Chapter 222-16 WAC
DEFINITIONS

WAC

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DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

222-16-020	Water categories. [Order 263, § 222-16-020, filed 6/16/76.] Repealed by 92-15-011, filed 7/2/92, effective 8/2/92. Statutory Authority: RCW 76.09.040, 76.09.050 and chapter 34.05 RCW.
222-16-040	Temperature sensitive waters. [Order 263, § 222-16-040 WRIA Map, filed 6/16/76.] Repealed by 87-23-036 (Order 535), filed 11/16/87, effective 1/1/88. Statutory Authority: RCW 76.09.040.

Reviser's note: For an explanation of the rules marked with an asterisk (*), see WAC 222-12-010.

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 pollution control hearings board established in RCW 43.21B.010.

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

"Area of resource sensitivity" means areas identified in accordance with WAC 222-22-050 (2)(d), 222-22-060(2), or 222-22-090.

"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 flood plain 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.

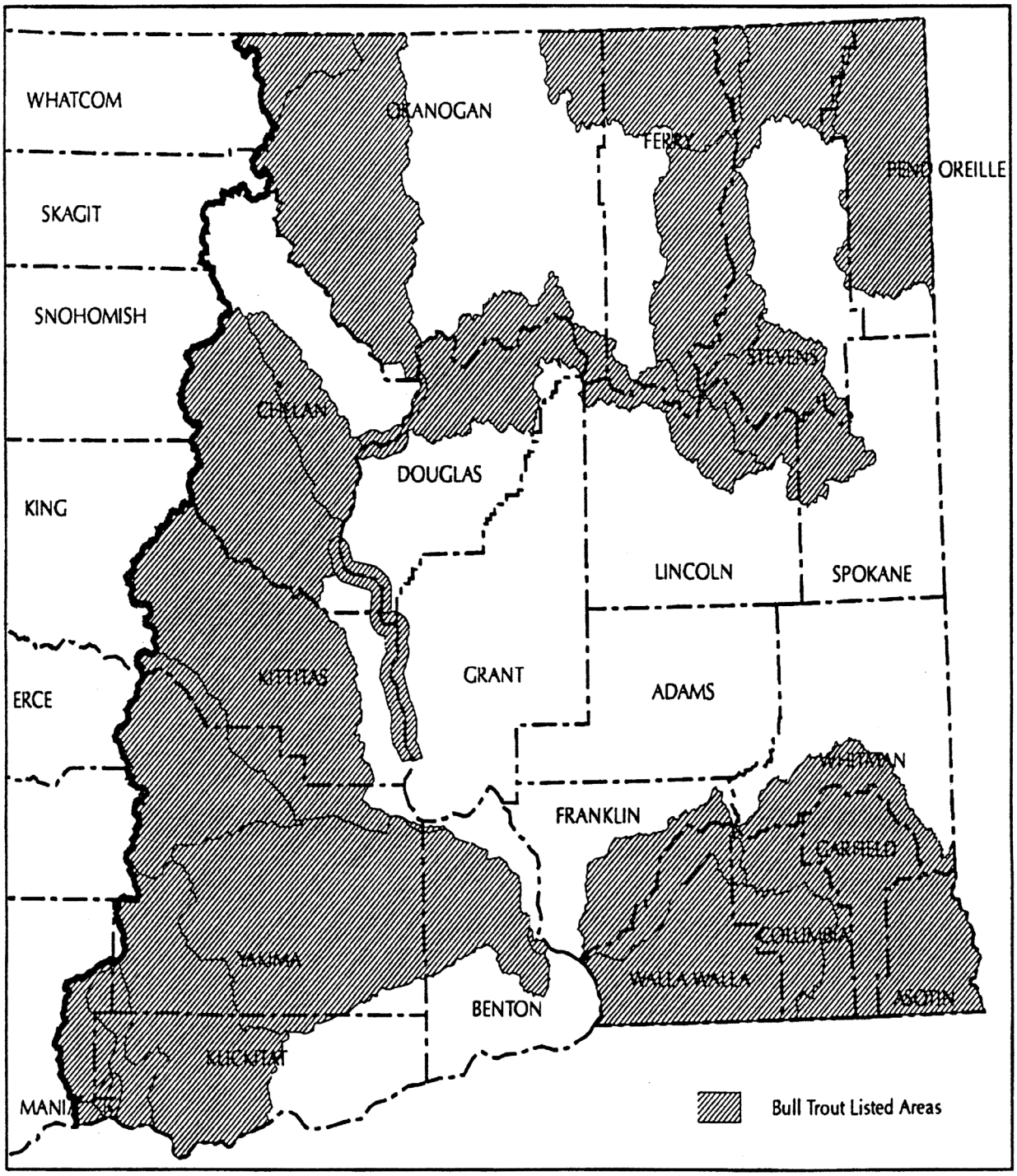
"Bog" means wetlands which have the following characteristics: Hydric organic soils (peat and/or muck) typically 16 inches or more in depth (except over bedrock or hardpan); and vegetation such as sphagnum moss, Labrador tea, bog laurel, bog rosemary, sundews, and sedges; bogs may have an overstory of 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 teardrop-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 activities" means activities associated with conversions of forest land to land uses other than commercial timber operation. These activities may be occurring during or after timber harvest on forest land. They may include but are not limited to the following:

• Preparation for, or installation of, utilities on the forest practices activity site. The development or maintenance of existing rights of way providing utilities exclusively for other ownerships shall not be considered conversions of forest land (see WAC 222-20-010(5)).

• Any of, or any combination of, the following activities in preparation for nonforestry use of the land: Grading, filling, or stump removal.

• Preparation for, or construction of, any structure requiring local government approval.

• Construction of, or improvement of, roads to a standard greater than needed to conduct forest practices activities.

• Clearing for, or expansion of, rock pits for nonforest practices uses or developing surface mines.

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

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

"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.

"Date of receipt," as that term is defined in RCW 43.21B.001, means:

(a) Five business days after the date of mailing; or

(b) The date of actual receipt, when the actual receipt date can be proven by a preponderance of the evidence. The recipient's sworn affidavit or declaration indicating the date of receipt, which is unchallenged by the department, shall constitute sufficient evidence of actual receipt. The date of actual receipt, however, may not exceed forty-five days from the date of mailing.

"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 bank-

full 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;

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

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

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

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

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

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

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

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

"Fish passage barrier" means any artificial in-stream 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. Forest land does not include agricultural land that is or was enrolled in the conservation reserve enhancement program by contract if such agricultural land was historically used for agricultural purposes and the landowner intends to continue to use the land for agricultural purposes in the future. For small forest landowner road maintenance and abandonment planning only, the term "forest land" excludes the following:

(a) Residential home sites. A residential home site may be up to five acres in size, and must have an existing 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 landowner" 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. 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 landowner" 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. The following definitions apply only to road maintenance and abandonment planning:

(1) **"Large forest landowner"** is a 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 meets all of the following conditions:

• Has an average annual timber harvest level of two million board feet or less from their own forest lands in Washington state;

• Did not exceed this annual average harvest level in the three year period before submitting a forest practices application or notification;

• Certifies to the department that they will not exceed this annual harvest level in the ten years after submitting the forest practices application or notification.

However, the department will agree that an applicant is a small forest landowner if the landowner can demonstrate that the harvest levels were exceeded in order to raise funds to pay estate taxes or to meet equally compelling and unexpected obligations such as court-ordered judgments and extraordinary medical expenses.

"Forest practice" means any activity conducted on or directly pertaining to forest land and relating to growing, har-

vesting, or processing timber or forest biomass, 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. "Forest road" does not include skid trails, highways, or local government roads except where the local governmental entity is a forest landowner. For road maintenance and abandonment planning purposes only, "forest road" does not include forest roads used exclusively for residential access located on a small forest landowner's forest land.

"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.

"Horizontal distance" means the distance between two points measured at a zero percent 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.

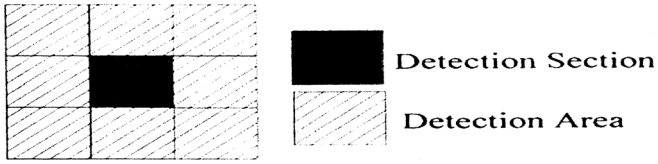
"Limits of construction" means the area occupied by the completed roadway or landing, including the cut bank, fill slope, and the area cleared for the purpose of constructing the roadway or landing.

"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 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 of a conversion to a nonforestry use" means a notice issued by the department pursuant to RCW 76.09.060 (3)(b). A landowner who receives such notice is subject to the actions and requirements described in RCW 76.09.460 and 76.09.470.

"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'*
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 thirty 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 either of the following:

(a) Establishing any new forest road;

(b) Road work located outside an existing forest road prism, except for road maintenance.

"Road maintenance" means either of the following:

(a) All road work located within an existing forest road prism;

(b) Road work located outside an existing forest road prism specifically related to maintaining water control, road safety, or visibility, such as:

• Maintaining, replacing, and installing drainage structures;

• Controlling road-side vegetation;

• Abandoning forest roads according to the process outlined in WAC 222-24-052(3).

"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
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.

"Small forest landowner long-term application" means a proposal from a small forest landowner to conduct forest practices activities for terms of three to fifteen years. Small forest landowners as defined in WAC 222-21-010(13) are eligible to submit long-term applications.

"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 conservation advisory group" means a three-person advisory group designated by the board as follows: One person shall be a representative of Washington's forest products industry, one person shall be a representative of a Washington-based conservation organization actively involved with spotted owl conservation, and one person shall be a representative of the department's forest practices program. Members of the group shall have a detailed working knowledge of spotted owl habitat relationships and factors affecting northern spotted owl conservation. On an annual basis, beginning November 2010, the board will determine whether this group's function continues to be needed for spotted owl conservation.

"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 forty percent of the dominant and codominant trees are Douglas-fir, western hemlock, western red cedar or sitka spruce;

(c) Two or more nesting platforms per acre;

(d) At least 7 acres in size, including the contiguous forested area within 300 feet of nesting platforms, with similar forest stand characteristics (age, species composition, forest structure) to the forested area in which the nesting platforms occur.

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

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

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

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

"Timber" 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 stream" see WAC 222-23-010(2).

"Validation," as used in WAC 222-20-016, means the department's agreement that a small forest landowner has correctly identified and classified resources, and satisfactorily completed a roads assessment for the geographic area described in Step 1 of a long-term application.

