

Chapter 222-08 WAC

PRACTICES AND PROCEDURES

WACs in this chapter were in effect 7/2001 except some have been amended since 7/2001. The effective dates of the amended WACs are shown after the WAC headings.

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Note: Rules marked with an asterisk () pertain to water quality protection and have been adopted or amended by the Forest Practices Board with agreement from the Department of Ecology per WAC 222-12-010.*

WAC 222-08-010 Purpose. *[Effective 3/24/21]*

The purpose of this chapter is to describe the forest practices board, its organization and administrative procedures, and to provide rules implementing RCW 34.05.220 and chapters 42.52 and 42.56 RCW. The purpose of this chapter is also to set out department of natural resources procedures for administration of the forest practices regulatory program.

WAC 222-08-025 Definitions. *[Effective 4/8/18]*

- (1) "Board" means forest practices board.
- (2) "Board staff" means employees of the forest practices division of the department who work in support of the board.
- (3) "Department" means department of natural resources.
- (4) "Office" means the administrative office of the board in the forest practices division of the department.
- (5) "Public record" as defined in RCW 42.56.010(3), means any writing containing information relating to the conduct of government or the performance of any governmental or proprietary function prepared, owned, used, or retained by any state or local agency regardless of physical form or characteristics.
- (6) "Writing" as defined in RCW 42.56.010(4), means handwriting, typewriting, printing, photographing, including, but not limited to, letters, words, pictures, sounds, and all papers,

maps, magnetic or paper tapes, photographic films and prints, video recordings, diskettes, sound recordings, and other documents including existing data compilations from which information may be obtained or translated.

WAC 222-08-032 Function, organization, and office. [Effective 3/24/21]

- (1) The forest practices board was created by chapter 76.09 RCW to adopt forest practices rules as described in WAC 222-12-010.
- (2) The board's membership as described in RCW 76.09.030 (5), consists of thirteen members to include:
 - (a) The commissioner of public lands or the commissioner's designee;
 - (b) The director of the department of commerce or the director's designee;
 - (c) The director of the department of agriculture or the director's designee;
 - (d) The director of the department of ecology or the director's designee;
 - (e) The director of the department of fish and wildlife or the director's designee;
 - (f) An elected member of a county legislative authority appointed by the governor so long as that member serves as an elected official;
 - (g) A member representing a timber products union, appointed by the governor from a list of three names submitted by a timber labor coalition affiliated with a statewide labor organization that represents a majority of the timber product unions in the state; and
 - (h) Six members of the general public appointed by the governor, one of whom shall be a small forest landowner who actively manages his or her land, and one of whom shall be an independent logging contractor.
- (3) The governor-appointed members are appointed to four-year terms.
- (4) The commissioner of public lands or designee shall chair the board.
- (5) General public members of the board, except public employees and elected officials, shall be compensated in accordance with RCW 43.03.250. Each member shall be entitled to reimbursement for travel expenses incurred in the performance of their duties as provided in RCW 43.03.050 and 43.03.060.
- (6) Staff support is provided to the board as provided in RCW 76.09.030(5). Staff shall perform the following duties under the general authority and supervision of the board:
 - (a) Act as administrative arm of the board;
 - (b) Act as records officer to the board;
 - (c) Coordinate the policies and activities of the board; and
 - (d) Act as liaison between the board and other public agencies and stakeholders.
- (7) The administrative office of the board is located at 1111 Washington Street S.E., Olympia, Washington. The board may sit or hold hearings anywhere in the state. The office hours are 8:00 a.m. to noon and 1:00 p.m. to 5:00 p.m., Monday through Friday, except legal holidays and during board meetings. The board may be contacted at:
 Forest Practices Board
 c/o Department of Natural Resources
 Forest Practices Division
 P.O. Box 47012
 Olympia, WA 98504-7012
 Phone: 360-902-1400
 Fax: 360-902-1428
 E-mail: forest.practicesboard@dnr.wa.gov
- (8) Any person may contact the board as indicated in subsection (7) of this section to obtain information on board activities.

WAC 222-08-040 Operations and procedures. [Effective 4/8/18]

- (1) The board holds quarterly scheduled meetings on the second Wednesday of February, May, August, and November, at such times and places as deemed necessary to conduct board business. At regularly scheduled board meetings, agenda time is allotted for public comment on rule proposals and board activities, unless the board has already set public hearings on the rule proposals. Special and emergency meetings may be called anytime by the chair of the board or by a majority of the board members. Notice of special and emergency meetings will be provided in accordance with RCW 42.30.070 and 42.30.080. All meetings are conducted in accordance with chapter 42.30 RCW and RCW 76.09.030(3). A schedule of meetings shall be published in the *Washington State Register* in January of each year. Minutes shall be taken at all meetings.
- (2) Each member of the board is allowed one vote on any action before the board; pursuant to RCW 42.30.060(2), secret voting is not allowed. All actions shall be decided by majority vote. A majority of the board shall constitute a quorum for making decisions and promulgating rules necessary for the conduct of its powers and duties. When there is a quorum and a vote is taken, a majority vote is based upon the number of members participating. The chair, designee, or majority of the board may hold hearings and receive public comment on specific issues such as rule making that the board will consider in its actions.
- (3) Rules marked with an asterisk (*) pertain to water quality and are adopted or amended with agreement from the department of ecology. See WAC 222-12-010.
- (4) The chair or majority of board members shall set the meeting agenda. Public requests for topics to be included in the board's quarterly public meeting agenda must include the name of the requestor, and be received at the office at least fourteen days before the scheduled meeting. Topics requested may be added to the meeting agenda at the chair's discretion or by a majority vote of the board members. Pursuant to RCW 42.30.077 agendas of each regular meeting will be available online no later than twenty-four hours in advance of the published start time of the meeting.
- (5) Written materials for the board which are not provided in advance of the meeting date will not be distributed during the meeting unless fifteen copies are provided to staff.

WAC 222-08-050 Public records--Availability. [Effective 4/8/18]

The board's public records are available for inspection and copying except as otherwise exempted under RCW 42.56.210 through 42.56.470, any other law, and this chapter.

WAC 222-08-060 Public records officer. [Effective 3/20/04]

The public records officer or designee for the board shall be the board's rules coordinator. The public records officer shall be responsible for responses to requests for public records. All requests for public records shall be directed to: Public Records Officer, Forest Practices Board, c/o Department of Natural Resources, Forest Practices Division, P.O. Box 47012, Olympia, WA 98504-7012.

WAC 222-08-070 Public records index. *[Effective 3/20/04]*

The board's rules coordinator maintains the board files, including in part, meeting minutes, correspondence, rule-making documents, contracts, and other board business. A filing system is utilized at the board's office that consists of rule-making dockets, board meeting files, contracts, and petitions for rule making. These files are indexed by subject and date. Correspondence files are indexed by date. All files are available for inspection by contacting the board's rules coordinator in the administrative office of the board.

WAC 222-08-080 Protection of public records. *[Effective 3/20/04]*

- (1) No person shall knowingly alter, deface, or destroy public records of the board, except as allowed by law.
- (2) Original public records or portions thereof shall not be removed from the premises by the public, except board members may retain their individual notes.
- (3) Records furnished for inspection shall be returned in their original condition and in the same sequence or organization as when furnished.

WAC 222-08-090 Disclosure of public records. *[Effective 4/8/18]*

Public records may be inspected or copies of such records obtained, upon compliance with the following procedure:

- (1) A request shall be made in writing, by fax or electronic mail, to the public records officer or designee. The request shall include the following information:
 - (a) The name of the person requesting the record;
 - (b) The calendar date of the request; and
 - (c) A description of the record(s) requested.
- (2) Within five business days of receiving a public records request, as required by RCW 42.56.520, the office shall respond by:
 - (a) Providing the record; or
 - (b) Acknowledging that the office has received the request and providing a reasonable estimate of time required to respond; or
 - (c) Denying the request.
- (3) The office may request additional time to provide the records based upon the need to:
 - (a) Clarify the intent of the request;
 - (b) Locate and assemble the information requested;
 - (c) Notify third persons or agencies who may be affected by the request; or
 - (d) Determine whether any of the information requested is exempt and that a denial should be made for all or part of the request.
- (4) The public records officer may, if it deems the request is unclear, ask the requestor to clarify the information the requestor is seeking. If the requestor fails to clarify the request, the office need not respond to it.
- (5) Public records shall be available for inspection in the office from 9:00 a.m. to noon and from 1:00 p.m. to 4:00 p.m., Monday through Friday, excluding legal holidays and during board meetings.
- (6) No fee shall be charged for the inspection of public records. The board's charges for producing public records shall follow the fee schedule established in RCW 42.56.120, because calculating the actual costs associated with records production would be unduly burdensome. The public records officer may waive the fees for de minimus requests. Before releasing the copies, the public records officer may require a deposit not to exceed 10 percent of the estimated cost.

- (7) The public records officer may determine that all or a portion of a public record is exempt under the provisions of chapter 42.56 RCW. Pursuant to RCW 42.56.070(1) and 42.56.210(1), the public records officer may redact portions of public records. The public records officer will explain the reasons for such redaction in writing, including the exemption that applies.
- (8) Any denial of a request for public records shall be in writing, specifying the reason for the denial, including the specific exemption authorizing the nondisclosure of the record, and a brief explanation of how the exemption applies to the records withheld.
- (9) Any person who objects to a denial of a request for a public record may request review of such decision by submitting a written request to the public records officer. The written request shall specifically refer to the written statement by the public records officer or designee which constituted or accompanied the denial.
- (10) Immediately after receiving a written request for review of a decision denying disclosure of a public record, the public records officer or designee denying the request shall refer it to the chair of the board. The chair shall consider the matter and either affirm or reverse such denial.
- (11) Administrative remedies shall not be considered exhausted until the chair of the board or designee has returned the request for review with a decision or until the close of the second business day following receipt of the written request for review of the denial of the public record, whichever occurs first.

WAC 222-08-100 Petitions for adoption, repeal or amendment of a rule. [Effective 3/20/04]

- (1) Any person may submit a petition to the board requesting the adoption, amendment, or repeal of any rule pursuant to RCW 34.05.330 and the process set forth in chapter 82-05 WAC as further supplemented by these rules. The petition should be clearly identified as such and contain sufficient information so the board and public can understand the proposal.
- (2) Any petition for rule making, amendment or repeal shall be submitted no later than fourteen days before the next regularly scheduled board meeting to be included on the agenda. Petitions shall be sent to the rules coordinator for the board at the following address: Forest Practices Board, c/o Department of Natural Resources, Forest Practices Division, P.O. Box 47012, Olympia, WA 98504-7012. If the petition is more than twenty pages in length (including any supplementary materials), it shall be accompanied by fifteen copies.
- (3) Submission of a petition is defined as receipt of a complete petition by the board staff. Petitions requiring additional copies as described in subsection (2) of this section will not be considered complete until copies have been provided to staff.
- (4) Within five business days of submission, the board staff will send the petitioner acknowledgment of receipt of the petition, including the name and telephone number of a contact person. If the petition is incomplete, board staff will notify the petitioner what additional information is required.
- (5) Information required for proposed new rule adoption:
 - (a) Text of the proposed rule or description of its provisions and rationale for a new rule.
 - (b) Authority for the proposed rule.
 - (c) Reason the rule is needed, including what or who is benefited or otherwise affected by the rule.
- (6) Information required for amendment of an existing rule: Rule title and chapter number, text, or description of the proposed amendment, and rationale for amendment.
- (7) Information required for repeal of existing rule: Rule title and chapter number, and description of the rationale and effects of the proposed repeal.

- (8) Other information to include, if applicable, to proposed rule amendments or repeals:
 - (a) How the rule harms or otherwise affects public resources or public health, safety, or general welfare.
 - (b) What alternatives to the rule exist that will serve the same purpose at less cost.
 - (c) If the rule is not clearly and simply stated, suggestions on how to state the rule clearly and simply.
 - (d) Whether the rule imposes unreasonable costs and to whom.
 - (e) How the rule conflicts with or duplicates other federal, state, or local laws.
 - (f) How the rule differs, without adequate justification, from a federal law that applies to the same activity or subject matter.
- (9) No later than sixty days after receipt of a complete petition, the board will:
 - (a) Initiate rule-making proceedings in accordance with chapter 34.05 RCW; or
 - (b) Deny the petition in writing, stating its reasons for the denial and specifically addressing the concerns stated in the petition. Where appropriate, the board will indicate alternative means by which the board will address the concerns raised in the petition.
- (10) If the board denies the petition, the petitioner may appeal the denial to the joint administrative rules review committee, the governor, or superior court pursuant to RCW 34.05.330 (2) and (3) and 34.05.570(4).

WAC 222-08-120 Inapplicability of model rules adopted by the chief administrative law judge. *[Effective 3/20/04]*

The board does not have adjudicative authority nor does the board enter declaratory orders. Therefore, the model rules adopted by the chief administrative law judge under RCW 34.05.250 and found in chapter 10-08 WAC do not apply to the board.

WAC 222-08-130 Ethics standards. *[Effective 3/20/04]*

This rule implementing the Ethics in Public Service Act, chapter 42.52 RCW, applies to the board.

- (1) The following definitions apply to this section:
 - (a) "Beneficial interest" has the meaning ascribed to it under the Washington case law.
 - (b) "Gift" means anything of economic value for which no consideration is given.
 - (c) "Transaction involving the board" means a proceeding, application, submission, request for a ruling or other determination, contract, claim, case, or other similar matter that the board member in question believes, or has reason to believe:
 - (i) Is, or will be, the subject of board action; or
 - (ii) Is one to which the board is or will be a party; or
 - (iii) Is one in which the board has a direct and substantial proprietary interest.
 - (d) "Transaction involving the board" does not include the following:
 - (i) Preparation, consideration, or enactment of legislation, including appropriation of moneys in a budget, or the performance of legislative duties by a board member; or
 - (ii) A claim, case, lawsuit, or similar matter if the board member did not participate in the underlying transaction involving the board that is the basis for the claim, case, or lawsuit.

Rule making is not a transaction involving the board.
 - (e) "Board action" means any action on the part of the board, including, but not limited to:
 - (i) A decision, determination, finding, ruling, order; or

- (ii) A grant, payment, award, license, contract, transaction, sanction, approval, or the denial thereof, or failure to act with respect to a decision, determination, finding, ruling, or order.
- (f) "Recusal" involves the following actions:
 - (i) Recuse himself or herself from discussions by the board regarding the related action(s);
 - (ii) Recuse himself or herself from any vote by the board on the related action(s); and
 - (iii) Refrain from attempting to influence any other member in any discussion or vote regarding the related action(s).
- (2) No board member may accept honoraria under the circumstances set forth in RCW 42.52.130. Board members may receive honoraria if all of the following are met:
 - (a) The board member will not be carrying out their board duties nor engaging in activity which focuses specifically on the board's responsibilities, policies or programs;
 - (b) The honorarium is not being offered because of the board member's official position on the board;
 - (c) The topic is such that it does not appear that the board member could have used information acquired in the course of membership on the board;
 - (d) The honorarium is not being offered by a person or entity which does business with or can reasonably be expected to seek business with the board; and
 - (e) No use of government time or resources was used by the board member to produce the materials or prepare for the article, appearance, or item for which the honorarium is being given.
- (3) "Gifts":
 - (a) No board member shall receive or solicit, directly or indirectly, any gift if it could be reasonably perceived that the gift would influence the vote, action, or judgment of the board member, or be perceived as part of a reward for action or inaction.
 - (b) Notwithstanding the exceptions specified in RCW 42.52.150 (2) and (5), a board member may receive only the items specifically listed in RCW 42.52.150 (4) from a person regulated by the board or from a person who seeks to provide goods or services to the board.
- (4) If a board member receives or solicits gifts prohibited in subsection (3) of this section, the board member is in violation of the Ethics in Public Service Act and shall return the gift or donate it to charity within thirty days. In addition, the board member shall recuse himself or herself in accordance with subsection (1)(f) of this section.
- (5) Board members shall recuse themselves in compliance with subsection (1)(f) of this section when the following circumstances apply or it is reasonably foreseeable that they will apply:
 - (a) The member is beneficially interested, directly or indirectly, in a contract, sale, lease, purchase, or grant that may be made by, through, or under the supervision of the board in whole or in part; or
 - (b) The member accepts, directly or indirectly, any compensation, gratuity or reward from any other person beneficially interested in a contract, sale, lease, purchase, or grant that may be made by, through, or under the supervision of the board, in whole or in part; or
 - (c) The member either owns a beneficial interest in, or is an officer, agent, employee, or member of, an entity which is engaged in a transaction involving the board.

- (6) Under subsection (5)(b) of this section, "any other person" has a beneficial interest in a contract, sale, lease, purchase, or grant when the other person bids or otherwise seeks to be awarded the contract, sale, lease, purchase, or grant.
- (7) The circumstances contained in subsection (5) of this section do not limit the member from using his or her general expertise to educate and provide general information on the subject area to other board members.
- (8) If recusal occurs pursuant to chapter 42.52 RCW, or rules adopted pursuant to that law or this chapter, the board member must disclose to the public the reasons for his or her recusal from any board action whenever recusal occurs. The board staff must record each such recusal and basis for the recusal.

EXAMPLE: The board includes members appointed by the governor who are employed in the private sector. Board members are appointed because they have general knowledge of forestry and are often recommended by interest groups, such as the timber industry and environmental organizations. A board member is employed by a company that provides economic analysis. The board is in the process of selecting a contractor to provide small business economic impact statements for several proposed rules. The company that employs the board member has bid for the contract. The board member may use his or her general expertise to educate the other board members about the requirements for a good small business economic impact statement. However, the board member is prohibited from participating in the board discussion establishing criteria for selecting a contractor and is prohibited from participating in the vote to select a contractor. The board member would publicly announce his or her recusal and the reasons for it, and the board staff would record this information as part of the public record.

- (9) No board member shall divulge state agency or board information or proprietary information in the board's possession, whether labeled confidential or not, to any unauthorized person or in advance of the time prescribed for its authorized issuance, or otherwise make use of, or permit others to make use of, information not available to the general public.
- (10) No board member shall use his or her position with the board, or use board facilities, equipment, or supplies to obtain or attempt to obtain private gain or advantage, either for themselves or for other persons.
- (11) No board member shall use his or her position with the board, or use board facilities, equipment, or supplies to assist another in a transaction involving the board, or use his or her influence over the board to obtain or attempt to obtain gain or advantage for the person or entity seeking to transact business with the board.
- (12) No board member shall accept employment that will adversely affect the performance of that member's official duties, discredit the board, or result in a conflict of interest.

WAC 222-08-140 Orientation and training. The department shall be responsible for a continuing program of orientation and training, relating to forest practices and rules thereof, pursuant to RCW 76.09.250. Such program shall include:

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

WAC 222-08-151 Reporting procedures. The department shall:

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

WAC 222-08-160 Continuing review of forest practices rules. [Effective 12/22/08]

- * (1) Annual evaluations. The department, after consulting with affected state agencies, Indian tribes, forest landowners, fish and wildlife, natural resources, and environmental interest groups, shall report annually to the forest practices board. This reporting will be an assessment of how the rules and voluntary processes, including the Cultural Resources Protection and Management Plan, as committed in the *1999 Forests and Fish Report*, Appendix O (O.3), are working.
- * (2) Adaptive management program. The adaptive management program will be used to determine the effectiveness of forest practices rules in aiding the state's salmon recovery effort and provide recommendations to the board on proposed changes to forest practices rules to meet timber industry viability and salmon recovery. The program provides assurances that rules and guidance not meeting aquatic resource objectives will be modified in a streamlined and timely manner. The board may also use this program to adjust other forest practices rules and guidance in order to further the purposes of chapter 76.09 RCW. The specific components of the adaptive management program are set forth in WAC 222-12-045.
- (3) Resource management plans. The department is directed to develop a method for cooperative voluntary resource management planning among forest landowners, governmental agencies, affected Indian tribes, and environmental groups which would result in the development of plans which might be used as an alternative to the forest practices rules in achieving the purposes and policies set forth in the act. This should be done through pilot projects, at least one of which should be located on the east side of the Cascade summit and one on the west side of the Cascade summit.
- (4) Compliance monitoring. The department shall conduct compliance monitoring that addresses the following key question: "Are forest practices being conducted in compliance with the rules?" The department shall provide statistically sound, biennial compliance audits and monitoring reports to the board for consideration and support of rule and guidance analysis. Compliance monitoring shall determine whether forest practices rules are being implemented on the ground. An infrastructure to support compliance will include adequate compliance monitoring, enforcement, training, education and budget.

Chapter 222-10 WAC

STATE ENVIRONMENTAL POLICY ACT GUIDELINES

WACs in this chapter were in effect 7/2001 except some have been amended since 7/2001. The effective dates of the amended WACs are shown after the WAC headings.

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Note: Rules marked with an asterisk () pertain to water quality protection and have been adopted or amended by the Forest Practices Board with agreement from the Department of Ecology per WAC 222-12-010.*

WAC 222-10-010 Policies and authorities. [Effective 12/22/08]

- (1) **This chapter** is promulgated pursuant to the authority granted in RCW 76.09.010, 43.21C.120 and chapter 197-11 WAC.
- (2) **The forest practices board**, according to RCW 76.09.040, possesses the authority to promulgate forest practices rules establishing minimum standards for forest practices and setting forth necessary administrative provisions.
- (3) **The forest practices board adopts** by reference the policies of SEPA as set forth in RCW 43.21C.020.
- (4) **A forest practices application or notification** which requires a threshold determination will be conditioned when necessary to mitigate specific adverse impacts which are identified in the environmental documents prepared under SEPA. An application or notification will be disapproved when the proposal would result in significant adverse impacts identified in a final or supplemental environmental impact statement prepared under SEPA, and reasonable mitigation measures are insufficient to mitigate the identified impacts and denial is consistent with all provisions of the acts cited in subsection (1) of this section.
- (5) **SEPA policies** and procedures shall be implemented by the department of natural resources.

WAC 222-10-030 *SEPA policies for potentially unstable slopes and landforms. [Effective 3/29/15]

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

- (1) In order to determine whether such forest practices are likely to have a probable significant adverse impact, and therefore require an environmental impact statement, the applicant must submit the following additional information, prepared by a qualified expert as defined in subsection (5) of this section. The qualified expert must describe the potentially unstable landforms in and around the application site, and analyze:
 - (a) The likelihood that the proposed forest practices will cause movement on the potentially unstable slopes or landforms, or contribute to further movement of a potentially unstable slope or landform;
 - (b) The likelihood of delivery of sediment or debris to any public resources, or in a manner that would threaten public safety; and
 - (c) Any possible mitigation for the identified hazards and risks.
- (2) The department's threshold determination will include an evaluation of whether the proposed forest practices:
 - (a) Are likely to increase the probability of a mass movement on or near the site;
 - (b) Would deliver sediment or debris to a public resource or would deliver sediment or debris in a manner that would threaten public safety; and
 - (c) Such movement and delivery are likely to cause significant adverse impacts.

If the department determines that (a), (b) and (c) of this subsection are likely to occur, then the forest practice is likely to have a probable significant adverse impact.
- (3) The department will evaluate the proposal, using appropriate expertise and in consultation with other affected agencies and Indian tribes.
- (4) Specific mitigation measures or conditions must be designed to avoid accelerating rates and magnitudes of mass wasting that could deliver sediment or debris to a public resource or could deliver sediment or debris in a manner that would threaten public safety.
- (5) Qualified expert for the purposes of this section, reanalysis of watershed analysis mass wasting prescriptions under WAC 222-22-030, and preparation of required geologic information under WAC 222-20-010(9), means a person licensed under chapter 18.220 RCW as either an engineering geologist or as a hydrogeologist (if the site warrants hydrologist expertise), with at least three years of field experience in the evaluation of relevant problems in forested lands.

WAC 222-10-035 *Watershed analysis SEPA policies. [Effective 6/19/11]

When the department considers a watershed analysis for approval under WAC 222-22-080 or 222-22-090, the department will perform a review under SEPA as a nonproject proposal. When making the SEPA threshold determination, the department shall only make a determination of significance if, when compared to rules or prescriptions in place at the time of the analysis or the reanalysis, the prescriptions will cause a probable significant adverse impact on elements of the environment other than those addressed in the watershed analysis process.

WAC 222-10-040 Class IV-Special threatened and endangered species SEPA policies.

[Effective 7/1/05]

In addition to the SEPA policies established elsewhere in this chapter, the following policies shall apply to Class IV-Special forest practices involving threatened or endangered species.

- (1) The department shall consult with the department of fish and wildlife, other agencies with expertise, affected landowners, affected Indian tribes, and others with expertise when evaluating the impacts of forest practices. If the department does not follow the recommendations of the department of fish and wildlife, the department shall set forth in writing a concise explanation of the reasons for its action.
- (2) In order to determine whether forest practices are likely to have a probable significant adverse impact, and therefore require an environmental impact statement, the department shall evaluate whether the forest practices reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of the survival or recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species.
- (3) Specific mitigation measures or conditions shall be designed to reduce any probable significant adverse impacts identified in subsection (2) of this section.
- (4) The department shall consider the species-specific policies in WAC 222-10-041 and 222-10-042 when reviewing and evaluating SEPA documents and the impacts of forest practices.
- (5) The SEPA policies in this section and the species specific SEPA policies for threatened and endangered species do not apply to forest practices that are consistent with a wildlife conservation agreement listed in WAC 222-16-080(6) for species covered by these agreements, that has received environmental review with an opportunity for public comment under the National Environmental Policy Act, 42 U.S.C. section 4321 et seq., or the State Environmental Policy Act, chapter 43.21C RCW.

WAC 222-10-041 Northern spotted owls. [Effective 9/21/2006]

The following policies shall apply to forest practices subject to SEPA if the forest practices may cause adverse impacts to northern spotted owls.

- (1) **In SOSEAs or areas of SOSEAs where the goal is demographic support**, suitable spotted owl habitat should be maintained either to protect the viability of the owl(s) associated with each northern spotted owl site center or to provide demographic support for that particular SOSEA as described in the SOSEA goals.
- (2) **In SOSEAs or areas of SOSEAs where the goal is dispersal support**, either suitable spotted owl habitat should be maintained to protect the viability of the owl(s) associated with each northern spotted owl site center or dispersal habitat should be managed, over time, to provide the dispersal support for that particular SOSEA as described in the SOSEA goals. Dispersal support is provided by a landscape which includes dispersal habitat at the stand level interspersed with areas of higher quality habitat. Stands of dispersal habitat should be managed to reduce gaps between stands and to maintain a sufficient level of dispersal habitat to meet the SOSEA goals over time.
- (3) **In SOSEAs or areas of SOSEAs where the goal is a combination of dispersal support and demographic support**, either suitable spotted owl habitat should be maintained to protect the viability of the owl(s) associated with each northern spotted owl site center or a variety of habitat conditions should be provided which in total are more than dispersal support and less than demographic support. This can be accomplished by providing:
 - (a) Dispersal support as described in subsection (2) of this section;
 - (b) Areas of suitable spotted owl habitat that contain some opportunities for nesting as well as roosting and foraging habitat; and
 - (c) Connectivity between areas of SOSEAs designated for demographic support or adjacent federal lands which are designated as late successional reserves, congressionally reserved areas, or administratively withdrawn areas.

- (4) **Within SOSEAs**, the following amounts of suitable habitat are generally assumed to be necessary to maintain the viability of the owl(s) associated with each northern spotted owl site center, in the absence of more specific data or a mitigation plan, as provided for in subsections (6) and (7) of this section respectively:
- (a) All suitable spotted owl habitat within 0.7 mile of each northern spotted owl site center;
 - (b) Including the suitable spotted owl habitat identified in (a) of this subsection:
 - (i) For the Hoh-Clearwater/Coastal Link SOSEA - A total of 5,863 acres of suitable spotted owl habitat within the median home range circle (2.7 mile radius).
 - (ii) For all other SOSEAs - A total of 2,605 acres of suitable spotted owl habitat within the median home range circle (1.8 mile radius).

The department shall first identify the highest quality suitable spotted owl habitat for this purpose. Consideration shall be given to habitat quality, proximity to the activity center and contiguity in selecting the most suitable habitat. Suitable spotted owl habitat identified outside 0.7 mile of a northern spotted owl site center may support more than one median home range circle.
- (5) **Outside SOSEAs**, during the nesting season (between March 1 and August 31), seventy acres of the highest quality suitable spotted owl habitat surrounding a northern spotted owl site center should be maintained. The seventy acres for one site center shall not be utilized for meeting suitable habitat needs of any other site center.
- (6) The assumptions set forth in subsection (4) of this section are based on regional data. Applicants or others may submit information that is more current, accurate, or specific to a northern spotted owl site center, proposal, or SOSEA circumstances or goals. The department shall use such information in making its determinations under this section where the department finds, in consultation with the department of fish and wildlife, that the information is more likely to be valid for the particular circumstances than the assumptions established under subsection (4) of this section. If the department does not use the information, it shall explain its reasons in writing to the applicant.
- (7) The department shall consider measures to mitigate identified adverse impacts of an applicant's proposal. Mitigation measures must contribute to the achievement of SOSEA goals or to supporting the viability of impacted northern spotted owl site centers.

WAC 222-10-042 Marbled murrelets. *[Effective 1/1/2024]*

The following policies shall apply to forest practices subject to SEPA where the forest practices may cause adverse impacts to marbled murrelets.

- (1) **Within an occupied marbled murrelet site**, forest practices that will adversely impact this habitat will likely have a probable significant adverse impact on the environment except where the department determines, in consultation with the department of fish and wildlife, that the applicant's proposal will actually have no significant adverse impact.

- (2) **Within marbled murrelet detection areas:** Suitable marbled murrelet habitat with at least a 30 percent, probability of occupancy has a sufficiently high likelihood of marbled murrelet occupancy to warrant a survey. It is currently assumed that two platforms per acre meets the 30 percent probability of occupancy. Without survey information, forest practices that will adversely impact this habitat may have a probable significant adverse impact on the environment.
- A landowner may request the department of fish and wildlife to survey. The department of fish and wildlife should survey to the maximum extent practicable based on an appropriation to survey marbled murrelet suitable habitat within detection areas where the landowner provides access for surveys to the department of fish and wildlife, and sufficient time is allowed to complete the protocol surveys. The department shall provide a notice to the landowner within 60 days from the date of application of the department of fish and wildlife's intent to survey. If the department of fish and wildlife cannot conduct marbled murrelet surveys the responsibility for surveys remains with the landowner.
- (3) **Outside a marbled murrelet detection area:**
- (a) Suitable marbled murrelet habitat with at least a 60 percent probability of occupancy is assumed to have a high likelihood of marbled murrelet occupancy. It is currently assumed that seven platforms per acre meets the 60 percent probability of occupancy. Without survey information, forest practices that will adversely impact this habitat may have a probable significant adverse impact on the environment.
- (b) Within a marbled murrelet special landscape suitable marbled murrelet habitat with at least a 50 percent probability of occupancy is assumed to have a high likelihood of marbled murrelet occupancy. It is currently assumed that five platforms per acre meets the 50 percent probability of occupancy. Without survey information, forest practices that will adversely impact this habitat may have a probable significant adverse impact on the environment.
- (4) The adjacent forested area within 300 feet of "suitable marbled murrelet habitat" described in subsections (2) and (3) of this section is assumed to be necessary for buffering potentially occupied habitat as defined in WAC 222-16-080 (1)(h)(v). This additional information on the forested area within 300 feet of "suitable habitat" is necessary for the department to evaluate the environmental impact of the forest practice. Without survey information, forest practices that will adversely impact this buffer may have a probable significant adverse impact on the environment.
- (5) When determining whether a forest practice will have a probable significant adverse impact on the environment, the department shall, in consultation with the department of fish and wildlife, evaluate the impacts on the state-wide, regional (Southwest Washington, Olympic Peninsula, Hood Canal, North Puget Sound, South Puget Sound and South Cascades) and local (within the marbled murrelet detection area) marbled murrelet populations and associated habitats. The department should consider a variety of information including, but not limited to, survey data, habitat quality and patch size, the amount of edge in relation to the area of habitat, amount of interior habitat, distance from saltwater, detection rates, the amount and quality of habitat, the likelihood of predation and the recovery goals for the marbled murrelet.

- (6) The platform assumptions set forth above are based on regional data. Applicants or others may submit information to the department which was gathered in conjunction with a marbled murrelet survey agreement with the department of fish and wildlife, and other reliable information that is more current, or specific to the platform numbers in the marbled murrelet suitable habitat definition. The department shall use such information in making its determinations under this section where the department finds, in consultation with the department of fish and wildlife, that the information is more likely to be valid for a particular WRIA or physiographic province. If the department does not use the information, it shall explain its reasons in writing to the applicant.

WAC 222-10-050 Adoption by reference. Except to those rules that may not be applicable, the forest practices board hereby adopts by reference chapter 197-11 WAC, the “SEPA rules” adopted by the state of Washington department of ecology.

