1 | 93.6 | 93.0 | 94.1 | 93.6 |
| 100.0 | 93.0 | 94.1 | 94.1 | 93.6 | 94.5 | 94.1 |
| 125.0 | 93.6 | 94.5 | 94.1 | 94.5 | 94.5 | 94.1 |
| 150.0 | 93.6 | 95.0 | 94.5 | 94.5 | 95.0 | 95.0 |
| 200.0 | 94.5 | 95.0 | 94.5 | 95.0 | 95.0 | 95.0 |

TABLE 14-5
Duct Insulation

| Duct Type | Duct Location | Insulation R-Value | Other Requirements |
|--|---|--------------------|--------------------------------|
| Supply, Return | Not within conditioned space: On exterior of building, on roof, in attic, in enclosed ceiling space, in walls, in garage, in crawl spaces | R-7 | Approved weather proof barrier |
| Outside air intake | Within conditioned space | R-7 | See Section 1414.2 |
| Supply, Return, Outside air intake | Not within conditioned space: in concrete, in ground | R-5.3 | |
| Supply with supply air temperature < 55°F or > 105°F | Within conditioned space | R-3.3 | |

Note: Requirements apply to the duct type listed, whether heated or mechanically cooled. Mechanically cooled ducts requiring insulation shall have a vapor retarder, with a perm rating not greater than 0.5 and all joints sealed.

TABLE 14-6
Minimum Pipe Insulation (inches)¹

| Fluid Design Operating Temp. Range, °F | Insulation Conductivity | | Nominal Pipe Diameter (in.) | | | | | |
|---|--|----------------------|------------------------------|------------|----------|----------|----------|-----|
| | Conductivity Range Btu•in. / (h•ft ² •°F) | Mean Rating Temp. °F | Runouts ² up to 2 | 1 and less | > 1 to 2 | > 2 to 4 | > 4 to 6 | > 6 |
| Heating systems (Steam, Steam Condensate[,], and Hot water) | | | Nominal Insulation Thickness | | | | | |
| Above 350 | 0.32-0.34 | 250 | 1.5 | 2.5 | 2.5 | 3.0 | 3.5 | 3.5 |
| 251-350 | 0.29-0.31 | 200 | 1.5 | 2.0 | 2.5 | 2.5 | 3.5 | 3.5 |
| 201-250 | 0.27-0.30 | 150 | 1.0 | 1.5 | 1.5 | 2.0 | 2.0 | 3.5 |
| 141-200 | 0.25-0.29 | 125 | 0.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| 105-140 | 0.24-0.28 | 100 | 0.5 | 1.0 | 1.0 | 1.0 | 1.5 | 1.5 |
| Domestic and Service Hot Water Systems | | | | | | | | |
| 105 and Greater | 0.24-0.28 | 100 | 0.5 | 1.0 | 1.0 | 1.5 | 1.5 | 1.5 |
| Cooling Systems (Chilled Water, Brine[,], and Refrigerant) | | | | | | | | |
| 40-55 | 0.23-0.27 | 75 | 0.5 | 0.5 | 0.75 | 1.0 | 1.0 | 1.0 |
| Below 40 | 0.23-0.27 | 75 | 1.0 | 1.0 | 1.5 | 1.5 | 1.5 | 1.5 |

1. Alternative Insulation Types. Insulation thicknesses in Table 14-6 are based on insulation with thermal conductivities within the range listed in Table 14-6 for each fluid operating temperature range, rated in accordance with ASTM C 335-84 at the mean temperature listed in the table. For insulation that has a conductivity outside the range shown in Table 14-6 for the applicable fluid operating temperature range at the mean rating temperature shown (when rounded to the nearest 0.01 Btu•in./(h•ft²•°F)), the minimum thickness shall be determined in accordance with the following equation:

$$T = PR[(1 + t/PR)^{K/k} - 1]$$

Where

- T = Minimum insulation thickness for material with conductivity K, inches.
- PR = Pipe actual outside radius, inches.
- t = Insulation thickness from Table 14-6, inches
- K = conductivity of alternate material at the mean rating temperature indicated in Table 14-6 for the applicable fluid temperature range, Btu•in./(h•ft²•°F)
- k = the lower value of the conductivity range listed in Table 14-6 for the applicable fluid temperature range, Btu •in./(h•ft²•°F)
- 2. Runouts to individual terminal units not exceeding 12 ft. in length.

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency and appear in the Register pursuant to the requirements of RCW 34.08.040.