"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 resource assessment completed under WAC 222-22-050 or 222-22-060 together with the prescriptions selected under WAC 222-22-080 and shall include resource assessments completed under WAC 222-22-050 where there are no areas of resource sensitivity and the ongoing reviews and reanalyses completed under WAC 222-22-090.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

[Statutory Authority: RCW 76.09.040. 11-12-009, § 222-16-010, filed 5/20/11, effective 6/20/11; 10-23-077, § 222-16-010, filed 11/15/10, effective 12/16/10; 10-11-081, § 222-16-010, filed 5/17/10, effective 6/17/10; 08-17-092, § 222-16-010, filed 8/19/08, effective 9/19/08; 08-06-039, § 222-16-010, filed 2/27/08, effective 3/29/08. Statutory Authority: RCW 76.09.040, 76.09.010 (2)(d). 07-20-044, § 222-16-010, filed 9/26/07, effective 10/27/07. Statutory Authority: [RCW 76.09.040]. 06-17-128, § 222-16-010, filed 8/21/06, effective 9/21/06; 06-11-112, § 222-16-010, filed 5/18/06, effective 6/18/06; 05-12-119, § 222-16-010, filed 5/31/05, effective 7/1/05; 04-05-087, § 222-16-010, filed 2/17/04, effective 3/19/04. Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-16-010, filed 5/30/01, effective 7/1/01. Statutory Authority: RCW 76.09.040 and chapter 34.05 RCW. 98-07-047, § 222-16-010, filed 3/13/98, effective 5/1/98; 97-24-091, § 222-16-010, filed

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

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

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

The waters will be classified using the following criteria:

*(1) **"Type S Water"** means all waters, within their bankfull width, as inventoried as "shorelines of the state" under chapter 90.58 RCW and the rules promulgated pursuant to chapter 90.58 RCW including periodically inundated areas of their associated wetlands.

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

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

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

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

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

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

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

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

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

(3) **"Type Np Water"** means all segments of natural waters within the bankfull width of defined channels that are perennial nonfish habitat streams. Perennial streams are flowing waters that do not go dry any time of a year of normal rainfall and include the intermittent dry portions of the perennial channel below the uppermost point of perennial flow.

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

*(5) For purposes of this section:

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

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

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

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

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

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

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

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

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

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

[Statutory Authority: RCW 76.09.040 and 76.09.370. 06-23-096, § 222-16-030, filed 11/15/06, effective 12/16/06. Statutory Authority: RCW 76.09.040. 05-12-119, § 222-16-030, filed 5/31/05, effective 7/1/05. Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-16-030, filed 5/30/01, effective 7/1/01. Statutory Authority: RCW 76.09.040 and chapter 34.05 RCW. 97-24-091, § 222-16-030, filed 12/3/97, effective 1/3/98. Statutory Authority: RCW 76.09.040, 76.09.170 and chapter 34.05 RCW. 94-01-134, § 222-16-030, filed 12/20/93, effective 1/1/94. Statutory Authority: RCW 76.09.040, 76.09.050 and chapter 34.05 RCW. 92-15-011, § 222-16-030, filed 7/2/92, effective 8/2/92. Statutory Authority: RCW 76.09.040. 87-23-036 (Order 535), § 222-16-030, filed 11/16/87, effective 1/1/88; Order 263, § 222-16-030, filed 6/16/76.]

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

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

Water Type Conversion Table

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(C) Sufficient information about a geomorphic region is available to support a departure from the characteristics in (i) of this subsection, as determined in consultation with the department of fish and wildlife, department of ecology, affected tribes and interested parties.

*(4) **"Type 4 Water"** means all segments of natural waters within the bankfull width of defined channels that are perennial nonfish habitat streams. Perennial streams are flowing waters that do not go dry any time of a year of normal rainfall and include the intermittent dry portions of the perennial channel below the uppermost point of perennial flow.

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

*(6) For purposes of this section:

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

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

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

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

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

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

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

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

[Statutory Authority: RCW 76.09.040 and 76.09.370. 06-23-096, § 222-16-031, filed 11/15/06, effective 12/16/06. Statutory Authority: RCW 76.09.040. 05-12-119, § 222-16-031, filed 5/31/05, effective 7/1/05. Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-16-031, filed 5/30/01, effective 7/1/01.]

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

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

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

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

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

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

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

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

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

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

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

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

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

*(3) Landowners must make an approximate determination of the boundaries and map all forested wetlands 3 acres or more in size within the boundaries of the land to be covered by the application.

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

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

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

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

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

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

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

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

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

(A) Inner gorges, convergent headwalls, or bedrock hollows with slopes steeper than thirty-five degrees (seventy percent);

(B) Toes of deep-seated landslides, with slopes steeper than thirty-three degrees (sixty-five percent);

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

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

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

(ii) The department will base its classification of the application or notification on professional knowledge of the area, information such as soils, geologic or hazard zonation maps and reports, review of approved watershed analysis mass wasting prescriptions according to WAC 222-22-090 (6) or other information provided by the applicant.

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

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

(B) The forest practices are to be conducted in accordance with approved prescriptions from the watershed analysis; and

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

*(e) Timber harvest, in a watershed administrative unit not subject to an approved watershed analysis under chapter 222-22 WAC, construction of roads, landings, rock quarries, gravel pits, borrow pits, and spoil disposal areas on snow avalanche slopes within those areas designated by the depart-

ment, in consultation with department of transportation and local government, as high avalanche hazard where there is the potential to deliver sediment or debris to a public resource, or the potential to threaten public safety.

(f) Timber harvest or construction of roads, landings, rock quarries, gravel pits, borrow pits, and spoil disposal areas on the following except in (f)(iv) of this subsection:

(i) Archaeological sites or historic archaeological resources as defined in RCW 27.53.030; or

(ii) Historic sites eligible for listing on the National Register of Historic Places or the Washington Heritage Register as determined by the Washington state department of archaeology and historic preservation; or

(iii) Sites containing evidence of Native American cairns, graves, or glyptic records as provided for in chapters 27.44 and 27.53 RCW. The department of archaeology and historic preservation shall consult with affected Indian tribes in identifying such sites.

(iv) A forest practice would not be classified as Class IV-special under this subsection if:

(A) Cultural resources management strategies from an approved watershed analysis conducted under chapter 222-22 WAC are part of the proposed forest practices, and the landowner states this in the application; or

(B) A management plan agreed to by the landowner, the affected Indian tribe, and the department of archaeology and historic preservation is part of the proposed application, and the landowner states this in the application.

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

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

(2) **"Class IV - General."** Applications involving the following circumstances are "Class IV - General" forest practices unless they are listed in "Class IV - Special."

(a) Forest practices (other than those in Class I) on lands platted after January 1, 1960, as provided in chapter 58.17 RCW;

(b) Forest practices (other than those in Class I) on lands that have been or are being converted to another use;

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

(d) Forest practices involving timber harvesting or road construction on lands that are contained within urban growth areas, designated pursuant to chapter 36.70A RCW, except where the forest landowner provides one of the following:

(i) A written statement of intent signed by the forest landowner not to convert to a use other than commercial forest products operations for ten years accompanied by either a written forest management plan acceptable to the department or documentation that the land is enrolled under the provisions of chapter 84.33 RCW; or

(ii) A conversion option harvest plan approved by the local governmental entity and submitted to the department as part of the application.

Upon receipt of an application, the department will determine the lead agency for purposes of compliance with the SEPA pursuant to WAC 197-11-924 and 197-11-938(4) and RCW 43.21C.037(2). Such applications are subject to a thirty-day period for approval unless the lead agency determines a detailed statement under RCW 43.21C.030 (2)(c) is required. Upon receipt, if the department determines the application is for a proposal that will require a license from a county/city acting under the powers enumerated in RCW 76.09.240, the department shall notify the applicable county/city under WAC 197-11-924 that the department has determined according to WAC 197-11-938(4) that the county/city is the lead agency for purposes of compliance with the SEPA.

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

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

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

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

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

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

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

(g) Rocking an existing road.

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

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

(j) Tree planting and seeding.

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

(l) Emergency fire control and suppression.

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

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

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

*(p) Aerial application of chemicals (except insecticides), outside of the CRGNSA special management area when applied to not more than forty contiguous acres if the application is part of a combined or cooperative project with another landowner and where the application does not take place within one hundred feet of lands used for farming, or within two hundred feet of a residence, unless such farmland or residence is owned by the forest landowner. Provisions of chapter 222-38 WAC shall apply.

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

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

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

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

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

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

(4) **"Class II."** Certain forest practices have been determined to have a less than ordinary potential to damage a public resource and may be conducted as Class II forest practices: Provided, That no forest practice enumerated below may be conducted as a Class II forest practice if the operation requires a hydraulic project approval (RCW 77.55.100) or is within a "shorelines of the state," or involves owner of perpetual timber rights subject to RCW 76.09.067 (other than renewals). Such forest practices require an application. No forest practice enumerated below may be conducted as a "Class II" forest practice if it takes place on lands platted after January 1, 1960, as provided in chapter 58.17 RCW, or on lands that have been or are being converted to another use. No forest practice enumerated below involving timber harvest or road construction may be conducted as a "Class II" if it takes place within urban growth areas designated pursuant to chapter 37.70A RCW. Such forest practices require a Class IV application. Class II forest practices are the following:

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

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

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

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

(iii) No change in the nature and extent of the forest practice is required under rules effective at the time of renewal; and

(iv) The application is not a multiyear permit that is located within an area subject to reanalysis of a watershed analysis under WAC 222-22-090(6).

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

(i) Construction of advance fire trails.

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

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

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

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

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

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

(iv) Any harvest on less than forty acres.

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

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

(a) Those requiring hydraulic project approval (RCW 77.55.100).

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

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

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

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

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

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

*(h) Road maintenance involving:

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

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

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

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

(k) Harvesting, road construction, site preparation or aerial application of pesticides on lands which contain cultural, historic or archaeological resources which, at the time the application or notification is filed, have been identified to the department as being of interest to an affected Indian tribe.

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

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

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

*(o) Multiyear permits.

*(p) Small forest landowner long-term applications that are not classified Class IV - Special or Class IV - General, or renewals of previously approved Class III or IV long-term applications.