WAC 222-10-070 Additional definitions. In addition to those definitions contained within WAC 197-11-700 through 197-11-799, the following terms shall have the following meanings:

- (1) “Board” means the forest practices board, as defined by chapter 76.09 RCW.
- (2) “SEPA rules” means chapter 197-11 WAC adopted by the state of Washington department of ecology.

WAC 222-10-090 Designation of responsible official. The board shall act as the responsible official for the purpose of complying with the SEPA rules, or the board may designate the chairperson of the forest practices board or his/her designee to serve as such responsible official.

WAC 222-10-110 Board’s SEPA public information center. *[Effective 12/22/08]*

In accordance with chapter 42.56 RCW, the location of the board’s SEPA public records is the Natural Resources Building, Forest Practices Division, Olympia, Washington.

WAC 222-10-120 Exemption for emergency actions. The board may promulgate rules which must be promulgated immediately, or within a time too short to allow full compliance with this chapter of the SEPA rules where such action is required to avoid an imminent threat to public health or safety, to prevent imminent danger to public or private property or prevent imminent threat of serious environmental degradation without complying with the procedural requirements of this chapter of the SEPA rules.

WAC 222-10-125 Exemption from RCW 43.21C.030 (2)(c). *[Effective 6/19/11]*

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

WAC 222-10-130 Lead agency, agency with jurisdiction, consulted agency. The board shall be considered the lead agency, consulted agency or an agency with jurisdiction only when the action considered is the action of promulgating rules under chapter 76.09 RCW.

Chapter 222-12 WAC

POLICY AND ORGANIZATION

WACs in this chapter were in effect 7/2001 except some have been amended since 7/2001. The effective dates of the amended WACs are shown after the WAC headings.

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Note: Rules marked with an asterisk () pertain to water quality protection and have been adopted or amended by the Forest Practices Board with agreement from the Department of Ecology per WAC 222-12-010.*

WAC 222-12-010 Authority. *[Effective 12/30/13]*

These forest practices rules are adopted pursuant to chapter 76.09 RCW, and RCW 76.13.100 through 76.13.130. Where necessary to accomplish the purposes and policies stated in the act, the board is authorized to promulgate forest practices rules pursuant to chapter 34.05 RCW and in accordance with the procedures enumerated in the act. These rules establish minimum standards for forest practices, provide procedures for the voluntary development of resource management plans, set forth necessary administrative provisions, establish procedures for the collection and administration of forest practices fees, allow for the development of watershed analyses, foster cooperative relationships and agreements with affected tribes, and establish the rivers and habitat open space program. The board also establishes which forest practices will be included within each class and is authorized to adopt rules under RCW 76.09.055, 76.09.370, and 76.13.120(10).

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

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

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

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

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

WAC 222-12-030 Application information and classes of forest practices. [Effective 3/24/21]

Forest practices are divided into four classes as specified by RCW 76.09.050 and described in WAC 222-16-050. Review periods and application and notification requirements differ as follows:

- (1) **Class I forest practices** require no application or notification, but do require compliance with all other forest practices rules.
- (2) **Class II forest practices** require a notification to the department, and may begin five calendar days (or such lesser time as the department may determine) after receipt of a complete notification by the department.
- (3) **Class III forest practices** must be approved or disapproved within thirty or fewer calendar days of receipt of a complete application by the department. The department is directed to approve or disapprove within fourteen calendar days Class III applications not requiring additional field review. Exceptions are:
 - (a) Multiyear applications must be approved or disapproved within forty-five days of receipt of a complete application by the department.
 - (b) Small forest landowner long-term applications are reviewed in two steps as described in WAC 222-20-016.
 - (c) Applications including the project types listed in WAC 222-20-017 (4)(b), concurrence review, must be approved or disapproved within sixty days of receipt of a complete application by the department.
- (4) **Class IV forest practices** are divided into "Class IV-special," and "Class IV-general," and must be approved or disapproved within thirty calendar days of receipt of a complete application by the department. Exceptions are:
 - (a) Small forest landowner long-term applications are reviewed in two steps as described in WAC 222-20-016.

- (b) Applications including the project types listed in WAC 222-20-017 (4)(b), concurrence review, must be approved or disapproved within sixty days of receipt of a complete application by the department.
- (c) If a detailed environmental statement is necessary, additional time for approval or disapproval as specified in RCW 76.09.050 will be required.
- (5) In certain emergencies as defined in RCW 76.09.060(7), the application or notification may be submitted within forty-eight hours after commencement of the practice.

WAC 222-12-035 *Small forest landowner long-term applications. [Effective 1/5/13]

In order to facilitate flexibility for small forest landowners in the timing of their forest practices activities, the department will receive, and approve or disapprove, long-term forest practices applications. Small forest landowners are eligible to submit long-term applications unless proposing a conversion to a use other than commercial timber production. An approved long-term application will be effective for a term of four to fifteen years at the discretion of the landowner. These applications may contain alternate plans for all or portions of the forest land area included in the long-term application. Alternate plan portions of long-term applications will be reviewed according to the alternate plan process described in WAC 222-12-0401. The process for small forest landowner long-term applications is described in WAC 222-20-016.

WAC 222-12-037 *Applications that include forest practices hydraulic projects. [Effective 12/30/13]

- (1) The review process for applications that include forest practices hydraulic projects is described in WAC 222-20-017.
- (2) Each forest practices hydraulic project included in an application will be reviewed on an individual basis and will be subject to rules and applicable conditions to the forest practices application or notification. Common general provisions applicable to a specific project may be modified or deleted by the department where any of the following is demonstrated by the landowner:
 - (a) The provision has no logical application to the project.
 - (b) The applicant provides an alternate plan to the provision and demonstrates that it provides equal or greater protection for fish life.
 - (c) The modification or deletion of the provision will not contribute to net loss of fish life.
- (3) Projects may be subject to additional conditions to address project- or site-specific considerations not adequately addressed by the forest practices application or notification.
- (4) The department will place specific time limitations on project activities in forest practices hydraulic projects associated with Type S and F Waters in order to protect fish life. The department and the applicant will consult with the department of fish and wildlife for appropriate work windows for the protection of fish life.
- (5) If site conditions change over the course of an approved application, the department may approve a landowner request for an amendment to the application.

WAC 222-12-040 *Alternate plans--Policy. [Effective 7/1/05]

All forest practice operations must comply with both the act and the rules promulgated pursuant to the act, unless an alternate plan has been approved by the department.

- (1) The alternate plan process can be used as a tool to deal with a variety of situations, including where the cumulative impacts of regulations disproportionately impact a landowner. In some instances an alternate plan may be used to make minor on-the-ground modifications, which result in significant operation efficiencies. The alternate plan process may be used to address circumstances where a landowner has an economically inaccessible unit. The alternate plan process may also be used to facilitate voluntary landscape, riparian or stream restoration. In all cases, the alternate planning process will result in a plan that provides protection to public

- resources at least equal in overall effectiveness as provided by the act and rules while seeking to minimize constraints to the management of the affected lands.
- (2) The legislature has found in RCW 76.13.100(2) that small forest landowners should also have the option of alternate management plans or alternate harvest restrictions on smaller harvest units that may have a relatively low impact on aquatic resources. These alternate plans are intended to provide flexibility to small forest landowners that will still provide protection of riparian functions based on specific field conditions or stream conditions on the landowner's property.
 - (3) Alternate plans do not replace other rules that recognize different types of landowner plans. For examples, see WAC 222-08-160(3), 222-12-041, 222-16-080(6), 222-16-100(1), and 222-16-105.
 - (4) Landowners are encouraged to communicate with the departments of ecology, fish and wildlife, affected Indian tribes, the National Marine Fisheries Service, the United States Fish and Wildlife Service and other interested parties prior to submission of an application accompanied by an alternate plan.

WAC 222-12-0401 *Alternate plans--Process. *[Effective 1/5/13]*

- (1) **Application.** A landowner may submit an alternate plan that departs from the specific provisions of chapters 222-22 through 222-38 WAC for any or all of the activities described in the application. Alternate plans must be submitted with a three-year, multiyear, or small forest landowner long-term application. Alternate plans may support a single forest practices application or multiple applications if the sites included in the plan have sufficient common physical characteristics and elements to justify being considered together. See board manual section 21.
- (2) **Plan preparation.** The landowner is responsible for preparing and submitting an alternate plan. Small forest landowners may wish to seek the assistance of the small forest landowner office. See WAC 222-12-0402.
- (3) **Contents of alternate plans.** Alternate plans must contain all of the following:
 - (a) A map of the area covered, at a scale acceptable to the department showing the location of any affected streams and other waters, wetlands, unstable slopes, and existing roads. The map must also show the location of proposed road construction, timber harvest, and other forest practices;
 - (b) A description of how the alternate plan provides public resource protection to meet the approval standard, including a description of the proposed alternate management strategy, prescriptions, and where applicable, aquatic resource enhancements;
 - (c) A list of the forest practices rules that the alternate management plan is intended to replace;
 - (d) Where applicable, descriptions of monitoring and adaptive management strategies, including landowner plans for annual performance reviews;
 - (e) Where applicable, descriptions of an implementation schedule; and
 - (f) When multiple forest practices applications are submitted with the same alternate plan or when an alternate plan has been used for previous applications, justification that the sites included in the plan share sufficient common physical characteristics and elements to be considered together.
- (4) **Review of proposed plan.** Upon receipt of a forest practices application together with an alternate plan, the department will do all of the following:
 - (a) Appoint an interdisciplinary team;
 - (b) Establish a deadline for completion of the interdisciplinary team review that is consistent with the requirements of subsection (5) of this rule; and

- (c) Within five business days of receipt of an application with an alternate plan, provide copies of the application and alternate plan to the departments of ecology and fish and wildlife, affected Indian tribes, the National Marine Fisheries Service, the United States Fish and Wildlife Service, and other parties that have expressed an interest in alternate plans in the area of the application. If the landowner is a small forest landowner, copies should also be provided to the small forest landowner office.
- (5) **Interdisciplinary team.**
- (a) The department will determine the members invited to participate on an interdisciplinary team. Teams will include members with the qualifications necessary to evaluate the alternate plan. A representative of any affected Indian tribe, and departments of ecology and fish and wildlife will be invited to participate. Each team will include a representative of the landowner and a professional forester employed by the department and shall be led by a department employee.
 - (b) The interdisciplinary team will conduct a site visit and submit a recommendation to the department at least three days prior to the expiration of the application time limit in WAC 222-20-020. The interdisciplinary team may submit a recommendation without a site visit if a small forest landowner submitted the alternate plan using a template contained in board manual section 21 and is a low impact alternate plan and the team determines a visit is not necessary to evaluate the site specific application of a template or a low impact alternate plan.
 - (c) The recommendation of the interdisciplinary team shall indicate whether the alternate plan meets the approval standard, or what revisions are necessary to meet the approval standard. The team is intended to work with the landowner in an attempt to reach consensus on the efficacy of the alternate plan. In the absence of consensus, the team will forward reports reflecting the majority and minority opinions, or the landowner may elect to withdraw or revise the proposal.
- (6) **Approval standard.** An alternate plan must provide protection for public resources at least equal in overall effectiveness to the protection provided in the act and rules.
- (7) **Approval, conditions, or disapproval.** Upon receipt of the interdisciplinary team's recommendation, the department shall determine whether to approve, disapprove, or condition the application based on the approval standard. The department shall give substantial weight to the recommendations of the interdisciplinary team in cases where a consensus recommendation is forwarded. If the department disapproves or conditions a forest practices application with an alternate plan, the department will provide a written statement to the landowner explaining why the application was conditioned or denied.

WAC 222-12-0402 *Assistance available for small forest landowners. [Effective 1/5/13]

- (1) The small forest landowner office has been established within the department to be a resource and focal point for small forest landowner concerns and policies. The legislature recognized that the further reduction in harvestable timber owned by small forest landowners would further erode small forest landowners' economic viability and willingness or ability to keep the lands in forestry use, and, therefore, reduced the amount of habitat available for salmon recovery and conservation of other aquatic resources. The legislature has directed that office to assist small forest landowners in preparing alternate plans appropriate to small forest landowners. See RCW 76.13.100 and 76.13.110(3).

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

WAC 222-12-0403 *Cooperative development of guidelines for alternate plans.

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

- (1) As required by RCW 76.13.110(3), the small forest landowner office recommendations for alternate plans or alternate harvest restrictions that meet riparian functions while generally requiring less costly regulatory prescriptions;
- (2) The effectiveness of strategies for meeting resource objectives and protecting public resources;
- (3) Template prescriptions designed to meet resource objectives to address common situations that are repeatedly addressed in alternate plans or strategies to simplify the development of future plans or strategies, including low impact situations and site-specific physical features;
- (4) Appropriate recognition or credit for improving the condition of public resources; and
- (5) Criteria to assist the department in determining whether a small forest landowner alternate plan qualifies as a low impact alternate plan.

WAC 222-12-0404 *Cooperation for effective alternate planning.

The department will work cooperatively with associations representing the interests of large and small forest landowners to develop more efficient alternate planning guidance and processes. In pursuing greater efficiency and technical assistance, the department will consider:

- (1) Successful alternate plans, and small forest landowner alternate management strategies and processes that can be used by other small forest landowners as examples of the plan development and approval process;
- (2) Auditing and monitoring results;
- (3) Maintaining a list of technical experts available to landowners in preparing such plans; and
- (4) Partnerships between the department and organizations supporting forest land stewardship principles.

WAC 222-12-0405 *Auditing and monitoring.

- (1) Audits. The department will conduct audits of landowner's compliance with the terms of alternate plans. The department will specifically review and approve each landowners scheduled performance reports, if a performance report is required, by checking the reports themselves or by implementing a more extensive audit involving field verification. The department audit program for alternate plans will be designed to be consistent with the terms of any agreements with the federal government regarding fish and water quality.
- (2) The small landowners office is required by RCW 76.13.110(3) to evaluate the cumulative impact of alternate plans for small forest landowners on essential riparian functions at the subbasin or watershed level. The department will provide the result of this evaluation to the board.

WAC 222-12-041 Use of approved state and federal conservation agreements for aquatic resources. *[Effective 12/22/08]*

- (1) Forest practices consistent with an agreement described in subsection (3) below are exempt from the forest practices rules in chapters 222-22 through 222-38 WAC if the following criteria are met:
 - (a) The forest practices rule pertains to a species included within aquatic resources and that species is covered by an agreement listed in subsection (3) below; and
 - (b) The primary risk(s) to public resources addressed by the forest practices rules (e.g., delivery of sediment to waters from roads, harvest activities, or mass wasting events; chemical contamination of waters; inadequate recruitment of large woody debris; delivery of thermal energy to waters) is addressed in the agreement. The agreement may address the risk using different prescriptions, approaches, or timing than the forest practice rule.
- (2)
 - (a) When the landowner submits an application or notification, the landowner must include a proposed list of specific rules replaced.
 - (b) The department will review and confirm whether the rules identified by the landowner meet the criteria identified in subsection (1) above.
 - (c) At the request of the department, the landowner will confer in good faith with the department and provide the department and other interested parties with information necessary to assist the department in implementing this section.
- (3) This section applies to landowners who are operating consistent with one of the following agreements that covers a species included within aquatic resources provided that the agreement has received environmental review with an opportunity for public comment under the National Environmental Policy Act, 42 U.S.C. section 4321 et seq., the Endangered Species Act, 16 U.S.C. section 1531 et seq., or the State Environmental Policy Act, chapter 43.21C RCW;
 - (a) A habitat conservation plan and incidental take permit approved by the Secretary of the Interior or Commerce pursuant to 16 U.S.C. section 1539(a);
 - (b) An incidental take statement issued by the Secretary of the Interior or Commerce pursuant to 16 U.S.C. 1536(b);
 - (c) An “unlisted species agreement” approved by the U.S. Fish and Wildlife Service or National Marine Fisheries Service; or
 - (d) A candidate conservation agreement or other cooperative or conservation agreement entered into with a federal or state fish and wildlife agency pursuant to its statutory authority for fish and wildlife protection.

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

WAC 222-12-044 Cooperative opportunities.

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

WAC 222-12-045 *Adaptive management program. [Effective 10/20/13]

In order to further the purposes of chapter 76.09 RCW, the board has adopted and will manage a formal science-based adaptive management program (program), as set forth in WAC 222-08-160(2). Refer to board manual section 22 for program guidance and further information.

- (1) **Purpose:** The purpose of the program is to provide science-based recommendations and technical information to assist the board in determining if and when it is necessary or advisable to adjust rules and guidance for aquatic resources to achieve resource goals and objectives. The board may also use this program to adjust other rules and guidance. The goal of the program is to effect change when it is necessary or advisable to adjust rules and guidance to achieve the goals of the forests and fish report or other goals identified by the board. There are three desired outcomes: Certainty of change as needed to protect targeted resources; predictability and stability of the process of change so that landowners, regulators and interested members of the public can anticipate and prepare for change; and application of quality controls to study design and execution and to the interpreted results.
- (2) **Program elements:** By this rule, the board establishes an active, ongoing program composed of the following initial elements, but not to exclude other program elements as needed:
 - (a) **Key questions and resource objectives:** Upon receiving recommendations from the Timber/Fish/Wildlife (TFW) policy committee, or similar collaborative forum, the board will establish key questions and resource objectives and prioritize them.
 - (i) Projects designed to address the key questions shall be established in the order and subject to the priorities identified by the board.
 - (ii) Resource objectives are intended to ensure that forest practices, either singularly or cumulatively, will not significantly impair the capacity of aquatic habitat to:
 - (A) Support harvestable levels of salmonids;
 - (B) Support the long-term viability of other covered species; or
 - (C) Meet or exceed water quality standards (protection of beneficial uses, narrative and numeric criteria, and antidegradation).
 - (iii) Resource objectives consist of functional objectives and performance targets. Functional objectives are broad statements regarding the major watershed functions potentially affected by forest practices. Performance targets are the measurable criteria defining specific, attainable target forest conditions and processes.
 - (iv) Resource objectives are intended for use in adaptive management, rather than in the regulatory process. Best management practices, as defined in the rules and manual, apply to all forest practices regardless of whether or not resource objectives are met at a given site.
 - (b) **Participants:** The board manages the program and empowers the following entities to

participate in the program:

- The cooperative monitoring evaluation and research committee (CMER);
- The TFW policy committee (and/or similar collaborative forum);
- The adaptive management program administrator; and
- Other participants as directed to conduct the independent scientific peer review process.

The program will strive to use a consensus-based approach to make decisions at all stages of the process. Specific consensus-decision stages will be established by CMER and approved by the board. Ground rules will follow those established by the TFW process as defined in the board manual.

- (i) **CMER.** By this rule, the board establishes a cooperative monitoring evaluation and research (CMER) committee to impose accountability and formality of process, and to conduct research and validation and effectiveness monitoring to facilitate achieving the resource objectives. The purpose of CMER is to advance the science needed to support adaptive management. CMER also has ongoing responsibility to continue research and education in terrestrial resource issues. CMER will be made up of members that have expertise in a scientific discipline that will enable them to be most effective in addressing forestry, fish, wildlife, and landscape process issues. Members will represent timber landowners, environmental interests, state agencies, county governments, federal agencies and tribal governments from a scientific standpoint, not a policy view. CMER members will be approved by the board. This will not preclude others from participating in and contributing to the CMER process or its subcommittees. CMER shall also develop and manage as appropriate:
- (A) Scientific advisory groups and subgroups;
 - (B) Research and monitoring programs;
 - (C) A set of protocols and standards to define and guide execution of the process including, but not limited to, research and monitoring data, watershed analysis reports, interdisciplinary team evaluations and reports, literature reviews, and quality control/quality assurance processes;
 - (D) A baseline data set used to monitor change;
 - (E) A process for policy approval of research, monitoring, and assessment projects and use of external information, including the questions to be answered and the timelines; and
 - (F) A biennial research, monitoring, and assessment work plan to be presented to the TFW policy committee at their regular April meeting beginning in 2015 and at least every two years thereafter.
- (ii) **TFW policy committee (policy committee).** The policy committee is established to consider the findings of CMER research and monitoring and to make recommendations to the board related to forest practices rules, board manual sections, and/or other guidance. Policy committee membership consists of caucus principals or their representatives from the following nine caucuses:
- Industrial private timber land owners;
 - Nonindustrial private timber landowners;
 - Environmental community;
 - Western Washington tribal governments;

- Eastern Washington tribal governments;
- County governments;
- Department of natural resources;
- State departments of fish and wildlife and ecology; and
Federal agencies (including National Marine Fisheries Service, Fish and Wildlife Service, and U.S. Environmental Protection Agency).

Policy committee members or their representatives are the primary participants for discussion and decisions at policy committee meetings. Technical or scientific staff may attend policy committee meetings for consultation and staff member or visitors may attend policy committee meetings, but refrain from decision making. The policy committee will base consensus on one vote from each of the nine caucuses. The policy committee will act as a consensus-based body. Beginning in April 2014, the policy committee shall, among other responsibilities, and in cooperation with CMER, prepare for presentation to the board at their regular May meeting:

- (A) A CMER master project schedule prioritizing all CMER research and monitoring projects through 2031;
 - (B) Assurances that the CMER work plan projects are scheduled according to the CMER master project schedule;
 - (C) A review and update of the CMER master project schedule at least every four years; and
 - (D) Assurances that all of the projects on the master project schedule, as amended by the board, will be completed by 2040.
- (iii) Adaptive management program administrator (program administrator). The department will employ a full-time independent program administrator to oversee the program and support CMER. The program administrator will have credentials as a program manager, scientist, and researcher. The program administrator will:
- (A) Make reports to the board and have other responsibilities as defined in the board manual.
 - (B) Work with the policy committee and CMER to develop the CMER master project schedule and present it to the board at their regular May 2014 meeting;
 - (C) Report to the board every two years, beginning at their regular May 2015 meeting on:
 - (I) Progress made to implement the CMER master project schedule and recommended revisions;
 - (II) The status of ongoing projects including adherence to scheduled timelines; and
 - (III) Policy committee's responses to all final CMER reports.
- (iv) **Forest practices board (board)**. The board, among other responsibilities, shall:
- (A) Require the program to complete work according to the CMER master project schedule as amended by the board;
 - (B) Determine whether the program is in substantial compliance with the CMER master project schedule every two years, beginning at the regular August 2014 meeting; and
 - (C) Notify the National Marine Fisheries Service and the U.S. Fish and

Wildlife Service by letter within thirty days after the regular August meeting if the board determines the program is not in substantial compliance with the CMER master project schedule.

- (c) **Independent scientific peer review process.** By this rule, the board establishes an independent scientific peer review process to determine if the scientific studies that address program issues are scientifically sound and technically reliable; and provide advice on the scientific basis or reliability of CMER's reports. Products that must be reviewed include final reports of CMER funded studies, certain CMER recommendations, and pertinent studies not published in a CMER-approved, peer-reviewed journal. Other products that may require review include, but are not limited to, external information, work plans, requests for proposal, subsequent study proposals, the final study plan, and progress reports.
- (d) **Process:** The following stages will be used to effect change for managing adaptive management proposals and approved projects. If consensus cannot be reached by participants at any stage, the issue will be addressed within the dispute resolution process as defined in (h) of this subsection.
- (i) **Proposal initiation:** Adaptive management proposals can be initiated at this stage by any of the participants listed in (b) of this subsection to the program administrator, or initiation may be proposed by the general public at board meetings. Proposals must provide the minimum information as outlined in the board manual and demonstrate how results of the proposal will address key questions and resource objectives or other program rule and/or guidance issues. The board may initiate proposals or research questions in the course of fulfilling their duties according to statute.
- (ii) **Proposal approval and prioritization:** The program administrator will manage the proposal approval and prioritization process at this stage and consult with CMER on the program workplan. CMER proposals will be forwarded by the program administrator to policy and then to the board. The board will make the final determination regarding proposal approvals and prioritization. The board will act on proposal approval and prioritization in a timely manner.
- (iii) **CMER implementation of proposal:** Board approved proposals are systematically implemented through CMER at this stage by the program administrator.
- (iv) **Independent scientific peer review:** An independent scientific peer review process will be used at identified points within this stage of implementation depending upon the study and will be used on specified final studies or at the direction of the board.
- (v) **CMER committee technical recommendations:** Upon completion, final CMER reports and information will be forwarded at this stage by the program administrator to policy in the form of a report that includes technical recommendations and a discussion of rule and/or guidance implications.
- (vi) **Policy committee petitions and recommendations to the board:** Upon receipt of a CMER report or a board requested action, the policy committee will prepare a report for the board outlining recommended actions including additional research, rule petitions, and/or guidance recommendations. When completed, the recommendations including rule petitions and the original CMER report and/or other information as applicable will be forwarded by the program administrator to the board for review and action. Policy committee

recommendations for rule amendments to the board will be accompanied by formal petitions for rulemaking (as described in WAC 222-08-100 and RCW 34.05.330). The policy committee will use the CMER results to make specific recommendations to the board on:

- (A) The regulatory scheme of forest practices management (Title 222 WAC rules and board manual);
 - (B) Voluntary, incentive-based, and training programs affecting forestry;
 - (C) The resource objectives; and CMER itself, adaptive management procedures, or other mechanisms implementing the recommendations contained in the most current forests and fish report.
- (vii) **Board action to accept petitions for rule making and/or recommendations from the policy committee:** Upon receiving recommendations from the policy committee for rule petitions and/or recommendations for guidance, the board will take appropriate and timely action. There will be a public review of all petitions as applicable. The board will make the final determination.
- (e) **Biennial fiscal and performance audits.** The board shall require biennial fiscal and performance audits of the program by the department or other appropriate and accepting independent state agency.
- (f) **CMER five-year peer review process.** Every five years the board will establish a peer review process to review all work of CMER and other available, relevant data, including recommendations from the CMER staff. There will be a specified, but limited, period for public review and comment.
- (g) **Funding.** Funding is essential to implement the adaptive management program, which is dependent on quality and relevant data. The department shall request biennial budgets to support the program priority projects and basic infrastructure needs including funding to staff the adaptive management program administrator position. A stable, long-term funding source is needed for these activities.
- (h) **Formal dispute resolution process for CMER and policy committee.** If consensus cannot be reached through the adaptive management program process, participants will have their issues addressed by this dispute resolution process. Potential failures include, but are not limited to:
- The inability of policy to agree on research priorities, program direction, or recommendations to the board for uses of monitoring and/or research after receiving a report from CMER;
 - The inability of CMER to produce a report and recommendation on schedule; and
 - The failure of participants to act on policy recommendations on a specified schedule. Key attributes of the dispute resolution process are:
 - (i) Specific substantive and benchmark (schedule) triggers will be established by the board for each monitoring and research project for invoking dispute resolution;
 - (ii) The dispute resolution process is available to and can be initiated by both CMER and the policy committee to resolve disputes that result in the course of their respective processes. Formal dispute resolution involves two stages and may be applied at any level of the adaptive management process. Any participating policy committee caucus, board approved CMER member, or the board, may invoke stage two, if agreement is not reached in stage one, within the specified time (or if agreements are not substantially implemented) as follows:

- (A) Stage one dispute resolution will be an attempt by CMER or the policy committee, as applicable, to reach consensus. CMER and the policy committee have up to two months to reach consensus under stage one; unless otherwise agreed upon by CMER or the policy committee if substantive progress is being made. Any party may move the process to stage two after an issue has been in dispute resolution before CMER or the policy committee for two months. The time periods commence from the date the dispute resolution process is invoked.
- (B) Stage two dispute resolution in CMER or the policy committee will be either mediation or arbitration. Within one month, one or the other will be picked, with the default being mediation unless otherwise agreed. Stage two will be completed within three months (including the one month to select the process) unless otherwise agreed based on substantive progress.
- (C) If stage two dispute resolution within CMER does not result in consensus, the program administrator will forward the dispute to the policy committee for a decision, which could include initiation of the dispute resolution process within the policy committee.
- (D) If stage two dispute resolution within the policy committee does not result in consensus, the program administrator will report the majority and minority recommendations to the board. The board will make the final determination regarding dispute resolution.

WAC 222-12-046 Cumulative effects. *[Effective 7/1/05]*

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

- (1) Title 222 WAC establishes minimum standards for all forest practices, regardless of the class of forest practices application.
- (2) Forest practices which have a potential for a substantial impact on the environment are classified as Class IV-Special or Class IV-General by WAC 222-16-050 and receive an evaluation as to whether or not a detailed statement must be prepared pursuant to chapter 43.21C RCW.
- (3) Certain rules are designed to focus on specific aspects of cumulative effects of forest practices. For example:
 - (a) WAC 222-08-160 requires continuing review of the forest practices rules and voluntary processes and adopts the concept of adaptive management. WAC 222-12-045 also adopts adaptive management.
 - (b) WAC 222-12-040 allows alternate plans that provide protection to public resources at least equal in overall effectiveness to the protection provided in the Forest Practices Act and rules.
 - (c) WAC 222-24-051 allows the department to require road maintenance and abandonment plans.
 - (d) WAC 222-30-025 addresses harvest unit size and separation requirements.

- (e) Chapter 222-22 WAC addresses cumulative effects of forest practices on, at a minimum, the public resources of fish, water, and capital improvements of the state or its political subdivisions.
- (f) Chapter 222-46 WAC establishes the enforcement policy for forest practices.
- (4) The board shall continue consultation with the departments of ecology, fish and wildlife, natural resources, and archaeology and historic preservation, forest landowners, and affected tribes to further protect cultural resources and wildlife resource issues.

WAC 222-12-050 Notices to comply--Stop work orders. [Effective 12/30/13]

- * (1) **Violations.** When a forest practice has been completed, the department may issue a notice to comply requiring the operator or landowner to correct or compensate for damage to public resources where there was:
 - (a) A violation of the act, or these rules; or
 - (b) A deviation from the approved application; or
 - (c) A willful or negligent disregard for potential damage to a public resource.
- (2) **Other required action.** When a forest practice has not yet been completed, the department may issue either a notice to comply to the operator and/or landowner, or a stop work order to the operator, requiring him/her to prevent potential or continuing damage to a public resource where:
 - (a) The need for additional actions or restrictions has become evident; and
 - (b) The department determines that a specific course of action is needed to prevent potential or continuing damage to public resources; and
 - (c) The damage would result or is resulting from the forest practices activities, whether or not the activities involve any violation, unauthorized deviation or negligence.
- (3) **No notice to comply** shall be issued to require a person to prevent, correct, or compensate for any damage to public resources which occurs more than one year after the date of completion of the forest practices operations involved exclusive of reforestation, unless such forest practices were not conducted in accordance with forest practices rules: Provided, That this provision shall not relieve the forest landowner from any obligation to comply with forest practices rules pertaining to providing continuing road maintenance.
- (4) **No notice to comply** to recover money damages shall be issued more than two years after the date the damage involved occurs.
- * (5) **In emergency action**, where the department requires the operator or landowner to do immediate work that could affect the bed or flow of the stream, the department shall first seek consultation from the department of fish and wildlife.

WAC 222-12-060 Supplemental directives.

Supplemental directives are advisory directives and are issued to forest landowners, timber owners and operators conducting forest practices, recommending an alternate preferred course of action or a minor change in the operation, which the department believes would provide greater assurance that the purposes and policies set forth in RCW 76.09.010 will be met.

WAC 222-12-070 Enforcement policy. *[Effective 12/16/10]*

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

WAC 222-12-080 Administrative and judicial appeals. *[Effective 12/16/10]*

- (1) Certain decisions of the department may be appealed to the appeals board under chapter 76.09 RCW except that notices to comply may not be appealed to the appeals board unless first appealed to the department under RCW 76.09.090. Proceedings at the appeals board are governed by the Administrative Procedure Act, chapter 34.05 RCW, and chapter 371-08 WAC.
- (2) A petition for judicial review of a decision of the appeals boards may be filed in accordance with the Administrative Procedure Act, chapter 34.05 RCW.

WAC 222-12-090 Forest practices board manual. *[Effective 1/1/2024]*

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

- (1) **Method for determination of adequate shade requirements on streams** needed for use with WAC 222-30-040.
- (2) Standards for identifying channel migration zones and bankfull channel features.
- (3) **Guidelines** for forest roads.
- (4) **Guidelines** for clearing slash and debris from Type Np and Ns Waters.
- (5) **Guidelines** for forest practices hydraulic projects.
- (6) **Guidelines** for determining acceptable stocking levels.
- (7) **Guidelines** for riparian management zones.
- (8) **Guidelines** for wetland delineation.
- (9) **Guidelines** for wetland replacement or substitution.
- (10) A list of nonnative wetland plant species.
- (11) The standard methodology for conducting watershed analysis shall specify the quantitative methods, indices of resource conditions, and definitions, for conducting watershed analysis under chapter 222-22 WAC. The methodology shall also include a cultural resource module that shall specify the quantitative and qualitative methods, indices of resource conditions, and guidelines for developing voluntary management strategies for cultural resources. Except for cultural resources, the department, in consultation with Timber/Fish/Wildlife's Cooperative Monitoring, Evaluation and Research Committee (CMER), may make minor modifications to the version of the standard methodology approved by the board. Substantial amendments to the standard methodology requires approval by the board.
- (12) **Guidelines** for forest chemicals.