[Statutory Authority: RCW 76.09.040. 11-12-009, § 222-16-050, filed 5/20/11, effective 6/20/11; 08-17-092, § 222-16-050, filed 8/19/08, effective 9/19/08. Statutory Authority: RCW 76.09.040, 76.09.010 (2)(d). 07-20-044, § 222-16-050, filed 9/26/07, effective 10/27/07. Statutory Authority: RCW 76.09.040. 06-11-112, § 222-16-050, filed 5/18/06, effective 6/18/06; 05-12-119, § 222-16-050, filed 5/31/05, effective 7/1/05. Statutory Authority: RCW 76.09.040, 76.09.050, 76.09.370, and 34.05.350. 02-17-099, § 222-16-050, filed 8/20/02, effective 9/20/02. Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-16-050, filed 5/30/01, effective 7/1/01. Statutory Authority: RCW 76.09.040 and chapter 34.05 RCW. 98-07-047, § 222-16-050, filed 3/13/98, effective 5/1/98; 97-24-091, § 222-16-050, filed 12/3/97, effective 1/3/98; 93-12-001, § 222-16-050, filed 5/19/93, effective 6/19/93. Statutory Authority: RCW 76.09.040, 76.09.050 and chapter 34.05 RCW. 92-15-011, § 222-16-050, filed 7/2/92, effective 8/2/92. Statutory Authority: RCW 76.09.040, 76.09.050 and 34.05.350. 91-23-052, § 222-16-050, filed 11/15/91, effective 12/16/91. Statutory Authority: RCW 76.09.040. 88-19-112 (Order 551, Resolution No. 88-1), § 222-16-050, filed 9/21/88, effective 11/1/88; 87-23-036 (Order 535), § 222-16-050, filed 11/16/87, effective 1/1/88. Statutory Authority: RCW 76.09.040 and 76.09.050. 82-16-077 (Resolution No. 82-1), § 222-16-050, filed 8/3/82, effective 10/1/82; Order 263, § 222-16-050, filed 6/16/76.]

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

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

WAC 222-16-060 Lands with a likelihood of future conversion. (1) Prior to identification of any forest lands as having a likelihood of future conversion to urban development within a ten-year period, the department shall consider all available information, including but not limited to:

(a) Whether the land is assessed under the provisions of chapter 84.33 or 84.34 RCW;

(b) Whether the land is excluded from any local improvement district;

(c) Whether the classification of the land in the local comprehensive plan or the local zoning ordinance permits or encourages long-term timber production;

(d) Whether the land lies outside the current or proposed boundary of a city or the urban growth boundary of a city or outside a water or sewer district;

(e) Whether the land has received previous development permit approval;

(f) The presence or absence of a written forest management plan for the land.

Any identification must be consistent with any local or regional land use plans or ordinances.

(2) A local governmental entity with jurisdiction or an affected Indian tribe may submit to the department a proposal for identification of forest lands that have the likelihood of future conversion to urban development within a ten-year period.

(3) The department may develop a public participation process when identifying forest lands with a likelihood of future conversion to urban development within a ten-year period.

(4) Forest lands that have been identified by the department prior to the effective date of this section as having a likelihood of future conversion to urban development within a ten-year period shall be reviewed under subsection (1) of this section to determine if the identification should be withdrawn or modified.

(5) A landowner that submits an application or notification in an area that has been identified as having a likelihood of future conversion to urban development within a ten-year period may request the department to reconsider the identification of the affected parcel. The department shall remove the identification if the landowner complies with (a) of this subsection and at least one from (b) or (c) of this subsection:

(a) The landowner submits a statement of intent not to convert to a use other than commercial timber operation for a period of ten years after completion of the forest practice. The statement shall be on a form prepared by the department and shall indicate the landowner is aware of the provisions of RCW 76.09.060 (3)(b); and

(b) The land is enrolled under the provisions of chapter 84.28, 84.33, or 84.34 RCW; or

(c) A written forest management plan for the land covering the next ten years has been reviewed and accepted by the department.

[Statutory Authority: RCW 76.09.040. 08-24-011, § 222-16-060, filed 11/21/08, effective 12/22/08. Statutory Authority: RCW 76.09.040, 76.09.170 and chapter 34.05 RCW. 94-01-134, § 222-16-060, filed 12/20/93, effective 1/1/94. Statutory Authority: RCW 76.09.040, 76.09.050 and 34.05.350. 91-23-052, § 222-16-060, filed 11/15/91, effective 12/16/91.]

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

(1) Pesticide list - The department shall maintain a list of all pesticides registered under chapter 15.58 RCW for use in forest practices. The department shall conduct, in consultation with the departments of ecology, health, agriculture, and fish and wildlife, an annual review of the list for the purpose of including new pesticides and/or removing those pesticides which have been prohibited from use. The list shall be available to the public at each of the department's offices. A list of the department's offices and their addresses appears at WAC 332-10-030. In preparing the pesticide list, the department shall include information on the following characteristics:

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

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

(c) Whether the pesticide is a state restricted use pesticide for the protection of groundwater under WAC 16-228-1231.

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

KEY FOR EVALUATION OF SITE SPECIFIC USE OF AERIALLY APPLIED PESTICIDES

Question	Question	Resp	Action
1 (a)	Is the pesticide on the pesticide list (WAC 222-16-070(1))?	Yes No	go to 2 go to 1(b)
1 (b)	Is the pesticide being used under a Dept of Agriculture Experimental Use Permit (WAC 16-228-1460)?	Yes No	Class III Class IV Sp
2	Is the toxicity rating for the pesticide to be used "Danger - Poison" as designated in the pesticide list (WAC 222-16-070 (1)(b))?	Yes No	Class IV Sp go to 3(a)
3 (a)	Is *Bacillus thuringiensis* (BT) the only pesticide being used on this application?	Yes No	go to 3(b) go to 4(a)
3 (b)	Is there a Threatened or Endangered species or the critical habitat (Federal) or critical habitat (State) of a species within the application area that is susceptible to the BT strain being used?	Yes No	Class IV Sp Class III
4 (a)	Is this operation occurring over groundwater with a high susceptibility to contamination as specified in EPA 910/9-87-169 or in documentation provided by the department of ecology?	Yes No	go to 4(b) go to 5(a)
4 (b)	Is this pesticide a state restricted use pesticide for the protection of groundwater under WAC 16-228-1231?	Yes No	Class IV Sp go to 5(a)
5 (a)	Is the operation adjacent (within 100 ft.) of surface water?	Yes No	go to 5(b) go to 5(e)

KEY FOR EVALUATION OF SITE SPECIFIC USE OF AERIALLY APPLIED PESTICIDES

Question	Question	Resp	Action
5 (b)	Determine the toxicity rating from the pesticide list: *Is the toxicity rating "Caution" or "Warning"? *Is the toxicity rating "Danger"?	 Yes Yes	 go to 5(c) go to 5(d)
5 (c)	Is there a Group A or B water surface water system (WAC 246-290-020) intake OR a fish hatchery intake within one half mile downstream of the operation?	Yes No	Class IV Sp go to 5(e)
5 (d)	Is there a Group A or B water surface system intake OR a fish hatchery intake within 1 mile downstream of the operation?	Yes No	Class IV Sp go to 5(e)
5 (e)	Is the operation within 200 feet of the intake of a Group A or B spring water system?	Yes No	Class IV Sp go to 5(f)
5 (f)	Is the operation applying a pesticide in a Type A or B wetland?	Yes No	Class IV Sp go to 6(a)
6 (a)	Does any portion of the planned operation cover 240 or more contiguous acres? Pesticide treatment units will be considered contiguous if they are separated by less than 300 feet or treatment dates of adjacent units are less than 90 days apart.	Yes No	Class IV Sp go to 6(b)
6 (b)	Is there a Threatened or Endangered species or the critical habitat (Federal) or critical habitat (State) of a species within the application area?	Yes No	Class IV Sp go to 6(c)
6 (c)	If there is a special concern identified for this pesticide in the Board manual, does it apply to this application?	Yes No	Class IV Sp Class III

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

[Statutory Authority: RCW 76.09.040. 05-12-119, § 222-16-070, filed 5/31/05, effective 7/1/05. Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-16-070, filed 5/30/01, effective 7/1/01. Statutory Authority: RCW 76.09.040 and chapter 34.05 RCW. 97-24-091, § 222-16-070, filed 12/3/97, effective 1/3/98; 93-12-001, § 222-16-070, filed 5/19/93, effective 6/19/93. Statutory Authority: RCW 76.09.040, 76.09.050 and chapter 34.05 RCW. 92-15-011, § 222-16-070, filed 7/2/92, effective 8/2/92.]

WAC 222-16-080 Critical habitats (state) of threatened and endangered species. (1) Critical habitats (state) of threatened or endangered species and specific forest practices designated as Class IV-Special are as follows:

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

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

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

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

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

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

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

(h) Northern spotted owl (*Strix occidentalis caurina*).

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

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

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

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

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

(j) Marbled murrelet (*Brachyramphus marmoratus*).

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

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

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

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

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

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

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

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

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

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

(state) adopted by the board shall be added to the list in subsection (1) of this section. See WAC 222-16-050 (1)(b).

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

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

(i) The effective date of a regulatory system for wildlife protection referred to in (b) of this subsection or of substantive rules on the species.

(ii) The delisting of a threatened or endangered species by the Washington fish and wildlife commission and by the United States Secretary of Interior or Commerce.

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

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

(ii) Use a landscape approach to wildlife protection;

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

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

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

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

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

(i) A habitat conservation plan and incidental take permit; or an incidental take statement covering such species approved by the Secretary of the Interior or Commerce pursuant to 16 U.S.C. § 1536(b) or 1539(a); or

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

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

(iv) A rule adopted by the U.S. Fish and Wildlife Service or the National Marine Fisheries Service for the conservation of an affected species pursuant to 16 U.S.C. section 1533(d); or

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

(i) A landscape management plan; or

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

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

(d) A bald eagle management plan approved under WAC 232-12-292;

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

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

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

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

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

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

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

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

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

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

[Statutory Authority: RCW 76.09.040. 10-11-081, § 222-16-080, filed 5/17/10, effective 6/17/10; 05-12-119, § 222-16-080, filed 5/31/05, effective 7/1/05. Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-16-080, filed 5/30/01, effective 7/1/01. Statutory Authority: RCW 76.09.040 and chapter 34.05 RCW. 97-24-091, § 222-16-080, filed 12/3/97, effective 1/3/98; 97-15-105, § 222-16-080, filed 7/21/97, effective 8/21/97. Statutory Authority: Chapters 76.09 and 34.05 RCW. 96-12-038, § 222-16-080, filed 5/31/96, effective 7/1/96. Statutory Authority: RCW 76.09.040 and chapter 34.05 RCW. 93-12-001, § 222-16-080, filed 5/19/93, effective 6/19/93. Statutory Authority: RCW 76.09.040, 76.09.050 and chapter 34.05 RCW. 92-15-011, § 222-16-080, filed 7/2/92, effective 8/2/92.]

WAC 222-16-085 Northern spotted owl habitats. (1) **Suitable spotted owl habitat** means forest stands which meet the description of old forest habitat, sub-mature habitat or young forest marginal habitat found in (a) and (b) of this subsection. Old forest habitat is the highest quality, followed in descending order by sub-mature habitat and young forest marginal habitat.

(a) **Old forest habitat** means habitat that provides for all the characteristics needed by northern spotted owls for nesting, roosting, foraging, and dispersal, described as stands with:

(i) A canopy closure of 60% or more and a layered, multispecies canopy where 50% or more of the canopy closure is provided by large overstory trees (typically, there should be at least 75 trees greater than 20 inches dbh per acre, or at least 35 trees 30 inches dbh or larger per acre); and

(ii) Three or more snags or trees 20 inches dbh or larger and 16 feet or more in height per acre with various deformities such as large cavities, broken tops, dwarf mistletoe infections, and other indications of decadence; and

(iii) More than two fallen trees 20 inches dbh or greater per acre and other woody debris on the ground.

(b) **Sub-mature habitat and young forest marginal habitat.** Sub-mature habitat provides all of the characteristics needed by northern spotted owls for roosting, foraging, and dispersal. Young forest marginal habitat provides some of the characteristics needed by northern spotted owls for roosting, foraging, and dispersal. Sub-mature habitat and young forest marginal habitat stands can be characterized based on the forest community, canopy closure, tree density and height, vertical diversity, snags and cavity trees, dead and down wood, and shrubs or mistletoe infection. They are described in the following tables:

(i) Western Washington spotted owl sub-mature and young forest marginal habitat characteristics.

Characteristic	Habitat Type	
	Sub-Mature	**Young Forest Marginal**
Forest Community	conifer-dominated *or* conifer-hardwood (greater than or equal to 30% conifer)	conifer-dominated *or* conifer-hardwood (greater than or equal to 30% conifer)
Canopy Closure	greater than or equal to 70% canopy closure	greater than or equal to 70% canopy closure
Tree Density and Height	115-280 trees/acre (greater than or equal to 4 inches dbh) with dominants/codominants greater than or equal to 85 feet high OR	115-280 trees/acre (greater than or equal to 4 inches dbh) with dominants/codominants greater than or equal to 85 feet high OR
Vertical Diversity	dominants/codominants greater than or equal to 85 feet high with 2 or more layers and 25 - 50% intermediate trees	dominants/codominants greater than or equal to 85 feet high with 2 or more layers and 25 - 50% intermediate trees
Snags/Cavity Trees	greater than or equal to 3/acre (greater than or equal to 20 inches dbh and 16 feet in height)	greater than or equal to 2/acre (greater than or equal to 20 inches dbh and 16 feet in height) OR greater than or equal to 10% of the ground covered with 4 inch diameter or larger wood, with 25-60% shrub cover
Dead, Down Wood	N/A	
Shrubs	N/A	

The values indicated for canopy closure and tree density may be replaced with a quadratic mean diameter of greater than 13 inches and a basal area of greater than 100.

(ii) Eastern Washington spotted owl sub-mature and young forest marginal habitat characteristics.

Characteristic	Habitat Type		
	Sub-Mature	**Young Forest Marginal (closed canopy)**	**Young Forest Marginal (open canopy)**
Forest Community	greater than or equal to 40% fir	greater than or equal to 40% fir	greater than or equal to 40% fir
Tree Density and Height	110-260 trees/acre (greater than or equal to 4 inches dbh) with dominants/codominants greater than or equal to 90 feet high OR	100 - 300 trees/acre (greater than or equal to 4 inches dbh)	100 - 300 trees/acre (greater than or equal to 4 inches dbh)
		dominants/codominants equal to or greater than 70 feet high	dominants/codominants equal to or greater than 70 feet high

Characteristic	Habitat Type		
	Sub-Mature	Young Forest Marginal (closed canopy)	Young Forest Marginal (open canopy)
Vertical Diversity	dominants/codominants greater than or equal to 90 feet high with 2 or more layers and	2 or more layers	2 or more layers
	25 - 50% intermediate trees	25 - 50% intermediate trees	25 - 50% intermediate trees
Canopy Closure	greater than or equal to 70% canopy closure	greater than or equal to 70% canopy closure	greater than or equal to 50% canopy closure
Snags/Cavity Trees	greater than or equal to 3/acre (greater than or equal to 20 inches dbh 16 feet in height) OR	N/A	2/acre or more (greater than or equal to 20 inches dbh 16 feet in height)
Mistletoe	high or moderate infection	N/A	high or moderate infection
Dead, Down Wood	greater than or equal to 5% of the ground covered with 4 inch diameter or larger wood	N/A	N/A

The values indicated for canopy closure and tree density may be replaced with the following:

(A) For sub-mature a quadratic mean diameter of greater than 13 inches and a relative density of greater than 44;

(B) For young forest marginal a quadratic mean diameter of greater than 13 inches and a relative density of greater than 28.

(2) **Spotted owl dispersal habitat** means habitat stands that provide the characteristics needed by northern spotted owls for dispersal. Such habitat provides protection from the weather and predation, roosting opportunities, and clear space below the forest canopy for flying. Timber stands that provide for spotted owl dispersal have the following characteristics:

(a) **For western Washington,** timber stands 5 acres in size or larger with:

(i) 70% or more canopy cover; and

(ii) 70% or more of the stand in conifer species greater than 6 inches dbh; and

(iii) A minimum of 130 trees per acre with a dbh of at least 10 inches or a basal area of 100 square feet of 10 inch dbh or larger trees; and

(iv) A total tree density of 300 trees per acre or less; and

(v) A minimum of 20 feet between the top of the understory vegetation and the bottom of the live canopy, with the lower boles relatively clear of dead limbs.

(b) **For eastern Washington,** timber stands 5 acres in size or larger with:

(i) 50% or more canopy closure; and

(ii) A minimum of 50 conifer trees per acre, with a dbh of 6 inches or more in even-aged stands or 4 inches or more in uneven-aged stands, and an average tree height of 65 feet or more; and

(iii) Total tree density of 200 trees per acre or less; and

(iv) A minimum of 20 feet between the top of the understory vegetation and the bottom of the live canopy, with the lower boles relatively clear of dead limbs; or

(v) Conifer stands with a quadratic mean diameter of 9 inches or more and a relative density of 33 or more or a canopy closure of 55% or more.

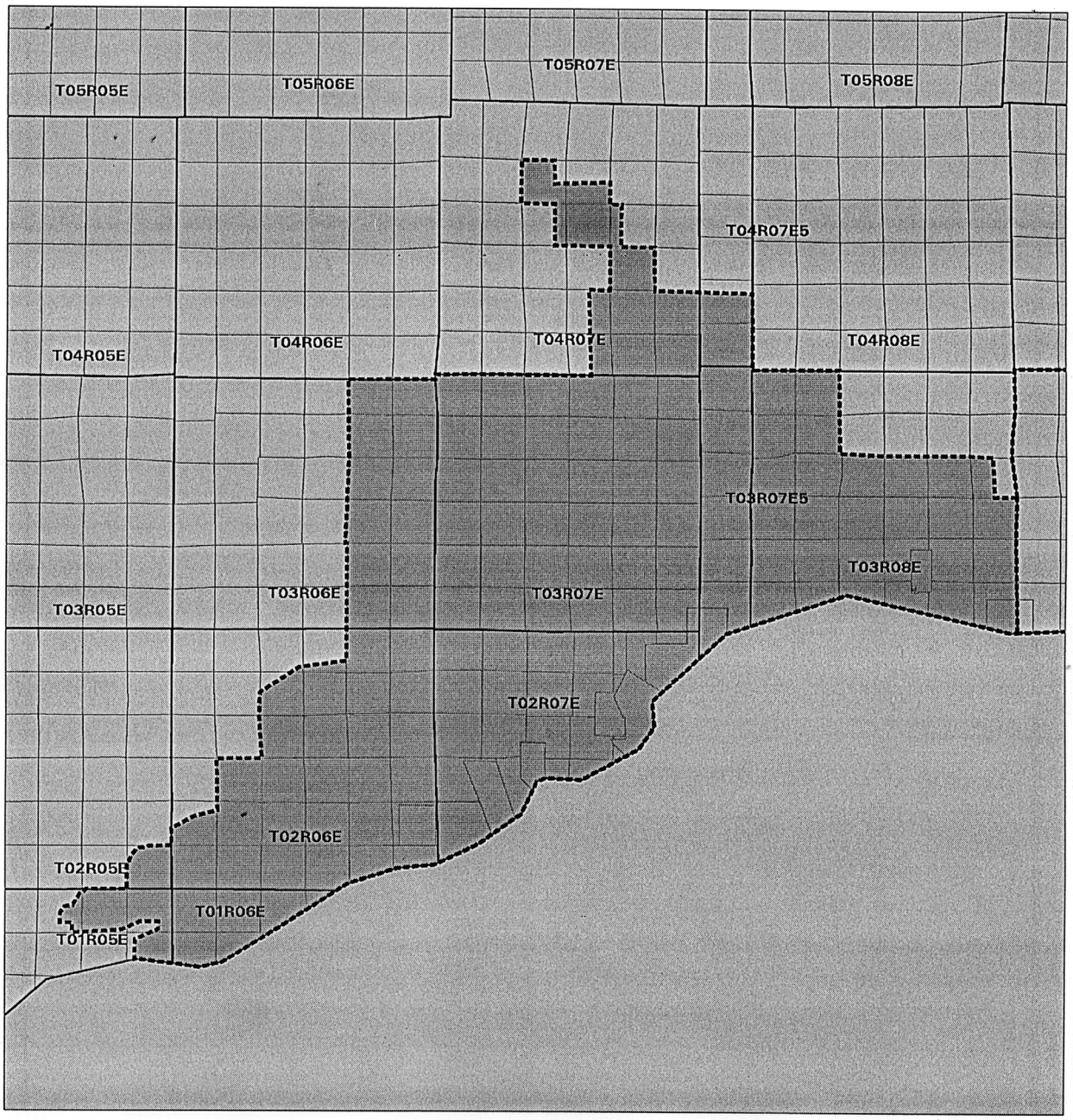
(c) Suitable spotted owl habitat provides all of the required characteristics needed by spotted owls for dispersal.

(d) Landowners may submit information to support an alternate definition of dispersal habitat for review and approval by the department in consultation with the department of fish and wildlife.

[Statutory Authority: Chapters 76.09 and 34.05 RCW. 96-12-038, § 222-16-085, filed 5/31/96, effective 7/1/96.]