- (a) A list of special concerns related to aerial application of pesticides developed under WAC 222-16-070(3).
- (b) Guidelines for aerial applications of pesticides and other forest chemicals under chapter 222-38 WAC.
- (13) **Guidelines** for determining fish use for the purpose of typing waters under WAC 222-16-031.
- (14) **Survey protocol for marbled murrelets.** The most current Pacific Seabird Group terrestrial survey protocol shall be used when surveying for marbled murrelets in a stand. Surveys are valid if they were conducted in compliance with the board-recognized Pacific Seabird Group survey protocols in effect at the beginning of the season in which the surveys were conducted.
- (15) The department shall, in consultation with the department of fish and wildlife, develop:
 - (a) **Platform protocols** for use by applicants in estimating the number of platforms, and by the department in reviewing and classifying forest practices under WAC 222-16-050. These protocols shall include:
 - (i) A sampling method to determine platforms per acre in the field;
 - (ii) A method to predict the number of platforms per acre based on information measurable from typical forest inventories. The method shall be derived from regression models or other accepted statistical methodology, and incorporate the best available data; and
 - (iii) Other methods determined to be reliable by the department, in consultation with the department of fish and wildlife.
 - (b) Guidance for applications classified by the department under WAC 222-16-080 (1)(h)(v) to be Class IV-Special forest practices for lands designated as critical habitat (state) for marbled murrelet (*Brachyramphus marmoratus*) for the following two forest practices activities:
 - (i) Harvesting within a 150-foot no-cut inner zone buffer of a 300-foot managed buffer zone adjacent to an occupied marbled murrelet site.
 - (ii) Harvesting within a 150-foot outer zone managed buffer of a 300-foot managed buffer zone adjacent to an occupied marbled murrelet site that results in less than a residual stand relative density of 35 for Douglas-fir or red alder dominant species group or a residual stand relative density of 50 for Western hemlock dominant species group.
- (16) **Guidelines** for evaluating potentially unstable slopes and landforms.
- (17) **Guidelines** for the small forest landowner forestry riparian easement program.
- (18) **Guidelines** for rivers and habitat open space program.
- (19) **Guidelines** for hardwood conversion.
- (20) **Guidelines** for financial assurances.
- (21) **Guidelines** for alternate plans.
- (22) **Guidelines** for adaptive management program.
- (23) **Guidelines** for field protocol to locate mapped divisions between stream types and perennial stream identification.
- (24) **Guidelines** for interim modification of bull trout habitat overlay.
- (25) **Guidelines** for bull trout presence survey protocol.
- (26) **Guidelines** for placement strategy for woody debris in streams.

Chapter 222-16 WAC

DEFINITIONS

WACs in this chapter were in effect 7/2001 except those that have been amended since 7/2001. The effective dates of the amended WACs are shown after the WAC headings.

WAC

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Note: Rules marked with an asterisk () pertain to water quality protection and have been adopted or amended by the Forest Practices Board with agreement from the Department of Ecology per WAC 222-12-010.*

WAC 222-16-010 *General definitions. [Effective 1/1/2024]

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 floodplain or intersect a terrace or hillslope. In cases where multiple channels exist, the bankfull depth is the average depth of all channels along the cross-section. (See board manual section 2.)

"Bankfull width" means:

- (a) For streams - the measurement of the lateral extent of the water surface elevation perpendicular to the channel at bankfull depth. In cases where multiple channels exist, bankfull width is the sum of the individual channel widths along the cross-section (see board manual section 2).
- (b) For lakes, ponds, and impoundments - line of mean high water.
- (c) For tidal water - line of mean high tide.
- (d) For periodically inundated areas of associated wetlands - line of periodic inundation, which will be found by examining the edge of inundation to ascertain where the presence and action of waters are so common and usual, and so long continued in all ordinary years, as to mark upon the soil a character distinct from that of the abutting upland.

"Basal area" means the area in square feet of the cross section of a tree bole measured at four and one-half feet above the ground.

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

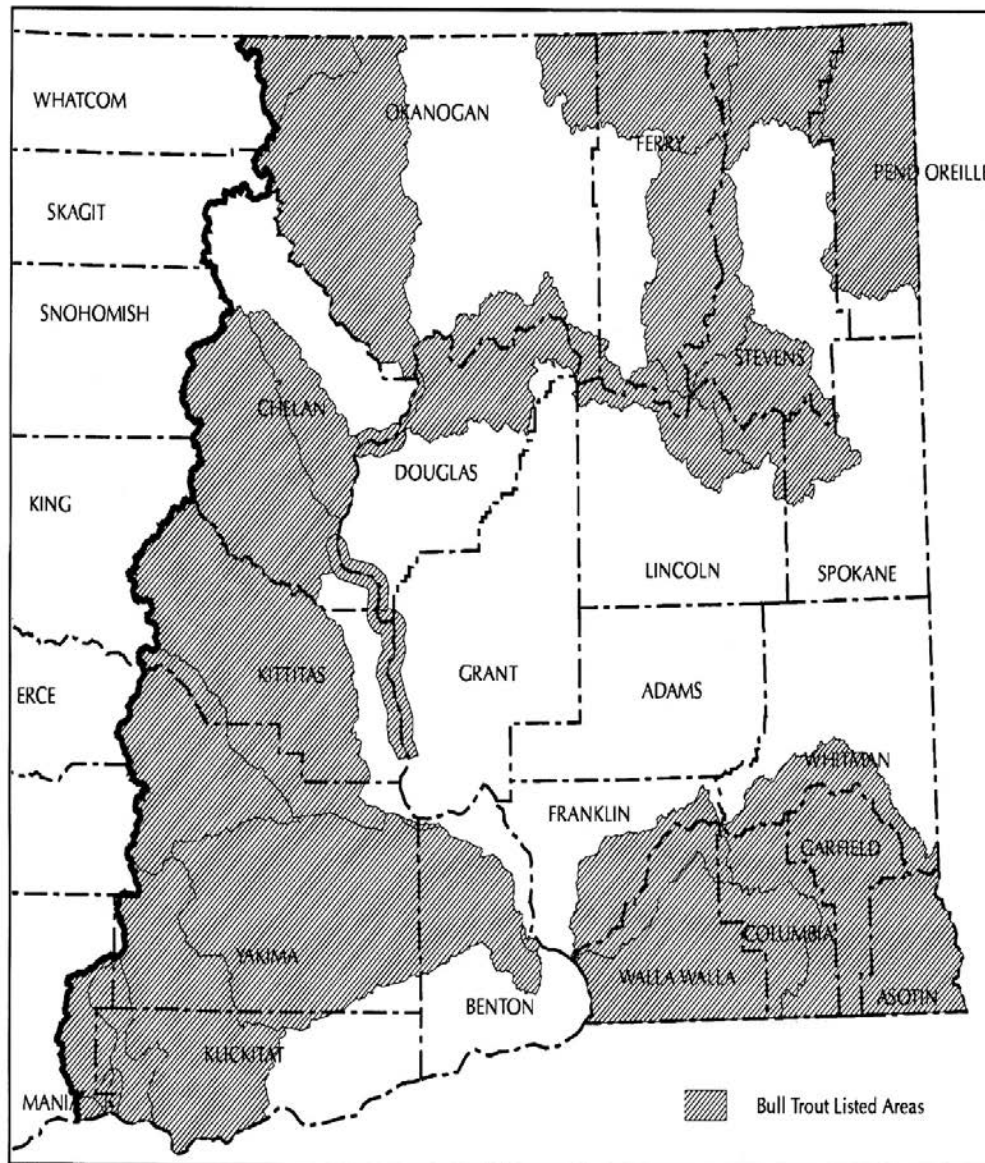
"Board" means the forest practices board established by the act.

"Bog" means wetlands which have the following characteristics: Hydric organic soils (peat and/or muck) typically 16 inches or more in depth (except over bedrock or hardpan); and vegetation such as sphagnum moss, Labrador tea, bog laurel, bog rosemary, sundews, and sedges; bogs may have an overstory of spruce, western hemlock, lodgepole pine, 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 six 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 three 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 10s to 100s 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 four and one-half 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:

<u>Timber Habitat Types</u>	<u>Elevation Ranges</u>
ponderosa pine	0 - 2500 feet
Mixed conifer	2501 - 5000 feet
high elevation	above 5000 feet

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

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

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

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

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

- Clearcuts;
- Seed tree harvests in which twenty or fewer trees per acre remain after harvest;
- Shelterwood regeneration harvests in which twenty or fewer trees per acre remain after harvest;
- Group or strip shelterwood harvests creating openings wider than two tree heights, based on dominant trees;
- Shelterwood removal harvests which leave fewer than 150 trees per acre which are at least five years old or four feet in average height;
- Partial cutting in which fewer than 50 trees per acre remain after harvest;
- Overstory removal when more than 5000 board feet per acre is removed and fewer than 50 trees per acre at least 10 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 10 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.

"Fish protection standards" means the standards met by fulfilling certain fish protection objectives when conducting forest practices hydraulic projects in Type S and F and associated Np Waters. The objectives, identified in WAC 222-16-025, are met by following rules associated with forest practices hydraulic projects.

"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 biomass” means material from trees and woody plants that are by-products of forest management, ecosystem restoration, or hazardous fuel reduction treatments on forest land. Although stumps are a by-product of these activities, only those removed for the purpose of road and landing construction, forest health treatments, or conversion activities may qualify as forest biomass.

"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 land owner" unless such lessee or other person has the right to sell or otherwise dispose of any or all of the timber located on such forest land.

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

- Activities in and over typed water;
- 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 practices hydraulic project” means a forest practices activity that includes the construction or performance of work that will use, divert, obstruct, or change the natural flow or bed of any Type S, F, or N Water. Stand-alone proposals involving channel change and realignment, dredging in fresh water areas, and constructing outfall structures are not forest practices hydraulic projects and remain governed by chapter 77.55 RCW and chapter 220-110 WAC.

"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(12).

"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.

"Large forest landowner" is a forest landowner who is not a small forest landowner.

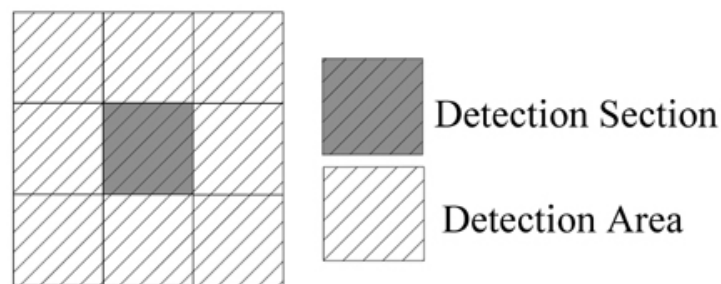
"Limits of construction" means the area occupied by the completed roadway or landing, including the cut bank, fill slope, and the area cleared for the purpose of constructing the roadway or landing.

"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 horizontal surface created by multiple leaders, a deformity created by mistletoe infection or branch break, or a debris/moss platform or stick nest equal to or greater than seven inches in width including associated moss if present, that is 50 feet or more above the ground in western hemlock trees 24 inches dbh and greater and in other conifer trees 32 inches dbh and greater 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 three 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 subsections (1) and (2) of this section, the sites will be presumed to be occupied based upon observation of circling described in subsection (1)(e) of this section, , unless a two-year survey following the most current Pacific Seabird Group (PSG) terrestrial survey 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 subsection (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 the most current PSG terrestrial survey 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 subsection (1) of this section, 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 subsection (1) of this section 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 subsection (2) of this section, 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 subsection (1) of this section occurred, of the following:
- (a) one and one-half miles from the point where the observed behaviors or conditions listed in subsection (1) of this section 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 subsection (1) of this section 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 line" 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 line cannot be found, the ordinary high-water line adjoining saltwater shall be the line of mean high tide and the ordinary high-water line 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

<u>Site Class</u>	<u>Western Washington Total RMZ Width</u>
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

<u>Site Class</u>	<u>Eastern Washington Total RMZ Width</u>
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

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

(2) For Eastern Washington

<u>Site class</u>	<u>100-year site index range (state soil survey)</u>	<u>50-year site index range (state soil survey)</u>
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" means an owner of forest land who, at the time of submission of required documentation to the department:

- Has harvested no more than an average timber volume of 2,000,000 board feet per year from their own forest lands in Washington state during the three years prior to submitting required documentation; and
- Certifies they do not expect to exceed that average timber volume for 10 years after the department receives the required documentation.

However, a landowner who exceeded or expects to exceed those harvest limits may still be deemed a small forest landowner under circumstances described in RCW 76.09.450.

"Small forest landowner long-term application" means a proposal from a small forest landowner to conduct forest practices activities for terms of four to 15 years. Small forest landowners are eligible to submit long-term applications if they meet the definition of "small forest landowner."

"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 for the purpose of conducting a protocol survey, a contiguous forested area containing trees capable of providing nesting opportunities with all of the following indicators unless the department, in consultation with the department of fish and wildlife, has determined that the habitat is not likely to be occupied by marbled murrelets:

- (a) Within 50 miles of marine waters;
- (b) At least 40 percent of the dominant and codominant trees are conifer tree species;
- (c) Two or more nesting platforms per acre;
- (d) At least five acres in size, (minimum convex polygon), of qualifying platform-bearing trees.

"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).

WAC 222-16-025 *Fish protection standards and objectives for forest practices hydraulic projects. [Effective 12/30/13]

- (1) Pursuant to RCW 76.09.040 (3)(a), the fish protection standards in the hydraulic code rules (chapter 220-110 WAC) applicable to forest practices activities are incorporated into the forest practices rules.
- (2) The department will evaluate forest practices hydraulic projects on the basis of whether they will meet fish protection standards. The primary objectives of the fish protection standards are to:
 - (a) Protect fish life;
 - (b) Achieve no-net-loss of productive capacity of fish or shellfish habitat;
 - (c) Minimize project-specific and cumulative impacts to fish life; and
 - (d) Mitigate for unavoidable impacts to fish life and fish habitat.
- (3) "Fish life," "protection of fish life," "mitigation," and "no-net-loss" are defined in WAC 220-110-020 as follows:
 - (a) "Fish life" means all fish species including, but not limited to, food fish, shellfish, game fish, and other nonclassified fish species and all stages of development of those species.
 - (b) "Protection of fish life" means prevention of loss or injury to fish or shellfish, and protection of the habitat that supports fish and shellfish populations.
 - (c) "Mitigation" means actions required as provisions of forest practices hydraulic projects to avoid or compensate for impacts to fish life resulting from the proposed project activity. The type(s) of mitigation required will be considered and implemented, where feasible, in the following sequential order of preference:
 - (i) Avoiding the impact altogether by not taking a certain action or parts of an action;
 - (ii) Minimizing impacts by limiting the degree or magnitude of the action and its implementation;
 - (iii) Rectifying the impact by repairing, rehabilitating, or restoring the affected environment;
 - (iv) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action;
 - (v) Compensating for the impact by replacing or providing substitute resources or environments; or
 - (vi) Monitoring the impact and taking appropriate corrective measures to achieve the identified goal.

For projects with potentially significant impacts, a mitigation agreement may be required prior to approval. Replacement mitigation may be required to be established and functional prior to project construction.

- (d) No-net-loss means:
 - (i) Avoidance or mitigation of adverse impacts to fish life; or
 - (ii) Avoidance or mitigation of net loss of habitat functions necessary to sustain fish life; or
 - (iii) Avoidance or mitigation of loss of area by habitat type.Mitigation to achieve no-net-loss should benefit those organisms being impacted.

- (4) The following general provisions shall apply to forest practices hydraulic projects in Type S or F Waters:
- (a) If fish may be adversely impacted as a result of the project, the landowner may be required to capture and safely move food fish, game fish, or other fish life (at the discretion of the department in consultation with the department of fish and wildlife) to the nearest free-flowing water. See board manual section 5 for further guidance.
 - (b) Disturbance to the stream bed, banks, and riparian vegetation shall be restricted to that necessary to complete the project.
 - (c) All disturbed areas shall be protected from erosion. The banks shall be revegetated with native or other approved woody species, or stabilized with other approved erosion control techniques, and maintained as necessary to ensure survival. See board manual section 5 for technical guidance.
 - (d) Equipment shall not enter or operate within the wetted perimeter of a stream unless such activity is approved in a forest practices application.
 - (e) Equipment shall be inspected, cleaned, and maintained to prevent loss of petroleum products waterward of the ordinary high water line. See board manual section 5 for further guidance.
 - (f) Excavation for and replacement of footings and foundations shall be landward of the ordinary high water line unless the construction site is separated from typed waters by use of a dike, cofferdam, or other structure.
 - (g) Structures containing concrete shall be sufficiently cured prior to contact with water.

WAC 222-16-030 Water typing system. *[Not in effect]*

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 above-ground channel system to Type S, F, or Np Waters.
- * (5) For purposes of this section:
- (a) “Residential unit” means a home, apartment, residential condominium unit or mobile home, serving as the principal place of residence.
 - (b) “Camping unit” means an area intended and used for:

- (i) Overnight camping or picnicking by the public containing at least a fireplace, picnic table and access to water and sanitary facilities; or
- (ii) A permanent home or condominium unit or mobile home not qualifying as a “residential unit” because of part time occupancy.
- (c) “Public accommodation facility” means a business establishment open to and licensed to serve the public, such as a restaurant, tavern, motel or hotel.
- (d) “Natural waters” only excludes water conveyance systems which are artificially constructed and actively maintained for irrigation.
- (e) “Seasonal low flow” and “seasonal low water” mean the conditions of the 7-day, 2-year low water situation, as measured or estimated by accepted hydrologic techniques recognized by the department.
- (f) “Channel width and gradient” means a measurement over a representative section of at least 500 linear feet with at least 10 evenly spaced measurement points along the normal stream channel but excluding unusually wide areas of negligible gradient such as marshy or swampy areas, beaver ponds and impoundments. Channel gradient may be determined utilizing stream profiles plotted from United States geological survey topographic maps (see board manual section 23).
- (g) “Intermittent streams” means those segments of streams that normally go dry.
- (h) “Fish habitat” means habitat which is used by any fish at any life stage at any time of the year, including potential habitat likely to be used by fish which could be recovered by restoration or management and includes off-channel habitat.

WAC 222-16-031 Interim water typing system. [Effective 12/16/06]

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 “shoreslines 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 or 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.)

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.

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.

WAC 222-16-050 *Classes of forest practices. [Effective 12/30/13]

There are four classes of forest practices created by the act. All forest practices (including those in Classes I and II) on nonfederal forest lands must be conducted in accordance with the forest practices rules. The department determines the classification of each forest practices proposal.

- (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 approved.
- * (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 thousand board feet 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 (d)(i) of this subsection 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 potentially 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 watershed administrative unit (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 WAU not subject to an approved watershed analysis under chapter 222-22 WAC, construction of roads, landings, rock quarries, gravel pits, borrow pits, and spoil disposal areas on snow avalanche slopes within those areas designated by the department, in consultation with department of transportation and local government, as high avalanche hazard where there is the potential to deliver sediment or debris to a public resource, or the potential to threaten public safety.
- (f) Timber harvest 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. Forest practices applications classified Class IV-general are subject to the SEPA review process described in subsection (1) of this section.
- * (a) Forest practices (other than those in Class I) on lands that are being converted to another use;

- (b) Forest practices that would otherwise be Class III, but are taking place on lands that are not to be reforested because of likelihood of future conversion to urban development (see WAC 222-16-060 and 222-34-050); or
- (c) Where the regulatory authority for forest practices has not been transferred from the department to the local governmental entity pursuant to RCW 76.09.240(1), 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 timber operations for ten years. This statement must be 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 or 84.34 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 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 permit from a local governmental entity acting under the powers enumerated in RCW 76.09.240, the department shall notify the applicable local governmental entity under WAC 197-11-924 that the department has determined according to WAC 197-11-938(4) that the local governmental entity is the lead agency for purposes of compliance with the SEPA.

- (3) **"Class I."** 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 an application.
 - (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.
- (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 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 that are being converted to another use. Unless the conditions described in (f) or (g) of this subsection are met, 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 36.70A 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 or of a forest practices hydraulic project design 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.
- * (f) Forest practices involving timber harvesting or road construction listed in (a) through (e) of this subsection within urban growth areas (UGAs) designated pursuant to chapter 36.70A RCW, if the 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 timber operations for ten years. This statement must be 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 or 84.34 RCW; or
 - (ii) A conversion option harvest plan approved by the local governmental entity and submitted to the department as part of the application.
- * (g) Forest practices listed in (a) through (e) of this subsection within UGAs, and where the regulatory authority for forest practices has been transferred to the local governmental entity pursuant to RCW 76.09.240(1), may nonetheless be Class II forest practices and regulated by the department if:

- (i) The forest practice is on a landowner's ownership of contiguous forest land equal to or greater than twenty acres; and
 - (ii) The landowner provides documentation described in (f)(i) or (ii) of this subsection.
- (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) Forest practices hydraulic projects except where classed as Class I, II, and IV forest practices.
 - *(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.
 - *(q) Forest practices involving timber harvest or road construction listed in (a) through (p) of this subsection within urban growth areas (UGAs) designated pursuant to chapter 36.70A RCW, if the landowner provides documentation described in subsection (4)(f)(i) or (ii) of this section.
 - *(r) Forest practices listed in (a) through (p) of this subsection within UGAs, and where the regulatory authority for forest practices has been transferred to the local governmental entity pursuant to RCW 76.09.240(1), may nonetheless be Class III forest practices and regulated by the department if:
 - (i) The forest practice is on a landowner's ownership of contiguous forest land equal to or greater than twenty acres; and
 - (ii) The landowner provides documentation described in subsection (4)(f)(i) or (ii) of this section.
 - (s) Removal of beaver structures from culverts on forest roads.

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).

WAC 222-16-060 Lands with a likelihood of future conversion. [Effective 12/22/08]

- (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.

WAC 222-16-070 Pesticide uses with the potential for a substantial impact on the environment. [Effective 7/1/05]

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

- (1) Pesticide list - The department shall maintain a list of all pesticides registered under chapter 15.58 RCW for use in forest practices. The department shall conduct, in consultation with the departments of ecology, health, agriculture, and fish and wildlife, an annual review of the list for the purpose of including new pesticides and/or removing those pesticides which have been prohibited from use. The list shall be available to the public at each of the department's offices. A list of the department's offices and their addresses appears at WAC 332-10-030. In preparing the pesticide list, the department shall include information on the following characteristics:
 - (a) Active ingredients, name brand or trade mark, labeled uses, pesticide type, EPA-registration number;
 - (b) Toxicity of the pesticide based on the Environmental Protection Agency (EPA) label warning under 40 C.F.R. 156.10 (h)(1), listed as "caution," "warning," "danger," or "danger - poison" except as modified to consider aquatic or mammalian toxicity; and
 - (c) Whether the pesticide is a state restricted use pesticide for the protection of ground water under WAC 16-228-1231.
- (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 AERIALY 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 <i>Bacillus thuringiensis</i> (BT) the only pesticide being used on this application?	Yes No	go to 3(b) go to 4(a)
3 (b)	Is there a Threatened or Endangered species or the critical habitat (Federal) or critical habitat (State) of a species within the application area that is susceptible to the BT strain being used?	Yes No	Class IV Sp Class III
4 (a)	Is this operation occurring over ground water with a high susceptibility to contamination as specified in EPA 910/ 9-87-169 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 ground water 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)
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

- (1) 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.

WAC 222-16-080 Critical habitats (state) of threatened and endangered species. [Effective 1/1/2024]

- (1) Critical habitats (state) of threatened or endangered species and specific forest practices designated as Class IV-Special are as follows:
 - (a) Gray wolf (*Canis lupus*) - harvesting, road construction, or site preparation within one mile of a known active den site, documented by the department of fish and wildlife, between the dates of March 15th and July 30th or 0.25 mile from the den site at other times of the year.
 - (b) Grizzly bear (*Ursus arctos*) - harvesting, road construction, aerial application of pesticides, or site preparation within one mile of a known active den site, documented by the department of fish and wildlife, between the dates of October 1st and May 30th or 0.25 mile at other times of the year.
 - (c) 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.
 - (d) 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.
 - (e) 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.
 - (f) Northern spotted owl (*Strix occidentalis caurina*).
 - (i) **Within a SOSEA boundary** (see maps in WAC 222-16-086), except as indicated in (f)(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 1st and August 31st on the 70 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.
 - (g) Pacific pond turtle (*Actinemys 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 fish and wildlife.

- (h) Marbled murrelet (*Brachyramphus marmoratus*).
 - (i) Harvesting, other than removal of down trees outside of the critical nesting season, or road construction within an occupied marbled murrelet site.
 - (ii) Harvesting, other than removal of down trees outside of the critical nesting season, or road construction within suitable marbled murrelet habitat within a marbled murrelet detection area.
 - (iii) Harvesting, other than removal of down trees outside of the critical nesting season, or road construction within suitable marbled murrelet habitat containing seven 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 five or more platforms per acre.
 - (v) Harvesting within a 300 foot managed buffer zone adjacent to an occupied marbled murrelet site that results in harvest within a no-cut inner buffer of 150 feet; or, harvest within a managed 150 foot outer buffer which will leave a residual stand relative density of less than 35 for Douglas-fir or red alder dominant species group or residual stand relative density of less than 50 for Western hemlock-spruce dominant species group. The inner zone of the buffer shall begin at the edge of the outer extent of the platform trees of the occupied habitat. The primary consideration for the design of managed buffer zone widths and leave tree retention patterns shall be to help minimize 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. The landowners shall consult with WDFW on managed buffer prescriptions.
 - (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 the 300-foot average buffer of 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) 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 landowner option plan (LOP) for northern spotted owls developed pursuant to WAC 222-16-100(1);
- (e) A cooperative habitat enhancement agreement (CHEA) developed pursuant to WAC 222-16-105; or
- (f) A take avoidance plan issued by the U.S. Fish and Wildlife Service or the National Marine Fisheries Service prior to March 20, 2000.
- (g) Surveys demonstrating the absence of northern spotted owls at a northern spotted owl site center have been reviewed and approved by the department of fish and wildlife and all three of the following criteria have been met:
 - (i) The site has been evaluated by the spotted owl conservation advisory group, and
 - (ii) As part of the spotted owl conservation advisory group's evaluation, the department's representative has consulted with the department of fish and wildlife, and
 - (iii) The spotted owl conservation advisory group has reached consensus that the site need not be maintained while the board completes its evaluation of rules affecting the northern spotted owl. The spotted owl conservation advisory group shall communicate its findings to the department in writing within 60 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.

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 dominants/codominants greater than or equal to 85 feet high with 2 or more layers and 25 - 50% intermediate trees	115-280 trees/acre (greater than or equal to 4 inches dbh) with dominants/codominants greater than or equal to 85 feet high OR dominants/codominants greater than or equal to 85 feet high with 2 or more layers and 25 - 50% intermediate trees
Vertical Diversity		
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/co-dominants greater than or equal to 90 feet high OR dominants/co-dominants greater than or equal to 90 feet high with 2 or more layers and 25 - 50% intermediate trees	100 - 300 trees/acre (greater than or equal to 4 inches dbh)	100 - 300 trees/acre (greater than or equal to 4 inches dbh)
Vertical Diversity		dominants/co-dominants equal to or greater than 70 feet high	dominants/co-dominants equal to or greater than 70 feet high
		2 or more layers	2 or more layers
		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)	N/A	2/acre or more (greater than or equal to 20 inches dbh 16 feet in height)
Mistletoe	OR 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

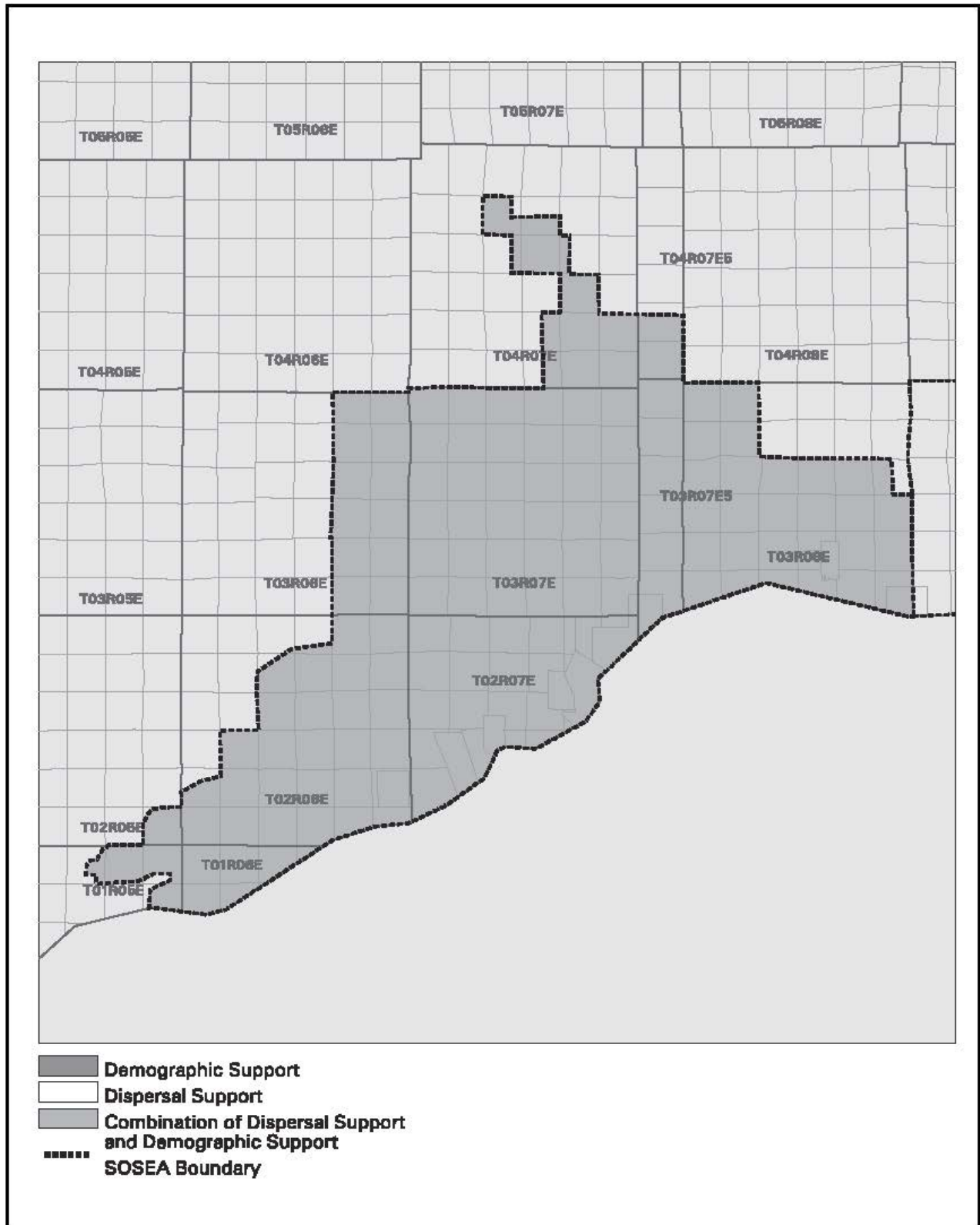
The values indicated for canopy closure and tree density may be replaced with the following:

- (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.