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

(1) Columbia Gorge SOSEA



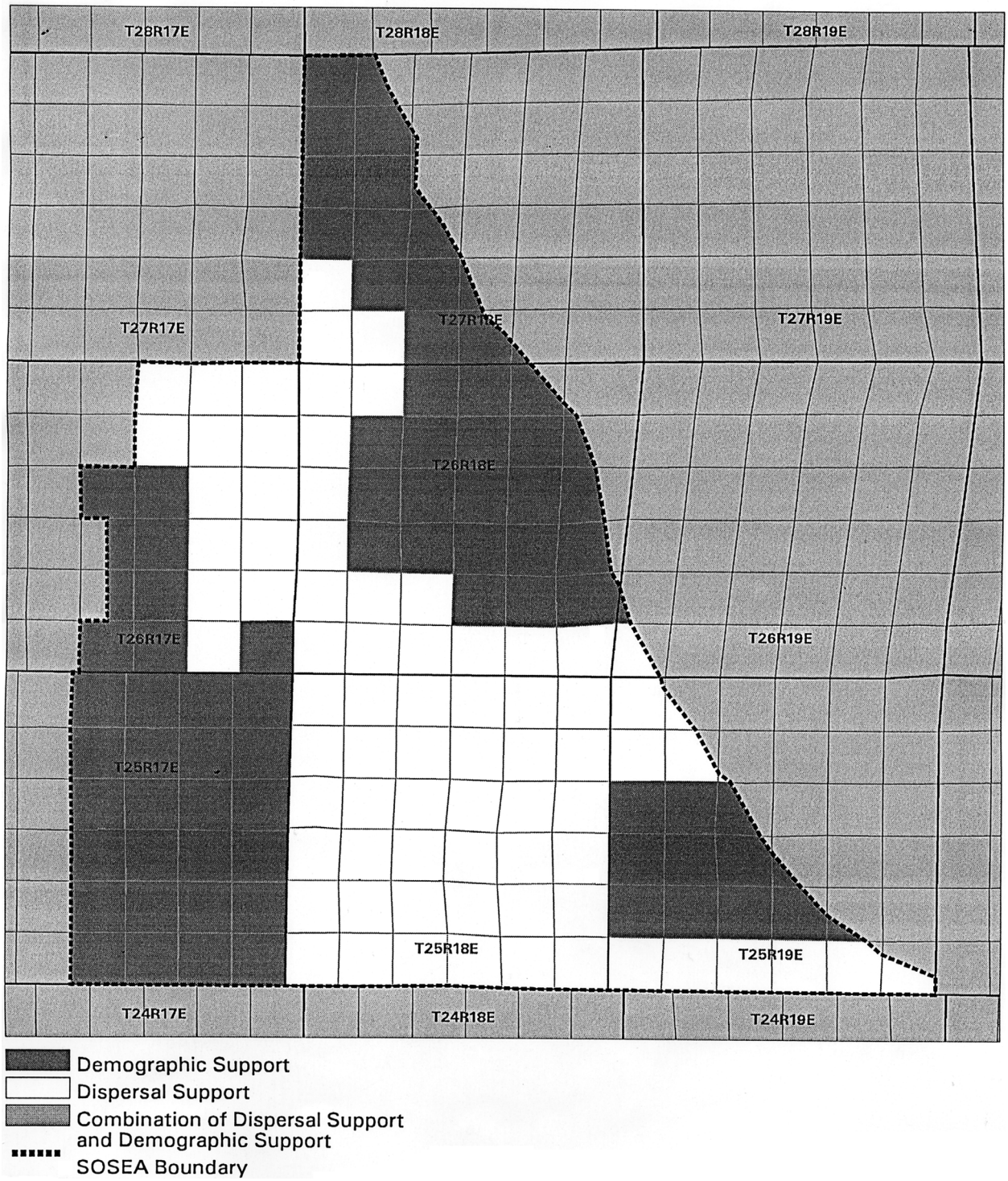
Demographic Support

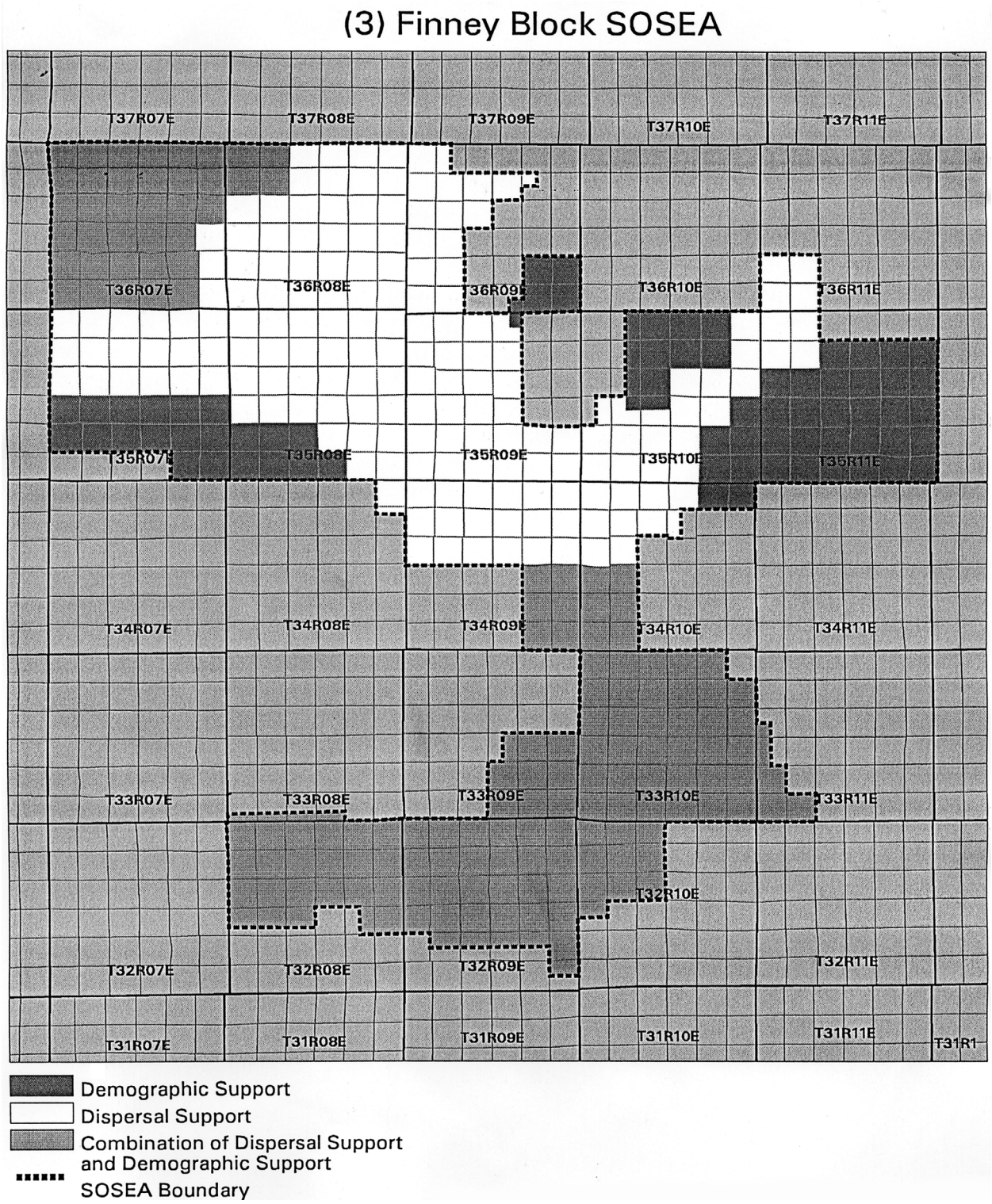
Dispersal Support

Combination of Dispersal Support and Demographic Support

SOSEA Boundary

(2) Entiat SOSEA




(3) Finney Block SOSEA
T37R07E
T37R08E
T37R09E
T37R10E
T37R11E
T36R07E
T36R08E
T36R09E
T36R10E
T36R11E
T35R07E
T35R08E
T35R09E
T35R10E
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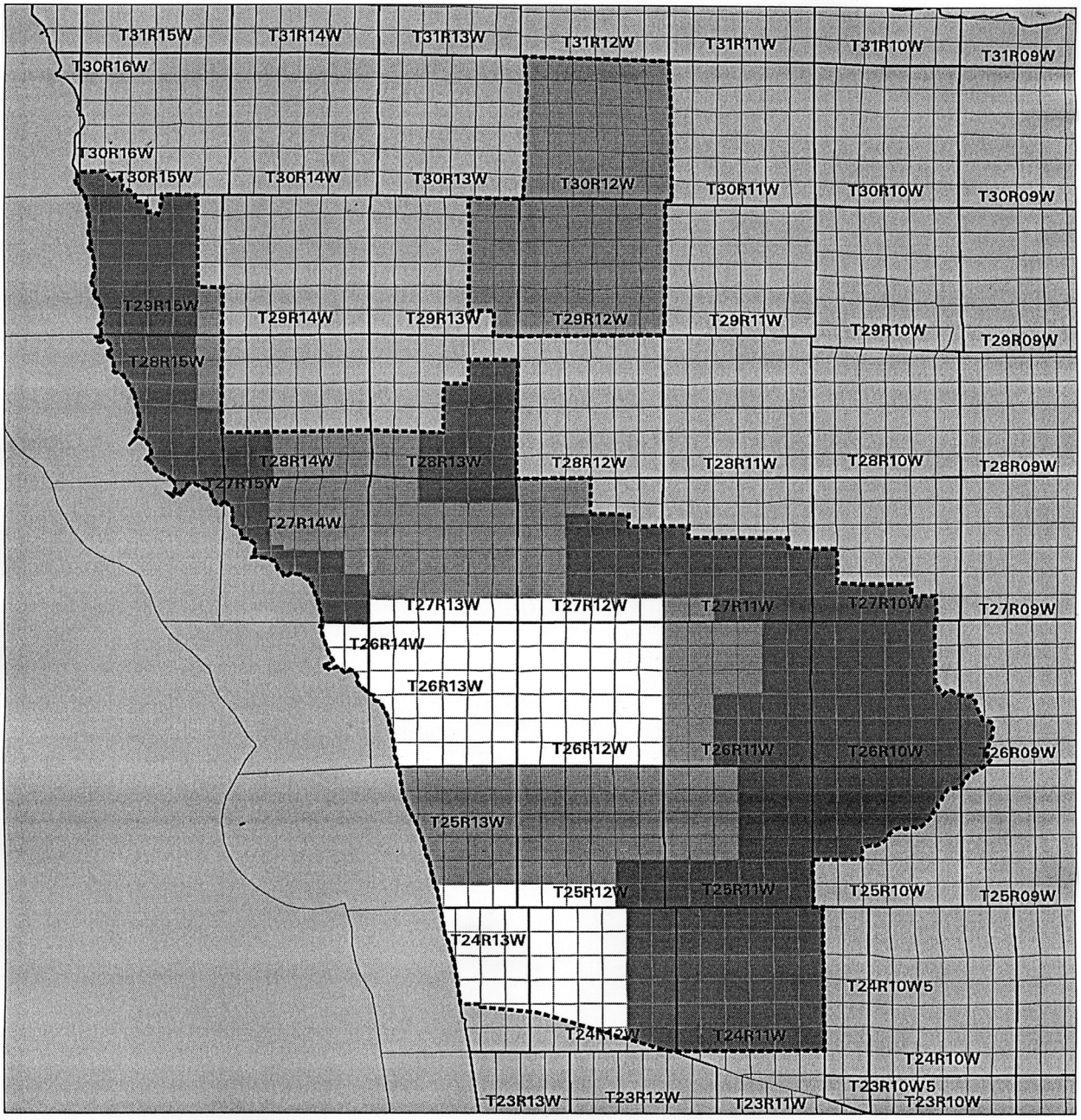
T33R09E
T33R10E
T33R11E
T32R10E
T32R07E
T32R08E
T32R09E
T32R11E
T31R07E
T31R08E
T31R09E
T31R10E
T31R11E
T31R1
Demographic Support
Dispersal Support
Combination of Dispersal Support and Demographic Support
SOSEA Boundary