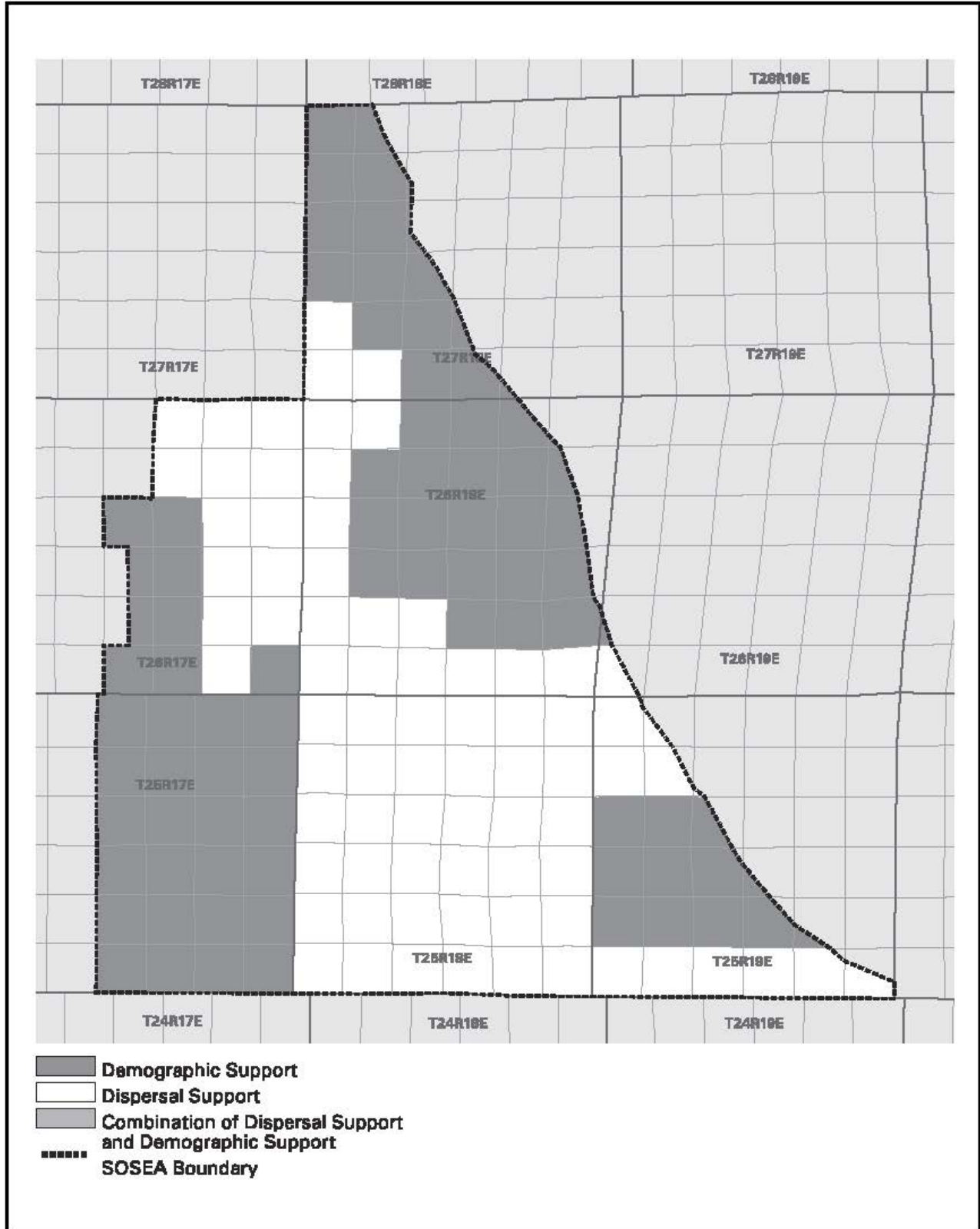
- (2) **Spotted owl dispersal habitat** means habitat stands that provide the characteristics needed by northern spotted owls for dispersal. Such habitat provides protection from the weather and predation, roosting opportunities, and clear space below the forest canopy for flying. Timber stands that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

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.

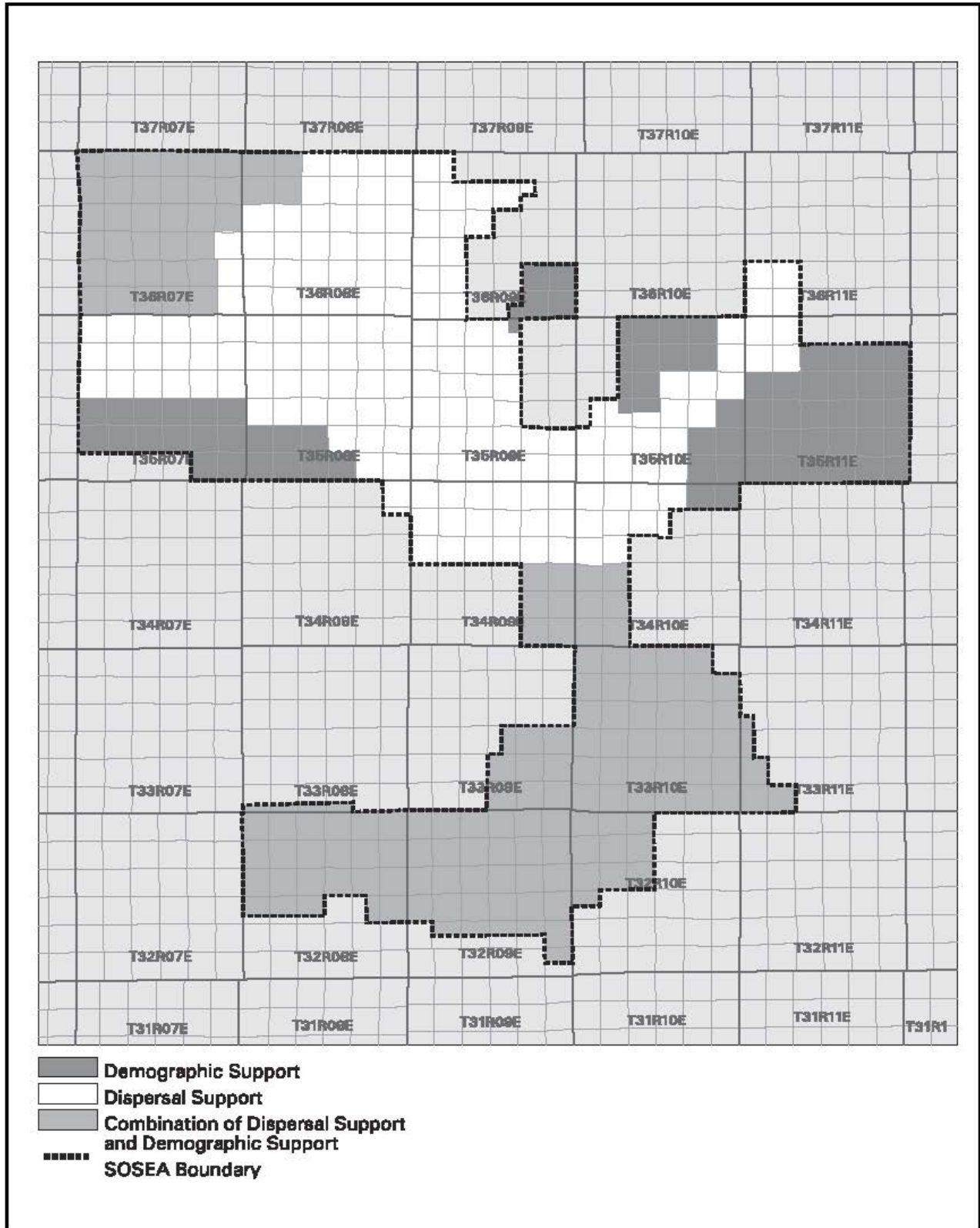
(1) Columbia Gorge SOSEA



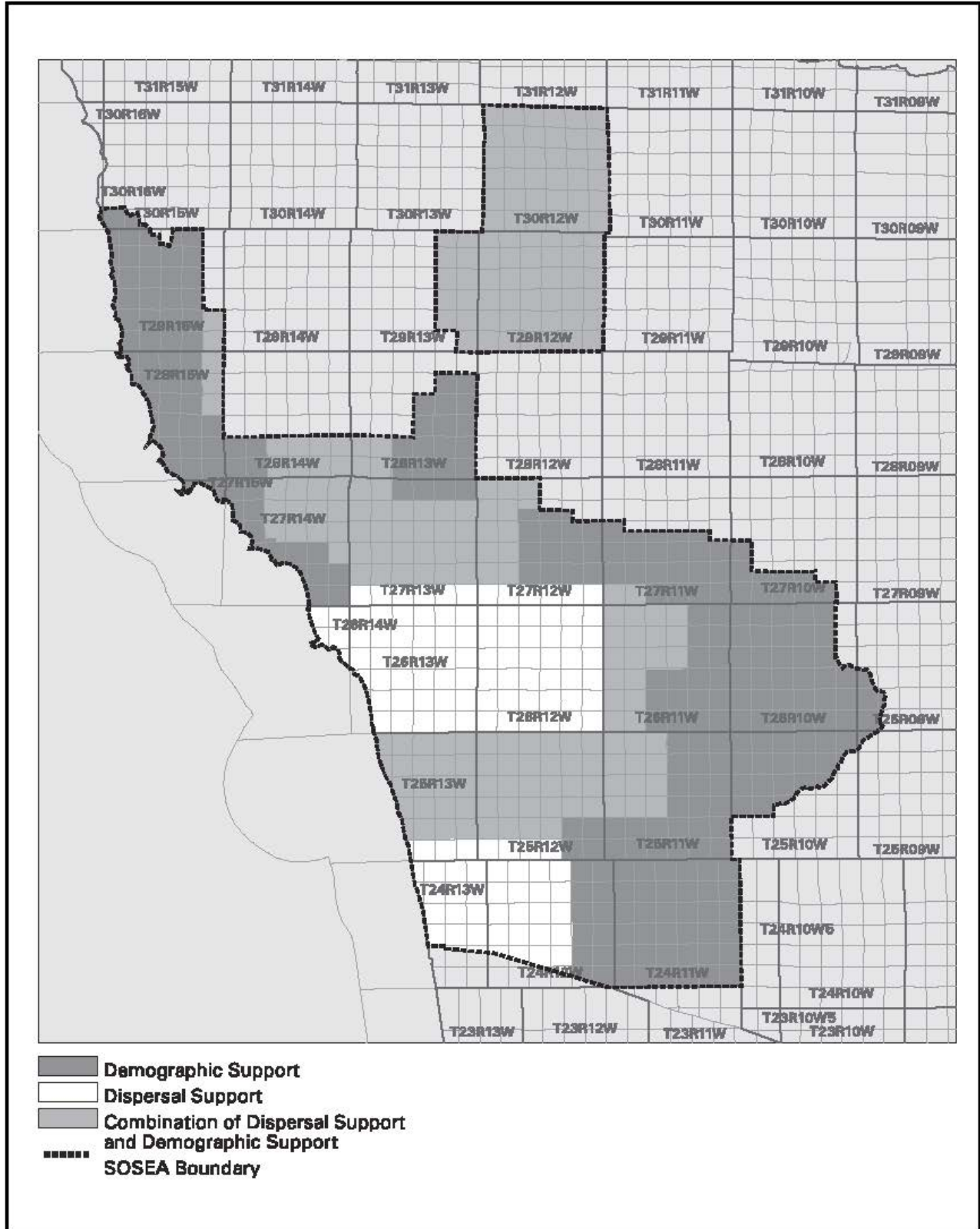
(2) Entiat SOSEA



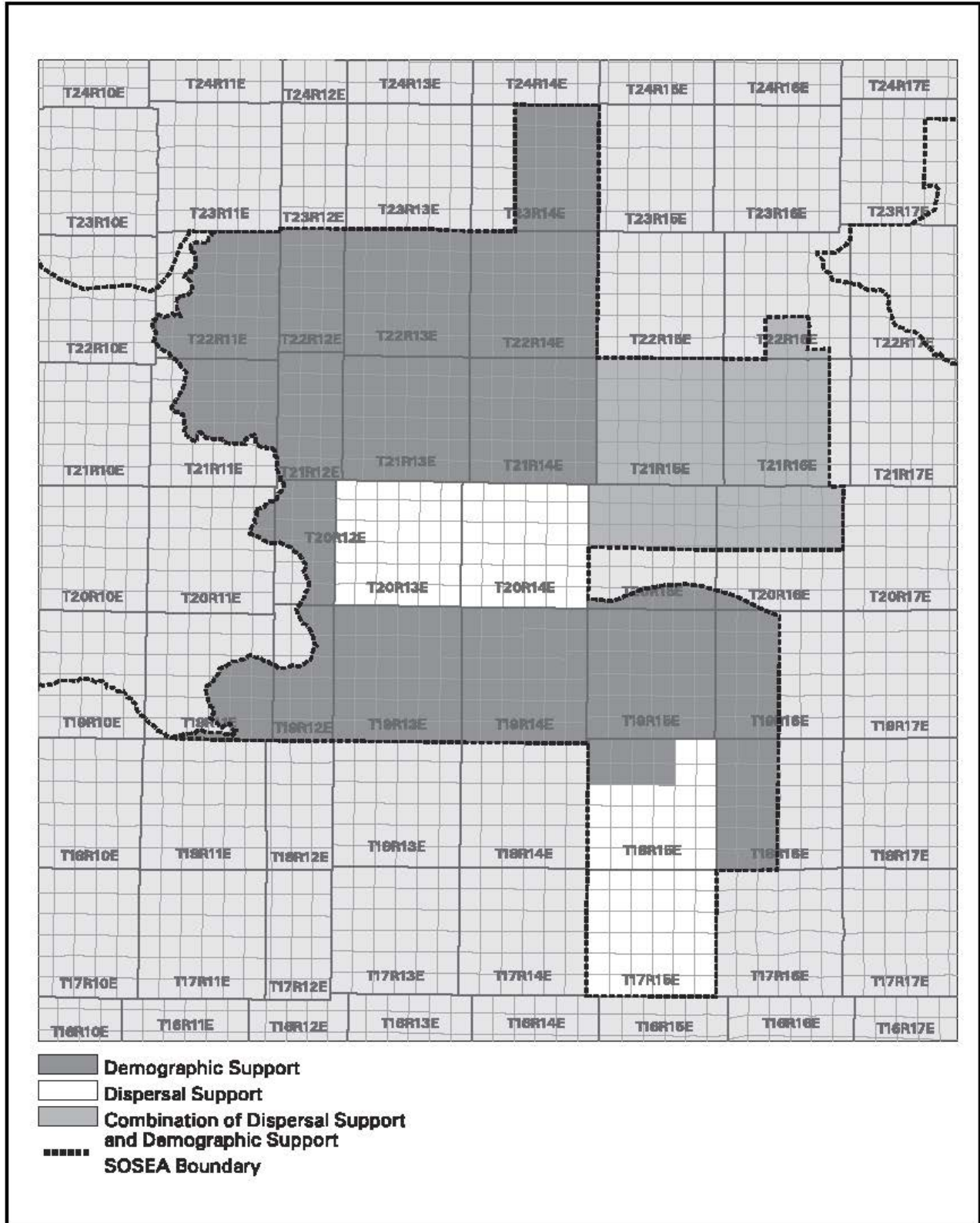
(3) Finney Block SOSEA



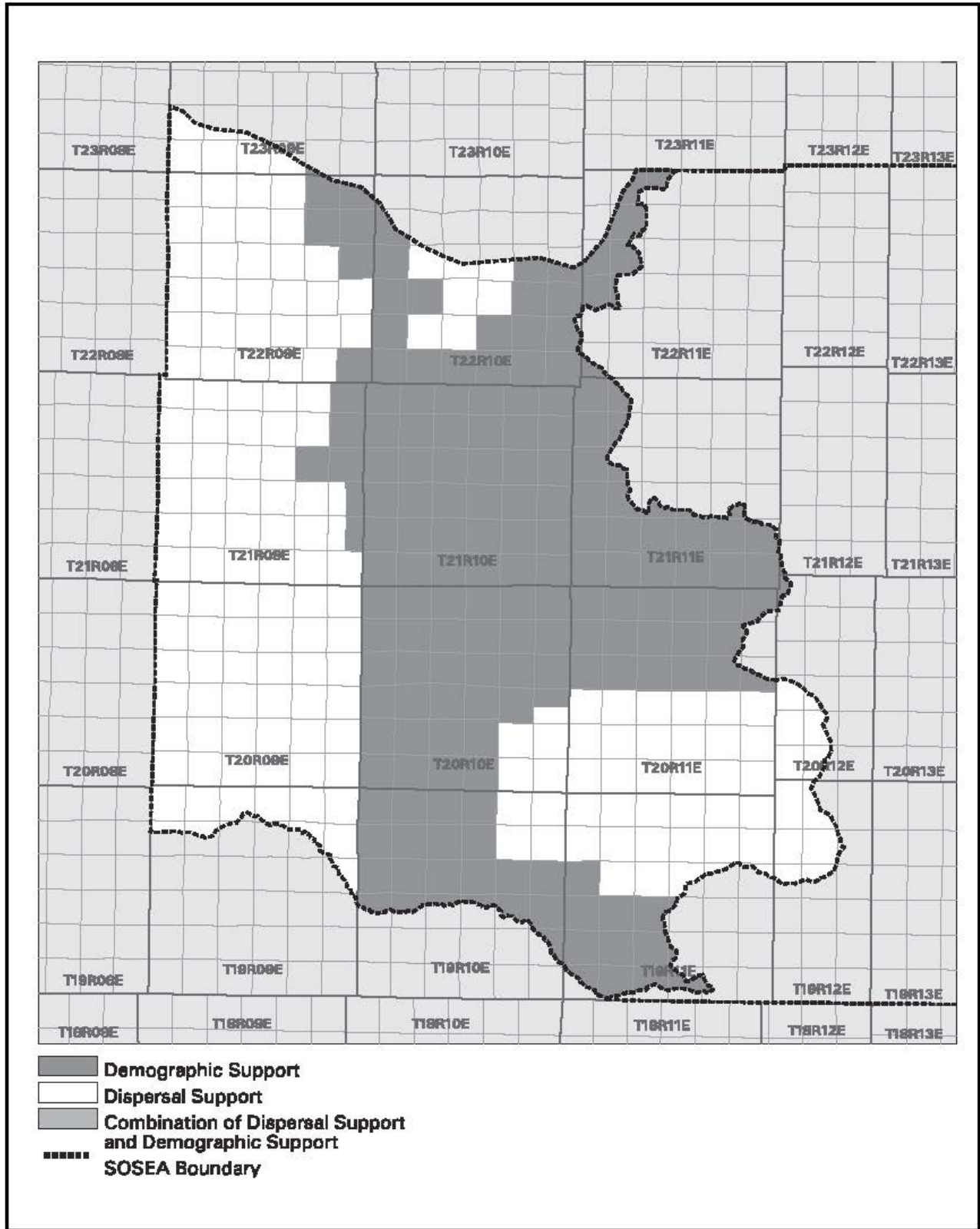
(4) Hoh-Clearwater/Costal Link SOSEA



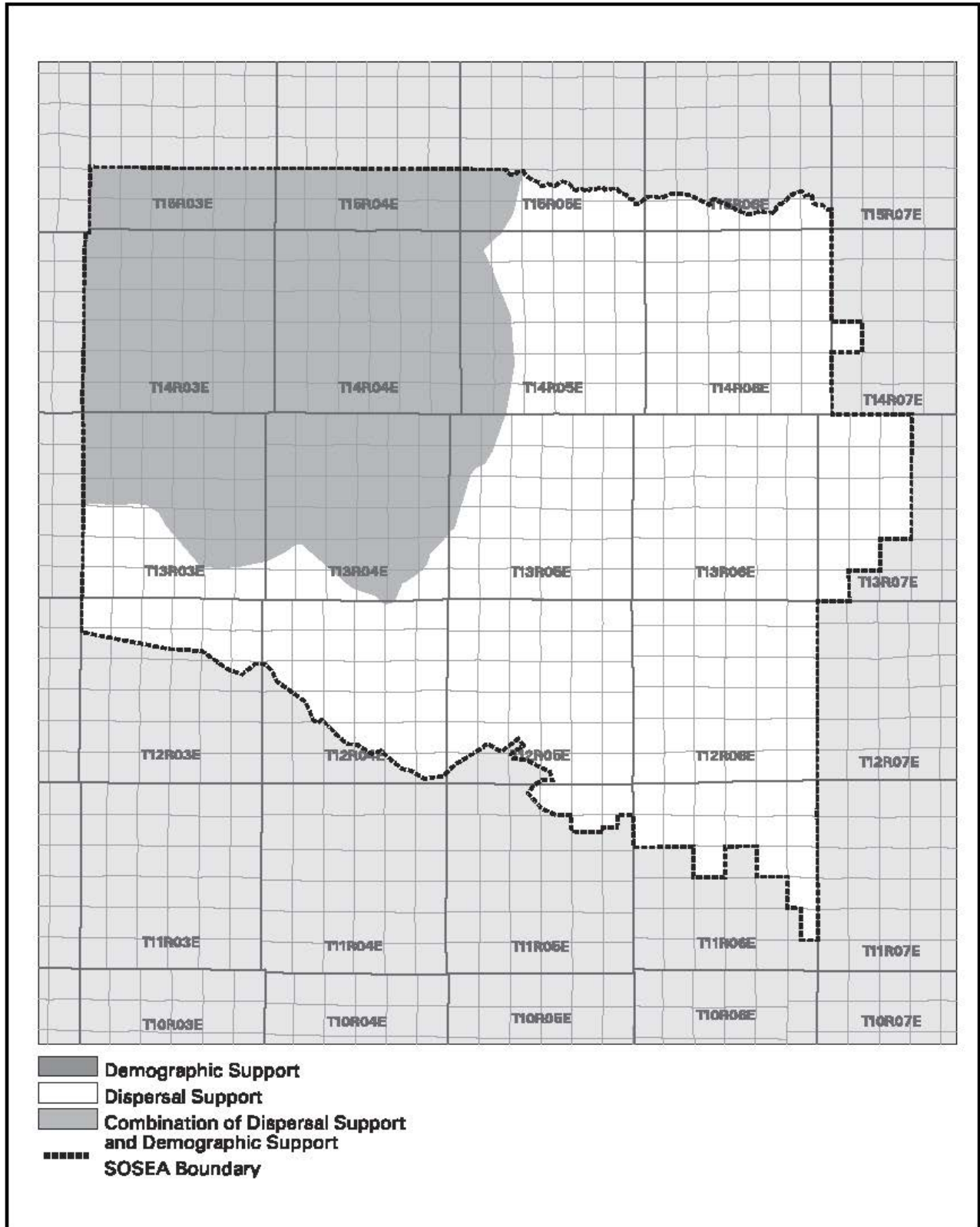
(5) I-90 East SOSEA



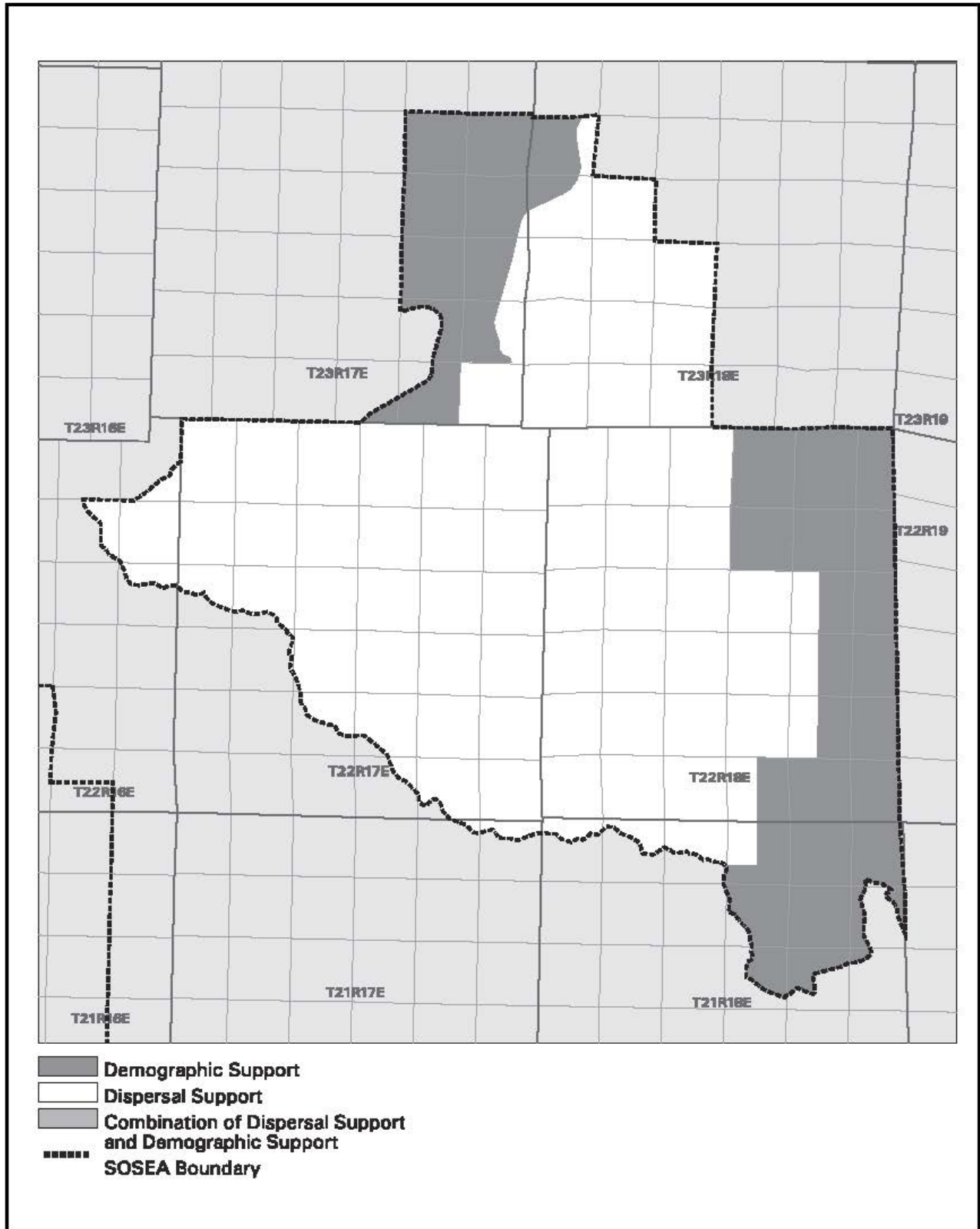
(6) I-90 West SOSEA



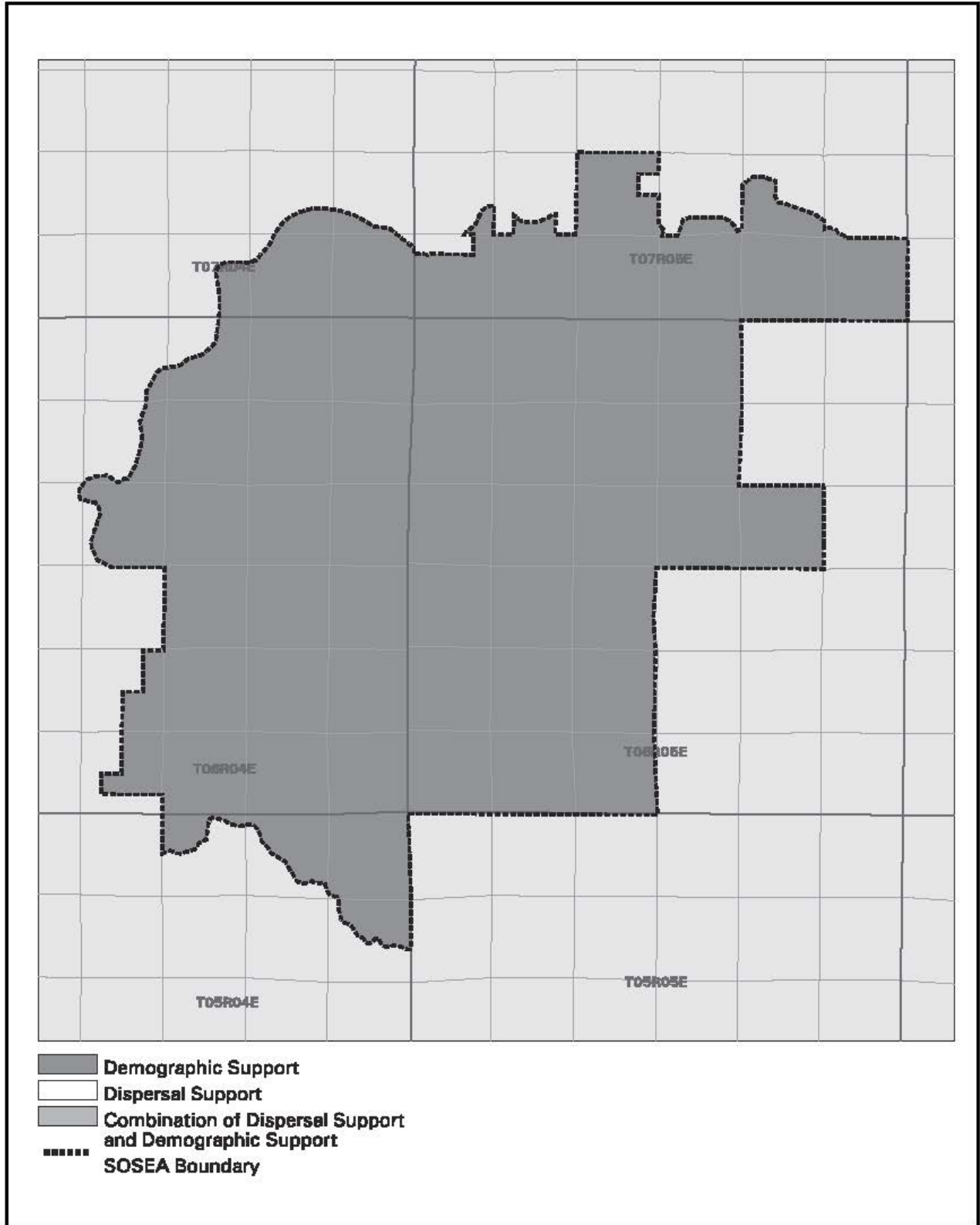
(7) Mineral Block/Link SOSEA



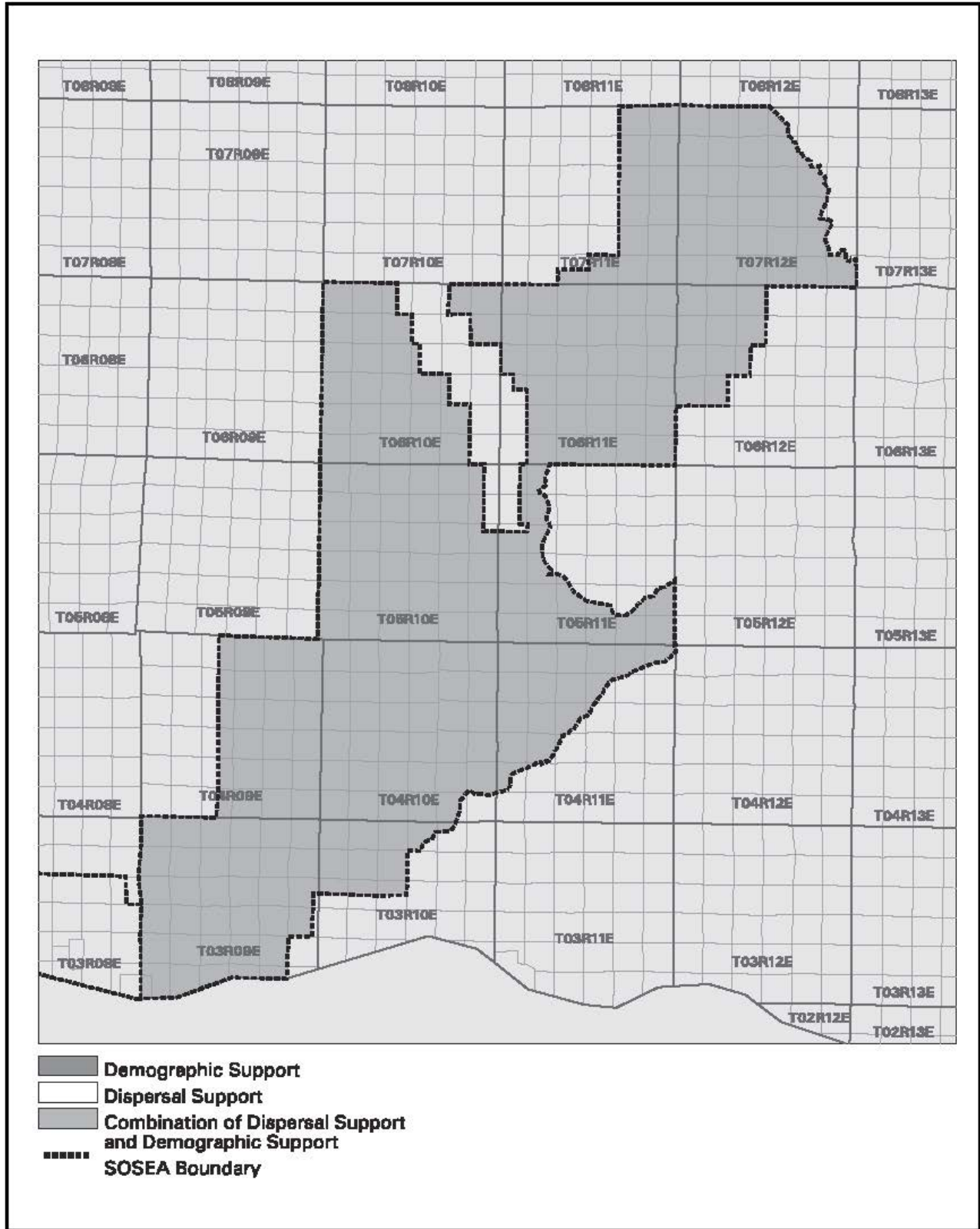
(8) North Blewett SOSEA



(9) Siouxon SOSEA

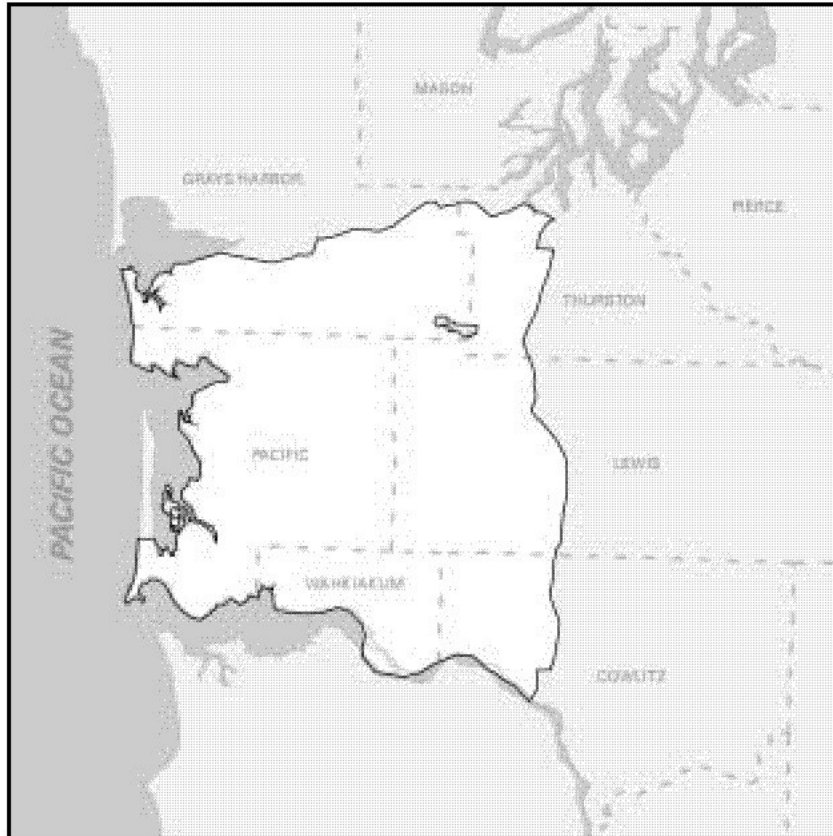


(10) White Salmon SOSEA



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



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, sub-mature, young forest marginal, or dispersal.
 - (D) The current species status. All status 1, 2, and 3 northern spotted owl site centers and the associated median home range circles that overlap any of the landowner's ownership within the LOP boundary must be mapped.
 - (E) Management proposals and relevant operations plans.
 - (F) Projected suitable habitat development.
 - (G) A plan for training.
 - (H) A monitoring program.
 - (I) Reporting standards.
 - (J) The conditions under which the LOP may be modified.
 - (K) The term of the LOP and conditions for termination. The term of the LOP shall be sufficient to meet its goals and objectives. The conditions of the LOP run with the land unless the LOP specifies alternative means to achieve the LOP goals and objectives upon mid-term sale or transfer. In addition to any other termination provisions in the LOP, plans may be terminated by mutual agreement of the landowner and the department.
- (b) **Approval of LOPs.** Upon receipt of a landowner option plan, the department shall circulate the plan to the department of fish and wildlife, affected Indian tribes, local government entities, other forest landowners in the SOSEA, and the public for a thirty-day review and comment period. The department may extend this review period for up to thirty additional days. Within ninety days of receipt of the plan, the department shall review the comments and approve or disapprove the plan or submit the plan to the landowner to revise as appropriate. The department, after consultation with the department of fish and wildlife, shall approve the plan if:
- (i) The plan contains all of the elements required under this section;
 - (ii) The plan is expected to be effective in meeting its goals and objectives;

- (iii) The plan will not have a probable significant adverse impact on the ability of the SOSEA to meet its goals; and
 - (iv) The plan will not appreciably reduce the likelihood of the survival and recovery of the northern spotted owl in the wild.
In making its determination under this subsection, the department shall consider the direct, indirect, and cumulative effects of the plan; both the short-term and long-term effects of the plan; and whether local, state, or federal land management, regulatory, or nonregulatory requirements will mitigate identified significant adverse impacts. If the department does not approve the plan, or approves it over the objections of the department of fish and wildlife, the department shall set forth in writing a concise explanation of the reasons for its action.
- (c) **Enforcement of LOPs.** The department shall review all applications and notifications from the landowner, proposed within the plan area, for consistency with the plan. Any applications or notifications found to be inconsistent with the plan shall be returned to the landowner for modification. After landowner review, applications and notifications which are not consistent with the plan shall be classified as Class IV-Special.
- (2) See WAC 222-16-105 for CHEAs.