(4) Hoh-Clearwater/Coastal Link SOSEA



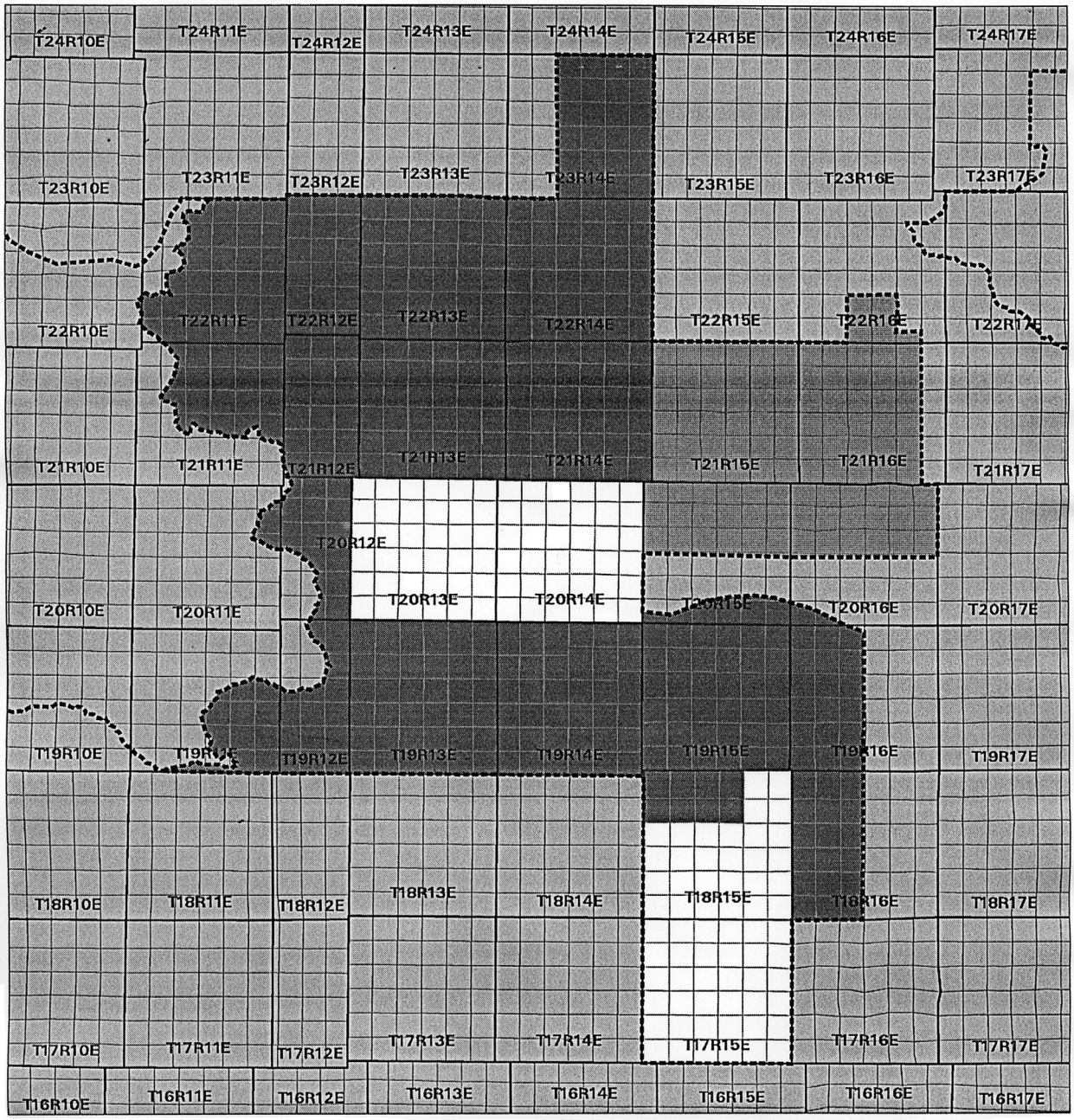
Demographic Support

Dispersal Support

Combination of Dispersal Support and Demographic Support

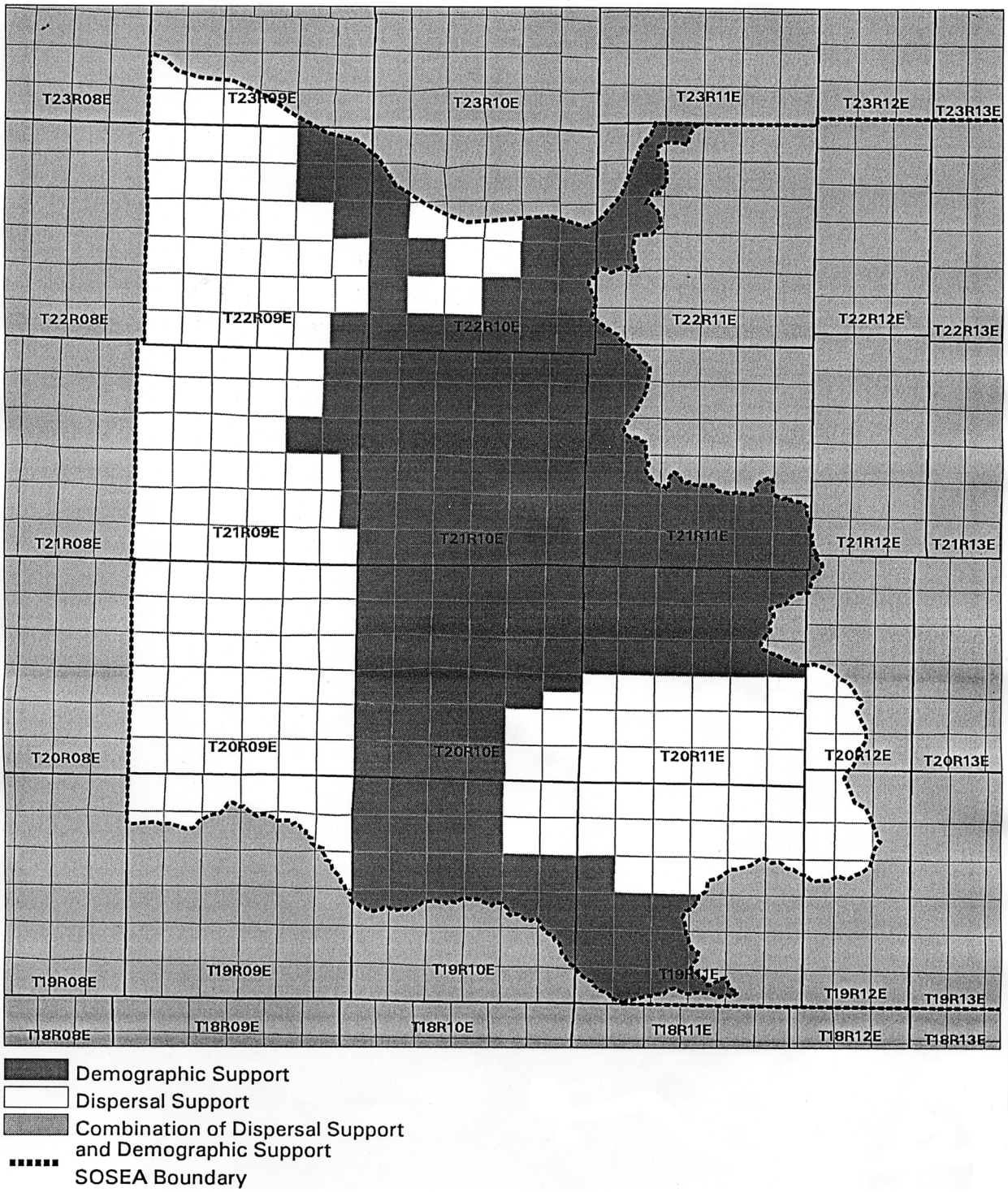
SOSEA Boundary

(5) I-90 East SOSEA

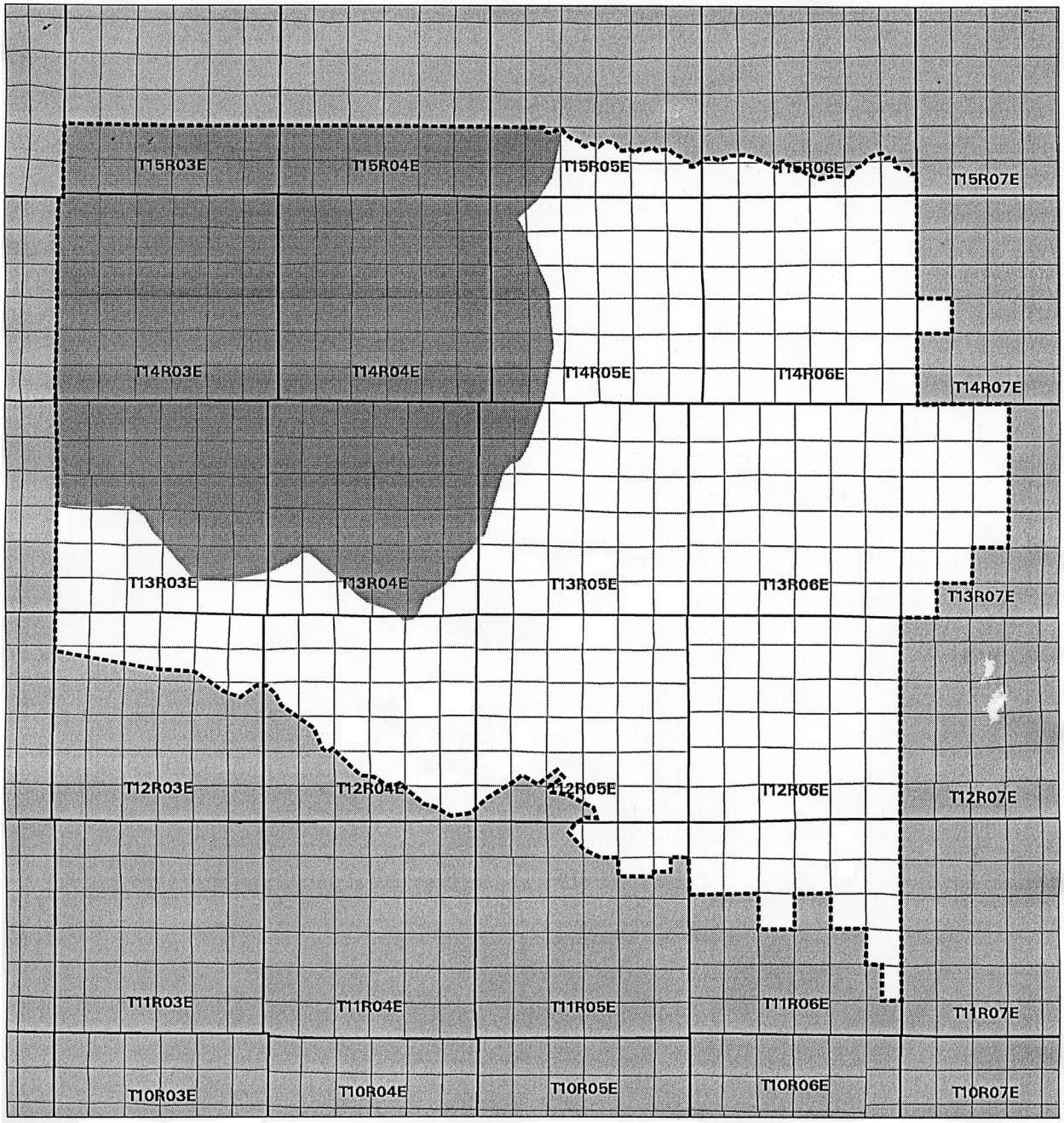


Demographic Support
Dispersal Support
Combination of Dispersal Support and Demographic Support
SOSEA Boundary