WAC 222-16-105 Cooperative habitat enhancement agreements. [Effective 12/22/08]

- (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.

Chapter 222-20 WAC

APPLICATION AND NOTIFICATION

WACs in this chapter were in effect 7/2001 except those that have been amended since 7/2001. The effective dates of the amended WACS are shown after the WAC headings.

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WAC 222-20-010 Applications and notifications - Policy. [Effective 4/8/18]

- (1) **No Class II, III or IV forest practices** shall be commenced or continued unless the department has received a notification for Class II forest practices, or approved an application for Class III or IV forest practices pursuant to the act. Where the time limit for the department to act on the application has expired, and none of the conditions in WAC 222-20-020(1) exist, the operation may commence. (NOTE: OTHER LAWS AND RULES AND/OR PERMIT REQUIREMENTS MAY APPLY. SEE CHAPTER 222-50 WAC.)
- (2) **The department shall** prescribe the form and contents of notifications and applications. The department shall specify the information required for a notification, and the information required for the department to approve or disapprove an application.
- (3) **Except as provided in subsection (4) of this section, applications and notifications** shall be signed by the landowner, the timber owner, and the operator if the operator is known at the time the application is submitted. Electronic signatures may be accepted when the department develops an electronic business system.

- (4) In lieu of a landowner's signature, where the timber rights have been transferred by deed to a perpetual owner who is different from the forest landowner, the owner of perpetual timber rights may sign a forest practices application or notification for operations not converting to another use and the statement of intent not to convert for a set period of time. The holder of perpetual timber rights shall serve the signed forest practices application or notification and the signed statement of intent on the forest landowner. The forest practices application shall not be considered complete until the holder of perpetual timber rights has submitted evidence acceptable to the department that such service has occurred.
- (5) **Where an application** for a conversion is not signed by the landowner, the department shall not approve the application. Applications and notifications for the development or maintenance of utility rights of way shall not be considered to be conversions.
- (6) **Transfer of the** approved application or notification to a new landowner, timber owner or operator requires written notice by the former landowner or timber owner to the department and should include the original application or notification number. This written notice shall be in a form acceptable to the department and shall contain an affirmation signed by the new landowner, timber owner, or operator, as applicable, that he/she agrees to be bound by all conditions on the approved application or notification. In the case of a transfer of an application previously approved without the landowner's signature the new timber owner or operator must submit a bond securing compliance with the requirements of the forest practices rules as determined necessary by the department. If an application or notification indicates that the landowner or timber owner is also the operator, or an operator signed the application, no notice need be given regarding any change in subcontractors or similar independent contractors working under the supervision of the operator of record.
- (7) The landowner or timber owner must provide notice of hiring or change of operator to the department within forty-eight hours of the change. The department shall promptly notify the landowner if the operator is subject to a notice of intent to disapprove under WAC 222-46-070. Once notified, the landowner will not permit the operator, who is subject to a notice of intent to disapprove, to conduct the forest practices specified in the application or notification, or any other forest practices until such notice of intent to disapprove is removed by the department.
- (8) **Applications and notifications**, if complete, will be considered officially received on the date shown on any registered or certified mail receipt, or the written receipt given at the date of personal delivery, or on the date of receipt by general mail delivery, or on the date of electronic receipt when the department develops an electronic business system. The department will immediately provide a dated receipt to the applicant. Applications or notifications that are not complete, or are inaccurate will not be considered officially received until the applicant furnishes the necessary information to complete the application.
 - (a) A review statement from the U.S. Forest Service that evaluates compliance of the forest practices with the Columbia River Gorge National Scenic Area Act (CRGNSA) special management area guidelines is necessary information for an application or notification within the CRGNSA special management area. The review statement requirement shall be waived if the applicant can demonstrate the U.S. Forest Service received a complete plan application and failed to act within forty-five days.
 - (b) A complete environmental checklist (WAC 197-11-315) is necessary information for all Class IV applications.

- (c) A local governmental entity clearing and/or grading permit is necessary information for all Class IV applications on lands that will be converted to a use other than commercial timber operations if the local governmental entity has jurisdiction and has an ordinance requiring such permit.
 - (d) A checklist road maintenance and abandonment plan is necessary information for all small forest landowners' applications or notifications for timber harvest (including salvage), unless exempt under WAC 222-24-0511, or unless the application is a small forest landowner long-term application which requires a roads assessment.
- (9) **Where potentially unstable slopes or landforms are in or around the area of an application**, the department may require the landowner to provide additional information in order to classify the application appropriately. If necessary, the department may require additional geologic information prepared by a qualified expert. The department may request that the qualified expert explain the methods the qualified expert used to evaluate the proposed harvest or construction activities with respect to the potentially unstable slopes or landforms. Nothing in this subsection is intended to require a geotechnical report if the geologic information provided is sufficient to appropriately classify the application.
- (a) "Qualified expert" is defined in WAC 222-10-030.
 - (b) "Potentially unstable slopes or landforms" are those listed in WAC 222-16-050 (1)(d)(i)(A) through (E).
- (10) **Financial assurances** may be required by the department prior to the approval of any future forest practices application or notification to an operator or landowner under the provisions of WAC 222-46-090.

WAC 222-20-015 Multiyear permits. [Effective 1/5/13]

Landowners may apply for multiyear permits to conduct forest practices for four or five years in the following situations.

- (1) Where a watershed analysis has been approved for a WAU under WAC 222-22-080, a landowner may apply for a multiyear permit. The information provided and level of detail for the application must be comparable to that required for a three-year permit. At a minimum, the applications for these permits must include:
 - (a) A description of the forest practices to be conducted during the period requested for the permit, and a map(s) showing their locations; and
 - (b) Prescriptions must be identified where operations are proposed within or include areas of resource sensitivity.
- (2) Where a road maintenance and abandonment plan (other than a checklist road maintenance and abandonment plan) has been approved under WAC 222-24-051, a landowner may apply for a multiyear permit to perform road maintenance, road abandonment, and/or associated right of way timber harvest, if the schedule for implementing the plan is longer than three years.
- (3) Where an alternate plan has been approved under WAC 222-12-0401, a landowner may apply for a multiyear permit to perform the activities in the alternate plan.

WAC 222-20-016 Small forest landowner long-term applications. [Effective 1/5/13]

- (1) **Application.** A small forest landowner may submit a forest practices application that includes planned forest practices activities on all or part of a landowner's ownership within one of the department's geographic region boundaries. The application can be for terms of four to fifteen years at the discretion of the landowner. The landowner will submit the application to the department in two steps.

- (2) **Review of proposed application.**
- (a) **Step 1: Resource and roads assessment review.** The landowner will submit the resource and roads assessment portion of the application. As part of the review, the department will determine any additional known resources or threats to public safety and initiate one or more site reviews in consultation with the department of ecology, the department of fish and wildlife, and the affected Indian tribes. The department will notify the landowner and the landowner's representative to attend the site review(s). Within forty-five days of receiving the complete assessment, the department will notify the landowner in writing of its validation or rejection of the assessment. If rejected, the department will provide a written statement to the landowner explaining why the assessment was rejected.
- (b) **Step 2: Resource protection strategies review.** The department will accept for review the resource protection strategies portion of the long-term application after the department validates Step 1. The required elements of Step 2 will include a description of proposed forest practices activities and strategies for protection of all resources identified in Step 1. The department will approve, condition, or disapprove Step 2 within forty-five days of receiving the complete Step 2 portion, except if a detailed environmental statement is necessary, additional time for approval or disapproval as specified in RCW 76.09.050 will be required. If disapproved, the department will provide a written statement to the landowner explaining why the proposed strategies were disapproved.
- (3) **Activity notice.** At least five business days before a landowner starts an approved forest practices activity the landowner will submit to the department an activity notice in a format acceptable to the department.
- (4) **Amendments to long-term applications.**
- (a) The department may authorize nonsubstantial amendments as authorized in WAC 222-20-060.
- (b) If the board considers new or amended rules to achieve resource protection objectives, the department and the board will do the following regarding existing approved long-term applications:
- (i) The department, in consultation with the departments of ecology, fish and wildlife, and affected Indian tribes will review, and if necessary analyze the effects of approved long-term applications on the public resources the proposed rules are intended to protect.
- (ii) The department will report the results of its review and/or analysis to the board prior to rule adoption.
- (iii) Upon rule adoption, the board may direct the department to condition existing approved long-term applications to protect resources.
- (iv) The department will notify impacted landowners in writing of the board's decision.

WAC 222-20-017 *Applications that include forest practices hydraulic projects. [Effective 3/24/21]

- (1) **Review for consistency with fish protection standards.** The department reviews forest practices applications that include forest practices hydraulic projects in Type S and F and associated Np Waters for consistency with fish protection standards.
- (2) **Preapplication consultation.**
 - (a) Prospective applicants are encouraged to consult with the department and the department of fish and wildlife, including site visits as needed, prior to submitting a forest practices application to the department.
 - (b) Preapplication consultation helps to ensure that project design and specifications meet fish protection standards.
 - (c) Preapplication consultation should take place well before submitting an application to the department and well before the desired work windows.
- (3) **Application time limits.** Except for applications involving project types listed in subsection (4)(b) of this section, application time limits for applications that include forest practices hydraulic projects are the same as those listed in WAC 222-20-020.
- (4) **Review of forest practices hydraulic projects involving Type S and F Waters by the department of fish and wildlife.** The department of fish and wildlife's review of forest practices hydraulic projects is guided by WAC 220-660-060, and summarized in (a) and (b) of this subsection:
 - (a) Except for the particular review process for projects listed in (b)(i) of this subsection, the department of fish and wildlife reviews forest practices hydraulic projects involving Type S and F Waters as follows:
 - (i) The department of fish and wildlife either provides comments to the department or documents that the review has occurred without the need for comments.
 - (ii) Prior to commenting, or as soon as reasonably practical, the department of fish and wildlife will communicate with the applicant regarding any concerns relating to consistency with fish protection standards.
 - (iii) The department of fish and wildlife will also strive to maintain communications with the department as concerns arise, and inform the department of its communications with applicants.
 - (b) Concurrence review.
 - (i) The following project types involving Type S and F Waters are subject to the department of fish and wildlife conducting a concurrence review according to the process outlined in WAC 220-660-060(3):
 - Culvert installation or replacement, and repair at or below the bankfull width in Type S and F Waters that exceed five percent gradient;
 - Bridge construction or replacement, and repair at or below the bankfull width of unconfined streams in Type S and F Waters; or
 - Fill within the flood level-100 year of unconfined streams in Type S and F Waters.
 - (ii) After review of these projects, the department of fish and wildlife must provide written notification of concurrence or nonconcurrence to the department within thirty days of the department officially receiving a complete application, stating whether or not the project is consistent with fish protection standards and including any proposed changes needed to meet fish protection standards.

- (iii) As indicated in WAC 222-20-020 (1)(e), the department approves, conditions, or disapproves such applications within sixty days of officially receiving an application. The department of fish and wildlife's review is completed within the first thirty days.
- (5) **Disapproval.**
- (a) An application will be disapproved if the department determines, after consultation with the department of fish and wildlife, that a forest practices hydraulic project in the application will result in direct or indirect harm to fish life, unless:
 - (i) Adequate mitigation can be assured by conditioning the application for the project; or
 - (ii) The project is modified satisfactorily.
 - (b) If disapproved, the department will provide a statement to the applicant in writing of the specific reason(s) why, and how the proposed project would adversely affect fish life.

WAC 222-20-020 Application time limits. *[Effective 12/30/13]*

- (1) **When the department officially receives an application,** the department will approve, condition or disapprove it within thirty calendar days for Class III and Class IV forest practices, except:
- (a) To the extent the department is prohibited from approving the application by the act.
 - (b) For Class IV applications when the department or the lead agency has determined that a detailed environmental statement must be made, the application must be approved, conditioned or disapproved within sixty days, unless the commissioner of public lands promulgates a formal order specifying a later date for completion of the detailed environmental statement and final action on the application. At least ten days before promulgation of such an order extending the time, the applicant shall be given written notice that the department is requesting such extension; giving the reasons the process cannot be completed within such period; and stating that the applicant may comment in writing to the commissioner of public lands or obtain an informal conference with the department regarding the proposed extension.
 - (c) When they involve lands described in (c)(i), (ii) or (iii) of this subsection, the applicable time limit shall be no less than fourteen business days from transmittal to the local governmental entity unless the local governmental entity has waived its right to object or has consented to approval of the application:
 - (i) Lands that are being converted to another use;
 - (ii) Lands that will not be reforested because of likelihood of future conversion to urban development (see WAC 222-16-060 and 222-20-050); or
 - (iii) Forest practices involving timber harvesting or road construction on lands that are contained within urban growth areas, designated pursuant to chapter 36.70A RCW.
 - (d) Applications for multiyear permits will be approved, conditioned, or disapproved within forty-five days of the department receiving a complete application, except if a detailed environmental statement is necessary, additional time for approval or disapproval as specified in RCW 76.09.050 will be required.
 - (e) Applications requiring a concurrence review of forest practices hydraulic projects listed in WAC 222-20-017 (4)(b) will be approved, conditioned, or disapproved

within sixty days of the department officially receiving a complete application. The department of fish and wildlife's review will take place within the first thirty days.

- (f) Small forest landowner long-term applications will be reviewed in two steps as described in WAC 222-20-016. The department will review Step 1 and issue a decision within forty-five days of receiving a complete resource and roads assessment. The department will review and approve, condition, or disapprove Step 2 within forty-five days of receiving a complete resource protection strategies portion of the long-term application, except if a detailed environmental statement is necessary, additional time for approval or disapproval as specified in RCW 76.09.050 will be required.
- (2) **Where a notification** is submitted for operations which the department determines involve Class III or IV forest practices, the department shall issue a stop work order or take other appropriate action. If the operations were otherwise in compliance with the act and forest practices rules, no penalty should be imposed for those operations which occurred prior to the enforcement action: Provided that no damage to a public resource resulted from such operations, and the operations commenced more than five days from receipt by the department of the notification.
- (3) **If the department** fails to approve or disapprove an application or any portion thereof within the applicable time limit, the application shall be deemed approved and the operation may commence except that this provision shall not apply where:
- (a) The local governmental entity objects and the application involves lands that are being converted to a use other than commercial timber operations where the local governmental entity's right of objection is fourteen business days which may be longer than the approval time limit.
 - (b) The department is prohibited from approving the application by the act.
 - (c) Compliance with the State Environmental Policy Act requires additional time.
- (4) **If seasonal field** conditions prevent the department from being able to properly evaluate the application, the department may disapprove the application until field conditions allow for an on-site review.

WAC 222-20-030 Delivery of notifications and applications--Receipts--File numbers.

[Effective 4/8/18]

- (1) **Notifications and applications** shall be delivered to the department by mail or personal delivery at the appropriate region office, or electronically when the department develops an electronic business system. Notifications and applications actually received at the appropriate region office by other means may be accepted or returned to the applicant.
- (2) **Upon delivery of** a complete notification or application the department will provide a written receipt to the landowner, timber owner, and operator.
- (3) **Each receipt will** indicate the file number assigned to the notification or application.

WAC 222-20-040 *Approval conditions. *[Effective 12/30/13]*

- (1) **Whenever an approved** application authorizes a forest practices activity which, because of soil condition, proximity to a water course or other unusual factor, has a potential for causing material damage to a public resource, as determined by the department, the applicant shall, when required as a condition on the approved application, notify the department two business days before the commencement of actual operations.
- (2) **All approvals are** subject to any conditions stipulated on the approved application and to any subsequent additional requirements set forth in a stop work order or a notice to comply.

- (3) **Local governmental entity conditions—Class IV-general applications.**
- (a) RCW 76.09.240(6) allows a local governmental entity to exercise limited land use planning or zoning authority on certain types of forest practices. This subsection is designed to ensure that local governmental entities exercise this authority consistent with chapter 76.09 RCW and the rules in Title 222 WAC. The system provided for in this subsection is optional.
 - (b) This subsection only applies to applications on lands that are being converted to a use other than commercial timber operations.
 - (c) After determining that an application is Class IV-general, the department shall transmit the applications to the appropriate local governmental entity within two business days from the date the department officially receives the application.
 - (d) The department shall condition the application consistent with the request of the local governmental entity if:
 - (i) The local governmental entity has adopted a clearing and/or grading ordinance that addresses the items listed in (e) of this subsection and requires a permit;
 - (ii) The local governmental entity has issued a permit under the ordinance in (i) that contains the requested conditions; and
 - (iii) The local governmental entity has entered into an interagency agreement with the department consistent with WAC 222-50-030 addressing enforcement of forest practices.
 - (e) The local governmental entity conditions may only cover:
 - (i) The location and character of open space and/or vegetative buffers;
 - (ii) The location and design of roads;
 - (iii) The retention of trees for bank stabilization, erosion prevention, and/or storm water management; or
 - (iv) The protection of critical areas designated pursuant to chapter 36.70A RCW.
 - (f) The local governmental entity shall file its conditions with the department within twenty-nine days of the department's official receipt of the application or within fourteen business days of the transmittal of the application to the local governmental entity or one day before the department acts on the application, whichever is later.
 - (g) The department shall incorporate local governmental entity conditions consistent with this subsection as conditions of the forest practices approval.
 - (h) Any exercise of local governmental entity authority consistent with this subsection shall be considered consistent with the forest practices rules in this chapter.
- (4) **Lead agency mitigation measures.**
- (a) This subsection is designed to specify procedures for a mitigated DNS process that are consistent with chapters 76.09 and 43.21C RCW and the rules in Title 222 WAC and chapter 197-11 WAC.
 - (b) This subsection applies to all Class IV applications in which the department is not the lead agency under the State Environmental Policy Act. (See WAC 197-11-758.)
 - (c) The department shall transmit the application to the lead agency within two business days from the date the department officially receives the application.
 - (d) The lead agency may specify mitigation measures pursuant to WAC 197-11-350.
 - (e) The lead agency threshold determination and any mitigation measures must be filed with the department within the later of twenty-nine days of the official receipt of the application by the department, fourteen business days of the transmittal of the

application to the lead agency if the lead agency is a local governmental entity; or one day before the department acts on the application.

- (f) Unless the applicant clarifies or changes the application to include mitigation measures specified by the lead agency, the department must disapprove the application or require an environmental impact statement. (See WAC 197-11-738.)
 - (g) If the department does not receive a threshold determination from the lead agency by the time it must act on the application, the department shall disapprove the application.
- (5) **Small forest landowner approval conditions.** The department shall not disapprove a small forest landowner's application or notification on the basis that fish passage barriers have not been removed or replaced if the landowner has committed to participate in the department's family forest fish passage program for:
- (a) Any barriers on their forest roads located within the boundaries of their application or notification; and
 - (b) Any barriers on their forest roads needed for their proposed forest practice, but located outside the boundaries of the application or notification.
- (6) **CRGNSA special management area.**
- (a) **Policy.** The states of Oregon and Washington have entered into a Compact preauthorized by Congress to implement the CRGNSA Act, 16 U.S.C. §§ 544, et seq. chapter 43.97 RCW, 16 U.S.C. § 544c. The purposes of the CRGNSA Act are:
 - (i) To establish a national scenic area to protect and provide for the enhancement of the scenic, cultural, recreational, and natural resources of the Columbia River Gorge; and
 - (ii) To protect and support the economy of the Columbia River Gorge area by encouraging growth to occur in existing urban areas and by allowing future economic development in a manner that is consistent with paragraph (1). 16 U.S.C. § 544a.

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

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

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

WAC 222-20-050 Conversion of forest land to nonforest use. *[Effective 1/5/13]*

- (1) If an application to harvest signed by the landowner indicates that within three years after completion, the forest land will be converted to a specified active use that is incompatible with a use other than commercial timber operations, the reforestation requirements of chapter 222-34 WAC shall not apply, and the information relating to reforestation on the application form need not be supplied. However, if the specified active use is not initiated within three years after harvest is completed, the reforestation requirements shall apply and reforestation shall be completed within one additional year.
- (2) If a landowner who did not state an intent to convert decides to convert to a nonforestry use within six years of receiving an approved forest practices application or notification, the landowner must:
 - (a) Stop all forest practices activities on the parcels subject to conversion;
 - (b) Contact the department of ecology and the applicable local governmental entity to begin the permitting process; and
 - (c) Notify the department and withdraw any related applications or notifications, or request a new application for conversion.

Upon request from the local governmental entity, the department will provide the status of the landowner's related applications and notifications, and any final orders or decisions.

WAC 222-20-051 Conversion option harvest plans. *[Effective 1/5/13]*

- (1) For Class II, III, and IV-special forest practices, if a landowner wishes to maintain the option to convert forest land to a use other than commercial timber operations, the landowner may request the appropriate local governmental entity to approve a conversion option harvest plan.
- (2) If a local governmental entity approves a plan, the landowner must attach it to the forest practices application or notification.
- (3) The plan will be a condition of the approved application or notification.
- (4) Violation of the plan will result in the development prohibitions or the conditions described in RCW 76.09.460.
- (5) Reforestation requirements will not be waived regardless of the existence of a conversion option harvest plan.

WAC 222-20-052 Notice of conversion to nonforestry use. *[Effective 1/5/13]*

- (1) Under the provisions of RCW 76.09.060 (3)(b), if harvest takes place without an approved application or notification, or the landowner did not state that any land covered by the application or notification is intended to be converted to a use other than commercial timber operations, then the department and the appropriate local governmental entity will follow the process described in subsections (2) and (3) of this section.
- (2) When the department or local governmental entity becomes aware of conversion activities the department will send to the department of ecology and the appropriate local governmental entities the following documents:
 - (a) A notice of conversion to nonforestry use;
 - (b) A copy of the applicable forest practices application or notification, if any; and

- (c) Copies of any applicable outstanding final orders or decisions issued by the department related to the forest practices application or notification.
- (3) When a local governmental entity receives a notice of conversion to a nonforestry use from the department, it will follow the requirements of RCW 76.09.460.
- (4) A notice of a conversion to a nonforestry use issued by the department under the provisions of RCW 76.09.060 (3)(b) and this section may be appealed to the appeals board in accordance with RCW 43.21B.110 and 43.21B.230.

WAC 222-20-055 Continuing forest land obligations. [Effective 6/18/06]

Continuing forest land obligations include reforestation, road maintenance and abandonment plans, and harvest strategies on perennial nonfish habitat waters in Eastern Washington. This section does not apply to small forest landowner checklist road maintenance and abandonment plans.

- (1) Prior to the sale or transfer of land or perpetual timber rights subject to continuing forest land obligations under the Forest Practices Act and rules, the seller must notify the buyer of the existence and nature of such a continuing obligation and the buyer must sign a notice of continuing forest land obligation indicating the buyer's knowledge of the obligations. The notice must be:
 - (a) On a form prepared by the department;
 - (b) Sent to the department by the seller at the time of sale or transfer of land or perpetual timber rights; and
 - (c) Retained by the department.
- (2) If the seller fails to notify the buyer about the continuing forest land obligation, the seller must pay the buyer's costs related to continuing forest land obligations, including all legal costs and reasonable attorneys' fees incurred by the buyer in enforcing the continuing forest land obligation against the seller.
- (3) Failure by the seller to send the required notice to the department at the time of sale will be prima facie evidence in an action by the buyer against the seller for costs related to the continuing forest land obligation prior to sale.

WAC 222-20-060 Deviation from prior application or notification. [Effective 10/27/2007]

Substantial deviation from a notification or an approved application requires a new notification or application. Other deviations may be authorized by a supplemental directive, notice to comply or stop work order. The department shall notify the departments of fish and wildlife, and ecology, and affected Indian tribes and the appropriate local governmental entity of any supplemental directive, notice to comply or stop work order involving a deviation from a prior notification or approved application, except where such notice has been waived.

WAC 222-20-070 Emergency forest practices. No prior notification or application shall be required for emergency forest practices necessitated by and commenced during or immediately after fire, flood, windstorm, earthquake, structural failure or other catastrophic event. Within 48 hours after commencement of such practice, the operator shall submit an application or notification to the department with an explanation why emergency action was necessary. Such emergency forest practices are subject to these rules: Provided, however, That the operator may take any reasonable action to minimize damage to forest lands, timber or public resources from the direct or indirect effects of the catastrophic event and: Provided further, The operator shall comply with any requirements of a notice to comply or stop work order as if conducted pursuant to an approved application.

WAC 222-20-075 *Exotic forest insect or disease outbreaks. *[Effective 7/1/05]*

Forest practices applications or notifications are not required for forest practices conducted to control exotic forest insect or disease outbreaks, when conducted by or under the direction of the department of agriculture in carrying out an order of the governor or director of the state department of agriculture to implement pest control measures as authorized under chapter 17.24 RCW, and are not required when conducted by or under the direction of the department in carrying out emergency measures under a forest health emergency declaration by the commissioner of public lands as provided in RCW 76.06.130.

- (1) For the purposes of this section, exotic forest insect or disease has the same meaning as defined in RCW 76.06.020.
- (2) In order to minimize adverse impacts to public resources, control measures must be based in integrated pest management, as defined in RCW 17.15.010, and must follow forest practices rules relating to road construction and maintenance, timber harvest, and forest chemicals, to the extent possible without compromising control objectives.
- (3) Forest lands where trees have been cut as part of an exotic forest insect or disease control effort under this subsection are subject to reforestation requirements under RCW 76.09.070.
- (4) The exemption from obtaining approved forest practices applications or notifications does not apply to forest practices conducted after the governor, the director of the department of agriculture, or the commissioner of public lands has declared that an emergency no longer exists because control objectives have been met, that there is no longer an imminent threat, or that there is no longer a good likelihood of control.
- (5) Nothing under this section relieves agencies conducting or directing control efforts from requirements of the federal Clean Water Act as administered by the department of ecology under RCW 98.48.260.

WAC 222-20-080 Application and notification expiration. *[Effective 1/5/13]*

- (1) The approval given by the department to an application to conduct a forest practice shall be effective for a term of three years from the date of approval, with the following exceptions:
 - (a) Multiyear permits are effective for four or five years.
 - (b) Small forest landowner long-term applications are effective for terms of four to fifteen years.
- (2) A notification is effective for a term of three years beginning five days from the date it is officially received.
- (3) An application or notification may be renewed for one additional three-year term by submitting a renewal in a form acceptable to the department.

WAC 222-20-090 *Options for filing applications and preapplication consultation for forest practices hydraulic projects. *[Effective 12/30/13]*

- (1) Applicants may schedule an early review of a proposed application with the department prior to official filing, or submit an application with a delayed effective date. Such early review or submission will allow the department to review multiple applications and bring other forest practices concerns to the attention of the applicant so that such concerns can be addressed prior to official filing and processing of an application. When submitting an application with a delayed effective date, the applicant shall indicate the date when approval is desired.
- (2) **Preapplication consultation for forest practices hydraulic projects.** Landowners are encouraged to consult with the department and the department of fish and wildlife prior to submitting an application involving a forest practices hydraulic project to help ensure that project plans and specifications meet fish protection standards.

WAC 222-20-100 Notice to parks and DAHP. *[Effective 10/27/07]*

- (1) **Notice to parks.** The department shall send to the affected agency, within two business days of receipt, a copy of any notification or application for forest practices within five hundred feet of the boundary of any park entity registered according to subsection (2) of this section.
- (2) **Parks register.** The department shall establish and update every five years a parks register listing all publicly owned parks where the affected owner has filed a written request with the department for inclusion on such register. The department shall notify owners of all public parks inventoried on the state comprehensive outdoor recreation plan (SCORP) of the opportunity to register.
- (3) **DNR to provide information to DAHP.** The department shall provide the department of archaeology and historic preservation (DAHP) with copies of all applications and notifications for forest practices to be conducted on lands known to contain historic sites or archaeological resources as identified by DAHP.

WAC 222-20-110 Notice of forest practices to cities and towns. The department shall establish and update every 5 years a register listing all incorporated cities and towns which have filed a written request for inclusion on such register. The department shall provide to those listed on the register, copies of all applications and notifications for forest practices on lands within the legal boundaries of the city or town.

WAC 222-20-120 Notice of forest practices that may contain cultural resources to affected Indian tribes. *[Effective 3/18/2012]*

- (1) The department shall notify affected Indian tribes of all applications in geographic areas of interest that have been identified by such tribes, including those areas that may contain cultural resources.
- (2) Where an application is within a tribe's geographic area of interest and contains cultural resources the landowner, at the tribe's discretion, shall meet with the affected tribe(s) prior to the application decision due date with the objective of agreeing on a plan for protecting the archaeological or cultural value.
- (3) The department will consider the requirements in subsection (2) complete if prior to the application decision due date:
 - (a) The landowner meets with the tribe(s) and notifies the department that a meeting took place and whether or not there is agreement on a plan. The department shall confirm the landowner's information with the tribe(s); or
 - (b) The department receives written notice from the tribe(s) that the tribe(s) is declining a meeting with the landowner; or
 - (c) The tribe(s) does not respond to the landowner's attempts to meet and the landowner provides to the department:
 - (i) written documentation of telephone or e-mail attempts to meet with the tribe's designated cultural resources contact for forest practices, and
 - (ii) a copy of a certified letter with a signed return receipt addressed to the tribe's cultural resources contact for forest practices requesting a meeting with the tribe; or
 - (d) The department receives other acceptable documentation.
- (4) The department may condition the application in accordance with the plan.