(6) I-90 West SOSEA

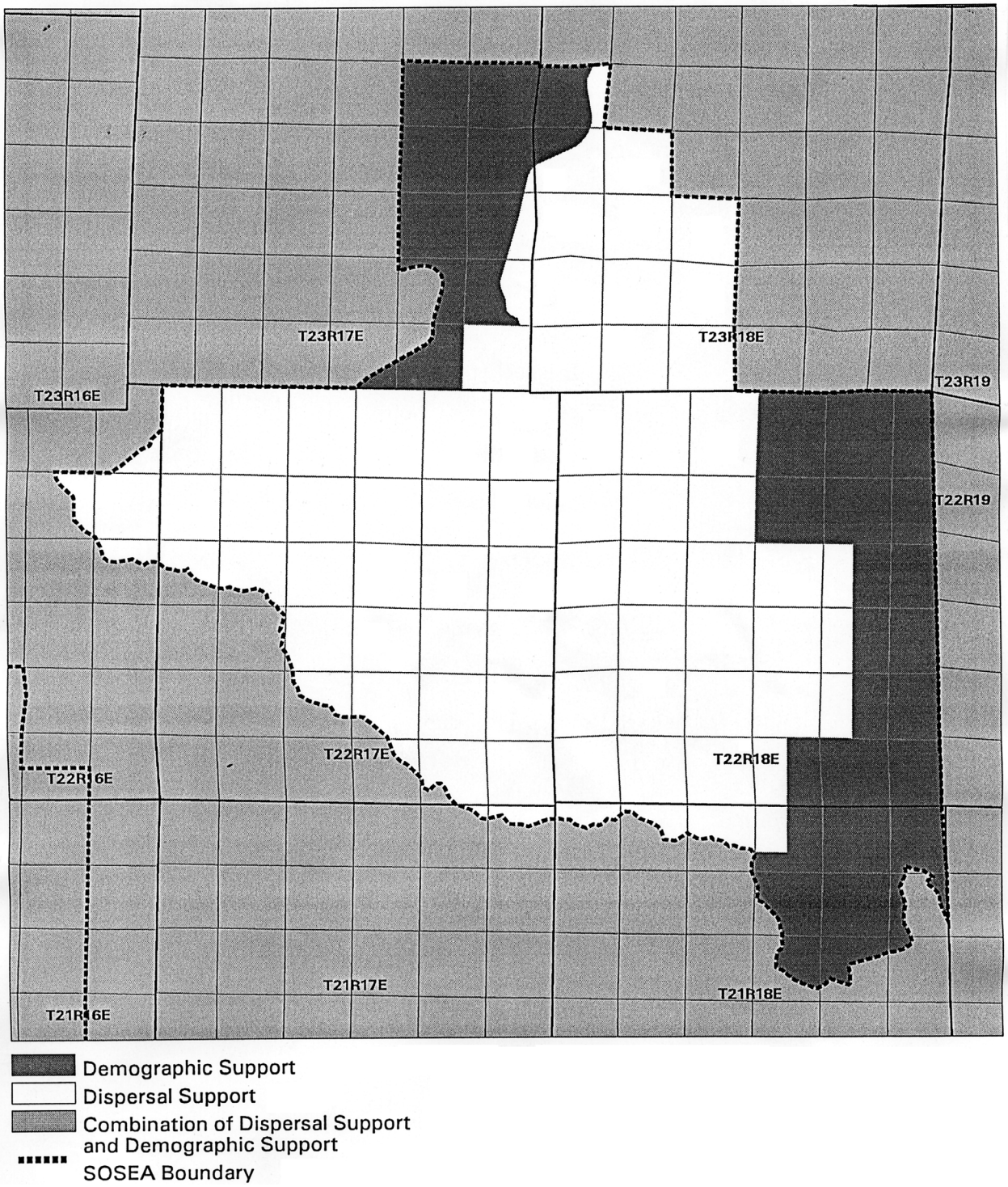


(7) Mineral Block/Link SOSEA

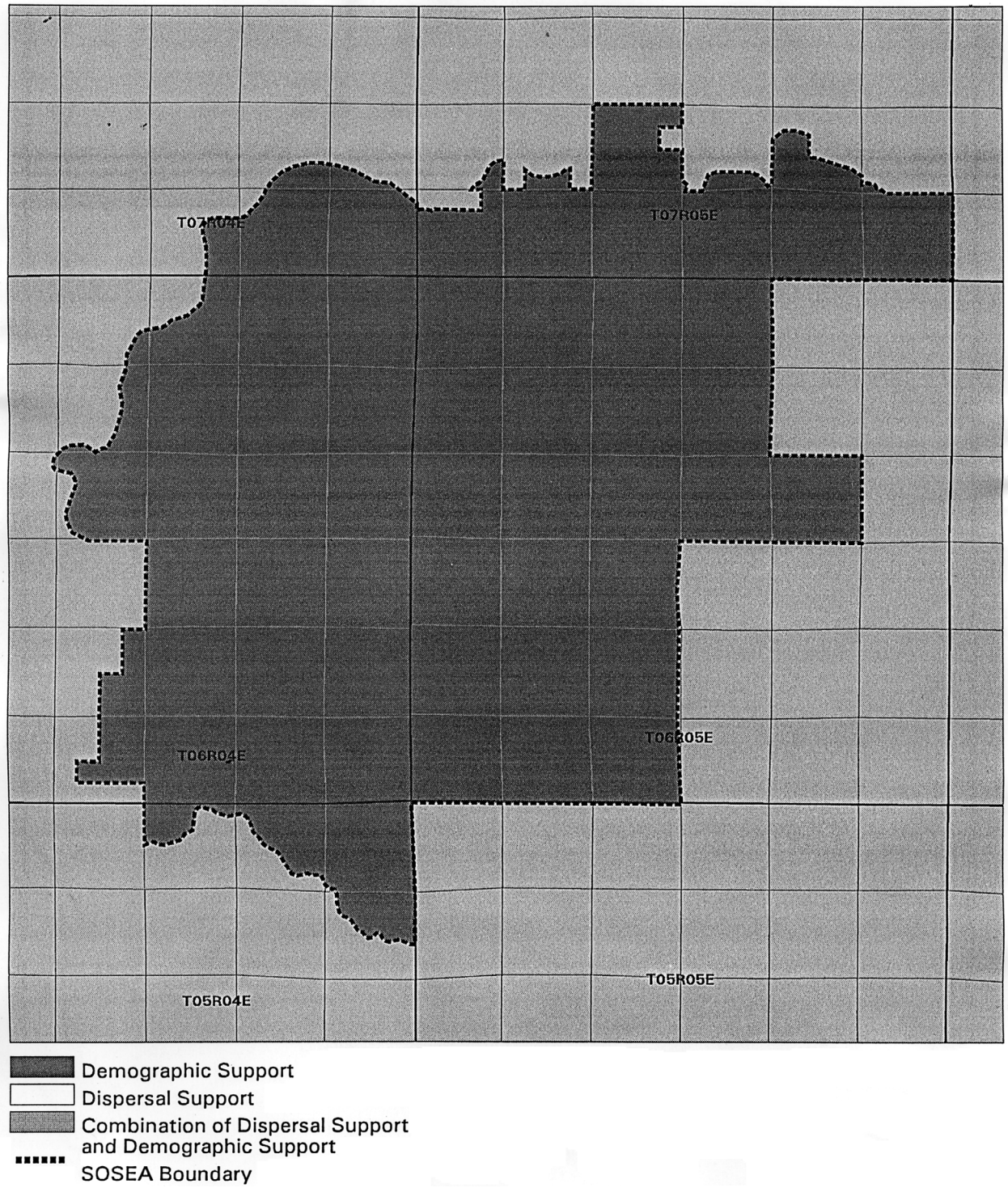


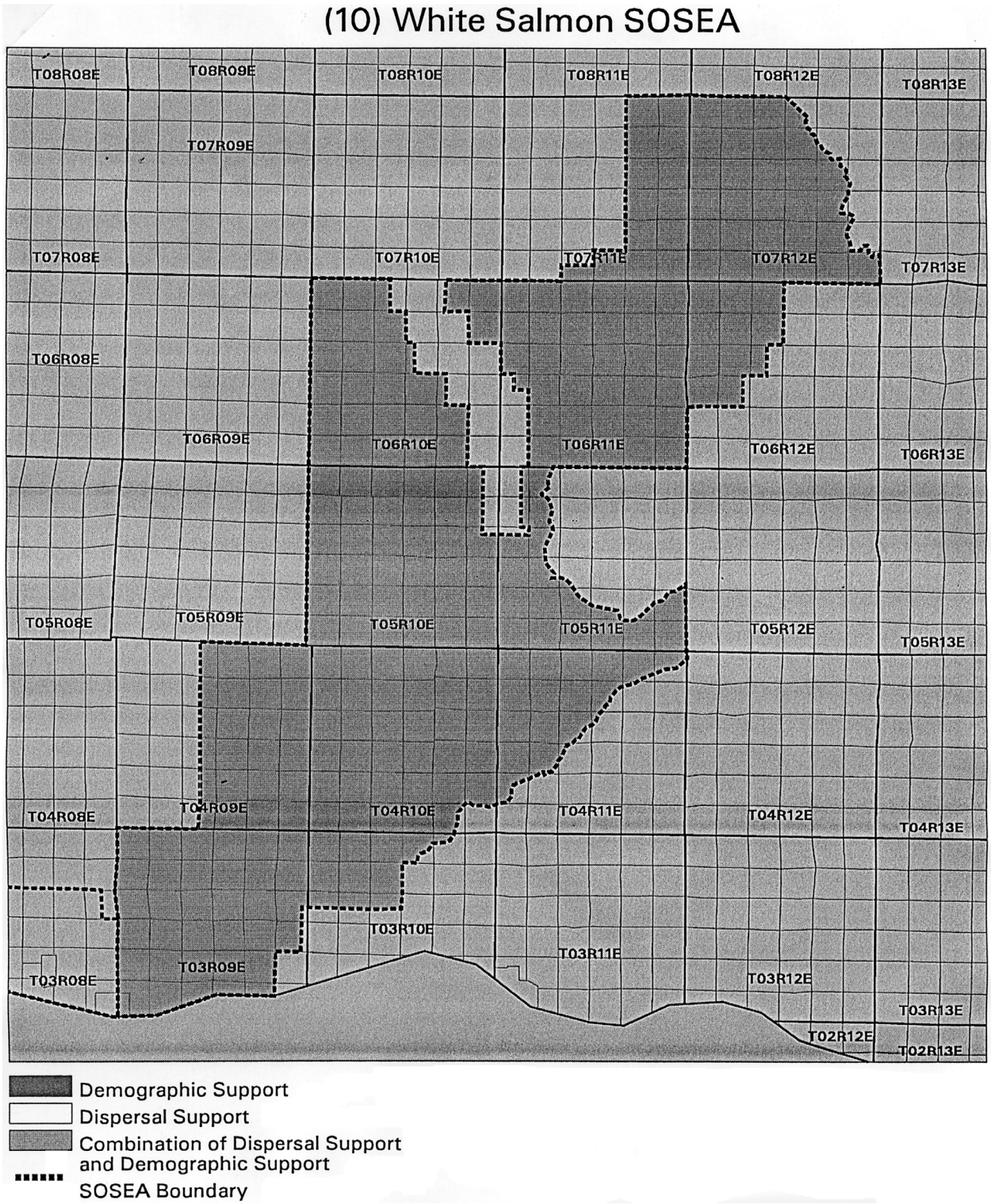
Demographic Support
Dispersal Support
Combination of Dispersal Support and Demographic Support
SOSEA Boundary

(8) North Blewett SOSEA



(9) Siouxon SOSEA

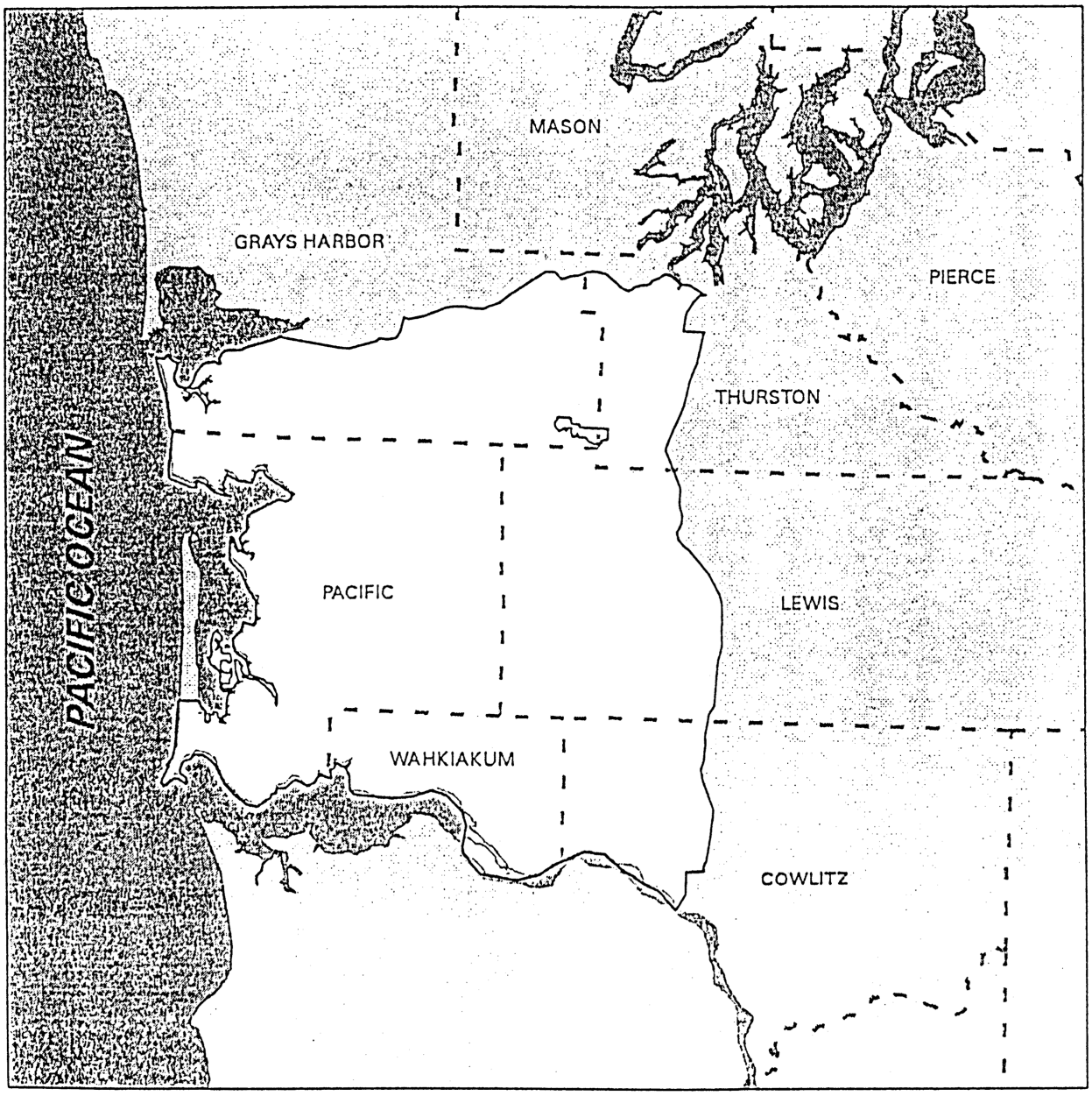




[Statutory Authority: Chapters 76.09 and 34.05 RCW. 96-12-038, § 222-16-086, filed 5/31/96, effective 7/1/96.]

WAC 222-16-087 Marbled murrelet special landscape. Marbled murrelet special landscape means the following geographic area as mapped. A detailed map of the marbled murrelet special landscape indicating the boundaries is available from the department at its regional offices.

Southwest Washington Special Landscape



[Statutory Authority: RCW 76.09.040 and chapter 34.05 RCW. 97-15-105, § 222-16-087, filed 7/21/97, effective 8/21/97.]

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

(a) **Required elements of LOPs.** The level of detail to be included in a LOP will depend on the area of ownership involved, the time period for which the plan will be in effect, and the complexity of the management strategy. Nevertheless, each plan shall contain the elements set forth in this subsection.

(i) **Goals and objectives.** The specific goals and objectives for the landowner's contributions proposed under the LOP shall be developed by the landowner and approved by

the department in consultation with the department of fish and wildlife based on the following:

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

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

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

(ii) **Other required elements:**

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

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

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

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

(E) Management proposals and relevant operations plans.

(F) Projected suitable habitat development.

(G) A plan for training.

(H) A monitoring program.

(I) Reporting standards.

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

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

(b) **Approval of LOPs.** Upon receipt of a landowner option plan, the department shall circulate the plan to the department of fish and wildlife, affected Indian tribes, local government entities, other forest landowners in the SOSEA, and the public for a thirty-day review and comment period. The department may extend this review period for up to thirty additional days. Within ninety days of receipt of the plan, the department shall review the comments and approve or disapprove the plan or submit the plan to the landowner to revise as appropriate. The department, after consultation with the department of fish and wildlife, shall approve the plan if:

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

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

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

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

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

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

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

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

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

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

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

(2) **Authority.** Outside of the median home range circles of northern spotted owls or an occupied marbled murrelet site, the department, in consultation with the department of fish and wildlife, may enter into agreements with nonfederal landowners to create, enhance, or maintain habitat that the northern spotted owl and/or the marbled murrelet can be expected to utilize. During the term of these agreements, forest practices covered by the agreements shall not be classified as Class IV - Special on the basis of critical habitat (state) or critical habitat (federal) for the northern spotted owl or the marbled murrelet. This does not preclude classification as

Class IV - Special because of the presence of other factors listed in WAC 222-16-050(1).

(3) **Baseline.**

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

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

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

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

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

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

(iii) The term of the agreement.

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

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

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

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

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

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

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

[Statutory Authority: RCW 76.09.040. 08-24-011, § 222-16-105, filed 11/21/08, effective 12/22/08. Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). 01-12-042, § 222-16-105, filed 5/30/01, effective 7/1/01. Statutory Authority: RCW 76.09.040 and chapter 34.05 RCW. 97-15-105, § 222-16-105, filed 7/21/97, effective 8/21/97.]