WAC 222-20-130 Notice and administration in CRGNSA special management area. The department shall administer the permitting process for all forest practices on forest land in the CRGNSA special management area. For all applications and notifications within the CRGNSA special management area, the department shall send copies of a satisfactorily completed application or notification, including the U.S. Forest Service review statement, to the county in which the forest practices are to be commenced, the Columbia River Gorge commission, the U.S. Forest Service, the Yakama Indian Nation, and any interested parties that have requested to receive copies.

Chapter 222-21 WAC

SMALL FOREST LANDOWNER FORESTRY

RIPARIAN EASEMENT PROGRAM

WAC

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WAC 222-21-005 Policy. *[Effective 6/22/2012]*

The legislature has found that further reduction in harvestable timber owned by small forest landowners as a result of the rules adopted under RCW 76.09.055 or 76.09.370 will further erode small landowners' economic viability and willingness or ability to keep the lands in forestry use and, therefore, reduce the amount of habitat available for salmon recovery and conservation of other aquatic resources. The legislature addressed these concerns by establishing a forestry riparian easement program to acquire easements from qualifying small forest landowners along riparian and other areas of value to the state for protection of aquatic resources.

WAC 222-21-010 Definitions. *[Effective 6/22/2012]*

The following definitions apply to this chapter:

- (1) "Completion of harvest" means that the trees within the area under an approved forest practices application have been harvested and further entry into that area by any type of logging or slash treating equipment or method is not expected.
- (2) "Easement premises" means the geographic area designated in a forestry riparian easement including areas in which qualifying timber is located.
- (3) "Forestry riparian easement" means a conservation easement covering qualifying timber granted voluntarily to the state by a qualifying small forest landowner.
- (4) "Forests and fish rules" means the rules adopted by the board in accordance with RCW 76.09.055, 76.09.370, and the amendments to those rules.
- (5) "Hazardous substances" includes, but is not limited to, hazardous substances as defined in RCW 70.102.010 and 70.105D.020, and solid waste as defined in RCW 70.95.030.

- (6) "Qualifying small forest landowner" means an owner of forest land with qualifying timber meeting all of the criteria in (a)(i) through (iv) of this subsection as of the date the department receives a forest practices application associated with a proposed forestry riparian easement, and the date the department offers compensation for the easement.
- (a) A qualifying small forest landowner:
- (i) Is an individual, partnership, corporation, or other nongovernmental for-profit legal entity. If a landowner grants timber rights to another entity for less than five years, the landowner may still be a qualifying small forest landowner under this chapter;
 - (ii) Has a fee interest in the land and timber or has rights to harvest the timber to be included in the forestry riparian easement that extend at least fifty years from the date the completed forestry riparian easement application is submitted to and received by the small forest landowner office;
 - (iii) Has no outstanding violations of chapters 76.09 or 76.13 RCW or any associated forest practices rules;
 - (iv) Has harvested or expects to harvest from his or her forest lands in this state as follows:
 - (A) No more than the average volume that would qualify the landowner as a "small harvester" under RCW 84.33.035 during the three years prior to the year the department receives a complete forest practices application associated with the easement, and certifies that he or she does not expect to exceed that average timber volume during the ten years following the date of the offer of compensation for the easement; or
 - (B) If the landowner can establish to the satisfaction of the small forest landowner office that those harvest limits were or will be exceeded to raise funds to pay estate taxes or other equally compelling and unexpected obligations such as court-ordered judgments or extraordinary expenses, the landowner may still be a qualifying small forest landowner.
- (b) To be eligible for a forestry riparian easement, a qualifying small forest landowner must have submitted a forest practices application covering qualifying timber to the appropriate region office, and the department must have approved the application or disapproved it because of forests and fish rule restrictions. See WAC 222-21-032 for more information about easement eligibility.
- (7) "Qualifying timber" means forest trees that meet criteria (a) through (c) of this subsection:
- (a) Are covered by a forest practices application.
 - (b) Fit one of the following situations:
 - (i) The timber is required to be left unharvested because of forests and fish rule restrictions and is within, immediately adjacent to, or physically connected to a commercially reasonable harvest unit under an approved forest practices application; or
 - (ii) The timber cannot be approved for harvest under a forest practices application because of forests and fish rule restrictions.
 - (c) Are located within one or more of the following areas:
 - (i) Riparian or other sensitive aquatic areas;
 - (ii) Channel migration zones; or

- (iii) Areas of potentially unstable slopes or landforms, verified by the department, that have the potential to deliver sediment or debris to a public resource or threaten public safety and are immediately adjacent to or physically connected to other qualifying timber that is located within riparian or other sensitive aquatic areas.

Qualifying timber may also mean forest trees that do not meet criteria (b) or (c) of this subsection if they are uneconomic to harvest as determined under WAC 222-21-032(6).

- (8) "Small forest landowner office" means an office within the department of natural resources. The office is a resource and focal point for small forest landowner concerns and policies, and has expertise regarding the management of small forest holdings and government programs applicable to such holdings. The office manages the forestry riparian easement program.

WAC 222-21-030 Documentation and standards. [Effective 3/24/21]

- (1) Forest practices application. Prior to submitting a forestry riparian easement application, the landowner must have an approved forest practices application or an application that was disapproved because of forests and fish rule restrictions.
- (2) Forestry riparian easement application. The landowner will provide the following information in a forestry riparian easement application:
 - (a) County tax parcel numbers of the property in the proposed easement premises;
 - (b) A list of all forest practices application numbers of approved and/or disapproved forest practices applications;
 - (c) The landowner's signature certifying that the landowner meets the criteria of a qualifying small forest landowner and documenting that the landowner is willing to sell or donate such easements to the state; and
 - (d) Documentation that qualifying timber within or immediately adjacent to, or physically connected to a commercially reasonable harvest area, cannot be harvested because of forests and fish rule restrictions, or is uneconomic to harvest because of forests and fish rule restrictions. See WAC 222-21-032 for additional information about these eligibility criteria.

The small forest landowner office may require additional information from the applicant to process the application and evaluate the eligibility of the proposed easement premises and the landowner.

- (3) Baseline documentation. The small forest landowner office will gather baseline documentation that will describe the features and current uses on the proposed forestry riparian easement premises and the qualifying timber. The documentation will include but not be limited to:
 - (a) A summary of cruise information consistent with the standards and methods in WAC 222-21-040; and
 - (b) An assessment to determine site condition and potential liabilities associated with the proposed riparian easement premises.
- (4) Forestry riparian easement contract. The forestry riparian easement contract will identify the parties, describe the land, locate the easement, state the terms and conditions, and provide a statement of consideration. The contract will include language consistent with RCW 76.13.120(5) concerning the preservation of all lawful uses of the easement premises by the landowner. The easement will be for a term of fifty years from the date the completed forestry riparian easement application is submitted to and received by the small forest landowner office.
- (5) Land description standards.
 - (a) The forestry riparian easement contract will include a description of the easement premises using a land survey provided by the department unless the cost of securing the survey would be unreasonable in relation to the value of the easement conveyed.

- (b) When the small forest landowner office determines a land survey is not required, the department will prepare a written description that suitably and accurately depicts the location of the easement conveyed, or the department may consider other methods, such as producing a map, to accurately describe the easement premises.

WAC 222-21-031 Forestry riparian easement application review and processing. *[Effective 6/22/2012]*

After the small forest landowner office makes a preliminary determination of eligibility:

- (1) The department will verify the timber harvest associated with the easement is complete.
- (2) The department will submit the list of eligible projects to the state legislature for budget approval.
- (3) The landowner or the landowner's representative will mark the boundary of the area containing the qualifying timber.
- (4) The department will verify eligibility of qualifying timber.
- (5) The department will perform a timber cruise on the qualifying timber to establish the compensation value.
- (6) The department will inform the landowner in writing of the easement value. All compensation and reimbursement is subject to available funding.
- (7) If an application is ineligible, the department will notify the landowner in writing the reasons why. The department will return ineligible applications to landowners.

WAC 222-21-032 Eligibility criteria. *[Effective 3/24/21]*

- (1) Qualifying small forest landowners must complete a timber harvest to be eligible for a forestry riparian easement, unless a commercially reasonable harvest is not possible according to subsection (5) of this section or the only timber available to harvest meets the criteria of uneconomic to harvest according to subsection (6) of this section.
- (2) The easement premises cannot contain unacceptable liabilities as determined by the small forest landowner office. Unacceptable liabilities include, but are not limited to, the presence of hazardous substances on the land or other conditions that may create a liability to the department, any existing uses of the property that may jeopardize the protection of the easement premises and qualifying timber, and situations in which the applicant is unwilling or unable to provide reasonable protection against financial loss to the state.
- (3) Where more than one person has an interest in property to be covered by a forestry riparian easement, all persons holding rights to control or affect the easement premises and qualifying timber must execute the easement documents or otherwise subordinate their interest to the easement being acquired by the state. This includes tenants in common, joint tenants, holders of reversionary interests, lien holders, and mortgages.
- (4) Commercially reasonable harvest. The small forest landowner office will consider the following criteria to determine if an area covered by a forest practices application involves a commercially reasonable harvest. The proposed harvest must meet all five of the following requirements:
 - (a) The harvest unit is immediately adjacent to or physically connected to qualifying timber;
 - (b) The application is for a forest practice involving a timber harvest and the harvest would not result in a conversion to a use other than commercial timber operation;
 - (c) The landowner is not eligible for the twenty acre exemption under WAC 222-30-023;
 - (d) The value of the timber in the harvest unit, excluding qualifying timber, equals or exceeds one thousand dollars; and
 - (e) The value of the taxable harvest equals or exceeds the value of the qualifying timber established under WAC 222-21-045 unless otherwise approved by the small forest landowner office.

- (5) **Commercially reasonable harvest is not possible.** The small forest landowner office will consider the following criteria to determine if a forest practices application for harvest may qualify for the forestry riparian easement program because it involves an area where a commercially reasonable harvest is not possible. The proposed harvest must meet all four of the following requirements:
- (a) The forest practices application has been disapproved because the area covered by the application cannot be harvested due to forests and fish rule restrictions;
 - (b) The forest practices application involves a proposed timber harvest and the harvest would not result in a conversion to a use other than commercial timber operation;
 - (c) The landowner is not eligible for the twenty acre exemption under WAC 222-30-023; and
 - (d) The value of the qualifying timber equals or exceeds one thousand dollars.
- (6) **Uneconomic to harvest.** The small forest landowner office will consider the following criteria to determine whether timber is qualifying timber because the forests and fish rules made it uneconomic to harvest. The proposed harvest must meet all four of the following requirements:
- (a) The timber could have been included in a commercially reasonable harvest unit if there were no additional requirements imposed by the forests and fish rules;
 - (b) The area is not reasonably accessible economically because of requirements imposed by the forests and fish rules;
 - (c) There is no reasonable unit size alternative which, if used, would make the area economical to harvest; and
 - (d) The cost to access the harvest unit plus the cost to harvest would equal or exceed thirty-five percent of the stumpage value in the portion of the unit considered uneconomic. The small forest landowner office will determine these costs and values consistent with WAC 222-21-045. Costs include harvest, construction of nonpermanent roads and/or water crossing structures, and associated expenses. When using the small harvester tax return method to calculate stumpage values and allowable costs, the landowner may include actual timber appraisal and sale layout costs incurred as part of the cost calculations.

WAC 222-21-040 Timber cruises. [Effective 6/22/12]

- (1) This section applies only to timber cruises related to the forestry riparian easement program to establish easement compensation.
- (2) A timber cruise is required to determine the volume by species and grade to accurately determine the value of the qualifying timber.
 - (a) The cruise method will be a one hundred percent inventory of qualifying timber on the proposed easement premises. The inventory will include species, diameter class, grade, and any other information necessary to determine a value for the qualifying timber.
 - (b) A sampling cruise method may be used under certain circumstances such as where easement premises are greater than ten acres or where the forest trees are homogeneous.
- (3) Additional trees left voluntarily by the small forest landowner may be noted but will not be included in the cruise volume.

WAC 222-21-045 Valuation. [Effective 3/24/21]

- (1) The small forest landowner office will calculate the compensation amount for forestry riparian easements by determining a value for the qualifying timber. The office will use data gathered from or adjusted to the date the office received the complete forestry riparian easement application. The office will use the stumpage value determination method described in (a) of this subsection for qualifying timber that cannot be harvested because of forests and fish rule

restrictions. For qualifying timber approved for harvest, the office will use both the stumpage value determination method and the small harvester tax return method to determine the highest compensation amount for the landowner.

(a) Stumpage value determination method. The small forest landowner office will create and maintain value tables to determine stumpage value of the qualifying timber. These tables will be created using a method coordinated with the department of revenue. The values will closely approximate the stumpage value for logs on the date the office received a complete forestry riparian easement application. The landowner will provide:

- (i) The reference for the stumpage value table and any other needed information for use of the table; and
- (ii) Any information the landowner would like the office to consider in its cruise and valuation of the qualifying timber.

(b) Small harvester tax return method.

- (i) The landowner must provide comprehensive mill or buyer information for each harvest unit associated with the forestry riparian easement including:
 - (A) The delivered value by species;
 - (B) The total volume by species; and
 - (C) The actual harvesting and marketing costs as defined in the department of revenue small harvester instructions.

This information must be verifiable as proceeds from the timber harvests from documents such as mill receipts and/or forest excise tax returns. If the small forest landowner office does not receive a comprehensive packet of mill or buyer information or is not satisfied with the source of the documentation, the office will determine the qualifying timber value using the stumpage value determination method.

- (ii) The office will use a time adjustment index to determine the qualifying timber value based on the date the office received the complete forestry riparian easement application. The office will generate a time adjustment index for each harvest associated with the easement based on log price changes.
- (iii) The office will determine the adjusted stumpage value by subtracting the average logging and hauling cost per thousand board feet (MBF) from the value of the time adjusted mill or buyer information. The office will then determine the value of the qualifying timber by multiplying the time adjusted stumpage value of each species in the harvest unit by the net volume for each corresponding species in the inventory of qualifying timber.
- (iv) The department determines the values of the timber species that exist in the easement premises, not the species in the harvest area. The department determines the easement value by multiplying the determined cruise volume of qualified timber in the easement premises by the appropriate stumpage value of those species shown on the appropriate table used for timber harvest excise tax purposes per RCW 84.33.091.

(2) Determining the forestry riparian easement compensation. The small forest landowner office uses a "high impact regulatory threshold" to calculate the compensation offered for a forestry riparian easement. This threshold is determined by multiplying the value of all timber covered under a forest practices application by 19.1 percent for timber in western Washington and 12.2 percent for timber in eastern Washington.

- (a) When the percentage of the qualifying timber value to the total value of all timber covered under a forest practices application is equal to or less than the applicable high

impact regulatory threshold (19.1 percent or 12.2 percent), the compensation offered for an easement will be fifty percent of the qualifying timber value.

- (b) When the percentage of the qualifying timber value to the total value of all timber covered under a forest practices application exceeds the applicable high impact regulatory threshold (19.1 percent or 12.2 percent), the compensation offered for an easement will be more than fifty percent of the qualifying timber value up to the applicable high impact regulatory threshold, plus full compensation (one hundred percent) for the qualifying timber value that exceeds the high impact regulatory threshold. This is mathematically represented as follows:

Where:

Vq = the value of qualifying timber;

Vh = the value of harvested timber; and

t = the high impact of regulatory threshold 19.1 percent for western Washington, 12.2 percent for eastern Washington);

The compensation for easement = $((Vq/(Vq + Vh)) - t) * (Vq + Vh) + (t * (Vq + Vh)/2)$.

WAC 222-21-048 Reimbursement of costs to the small forest landowner. [Effective 6/22/2012]

The state of Washington will reimburse landowners for actual costs incurred toward identifying qualifying timber. Costs can include one or more of the following:

- (1) Determining and marking streamside buffers;
- (2) Marking the qualifying timber; and
- (3) The cost of the portion of a geotechnical report that is applicable to the area determined to contain qualifying timber.

WAC 222-21-050 Payment of compensation and reimbursement to the small forest landowner.

[Effective 6/22/2012]

- (1) All compensation and reimbursement to the small forest landowner is subject to available funding.
- (2) If funding is not available, the small forest landowner office will maintain a priority list for compensation and reimbursement to the landowner. Priority will be based on the date the small forest landowner office received the complete forestry riparian easement application. In instances where two easement applications are received on the same date, priority will be based on the date the department received a complete forest practices application associated with the easement.
- (3) The small forest landowner office will offer compensation for the easement in a purchase and sale agreement. The small forest landowner will accept or reject the conditions of the purchase and sale agreement in writing and submit the written acceptance or rejection to the small forest landowner office.
- (4) Compensation for the forestry riparian easement and reimbursement of landowner costs will be paid after:
 - (a) The department has verified that the landowner has no outstanding violations under chapters 76.09 or 76.13 RCW or any associated forest practices rules
 - (b) Any dispute over the amount of compensation or eligibility or other matter involving the easement has been resolved; and
 - (c) The small forest landowner office has sent a forestry riparian easement contract to the landowner, the landowner has signed the contract, and the landowner has delivered it to the department.
- (5) Compensation for any qualifying timber located on potentially unstable slopes or landforms will not exceed a total of fifty thousand dollars during any biennial funding period.

WAC 222-21-055 Reimbursement to the department. *[Effective 6/22/2012]*

If, within the first ten years after receipt of compensation for a forestry riparian easement, a small forest landowner sells the land on which a forestry riparian easement is located to a landowner that does not meet the criteria for a qualifying small forest landowner, then the selling small forest landowner must reimburse the state for the full compensation received for the easement and the full amount of the costs incurred to identify the qualifying timber.

If the land on which the easement is located consists of multiple land parcels and the selling small forest landowner sells parcels that consist of only a portion of the easement, the small forest landowner office will calculate the reimbursement amount.

The calculation will be based on the ratio of qualifying timber volume within the portion of the easement on the land that is sold to the total volume of qualifying timber. The selling small forest landowner must make full payment for this reimbursement within one year of sale of the land the easement occupies. The department will continue to hold, in the name of the state, the forestry riparian easement for the full term of the easement.

WAC 222-21-070 Blowdown and salvage. *[Effective 6/22/2012]*

After execution of a forestry riparian easement, qualifying timber may not be salvaged without prior written permission from the department. Prior to removal, the small forest landowner office and the landowner must negotiate the terms of removal and reimbursement to the state, if any. Qualifying timber that blows down off the easement premises that presents a nuisance may be moved back onto the easement premises without permission from the department.

WAC 222-21-080 Eminent domain. *[Effective 6/22/2012]*

If a forestry riparian easement is taken, in whole or in part, by exercise of the power of eminent domain, or acquired by purchase in lieu of condemnation, the state will receive compensation for its remaining interest in the easement based upon the following formula:

Where:

C = the compensation to the department for the state's remaining interest in the easement;

O = the original compensation for the easement paid to the small forest landowner by the state;

P = the proportion of the forestry riparian easement extinguished or terminated;

CPI_o = the Consumer Price Index for all Urban Consumers as published by the Bureau of Labor Statistics for the month in which the original compensation was determined;

CPI_c = the U.S. Consumer Price Index for all Urban Consumers as published by the Bureau of Labor Statistics for the most recent month available at the time the easement is terminated or extinguished;

I = the rate of return on 30 year treasury bonds, as reported by the Federal Reserve Statistical Release H15 less the rate of increase in the Consumer Price Index for all Urban Consumers as published by the U.S. Department of Labor Bureau of Labor Statistics for the previous 12 months;

R = the number of years remaining on the easement at the time of extinguishment or termination;

$C = *P*(CPI_c/CPI_o)*(1-(1/(1+I)^R))/(1-1/(1+I)^{50})$.

WAC 222-21-090 Internal department of natural resources review of small forest landowner office decisions. *[Effective 6/22/2012]*

Any person who wishes to appeal written decisions of the small forest landowner office pertaining to application eligibility, easement valuation, and related decisions may submit a request for review within thirty days after the date of the small forest landowner office's written decision. The request for review must identify the issue being raised and provide any supporting documentation. The supervisor of the

department or designee will issue a written response within thirty days of receipt of the request for review and this response will constitute the department's final decision.

Chapter 222-22 WAC

WATERSHED ANALYSIS

WACs in this chapter were in effect 7/2001 except some have been amended since 7/2001. The effective dates of the amended WACs are shown after the WAC headings.

WAC

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Note: Rules marked with an asterisk () pertain to water quality protection and have been adopted or amended by the Forest Practices Board with agreement from the Department of Ecology per WAC 222-12-010.*

WAC 222-22-010 Policy. [Effective 7/1/05]

- *(1) Public resources may be adversely affected by the interaction of two or more forest practices. The purpose of this rule is to address these cumulative effects of forest practices on the public resources of fish, water, and capital improvements of the state or its political subdivisions.
- (2) Cultural resources may also be adversely affected by the interaction of two or more forest practices. The purpose of this rule is also to achieve management and protection of these cultural resources by fostering cooperative relationships and agreements between landowners and tribes.
- (3) The long-term objective of this rule is to protect and restore these public and cultural resources and the productive capacity of fish habitat adversely affected by forest practices while maintaining a viable forest products industry. For public resources, the board intends that this be accomplished through prescriptions designed to protect and allow the recovery of fish, water, and capital improvements of the state or its political subdivisions, through enforcement against noncompliance of the forest practice rules in this Title 222 WAC, and through voluntary mitigation measures. For cultural resources, with the exception of sites registered on the department of archaeology and historic preservation's archaeological and historic sites data base and all resources that require mandatory protection under chapters 27.44 and 27.53 RCW, the board intends that this be accomplished through voluntary management strategies. This system also allows for monitoring, subsequent watershed analysis, and adaptive management.

- * (4) Adaptive management in a watershed analysis process requires advances in technology and cooperation among resource managers. The board finds that it is appropriate to promulgate rules to address certain cumulative effects by means of the watershed analysis system, while recognizing the pioneering nature of this system and the need to monitor its success in predicting and preventing adverse change to fish, water, and capital improvements of the state and its political subdivisions. The board supports the use of voluntary, cooperative approaches to address impacts to cultural resources. If voluntary approaches are shown to be ineffective, the board may find it appropriate to seek additional protection to prevent adverse impacts to cultural resources.
- * (5) Many factors other than forest practices can have a significant effect on the condition of fish, water, capital improvements of the state or its political subdivisions, and cultural resources. Nonforest practice contributions to cumulative effects should be addressed by the appropriate jurisdictional authorities. When a watershed analysis identifies a potential adverse effect on fish, water, capital improvements of the state or its political subdivisions, or cultural resources from activities that are not regulated under chapter 76.09 RCW, the department should notify any governmental agency or Indian tribe having jurisdiction over those activities.
- * (6) The rules in this chapter set forth a system for identifying the probability of change and the likelihood of this change adversely affecting specific characteristics of fish, water, and capital improvements of the state or its political subdivisions, and for using forest management prescriptions to avoid or minimize significant adverse effects from forest practices. In addition, the rules in this chapter set forth a system for identifying the likelihood of adverse change affecting cultural resources and for developing voluntary management strategies to avoid or minimize significant adverse impacts to cultural resources. The rules in this chapter are in addition to, and do not take the place of, the other forest practices rules in this Title 222 WAC or laws for the protection of cultural resources including chapters 27.44 and 27.53 RCW.
- * (7) These rules are intended to be applied and should be construed in such a manner as to minimize the delay associated with the review of individual forest practices applications and notifications by increasing the predictability of the process and the appropriate management response.

WAC 222-22-020 Watershed administrative units. *[Effective 6/19/11]*

- * (1) For purposes of this chapter, the state is divided into areas known as watershed administrative units (WAUs). The department shall, in cooperation with the departments of ecology and fish and wildlife, affected Indian tribes, local governmental entities, forest landowners, and the public, define WAUs throughout the state. The department shall identify WAUs on a map.
- * (2) WAUs should generally be between ten thousand to fifty thousand acres in size and should be discrete hydrologic units. The board recognizes, however, that identified watershed processes and potential effects on resource characteristics differ, and require different spatial scales of analysis, and the department's determination of the WAUs should recognize these differences. The board further recognizes that mixed land uses will affect the ability of a watershed analysis to predict probabilities and identify causation as required under this chapter, and the department's conduct and approval of a watershed analysis under this chapter shall take this effect into account.
- * (3) The department is directed to conduct periodic reviews of the WAUs adopted under this chapter to determine whether revisions are needed to more efficiently assess potential cumulative effects. The department shall consult with the departments of ecology and fish and wildlife, affected Indian tribes, forest landowners, local governmental entities, and the public. From time to time and as appropriate, the department shall make recommendations to the board regarding revision

of watershed administrative units.

WAC 222-22-030 Qualification of watershed resource analysts, specialists, field managers and qualified experts. [Effective 6/19/11]

- * (1) The department shall set the minimum qualifications for analysts participating in level 1 assessments conducted under WAC 222-22-050, for specialists participating in level 2 assessments conducted under WAC 222-22-060, for field managers participating in recommendation of prescriptions under WAC 222-22-070, and for analysts, specialists, and field managers participating in reanalysis under WAC 222-22-090. The minimum qualifications shall be specific for the disciplines needed to participate in level 1 and level 2 assessments and in the recommendations of prescriptions, and shall include, at a minimum, formal education in the relevant discipline and field experience. Minimum qualifications for analysts participating in level 2 assessments should typically include a graduate degree in the relevant discipline. A reanalysis of mass wasting prescriptions under WAC 222-22-090 requires a qualified expert as defined in WAC 222-10-030.
- * (2) The department shall coordinate with relevant state and federal agencies, affected Indian tribes, forest landowners, local governmental entities, and the public to seek and utilize available qualified expertise to participate in watershed analysis or reanalysis.
- * (3) Qualified analysts, specialists, field managers, and qualified experts shall, while and only for the purpose of conducting a watershed analysis or monitoring in a WAU, be duly authorized representatives of the department for the purposes of RCW 76.09.150.
- * (4) An individual may qualify in more than one science or management skill. Qualification under subsection (1) of this section shall be effective for five years. When a qualification expires, a person requesting requalification shall meet the criteria in effect at the time of requalification.
- * (5) The department shall provide and coordinate training for, maintain a register of, and monitor the performance of qualified analysts, specialists, field managers, and qualified experts by region. The department shall disqualify analysts, specialists, field managers, and qualified experts who fail to meet the levels of performance required by the qualification standards.

WAC 222-22-040 Watershed prioritization. [Effective 6/19/11]

- (1) The department shall prioritize WAUs for the purposes of this section and for reviews under WAC 222-22-090 in cooperation with the departments of ecology and fish and wildlife, affected Indian tribes, forest landowners, and the public. The prioritization shall consider the availability of landowner participation and assistance and the availability and assistance that may be provided by affected Indian tribes and local governmental entities.
- * (2) The department may undertake a watershed analysis on any WAU. When conducting a watershed analysis, the department shall include available qualified expertise from state agencies, affected Indian tribes, forest landowners, local governmental entities, and the public.
- * (3) The owner or owners of ten percent or more of the nonfederal forest land acreage in a WAU may notify the department in writing that the owner or owners intend to conduct a level 1 assessment, level 2 assessment, or both, and the prescription recommendation and management strategy processes on the WAU under this chapter, or conduct a reanalysis under WAC 222-22-090, at their own expense. The notice shall identify the teams proposed to conduct the watershed analysis or reanalysis, which shall be comprised of individuals qualified by the department pursuant to WAC 222-22-030. The department shall promptly notify any owner or owners sending notice under this subsection if any member of the designated teams is not so qualified. Within thirty days of delivering a notice to the department under this subsection, the forest landowner or owners shall begin the level 1 assessment under WAC 222-22-050 or, at its option,

the level 2 assessment under WAC 222-22-060, or the reanalysis under WAC 222-22-090. An approved forest landowner team shall, while and only for the purposes of conducting a watershed analysis or reanalysis in a WAU, be a duly authorized representative of the department for the purposes of RCW 76.09.150. The board encourages forest landowners conducting assessments under this chapter to include available, qualified expertise from state and federal agencies, affected Indian tribes, forest landowners, local governmental entities, and the public.

- * (4) Before beginning a watershed analysis in a WAU, the department or the forest landowner conducting the analysis shall provide reasonable notice, including notice by regular United States mail where names and addresses have been provided to the department, to all forest landowners in the WAU, and to affected Indian tribes. The department or the forest landowner conducting the analysis shall also provide reasonable notice to the public and to state, federal, and local governmental entities, by, among other things, posting the notice conspicuously in the department's office in the region containing the WAU. The notice shall be in a form designated by the department and give notice that a watershed analysis or reanalysis is being conducted, by whose team, the time period of the analysis or reanalysis, and the dates and locations in which the draft analysis or reanalysis will be available for review and comment.

WAC 222-22-045 Cultural resources. *[Effective 6/19/11]*

- (1) Any watershed analysis initiated after July 1, 2005, is not complete unless the analysis includes a completed cultural resource module. Cultural resources module completeness is detailed in Appendix II of the module and includes affected tribe(s) participation, appropriate team qualification, required maps and forms, assessment of tribal and nontribal cultural resources, peer review of assessment, management strategies based on causal mechanism reports from synthesis, and agreement on the management strategies by affected tribes, landowners and land managers on the field managers team and, where applicable, the department of archaeology and historic preservation.
- (2) When conducting a reanalysis of a watershed analysis pursuant to WAC 222-22-090, the cultural resources module is not required if the watershed analysis was approved by the department prior to the date in subsection (1) of this section. However, the board encourages use of the cultural resources module upon such review.
- (3) The department does not review or approve cultural resources management strategies because their implementation is voluntary. The department of archaeology and historic preservation must be consulted and agree on all management strategies involving sites registered on the department of archaeology and historic preservation's archaeological and historic sites data base and all resources that require mandatory protection under chapters 27.44 and 27.53 RCW.
- (4) The cultural resources module may be conducted as a stand-alone method separate from a watershed analysis to identify, protect, and manage cultural resources. When used as a stand-alone methodology:
 - (a) Selected components of the methodology may be used as the participants deem necessary or the module may be used in its entirety.
 - (b) The methodology may be used at a variety of geographic scales and may be initiated by tribes, land managers or landowners. Landowner or land manager initiation is not limited by the minimum ownership threshold requirements in this chapter. Nothing in this rule grants any person or organization initiating the cultural resources module as a stand-alone method any right of entry onto private property.
 - (c) Watershed analysis notice requirements to the department do not apply.

- (d) Participants are encouraged to engage people that meet the minimum qualifications to conduct the module as set by this chapter.
- (e) In order for a stand-alone module to be incorporated into a watershed analysis, the module must have been conducted in accordance with the requirements of this chapter.

WAC 222-22-050 Level 1 watershed resource assessment. [Effective 6/19/11]

- * (1) To begin a watershed resource assessment on a WAU, the department acting under WAC 222-22-040 (2) or a forest landowner or owners acting under WAC 222-22-040 (3) may assemble a level 1 resource assessment team consisting of analysts qualified under WAC 222-22-030 (1) or, at its option, may begin the watershed analysis as a level 2 resource assessment under WAC 222-22-060. Each level 1 team shall include persons qualified in the disciplines indicated as necessary in the methodology, and should generally include a person or persons qualified in the following:
 - (a) Forestry;
 - (b) Forest hydrology;
 - (c) Forest soil science or geology;
 - (d) Fisheries science;
 - (e) Geomorphology;
 - (f) Cultural anthropology; and
 - (g) Archaeology.Any owner, and any cooperating group of owners, of ten percent or more of the nonfederal forest land acreage in the WAU and any affected Indian tribe shall be entitled to include one qualified individual to participate on the team at its own expense. The cultural resources module must include the participation of the affected Indian tribe(s). See board manual section 11, J. Cultural Resources Module, Introduction, 1) *Using this methodology in formal watershed analysis.*
- * (2) The level 1 team shall perform an inventory of the WAU utilizing the methodology, indices of resource condition, and checklists set forth in the manual in accordance with the following:
 - (a) The team shall survey the WAU for fish, water, and capital improvements of the state or its political subdivisions, and conduct an assessment for cultural resources.
 - (b) The team shall display the location of these resources on a map of the WAU, except mapping of tribal cultural resources sites must be approved by the affected tribe. The location of archaeological sites shall be on a separate map that will be exempt from public disclosure per RCW 42.56.300.
 - (c) For public resources (fish, water, and capital improvements of the state or its political subdivisions):
 - (i) The team shall determine the current condition of the resource characteristics of these resources, shall classify their condition as "good," "fair," or "poor," and shall display this information on the map of the WAU. The criteria used to determine current resource conditions shall include indices of resource condition, in addition to such other criteria as may be included in the manual. The indices will include two levels, which will distinguish between good, fair, and poor conditions.
 - (ii) The team shall assess the likelihood that identified watershed processes in a given physical location will be adversely changed by one forest practice or by cumulative effects and that, as a result, a material amount of water, wood, sediment, or energy (e.g., affecting temperature) will be delivered to fish, water, or capital improvements of the state or its political subdivisions. (This process is referred to in this chapter as "adverse change and deliverability.") (For example, the team will address the likelihood that road construction will result in mass wasting and a slide that will in

- turn reach a stream.) The team shall rate this likelihood of adverse change and deliverability as "high," "medium," "low," or "indeterminate." Those likelihoods rated high, medium, or indeterminate shall be displayed on the map of the WAU.
- (iii) For each instance of high, medium, or indeterminate likelihood of adverse change and deliverability identified under (c) (ii) of this subsection, the team shall assess the vulnerability of potentially affected resource characteristics. Criteria for resource vulnerability shall include indices of resource condition as described in (c) (i) of this subsection and quantitative means to assess the likelihood of material adverse effects to resource characteristics caused by forest practices. (For example, the team will assess the potential damage that increased sediment caused by a slide reaching a stream will cause to salmon spawning habitat that is already in fair or poor condition.) The team shall rate this vulnerability "high," "medium," "low," or "indeterminate" and shall display those vulnerabilities on the map of the WAU. If there are no other criteria in the manual to assess vulnerability at the time of the assessment, current resource condition shall be used, with good condition equivalent to low vulnerability, fair condition equivalent to medium vulnerability, and poor condition equivalent to high vulnerability.
 - (iv) The team shall identify as areas of resource sensitivity, as provided in table 1 of this section, the locations in which a management response is required under WAC 222-22-070 (3) because, as a result of one forest practice or of cumulative effects, there is a combination of a high, medium, or indeterminate likelihood of adverse change and deliverability under (c) (ii) of this subsection and a low, medium, high, or indeterminate vulnerability of resource characteristics under (c) (iii) of this subsection:

Table 1
Areas of Resource Sensitivity and Management Response
Likelihood of Adverse Change and Deliverability

		Low	Medium	High
<i>Vulnerability</i>	Low	Standard rules	Standard Rules	Response: Prevent or avoid
	Medium	Standard rules	Response: Minimize	Response: Prevent or avoid
	High	Standard rules	Response: Prevent or avoid	Response: Prevent or avoid

- The team shall display the areas of resource sensitivity on the map of the WAU.
- (v) The decision criteria used to determine low, medium, and high likelihood of adverse change and deliverability shall be as set forth in the manual. A low designation generally means there is minimal likelihood that there will be adverse change and deliverability. A medium designation generally means there is a significant likelihood

that there will be adverse change and deliverability. A high designation generally means that adverse change and deliverability is more likely than not with a reasonable degree of confidence. Any areas identified as indeterminate in the level 1 assessment shall be classified for the purposes of the level 1 assessment as medium until a level 2 assessment is done on the WAU under WAC 222-22-060, during which the uncertainties shall be resolved.

- (d) For cultural resources, the team shall follow the methodology outlined in the cultural resources module to determine the risk call for cultural resources based upon resource vulnerability and resource importance.
 - (e) The team shall prepare a causal mechanism report regarding the relationships of each process identified in (c) and (d) of this subsection. The report shall demonstrate that the team's determinations were made in accordance with the manual. If, in the course of conducting a level 1 assessment, the team identifies areas in which voluntary corrective action will significantly reduce the likelihood of material, adverse effects to the condition of a resource characteristic, the team shall include this information in the report, and the department shall convey this information to the applicable landowner.
- * (3) Within twenty-one days of mailing notice under WAC 222-22-040 (4), the level 1 team shall submit to the department its draft level 1 assessment, which shall consist of the map of the WAU marked as set forth in this section and the causal mechanism report proposed under subsection (2)(e) of this section. If the level 1 team is unable to agree as to one or more resource sensitivities or potential resource sensitivities, or the causal mechanism report, alternative designations and an explanation shall be included in the draft assessment. Where the draft level 1 assessment delivered to the department contains alternative designations, the department shall within twenty-one days of the receipt of the draft level 1 assessment make its best determination and approve that option which it concludes most accurately reflects the proper application of the methodologies, indices of resource condition, and checklists set forth in the manual.
- * (4) If the level 1 assessment contains any areas in which the likelihood of adverse change and deliverability or resource vulnerability are identified as indeterminate under this section or if the level 1 methodology recommends it, the department shall assemble a level 2 assessment team under WAC 222-22-060 to resolve the uncertainties in the assessment, unless a forest landowner acting under WAC 222-22-040 (3) has conducted a level 2 assessment on the WAU.
- * (5) Pending the completion of the level 2 assessment, if any, on the WAU, the department shall select interim prescriptions using the process and standards described in WAC 222-22-070 (1), (2), and (3) and 222-22-080 (3). Before submitting recommended interim prescriptions to the department, the field managers' team under WAC 222-22-070 (1) shall review the recommended prescriptions with available representatives of the jurisdictional management authorities of the fish, water, capital improvements of the state or its political subdivisions, and cultural resources in the WAU, including, but not limited to, the departments of fish and wildlife, ecology, and affected Indian tribes.

WAC 222-22-060 Level 2 watershed resource assessment. *[Effective 6/19/11]*

- * (1) The department acting under WAC 222-22-040 (2) or forest landowner acting under WAC 222-22-040 (3), may assemble a level 2 resource assessment team either to begin a watershed analysis at a level 2 resource assessment or to review the level 1 resource assessment on a WAU. The level 2 team shall consist of specialists qualified under WAC 222-22-030 (1). Each level 2 team shall include persons qualified in the disciplines indicated as necessary in the methodology, and should generally include a person or persons qualified in the following:

- (a) Forestry;
- (b) Forest hydrology;
- (c) Forest soil science or geology;
- (d) Fisheries science;
- (e) Geomorphology;
- (f) Cultural anthropology; and
- (g) Archaeology.

Any owner, and any cooperating group of owners, of ten percent or more of the nonfederal forest land acreage in the WAU and any affected Indian tribe shall be entitled to designate one qualified member of the team at its own expense. The cultural resources module must include the participation of the affected Indian tribe(s). See board manual section 11, J. Cultural Resources Module, Introduction, 1) *Using this methodology in formal watershed analysis.*

- * (2) The level 2 team shall perform an assessment of the WAU utilizing the methodology, indices of resource condition, and checklist set forth in the manual in accordance with the following:
 - (a) If a level 1 assessment has not been conducted under WAC 222-22-050, the assessment team shall complete the tasks required under WAC 222-22-050 (2), except that the level 2 team shall not rate any likelihood of adverse change and deliverability or resource vulnerability as indeterminate.
 - (b) If the level 2 team has been assembled to review a level 1 assessment, the level 2 team shall, notwithstanding its optional review of all or part of the level 1 assessment, review each likelihood of adverse change and deliverability and resource vulnerability rated as indeterminate and shall revise each indeterminate rating to low, medium, or high and shall revise the map of the WAU accordingly.
- * (3) Within sixty days of mailing notice under WAC 222-22-040 (4) where a watershed analysis begins with a level 2 assessment or within sixty days of beginning a level 2 assessment after completion of a level 1 assessment, the level 2 team shall submit to the department its draft level 2 assessment, which shall consist of the map of the WAU and the causal mechanism report.
- * (4) The level 2 team shall endeavor to produce a consensus report. If the level 2 team is unable to agree as to one or more areas of resource sensitivity or the causal mechanism report, alternative designations and an explanation shall be included in the draft assessment. Where the draft level 2 assessment delivered to the department contains alternative designations or reports, the department shall within thirty days of the receipt of the draft level 2 assessment make its best determination and approve that option which it concludes most accurately reflects the proper application of the methodologies, indices of resource condition, and checklists set forth in the manual.

WAC 222-22-070 Prescription and management strategies. [Effective 6/19/11]

- * (1) For each WAU for which a watershed analysis is undertaken, the department acting under WAC 222-22-040 (2) or forest landowner acting under WAC 222-22-040 (3) shall assemble a team of field managers qualified under WAC 222-22-030 (1). The team shall include persons qualified in the disciplines indicated as necessary in watershed analysis methods, and shall generally include a person or persons qualified in the following:
 - (a) Forest resource management;
 - (b) Forest harvest and road systems engineering;
 - (c) Forest hydrology;
 - (d) Fisheries science or management;

- (e) Cultural anthropology and/or archaeology, depending on the cultural resources identified in the assessment.

Any owner, and any cooperating group of owners, of ten percent or more of the nonfederal forest land acreage in the WAU and any affected Indian tribe shall be entitled to include one qualified individual to participate on the team at its own expense. The cultural resources module must include the participation of the affected Indian tribe(s). See board manual section 11, J. Cultural Resources Module, Introduction, 1) *Using this methodology in formal watershed analysis*.

- * (2) Each forest landowner in a WAU shall have the right to submit prescriptions to the department or the forest landowner conducting the watershed analysis for areas of resource sensitivity on their land. If these prescriptions are received within the time period described in subsection (4) of this section, they shall be considered for inclusion in the watershed analysis.
- * (3) For each identified area of resource sensitivity, the field managers team shall, in consultation with the level 1 and level 2 teams, if any, select and recommend prescriptions to the department. These prescriptions shall be reasonably designed to minimize, or to prevent or avoid, as set forth in table 1 in WAC 222-22-050 (2)(c)(iv), the likelihood of adverse change and deliverability that has the potential to cause a material, adverse effect to resource characteristics in accordance with the following:
 - (a) The prescriptions shall be designed to provide forest landowners and operators with as much flexibility as is reasonably possible while addressing the area of resource sensitivity. The prescriptions should, where appropriate, include, but not be limited to, plans for road abandonment, orphaned roads, and road maintenance and plans for applying prescriptions to recognized land features identified in the WAU as areas of resource sensitivity but not fully mapped;
 - (b) Restoration opportunities may be included as voluntary prescriptions where appropriate;
 - (c) Each set of prescriptions shall provide for an option for an alternate plan under WAC 222-12-040, which the applicant shows meets or exceeds the protection provided by the other prescriptions approved for a given area of resource sensitivity;
 - (d) The rules of forest practices and cumulative effects under this chapter shall not require mitigation for activities or events not regulated under chapter 76.09 RCW. Any hazardous condition subject to forest practices identified in a watershed analysis requiring corrective action shall be referred to the department for consideration under RCW 76.09.300 et seq.; and
 - (e) Effective July 1, 2001, the forests and fish riparian rules supersede all existing watershed analysis riparian prescriptions with the exception of riparian management zones for exempt 20-acre parcels, when watershed analysis prescriptions were in effect before January 1, 1999. (See WAC 222-30-021, 222-30-022, and 222-30-023.) No new riparian prescriptions will be written after completion of the riparian function assessment report during a watershed analysis.
- * (4) For each identified cultural resource area of resource sensitivity, the field managers team shall develop cultural resources management strategies in consultation with the assessment team and affected tribe(s).
 - (a) If a management strategy involves a site registered on the department of archaeology and historic preservation's archaeological and historic sites data base, data recovery at an archaeological site, or any resource that requires mandatory protection under chapters 27.44 and 27.53 RCW, the field managers team shall submit the management strategy to the department of archaeology and historic preservation for agreement.

- (b) The management strategies should be reasonably designed to protect or allow the recovery of resources by measures that minimize or prevent or avoid risks identified in the assessment.
 - (c) Management strategies resulting from conducting a cultural resources module are voluntary, not mandatory prescriptions, whether the module is conducted as part of a watershed analysis or as a stand-alone method separate from watershed analysis. However, the mandatory protections of resources under chapters 27.44 and 27.53 RCW still apply.
- (5) The field managers team shall submit the recommended prescriptions, monitoring recommendations and cultural resources management strategies to the department within thirty days of the submission to the department of the level 2 assessment under WAC 222-22-060 or within twenty-one days of the submission to the department of the level 1 assessment under WAC 222-22-050.

WAC 222-22-075 Monitoring. *[Effective 6/19/11]*

*In connection with any watershed analysis that is not a reanalysis under WAC 222-22-090, the monitoring module will be required to be completed but implementation of monitoring recommendations would be voluntary unless otherwise required by existing laws and rules, or required by an HCP implementation agreement. Implementation of the monitoring recommendations will be encouraged when needed as part of the statewide effectiveness monitoring program.

WAC 222-22-076 *Restoration. Restoration opportunities will also be identified based on the watershed resource assessment. Implementation of restoration opportunities will be voluntary.

WAC 222-22-080 *Approval of watershed analysis. *[Effective 3/24/21]*

- (1) Upon receipt of the recommended prescriptions and management strategies resulting from a level 1 assessment under WAC 222-22-050, a level 2 assessment under WAC 222-22-060, or a reanalysis under WAC 222-22-090, the department shall select prescriptions. The department shall circulate the draft watershed analysis to the departments of ecology and fish and wildlife, affected Indian tribes, local governmental entities, forest landowners in the WAU, and the public for review and comment. The prescriptions recommended by the field managers' team shall be given substantial weight. Within thirty days of receipt of the recommended prescriptions and management strategies, the department shall review comments, revise the watershed analysis as appropriate, and approve or disapprove the watershed analysis for the WAU.
- *(2) The department should notify any governmental agency or Indian tribe having jurisdiction over activities which are not regulated under chapter 76.09 RCW but which are identified in the draft analysis as having a potential for an adverse impact on identified fish, water, capital improvements of the state or its political subdivisions, or cultural resources.
- *(3) The department shall approve the draft watershed analysis unless it finds:
- (a) For any level 1 assessment or level 2 assessment, that:
 - (i) The team failed in a material respect to apply the methodology, indices of resource condition, or checklists set forth in the manual; or
 - (ii) A team meeting the criteria promulgated by the department and using the defined methodologies, indices of resource conditions, and checklists set forth in the manual could not reasonably have come to the conclusions identified in the draft level 1 or level 2 assessment; and
 - (b) The prescriptions will not accomplish the purposes and policies of this chapter and chapter 76.09 RCW.

- (c) In making its findings under this subsection, the department shall take into account its ability to revise assessments under WAC 222-22-090.
- * (4) If the department disapproves the draft watershed analysis, it shall set forth in writing a detailed explanation of the reasons for its disapproval.
- (5) To become final under subsection (1) of this section, all watershed analyses must be reviewed under SEPA on a nonproject basis. SEPA review may take place concurrently with the public review in subsection (1) of this section. See WAC 222-10-035.
- (6) As of July 1, 2011:
 - (a) Existing interim or draft prescriptions will expire; and
 - (b) A new draft watershed analysis or reanalysis will expire if the requirements in subsections (1) and (5) of this section are not met.These expirations sunset the draft watershed analysis for the WAU and do not require SEPA review. The department shall notify the landowners in the WAU that the watershed analysis has expired.
- (7) The department will not review or approve cultural resource management strategies because their implementation is voluntary.

WAC 222-22-090 Use, review, and reanalysis of a watershed analysis. [Effective 6/19/11]

- * (1) Where a watershed analysis has been completed and approved for a WAU under this chapter:
 - (a) Any landowner within the WAU may apply for a multiyear permit to conduct forest practices according to the watershed analysis prescriptions. This permit is not renewable if a reanalysis is found necessary by the department under subsection (6) of this section and either the reanalysis has not been completed and approved or the department has rescinded the prescriptions.
 - (b) Nonmultiyear forest practices applications and notifications submitted to the department shall indicate whether an area of resource sensitivity will be affected and, if so, which prescription the operator, timber owner, or forest landowners shall use in conducting the forest practice in the area of resource sensitivity;
 - (c) The department shall assist operators, timber owners, and forest landowners in obtaining governmental permits required for the prescription. See WAC 222-50-020 and 222-50-030;
 - (d) The department shall confirm that the prescription selected under (a) and (b) of this subsection was one of the prescriptions approved for the area of resource sensitivity under WAC 222-22-080 and shall require the use of the prescription; and
 - (e) The department shall not further condition forest practices applications and notifications in an area of resource sensitivity in a WAU where the applicant will use a prescription contained in the watershed analysis nor shall the department further condition forest practices applications and notifications outside an area of resource sensitivity in a WAU, except:
 - (i) For reasons other than the watershed processes and fish, water, and capital improvements of the state or its political subdivisions analyzed in the watershed analysis in the WAU; or
 - (ii) To correct mapping errors, misidentification of soils, landforms, vegetation, or stream features, or other similar factual errors.
- * (2) Pending completion and approval of a watershed analysis for a WAU, the department shall process forest practices notifications and applications in accordance with the other chapters of this title.
Processing and approval of applications and notifications shall not be delayed by reason of review, approval, or appeal of a watershed analysis.
- * (3) The board encourages cooperative and voluntary monitoring. Evaluation of resource conditions may be conducted by qualified specialists, analysts, field managers, and qualified experts as

determined under WAC 222-22-030. Subsequent watershed analysis and monitoring recommendations in response to areas where recovery is not occurring shall be conducted in accordance with this chapter.

- * (4) To keep watershed analyses current, the department shall determine if and when a reanalysis of a watershed analysis is necessary to evaluate the effectiveness of the prescriptions applied under this chapter to the WAU in providing for the protection and recovery of the resource. The department shall determine which watershed analysis modules and prescriptions need to be included in the reanalysis. Review and reanalysis shall be conducted in accordance with this chapter and board manual section 11, standard methodology for conducting watershed analysis, except that:
- (a) The reanalysis may be conducted on areas smaller than the entire WAU in the case of subsection (6)(a) of this section; and
 - (b) The reanalysis shall be conducted only on the areas affected in the case of subsection (6)(b) or (c) of this section.
- (5) Entities with an interest in maintaining prescriptions the department has identified for reanalysis are responsible for committing sufficient resources to complete a reanalysis in addition to the available resources provided by the department to administer the reanalysis process.
- (6) Once a watershed analysis is completed and approved on a WAU, the department shall conduct a review to determine if a reanalysis is necessary, upon the earliest of the following to occur:
- (a) Five years after the date the watershed analysis is final, and every five years thereafter; or
 - (b) The occurrence of a natural disaster having a material adverse effect on the resource characteristics of the WAU; or
 - (c) Deterioration in the condition of a resource characteristic in the WAU measured over a twelve-month period or no improvement in a resource characteristic in fair or poor condition in the WAU measured over a twelve-month period unless the department determines, in cooperation with the departments of ecology and fish and wildlife, affected Indian tribes, forest landowners, and the public, that a longer period is reasonably necessary to allow the prescriptions selected to produce improvement.
- (7) Once the department has determined that a reanalysis is necessary under subsection (6) of this section:
- (a) The department shall notify the forest landowners in the WAU, the departments of ecology and fish and wildlife, affected Indian tribes, relevant federal agencies and local governmental entities, and the public.
 - (b) Prior to the start of the reanalysis, the department shall determine and clearly delineate on a map the areas on which the reanalysis is to be conducted.
 - (c) The department shall classify per WAC 222-16-050 proposed forest practices within the mapped reanalysis area that would have been subject to those prescriptions identified for reanalysis.
 - (d) The department shall determine if the forest landowners in the WAU want to participate in the reanalysis and commit sufficient resources to complete the reanalysis process in accordance with subsection (5) of this section:
 - (i) If no forest landowners in the WAU wish to participate and commit resources, then the department may rescind the prescriptions it identified for the reanalysis after conducting SEPA review. If the department rescinds prescriptions, it shall notify the landowners in the WAU.

- (ii) If a landowner wishes to participate and commit resources, then the department in consultation with the departments of ecology and fish and wildlife, affected Indian tribes, forest landowners, and the public shall establish a timeline for the reanalysis. If the timeline for completion is not being met, the department may adjust the timeline or, after conducting SEPA review, rescind the prescriptions it identified for the reanalysis. If the department rescinds prescriptions, it shall notify the landowners in the WAU.
- (e) Upon receiving recommendations from the reanalysis, the department shall select prescriptions and approve or disapprove the reanalysis in accordance with WAC 222-22-080.
- (f) Reanalysis must be reviewed under SEPA on a nonproject basis. See WAC 222-10-035.
- (8) Regardless of subsection (7) of this section, the owner or owners of ten percent or more of the nonfederal forest land in the WAU may conduct a reanalysis at any time at their own expense and the reanalysis may be conducted on areas smaller than the entire WAU.

WAC 222-22-100 Application review prior to watershed analysis. *The watershed analysis system established in this chapter is a principal methodology for assessing the effects on fish, water, and capital improvements of the state or its political subdivisions of two or more forest practices. Recognizing that it will not be possible to achieve state-wide implementation of the analysis process for all WAUs for some time, the board hereby establishes certain interim regulatory measures pending watershed analysis on a given WAU. These measures are designed to ensure use of the best available analysis techniques and existing authorities to protect fish, water, and capital improvements of the state or its political subdivisions.

- *(1) The department shall continue to use its implementation and enforcement authority to prevent damage to fish, water, and capital improvements of the state or its political subdivisions. See chapter 222-46 WAC.
- *(2) The department shall condition the size of clearcut harvest applications in the significant rain-on-snow zone where the department determines, using local evidence, that peak flows have resulted in material damages to public resources. The department may prepare conditioning guidelines to assess and condition applications located in a significant rain-on-snow zone.
 - (a) Each year not later than August 31, the department shall provide a summary report of actions taken under rain-on-snow conditioning or conditioning guidelines to the appropriate board committee.
 - (b) Such conditioning authority shall expire upon completion of watershed analysis in a WAU.
 - (c) Nothing in this section shall require a watershed analysis to develop harvest size recommendations.

Chapter 222-23 WAC

RIVERS AND HABITAT OPEN SPACE PROGRAM

WAC

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WAC 222-23-010 Policy and definitions. *[Effective 6/19/11]*

- (1) **Policy.** The legislature determined that it is in the public interest to acquire (by purchase or donation) conservation easements on forest lands within unconfined channel migration zones and forest lands containing a critical habitat for threatened or endangered species as designated by the board. The rivers and habitat open space program (formerly known as the riparian open space program), established in RCW 76.09.040, is for these forest lands voluntarily enrolled by the landowner. The department may acquire a permanent conservation easement over such lands. The purpose of this program, which will be administered by the department, is to provide for ecological protection and fisheries and wildlife enhancement. This chapter implements the rivers and habitat open space program (hereinafter referred to in this chapter as "program"). In any circumstance where qualifying channel migration zone lands or qualifying critical habitat lands are not acquired by the department through a conservation easement, the landowner may elect to develop a management option for the lands in cooperation with the department, other agencies and affected Indian tribes.
- (2) **Definitions.** The following definitions apply to this chapter:
 - (a) "Qualifying channel migration zone (CMZ) lands" means those forest lands located within an unconfined channel migration zone. Qualifying CMZ lands are eligible for easement acquisition if they meet the standards in WAC 222-23-020 (5).
 - (i) An "unconfined channel migration zone" means the area within which the active channel of an unconfined stream is prone to move and where the movement would result in a potential near-term loss of riparian forest adjacent to the stream. A merchantable stand of timber may exist within the zone and is considered a part of the channel migration zone. The unconfined channel migration zone does not include areas that are permanently restricted from channel movement by a dike or levee.
 - (ii) An "unconfined stream" is generally:
 - (A) A fifth order or larger water;
 - (B) Less than two percent gradient; and
 - (C) Found in a valley more than four times wider than the bankfull width of the channel.

- (b) "Qualifying critical habitat lands" means those forest lands that qualify as one or more of the critical habitats (state) defined in WAC 222-16-080 including forest lands that have existing plans or evaluations described in WAC 222-16-080 (6). Qualifying critical habitat lands are eligible for easement acquisition if they meet the standards in WAC 222-23-020 (5).
- (c) "Unacceptable liabilities" means exposure to undesirable responsibilities or problems as determined by the department. This includes, but is not limited to, the presence of hazardous substances on the lands or by other conditions that may create a liability to the department, or that may jeopardize the department's ability to maintain ecological protection, and fisheries and wildlife enhancement of the qualifying lands. Unacceptable liabilities may exist when the applicant is unwilling or unable to provide reasonable indemnification to the department.
- (d) "Hazardous substances" includes, but is not limited to, hazardous substances as defined in RCW 70.102.010 (5), and 70.105D.020 (10), and solid waste as defined in RCW 70.95.030 (23).
- (e) "Conservation easement" means a voluntary, legally enforceable land preservation agreement between the landowner and easement holder to permanently limit the type and amount of alteration of identified habitat or CMZ on the subject property while the landowner retains ownership.

WAC 222-23-020 Submitting and processing of applications for the rivers and habitat open space program. [Effective 6/19/11]

- (1) **Rivers and habitat open space application.** An owner or owners of qualifying lands may apply to the department to place the qualifying CMZ lands or qualifying critical habitat lands within the program. The department will accept or reject the program application based on eligibility for an easement acquisition. The application for the program shall be in writing on a form provided by the department. The application shall contain information the department determines is necessary to assess whether the land qualifies for the program, as well as the following information (see board manual section 18 for details):
 - (a) A description of the methods the landowner used to propose that the land meets the eligibility for easement acquisition criteria;
 - (b) A statement indicating the landowner's desire to place the land covered by the application within the program and whether the landowner wishes to grant a conservation easement to the state on both land and trees or in trees only;
 - (c) Whether the landowner wishes to receive the statutory compensation for the conveyance or wishes to donate the qualifying lands;
 - (d) Whether the landowner is aware of the presence of any hazardous substances on the lands;
 - (e) A statement affirming that the person or persons submitting the application stating they are the landowner and believes that the information contained in the application and its supporting materials is true and complete.

- (2) **Review and processing of application.** The application process will follow the program funding cycle process described in board manual section 18. After the department receives a complete and accurate application for the program, the department will make a preliminary determination whether the application is eligible for the easement acquisition. This determination is subject to the department's complete review, and subsequent confirmation of all information required for the program and identification of qualifying lands. After the preliminary determination of eligibility, the following shall occur:
- (a) The landowner, in cooperation with the department, shall delineate on the ground the boundary line of the qualifying lands as indicated in the application;
 - (b) The department shall verify the appropriateness of the delineation of qualifying lands using the procedure outlined in board manual section 18, make a final determination whether there are any unacceptable liabilities on the lands proposed for inclusion in the program, and communicate the foregoing to the landowner.
 - (c) The department will rate, rank, and fund, as described in WAC 222-23-025 (1), the eligible applications for each category of qualifying CMZ lands or critical habitat lands and for each funding cycle using a standardized scoring system.
 - (d) The department will prepare a combined preliminary project priority list, after evaluation and scoring of all applications.
 - (e) The department will submit the preliminary project priority list to the state legislature for budget consideration.
 - (f) The department will notify the applicant in writing of the funding decision for their application, subject to available funding from the legislature.
 - (g) For those applications determined to be funded, and if the department determines there are no unacceptable liabilities on the lands, the department shall follow the guidelines in WAC 222-23-030 (2) and the landowner shall enhance the boundary (as verified) using boundary marking methods specified by the department.
 - (h) For those applications determined to be eligible but not funded, the application will be returned to the applicant. At any time thereafter, the applicant may resubmit the application with or without revision. This resubmitted application will be placed on the next available funding cycle and will be reprioritized under the process described in (c) through (g) of this subsection.
 - (i) For those applications determined to be ineligible for reasons other than funding, the department must notify the landowner of the reason(s) and the application will be rejected.
 - (j) Once the landowner completes the boundary enhancement required in (g) of this subsection, the department shall:
 - (i) Perform a traverse of the boundary of the qualifying lands;
 - (ii) Conduct and finalize a cruise of the timber on the qualifying lands;
 - (iii) Determine the statutory compensation to be paid to the landowner;
 - (iv) Prepare conveyance documents consistent with this chapter; and
 - (v) Prepare any other documents necessary for closing and recording the conveyance, including without limitation a real estate excise tax affidavit.
- (3) **Timber cruise.** For the purpose of determining the compensation, a timber cruise will be conducted by the department using a cruiser acceptable to the department and the landowner, using a cruise methodology determined by the department and sampling intensity acceptable to both parties.

The department will provide the cruise data to the landowner. Within thirty days thereafter, the landowner shall advise the department whether the cruise results are acceptable. The landowner or the department may, at their option, perform a check cruise.

- (4) **Compensation for conveyances.** RCW 76.09.040 (3) specifies the compensation the department shall pay for the conveyance of a conservation easement under this chapter, unless the landowner chooses to donate the conservation easement. The department will calculate compensation based on stumpage and land use value tables described in (a) and (b) of this subsection. The tables applied will be those in effect as of the date the complete timber cruise is received by the department for new or resubmitted applications.
- (a) For conveyances of a conservation easement in which the landowner conveys an interest in the trees only, the compensation shall only include the timber value component, as determined by the cruise volume multiplied by the appropriate stumpage value for timber of the same species shown on the appropriate table used for timber harvest excise tax purposes under RCW 84.33.091.
 - (b) For conveyances of a conservation easement in which the landowner conveys interests in both land and trees, the compensation shall include the timber value component plus such portion of the land value component as determined just and equitable by the department. The timber value component will be as set forth in (a) of this subsection. The land value component must be the acreage of qualifying lands to be conveyed, multiplied by the average per acre value. The department shall determine the averages based on the land value tables established by RCW 84.33.140 and revised annually by the department of revenue with separate values for western and eastern Washington.
- (5) **Qualifying lands.** The lands proposed in an application must include qualifying CMZ lands or qualifying critical habitat lands that are eligible for easement acquisition as follows:
- (a) Qualifying lands are lands that, once a complete application is received, are identified in records of the applicable county assessor as being assessed and taxed either under chapter 84.33 RCW as designated forest land or under chapter 84.34 RCW as current use classification timber land or open space.
 - (b) Qualifying lands are lands owned by an individual, partnership, corporation or other nongovernmental entity.
 - (c) Lands do not qualify for the program where the department has determined that:
 - (i) The lack of access to the land is likely to materially impair the department's ability to administer the program with respect to the land;
 - (ii) The land is subject to unacceptable liabilities. See WAC 222-23-010 (2)(c).

WAC 222-23-025 Priorities for conveyances and funding--Use of lands conveyed. [Effective 6/19/11]

- (1) **Priorities for conveyances and funding.** The department shall rate, rank, and fund eligible CMZ applications separately from eligible critical habitat applications based on conservation benefits and landowner management options. See board manual section 18 for the rating, ranking and funding details for qualifying lands. The department will consult with representatives of affected Indian tribes, department of fish and wildlife, and department of ecology as necessary for technical expertise.

- (2) **Use and management of lands and easement interests acquired under rivers and habitat open space program.** Subject to the exceptions set forth in this subsection (or as otherwise provided in the easement documents), the lands subject to the conservation easements under this chapter shall be managed by the department only in a manner necessary for ecological protection, and fisheries and wildlife enhancement. The easements under the program shall not create a right of public access to or across adjoining or other lands owned by the landowner granting an easement.
- (3) **Transfer of easement interest or management responsibility.** After acquisition of an easement interest in qualifying lands, the department may transfer its interest in such lands by a recorded instrument to another state agency, a local governmental entity within which the lands lie, or a private nonprofit nature conservancy corporation (as defined in RCW 64.04.130). Alternatively, the department may contract with one or more of the foregoing entities to exercise the department's management authority over the qualifying lands. Any such contract will include provisions fully advising the contracting party of the rights of the landowner under this chapter and the conveyance instrument. The department shall notify the landowner of any transfer of its interest in the qualifying lands or any transfer of management responsibilities over those lands, provided that failure to so notify the landowner shall not affect the validity of the transfer.

WAC 222-23-030 Conveyance forms and procedure. *[Effective 6/19/11]*

- (1) **Conservation easement.** Conveyances of a conservation easement shall be through execution by the landowner and the department of a conservation easement in a form acceptable to the department and the landowner. The easement shall be perpetual and not for a term of years. The easement will include terms reasonably necessary and appropriate to the circumstances of the particular lands involved. Prior to closing, the landowner shall procure a preliminary title insurance report from a title company, provided that in the case of an easement being donated to the department, the department shall pay the cost of the report.
- (2) **Description standards.** The description of the qualifying lands being conveyed shall be a legal land survey description unless the cost of securing the survey would be unreasonable in relation to the value of the lands conveyed. When the department determines a survey need not be performed, the description shall be in the form that can depict the location of the lands conveyed without relying on verbal evidence, or another form acceptable to the department.
- (3) **Closing and recording.** Upon execution of the conveyance documents and other documents required for closing, the department shall pay any compensation owed to the landowner and record the conveyance documents. The department shall pay the recording fees. No compensating taxes under chapters 84.33 and 84.34 RCW shall be owed. Title insurance premiums and any real estate excise tax owed shall be paid by the landowner conveying the easement.
- (4) **Internal department of natural resources procedure for review of decisions.** Certain decisions of the department pursuant to this chapter may be appealed to the supervisor of the department or his or her designee. Any person that wishes to appeal final written decisions of the department pertaining to the following procedural determinations: Application eligibility, application prioritization, easement valuation, and related decisions made may submit a request for review within thirty days after the date of the department's final written notice of procedural determination. The request for review must identify the issue being raised and provide any supporting documentation. The supervisor will issue a written response within thirty days. The supervisor's written response shall constitute the department's final decision.

Chapter 222-24 WAC

ROAD CONSTRUCTION AND MAINTENANCE

WACs in this chapter were in effect 7/2001 except those that have been amended since 7/2001. The effective dates of the amended WACS are shown after the WAC headings.

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Note: Rules marked with an asterisk () pertain to water quality protection and have been adopted or amended by the Forest Practices Board with agreement from the Department of Ecology per WAC 222-12-010.*

WAC 222-24-010 Policy. [Effective 12/30/13]

- *(1) A well designed, located, constructed, and maintained system of forest roads is essential to forest management and protection of the public resources. Riparian areas contain some of the more productive conditions for growing timber, are heavily used by wildlife and provide essential habitat for fish and wildlife and essential functions in the protection of water quality. Wetland areas serve several significant functions in addition to timber production: Providing fish and wildlife habitat, protecting water quality, moderating and preserving water quantity. Wetlands may also contain unique or rare ecological systems.
- *(2) To protect water quality and riparian habitat, roads must be constructed and maintained in a manner that will prevent potential or actual damage to public resources. This will be accomplished by constructing and maintaining roads so as not to result in the delivery of sediment and surface water to any typed water in amounts, at times or by means, that preclude achieving desired fish habitat and water quality by:

- Providing for fish passage at all life stages;
- Preventing mass wasting;
- Limiting delivery of sediment and surface runoff to all typed waters;
- Avoiding capture and redirection of surface or groundwater. This includes retaining streams in their natural drainages and routing subsurface flow captured by roads and road ditches back onto the forest floor;
- Diverting most road runoff to the forest floor;
- Designing water crossing structures to the 100-year flood level to provide for the passage of bedload and some woody debris;
- Protecting stream bank stability, the existing stream channel, and riparian vegetation;
- Minimizing the construction of new roads;
- Assuring no-net-loss of wetland function; and
- Assuring no-net-loss of fish habitat.

The rules for road construction and maintenance and forest practices hydraulic projects must be applied in achieving these goals. Additional guidance is identified in board manual sections 3 and 5. If these goals are not achieved using the rules and the applied guidance, additional management strategies must be employed.

- *(3) Extra protection is required during road construction and maintenance and for forest practices hydraulic projects to protect public resources and timber growing potential. Landowners and fisheries and wildlife managers are encouraged to cooperate in the development of road management and abandonment plans. Landowners are further encouraged to cooperate in sharing roads to minimize road mileage and avoid duplicative road construction.
- *(4) This section covers the location, design, construction, maintenance and abandonment of forest roads, bridges, stream crossings, quarries, borrow pits, and disposal sites used for forest road construction and is intended to assist landowners in proper road planning, construction and maintenance so as to protect public resources.

(Note: Other laws and rules and/or permit requirements may apply. See chapter 222-50 WAC.)

WAC 222-24-015 Construction in wetlands.

- *(1) In order to assure that there is no net loss of wetland function, all road and landing construction near or within wetlands must be conducted so that selection of choices are made in the following order with avoidance being the most preferred and replacement being the least preferred alternative:
- (a) Avoid impacts by selecting the least environmentally damaging landing location, road location and road length. Landowners must attempt to minimize road length concurrently with the attempt to avoid wetlands; or
 - (b) Minimize impacts by reducing the subgrade width, fill acreage and spoil areas; or
 - (c) Restore affected areas by removing temporary fills or road sections upon the completion of the project; or
 - (d) Reduce or eliminate impacts over time by preserving or maintaining areas; or
 - (e) Replace affected areas by creating new wetlands or enhancing existing wetlands.
- *(2) An accurate delineation of wetland boundaries will not be required under this section except where necessary to determine acreage of road or landing construction which fills or drains more than (0.1) one tenth acre of a wetland. All such mapping must follow the delineation and mapping standards outlined in the board manual, section 8.

- * (3) Approximate determination of wetland boundaries, following the guidelines in the board manual, shall be required for the purpose of avoidance during design and construction of roads. Landowners must attempt to minimize road length concurrently with the attempt to avoid wetlands. Delineation, following the guidelines in the board manual, shall be required to determine the length of road constructed within a wetland in order to determine acreage when replacement by substitution or enhancement of a wetland is required. The requirement for accurate delineation shall be limited to the area of the wetland proposed to be filled.
- * (4) Filling or draining more than 0.5 acre of a wetland requires replacement by substitution or enhancement of the lost wetland functions. (See the board manual, section 9.) The objective of successful replacement by substitution of lost wetland area will be generally on a two-for-one basis and of the same type and in the same general location. The objective of enhancing wetlands function is to provide for an equivalent amount of function to replace that which is lost. See WAC 222-16-050 (1)(h).

WAC 222-24-020 Road location and design. [Effective 12/30/13]

- (1) **Fit the** road to the topography so that a minimum of alterations to the natural features will occur.
- * (2) Except for crossings, new stream-adjacent parallel roads shall not be located within natural drainage channels, channel migration zones, sensitive sites, equipment limitation zones, and riparian management zones when there would be substantial loss or damage to fish or wildlife habitat unless the department has determined that other alternatives will cause greater damage to public resources. Proposals with new stream-adjacent parallel roads will require an on-site review by an interdisciplinary team. The appropriate federal representative(s) will be invited to attend the interdisciplinary team to determine if the proposal is in compliance with the Endangered Species Act.
- * (3) Roads shall not be constructed in bogs or low nutrient fens.
- * (4) Roads shall not be located in wetlands if there would be substantial loss or damage to wetland functions or acreage, unless the department has determined that alternatives will cause greater damage to public resources.
- * (5) Minimize the number of stream crossings.
- * (6) Where stream crossings are necessary:
 - (a) Design stream crossings to minimize alterations to natural features;
 - (b) Locate and design culverts to minimize sediment delivery;
 - (c) Whenever practical, cross streams at right angles to the main channel; and
 - (d) Design stream crossings in Type S and F Waters so as not to impede fish passage at any life stage.
- * (7) Avoid duplicative roads by keeping the total amount of construction to a minimum. Use existing roads whenever practical and avoid isolating patches of timber which, when removed, may require unnecessary road construction.
- * (8) All new road construction on side slopes that exceed sixty percent, which have the potential to deliver sediment to any typed water or wetland must utilize full bench construction techniques, including end hauling, over hauling or other special techniques. The department may waive the full bench construction requirement if a site review is conducted and the absence of delivery potential to any typed water or wetlands is determined.
- (9) Use the minimum design standard that produces a road sufficient to carry the anticipated traffic load with reasonable safety.

- * (10) Subgrade width should average not more than thirty-two feet for double lane roads and twenty feet for single lane roads, exclusive of ditches, plus any additional width necessary for safe operations on curves and turnouts. Where road location in wetlands is unavoidable (see WAC 222-24-015 (1)(b)), minimize subgrade width.
- (11) Balance excavation and embankments so that as much of the excavated material as is practical will be deposited in the roadway fill sections. Where full bench construction is necessary, design suitable embankments so that the excavated material may be end hauled to appropriate deposit areas.
- (12) Cut and fill slopes must be designed and constructed in a manner that will assure a high likelihood of remaining stable throughout the life of the road.
- * (13) All roads shall be outsloped or ditched on the uphill side and appropriate surface drainage shall be provided by the use of adequate drainage structures such as: Cross drains, ditches, drivable dips, relief culverts, water bars, diversion ditches, or other such structures demonstrated to be equally effective.
- * (14) Drainage structures shall not discharge onto erodible soils, or over fill slopes unless adequate outfall protection is provided.
- * (15) Relief culverts installed on forest roads shall meet the following minimum specifications: (See board manual section 3 for culvert spacing.)
 - (a) Be at least eighteen inches in diameter or equivalent in western Washington and fifteen inches in diameter or equivalent in eastern Washington.
 - (b) Be installed in a manner that efficiently captures ditchline flow and passes it to the outside of the road.
- * (16) Ditch diversion. Where roadside ditches slope toward any typed water, or Type A or B Wetland, a ditch relief structure must be located as close to the stream crossing or wetland as possible so it drains off before reaching the stream. On stream-adjacent parallel roads, relief culverts shall be located at maximum distances from stream channels to minimize sediment delivery. The relief structure must allow the sediment to be deposited onto the forest floor and not carry surface water or sediment into the stream channel or wetland.
- * (17) Outslope the road surface where practical. Where outsloping is not practical, provide a ditch with drainage structure on the inside of the road, except where roads are constructed in rock or other materials not readily susceptible to erosion.
- * (18) Crown or slope the road to prevent the accumulation of water on the road surface.
- * (19) Install rock armor headwall inlets on all stream-crossing culverts where the stream gradient above the crossing is greater than six percent.
- * (20) Install rock armored headwalls and rock armored ditchblocks for drainage structure culverts located on erodible soils or where the affected road has a gradient greater than six percent.
- * (21) Install drainage structures at locations where seeps and springs are known or discovered during construction to route accumulated surface water across the road prism. The water from the seeps and springs must be returned to the forest floor as close to the point of origin as reasonably practicable.
- * (22) In addition to information required for a complete application, the department may require more detailed information for proposed road construction, including:
 - (a) A map with detailed topographic information showing the location and alignment of the road in relation to all typed water and wetlands as required in WAC 222-16-035;
 - (b) Location, size, alignment and number of water crossing and drainage structures;

- (c) Detailed site plans and designs for fish passage projects, bridges, and large culverts or other complex elements of the proposal; and
- (d) Other information identified by the department.

WAC 222-24-026 *Temporary roads. Temporary roads as defined in WAC 222-16-010 shall:

- (1) Be constructed in a manner to facilitate closure and abandonment when the intended use is completed.
- (2) Be designed to provide the same level of protection for public resources as provided by the rules during the length of its use.
- (3) Be identified on the forest practices application or notification, along with an abandonment date. Abandonment must be accomplished under WAC 222-24-052*(3) to the specifications approved by the department by the date specified in the approved forest practices application.

WAC 222-24-030 Road construction.

- (1) Right of way timber shall be removed or decked in suitable locations where the decks will not be covered by fill material or act as support for the fill or embankment.
- *(2) In permanent road construction, do not bury:
 - (a) Loose stumps, logs or chunks if they will contribute more than 5 cubic feet in the load-bearing portion of the road.
 - (b) Any significant amount of organic debris within the top 2 feet of the load-bearing portion of the road.
 - (c) Excessive accumulation of debris or slash in any part of the load-bearing portion of the road fill.
- (3) Compact fills. During road construction, fills or embankments shall be built up by layering. Each layer shall be compacted by operating the tractor or other construction equipment over the entire surface of the layer. Chemical compacting agents may be used in accordance with WAC 222-38-020.
- *(4) Stabilize soils. Erodible soil disturbed during road construction and located where it could reasonably be expected to enter the stream network must be seeded with noninvasive plant species. The use of local area native species, adapted for rapid revegetation is preferred. Treatment with other erosion control measures may be approved by the department.
- *(5) Channel clearance. Within 50 feet upstream from a culvert inlet clear stream channel of all debris and slash generated by the operations that reasonably may be expected to plug the culvert prior to the removal of equipment from the vicinity, or the winter season, whichever is first. (See the board manual, section 4 for debris removal guidelines.)
- *(6) Drainage.
 - (a) All required ditches and drainage structures shall be installed concurrently with the construction of the roadway.
 - (b) Uncompleted road construction to be left over the winter season or other extended periods of time shall be drained by outsloping or drainage structures. Water bars and/or dispersion ditches may also be used to minimize eroding of the construction area and stream siltation. Water movement within wetlands must be maintained.
- *(7) Moisture conditions. Construction shall be accomplished when moisture and soil conditions are not likely to result in excessive erosion and/or soil movement, so as to avoid damage to public resources.

- * (8) End haul/sidecasts. End haul or overhaul construction is required where significant amounts of sidecast material would rest below the 100-year flood level of any typed water, within the boundary of a Type A or Type B Wetland or wetland management zones or where the department determines there is a potential for mass soil failure from overloading on unstable slopes or from erosion of side cast material causing damage to the public resources.
- * (9) Waste disposal. When spoil, waste and/or other debris is generated during construction, this material shall be deposited or wasted in suitable areas or locations and be governed by the following:
 - (a) Spoil or other debris shall be deposited above the 100-year flood level of any typed waters or in other suitable locations to prevent damage to public resources. The material shall be stabilized using the recommended schedule and procedures found in the board manual, section 3.
 - (b) All spoils shall be located outside of Type A and Type B Wetlands and their wetland management zones. Spoils shall not be located within the boundaries of forested wetlands without written approval of the department and unless a less environmentally damaging location is unavailable. No spoil area greater than 0.5 acre in size shall be allowed within wetlands. (See WAC 222-24-015, Construction in wetlands.)
- (10) Disturbance avoidance for northern spotted owls. Road construction, operation of heavy equipment and blasting within a SOSEA boundary shall not be allowed within 0.25 mile of a northern spotted owl site center between March 1 and August 31, provided that, this restriction shall not apply if:
 - (a) The landowner demonstrates that the owls are not actively nesting during the current nesting season; or
 - (b) The forest practice is operating in compliance with a plan or agreement developed for the protection of the northern spotted owl under WAC 222-16-080 (6)(a), (e), or (f).
- (11) Disturbance avoidance for marbled murrelets.
 - (a) Road construction and operation of heavy equipment shall not be allowed within 0.25 mile of an occupied marbled murrelet site during the daily peak activity periods within the critical nesting season; and
 - (b) Blasting shall not be allowed within 0.25 mile of an occupied marbled murrelet site during the critical nesting season.
 - (c) Provided that, these restrictions shall not apply if the forest practice is operating in compliance with a plan or agreement developed for the protection of the marbled murrelet under WAC 222-16-080 (6)(a) or (c).

WAC 222-24-035 Landing location and construction.

- (1) Landing location:

Locate landings to prevent potential or actual damage to public resources. Avoid excessive excavation and filling. Landings shall not be located within natural drainage channels, channel migration zones, RMZ core and inner zones, Type Np RMZs, sensitive sites, equipment limitation zones, and Type A or B Wetlands or their wetland management zones. Minimize placement and size of landings within forested wetlands. (See WAC 222-24-015, Construction in wetlands.)
- (2) Landing construction.

- (a) Landings requiring sidecast or fill shall be no larger than reasonably necessary for safe operation of the equipment expected to be used.
 - * (b) Where the slopes exceed 60 percent, fill material used in construction of landings shall be free from loose stumps and excessive accumulations of slash and shall be mechanically compacted where necessary and practical in layers by tractor to prevent soil erosion and mass soil movement. Chemical compacting agents may be used in accordance with WAC 222-38-020.
 - * (c) Truck roads, skid trails, and fire trails shall be outsloped or cross drained uphill of landings and the water diverted onto the forest floor away from the toe of any landing fill.
 - * (d) Landings shall be sloped to minimize accumulation of water on the landing.
 - * (e) Excavation material shall not be sidecast where there is high potential for material to enter wetland management zones or within the bankfull width of any stream or the 100-year flood level of any typed water.
 - * (f) All spoils shall be located outside of Type A and Type B Wetlands and their wetland management zones. Spoils shall not be located within the boundaries of forested wetlands without written approval of the department and unless a less environmentally damaging location is unavailable. No spoil area greater than 0.5 acre in size shall be allowed within wetlands. (See WAC 222-24-015, Construction in wetlands.)
- * (3) **Temporary landings.**
- (a) A temporary landing is intended for use during the life of an approved application/notification.
 - (b) It must be constructed to facilitate abandonment when the intended use is complete or upon seasonal shutdown, whichever is sooner.
 - (c) It must be designed to provide the same level of protection for public resources as provided by the rules during the length of its intended use.
 - (d) Temporary landings must be identified on the forest practices application or notification, along with an abandonment date.
 - (e) Temporary landings must be abandoned to the specifications approved by the department by the date specified on the approved forest practices application.

WAC 222-24-038 *Preapplication consultation and road-related forest practices hydraulic projects. [Effective 12/30/13]

Landowners contemplating forest practices hydraulic projects related to road construction and maintenance are encouraged to consult with the department and the department of fish and wildlife prior to submitting an application to help ensure that project plans and specifications meet fish protection standards.

WAC 222-24-040 *Water crossing structures for all typed waters. [Effective 12/30/13]

- (1) Bridges are required for new crossings and reconstructed crossings of any typed waters regularly used for recreational boating.
- (2) Structures containing concrete must be sufficiently cured prior to contact with water.
- (3) One end of each new or reconstructed permanent log or wood bridge shall be tied or firmly anchored if any of the bridge structure is within ten vertical feet of the 100-year flood level.

- (4) Alterations or disturbance of the stream bed, bank or bank vegetation must be limited to that necessary to construct the project. All disturbed areas must be stabilized and restored according to the recommended schedule and procedures found in board manual section 5. This requirement may be modified or waived by the department, in consultation with the department of fish and wildlife, if precluded by engineering or safety factors.
- (5) When earthen materials are used for bridge surfacing, only clean sorted gravel may be used, a geotextile lining must be installed and curbs of sufficient size shall be installed to a height above the surface material to prevent surface material from falling into the stream bed.
- (6) Wood removed from the upstream end of culverts and bridges will be placed at the downstream end of such culverts and bridges in such a way as to minimize obstruction of fish passage and to the extent practical, while avoiding significant disturbance of sediment in connection with maintenance activities.
- (7) Fords.
 - (a) New ford construction requires a forest practices application.
 - (b) The entry and exit points of a new ford must not be within one hundred feet upstream or downstream of another ford.
 - (c) The following activities associated with established fords require a forest practices application:
 - (i) Ford repair with equipment or construction work waterward of the ordinary high water line;
 - (ii) Driving a vehicle or operating equipment on or across wetted stream beds at areas other than established fords.
 - (d) Driving a vehicle or operating equipment on or across an established ford does not require a forest practices application. "**Established ford**" means a crossing place in a watercourse that was in existence and annually used prior to 1986 or subsequently permitted by the department of fish and wildlife or the department, and has identifiable approaches on the banks.

WAC 222-24-041 *Water crossing structures in Type S and F Waters. [Effective 12/30/13]

- (1) In Type Sand F Waters, bridges are preferred as water crossing structures in order to ensure free and unimpeded fish passage for adult and juvenile fishes and preserve spawning and rearing habitat. Pier placement waterward of the ordinary high water line shall be avoided where practical. Other structures which may be approved include, in descending order of preference: Temporary culverts; bottomless arch culverts; arch culverts; round culverts; and fords. Corrugated culverts are generally preferred over smooth surfaced culverts. Culvert baffles and downstream control weirs are discouraged except to correct fish passage problems at existing structures.
- (2) An approved forest practices application is required for construction, structural work, and maintenance associated with any bridge structure. Typical maintenance includes painting and other activities where there is potential for wastage of paint, sandblasting material, sediments, or bridge parts into the water, or where the work, including equipment operation, occurs waterward of the ordinary high water line.
- (3) Water crossing structure projects shall incorporate mitigation measures as necessary to achieve no-net-loss of productive capacity of fish and shellfish habitat.

- (4) **Bridge construction.**
- (a) Excavation for and placement of the foundation and superstructure shall be outside the ordinary high water line unless the construction site is separated from the stream by use of an approved dike, cofferdam, or similar structure.
 - (b) The bridge structure or stringers shall be placed in a manner to minimize damage to the bed.
 - (c) Alteration or disturbance of bank or bank vegetation shall be limited to that necessary to construct the project. All disturbed areas shall be protected from erosion within seven days of completion of the project, using vegetation or other means. The banks shall be revegetated with native or other approved woody species, or stabilized with the other erosion control techniques, and maintained as necessary to ensure survival. See board manual section 5 for technical guidance.
 - (d) Removal of existing or temporary structures shall be accomplished so that the structure and associated material does not enter the stream.
 - (e) The bridge shall be constructed, according to the approved design, to pass the 100-year flood level and debris likely to be encountered. Exception shall be granted if applicant provides hydrologic or other information that supports alternative design criteria.
 - (f) Wastewater from project activities and water removed from within the work area shall be routed and deposited to the forest floor in an upland area, or above the 100-year flood level if present, to allow removal of fine sediment and other contaminants prior to being discharged to typed waters.
 - (g) Structures containing concrete shall be sufficiently cured prior to contact with water to avoid leaching.
 - (h) Abutments, piers, piling, sills, approach fills, etc., shall not constrict the flow so as to cause any appreciable increase (not to exceed 0.2 feet) in backwater elevation (calculated at the 100-year flood level) or channel wide scour and shall be aligned to cause the least effect on the hydraulics of the watercourse.
 - (i) Riprap materials used for structure protection shall be angular rock and the placement shall be installed according to an approved design to withstand the 100-year flood level.
 - (j) Wood or other materials treated with preservatives shall be sufficiently cured to minimize leaching into the water or bed. The use of creosote or pentachlorophenol is not allowed.
- (5) **Temporary culvert installation.** The allowable placement of temporary culverts and time limitations shall be determined by the department based on the specific fish resources of concern at the proposed location of the culvert. See board manual section 5 for guidance on temporary culvert installation.
- (a) Where fish passage is a concern, temporary culverts shall be installed according to an approved design to provide adequate fish passage. In these cases, the temporary culvert installation shall meet the fish passage design criteria in Table 1 in subsection (6) of this section.
 - (b) Where culverts are left in place during the period of September 30th to June 15th, the culvert shall be designed to maintain structural integrity to the 100-year flood level with consideration of the debris loading likely to be encountered.

- (c) Where culverts are left in place during the period June 16th to September 30th, the culvert shall be designed to maintain structural integrity at a peak flow expected to occur once in 100 years during the season of installation.
 - (d) Disturbance of the bed and banks shall be limited to that necessary to place the culvert and any required channel modification associated with it. Affected bed and bank areas outside the culvert shall be restored to preproject condition following installation of the culvert.
 - (e) The culvert shall be installed in the dry, or in isolation from stream flow by the installation of a bypass flume or culvert, or by pumping the stream flow around the work area. Exception may be granted if siltation or turbidity is reduced by installing the culvert in the flowing stream. The bypass reach shall be limited to the minimum distance necessary to complete the project. Fish stranded in the bypass reach shall be safely removed to the flowing stream.
 - (f) Wastewater from project activities and dewatering shall be routed and deposited to the forest floor in an upland area, or above the 100-year flood level if present, to allow removal of fine sediment and other contaminants prior to being discharged to typed waters.
 - (g) Imported fill which will remain in the stream after culvert removal shall consist of clean rounded gravel ranging in size from one-quarter to three inches in diameter. The use of angular rock may be approved from June 16th to September 30th, where rounded rock is unavailable. Angular rock shall be removed from the watercourse and the site restored to preproject conditions upon removal of the temporary culvert.
 - (h) The culvert and fill shall be removed and the disturbed bed and bank areas shall be reshaped to preproject configuration. All disturbed areas shall be protected from erosion, within seven days of completion of the project, using vegetation or other means. The banks shall be revegetated with native or other approved woody species, or stabilized with other approved erosion control techniques, and maintained as necessary to ensure survival. See board manual section 5 for technical guidance.
 - (i) The temporary culvert shall be removed and the approaches shall be blocked to vehicular traffic prior to the expiration of the work window as conditioned for the specific hydraulic project in the forest practices application.
 - (j) Temporary culverts must be removed prior to the expiration of the forest practices application.
- (6) **Permanent culvert installation.**
- (a) In fish bearing waters or waters upstream of a fish passage barrier (which can reasonably be expected to be corrected, and if corrected, fish presence would be reestablished), culverts shall be designed and installed so as not to impede fish passage. Culverts shall only be approved for installation in spawning areas where full replacement of impacted habitat is provided by the applicant.
 - (b) To facilitate fish passage, culverts shall be designed to the following standards:
 - (i) Culverts may be approved for placement in small streams if placed on a flat gradient with the bottom of the culvert placed below the level of the stream bed a minimum of twenty percent of the culvert diameter for round culverts, or twenty percent of the vertical rise or structure height for elliptical culverts (this depth consideration does not apply within bottomless culverts). Footings of bottomless culverts shall be buried sufficiently deep so they will not become

exposed by scour within the culvert. The twenty percent placement below the stream bed shall be measured at the culvert outlet. The culvert width at the bed, or footing width, shall be equal to or greater than the average width of the bed of the stream.

- (ii) Where culvert placement is not feasible as described in (b)(i) of this subsection, the culvert design shall include the elements in(b)(ii)(A) through (E) of this subsection:
 - (A) Water depth at any location within culverts as installed and without a natural bed shall not be less than that identified in Table 1. The low flow design, to be used to determine the minimum depth of flow in the culvert, is the two-year seven-day low flow discharge for the subject basin or ninety-five percent exceedance flow for migration months of the fish species of concern. Where flow information is unavailable for the drainage in which the project will be conducted, calibrated flows from comparable gauged drainages may be used, or the depth may be determined using the installed no-flow condition.
 - (B) The high flow design discharge, used to determine maximum velocity in the culvert (see Table 1), is the flow that is not exceeded more than ten percent of the time during the months of adult fish migration. The two-year peak flood flow may be used where stream flow data are unavailable.
 - (C) The hydraulic drop is the abrupt drop in water surface measured at any point within or at the outlet of a culvert. The maximum hydraulic drop criteria must be satisfied at all flows between the low and high flow design criteria.
 - (D) The bottom of the culvert shall be placed below the natural channel grade a minimum of twenty percent of the culvert diameter for round culverts, or twenty percent of the vertical rise or structural height for elliptical culverts (this depth consideration does not apply within bottomless culverts). The downstream bed elevation, used for hydraulic calculations and culvert placement in relation to bed elevation, shall be taken at a point downstream at least four times the average width of the stream (this point need not exceed twenty-five feet from the downstream end of the culvert). The culvert capacity for flood design flow shall be determined by using the remaining capacity of the culvert.

Table 1
Fish Passage Design Criteria for Culvert Installation

Criteria	Adult Trout > 6 in. (150 mm)	Adult Pink, Chum Salmon	Adult Chinook, Coho, Sockeye, Steelhead
1. Velocity, Maximum (fps)			
Culvert Length (ft)			
a. 10 - 60	4.0	5.0	6.0
b. 60 - 100	4.0	4.0	5.0
c. 100 - 200	3.0	3.0	4.0
d. > 200	2.0	2.0	3.0
2. Flow Depth Minimum (ft)	0.8	0.8	1.0
3. Hydraulic Drop, Maximum (ft)	0.8	0.8	1.0

- (E) Appropriate statistical or hydraulic methods must be applied for the determination of flows in (b)(ii)(A) and (B) of this subsection. These design flow criteria may be modified for specific proposals as necessary to address unusual fish passage requirements, where other approved methods of empirical analysis are provided, or where the fish passage provisions of other special facilities are approved by the department.
- (F) Culvert design shall include consideration of flood capacity for current conditions and future changes likely to be encountered within the stream channel, and debris and bedload passage.
- (c) Culverts shall be installed according to an approved design to maintain structural integrity to the 100-year flood level with consideration of the debris loading likely to be encountered. Exception may be granted if the applicant provides justification for a different level or a design that routes the flow past the culvert without jeopardizing the culvert or associated fill.
- (d) Disturbance of the bed and banks shall be limited to that necessary to place the culvert and any required channel modification associated with it. Affected bed and bank areas outside the culvert and associated fill shall be revegetated with native or other approved woody species, or stabilized with other approved erosion control techniques, and maintained as necessary to ensure survival. See board manual section 5 for technical guidance.
- (e) Fill associated with the culvert installation shall be protected from erosion to the 100-year flood level.
- (f) Culverts shall be designed and installed to avoid inlet scouring and shall be designed in a manner to prevent erosion of stream banks downstream of the project.

- (g) Where fish passage criteria are required, the culvert facility shall be maintained by the landowner(s), such that fish passage design criteria in Table 1 are not exceeded. If the structure becomes a hindrance to fish passage, the landowner shall be responsible for obtaining an approved forest practices application and providing prompt repair.
 - (h) The culvert shall be installed in the dry or in isolation from the stream flow by the installation of a bypass flume or culvert, or by pumping the stream flow around the work area. Exception may be granted if siltation or turbidity is reduced by installing the culvert in the flowing stream. The bypass reach shall be limited to the minimum distance necessary to complete the project. Fish stranded in the bypass reach shall be safely removed to the flowing stream.
 - (i) Wastewater from project activities and dewatering shall be routed to the forest floor in an upland area, or above the 100-year flood level if present, as necessary to allow removal of fine sediment and other contaminants prior to being discharged to any typed water or wetland.
- (7) **Alternative designs** will be considered if they can be demonstrated to meet or exceed fish protection standards. Alternative designs may require additional review.

WAC 222-24-042 *Water crossing structures in Type Np and Ns Waters. [Effective 12/30/13]

- * (1) **Bridges over Type Np and Ns Waters.** In addition to the applicable general provisions in WAC 222-24-040, the installation, maintenance, and removal of permanent bridges in or across Type Np and Ns Waters are subject to the following:
- (a) Permanent bridges must not constrict clearly defined channels and must be designed and installed to pass the 100-year flood. The bridge and its associated embankments and fills must provide sufficient erosion protection to withstand a 100-year flood event.
 - (b) Excavation for and placement of the bridge foundation and superstructure must be located and conducted from outside the outer edge of the bankfull width. This requirement may be waived by the department if it can be demonstrated that these activities may be conducted in such a manner to prevent damage to public resources.
 - (c) Earthen embankments constructed for use as bridge approaches must be provided with sufficient erosion protection to withstand a 100-year flood event.
- * (2) **Culvert installation for Type Np and Ns Waters.** In addition to applicable general provisions in WAC 222-24-040, the installation, maintenance and removal of permanent culverts in or across Type Np and Ns Waters are subject to the following provisions:
- (a) All permanent culverts must be designed to pass the 100-year flood event with consideration for the passage of debris likely to be encountered.
 - (b) The culvert and its associated embankments and fills must have sufficient erosion protection to withstand the 100-year flood event. Erosion protection may include armored overflows or the use of clean coarse fill material.
 - (c) If the department determines that because of unstable slopes the culvert size shown in board manual section 5, "Determining Culvert Size, Method A" would be inadequate to protect public resources, it may require a larger culvert designed using generally accepted engineering principles that meet the standards in (a) and (b) of this subsection.
 - (d) No permanent culverts shall be installed that are smaller than:
 - (i) Twenty-four inches for Type Np Waters;

- (ii) Eighteen inches for Type Ns Waters in western Washington; and
 - (iii) Fifteen inches for Type Ns Waters in eastern Washington.
 - (e) The alignment and slope of the culvert shall parallel the natural flow of the stream whenever possible.
 - (f) Culverts must be designed and installed so they will not cause scouring of the stream bed and erosion of the banks in the vicinity of the project.
 - (g) When the department determines that installing a culvert in a flowing stream will result in excessive siltation and turbidity, and siltation and turbidity would be reduced if stream flow were diverted, the department shall require the stream flow be diverted using a bypass flume or culvert, or by pumping the stream flow around the work area. This may include culvert installations that are within 0.25 miles of a Type S or F Water or within two miles of a hatchery intake in consultation with the department of fish and wildlife.
 - (h) Fill associated with culvert installation must have sufficient erosion protection to withstand the 100-year flood event.
 - (i) Stream beds shall be cleared for a distance of fifty feet upstream from the culvert inlet of such slash or debris that reasonably may be expected to plug the culvert.
 - (j) The entrance of all culverts shall have adequate headwalls constructed to minimize the possibility of erosion or fill failure.
- * (3) **Temporary water crossings in Type Np and Ns Waters.** In addition to the applicable general provisions above, installation, maintenance and removal of temporary bridges or other structures in or across Type Np and Ns Waters are subject to the following:
- (a) A temporary water crossing is intended for use during the life of an approved application/notification.
 - (b) It must be constructed to facilitate abandonment when the intended use is complete or upon seasonal shutdown, whichever is sooner.
 - (c) Temporary water crossings must be identified on the forest practices application or notification, along with an abandonment date.
 - (d) Temporary water crossings may be used:
 - (i) In western Washington if installed after June 1st and removed by September 30th of the same year.
 - (ii) In eastern Washington if installed after the spring runoff and removed prior to October 15th.
 - (iii) At other times, when the department and applicant can agree to specific dates of installation and removal and the extended dates result in equivalent levels of resource protection.
 - (e) Temporary water crossings must be designed to pass the highest peak flow event expected to occur during the length of its intended use.
 - (f) When the department determines that installing a culvert in a flowing stream will result in excessive siltation and turbidity, and siltation and turbidity would be reduced if stream flow were diverted, the department shall require the stream flow be diverted using a bypass flume or culvert, or by pumping the stream flow around the work area. This may include culvert installations that are within 0.25 miles of a Type S or F Water or within two miles of a hatchery intake.
 - (g) Temporary water crossings shall be promptly removed and abandoned to the specifications approved by the department upon completion of use or by the date

specified in the approved forest practices application, whichever is earlier.

Approaches to the crossing shall be water barred and stabilized at the time of the crossing removal. The department may waive removal of the water crossing if the applicant secures an amended forest practices application, and the structure and its approaches meet all of the requirements of a permanent water crossing structure.

- (h) Temporary wetland crossings shall be abandoned and restored based on a written plan approved by the department prior to construction.
- (i) Temporary water crossings must be designed to provide the same level of protection for public resources as provided by rules during the length of its use.

WAC 222-24-044 *Temporary bypass culverts, flumes, or channels. [Effective 12/30/13]

Temporary bypass culvert, flume, or channel projects shall incorporate mitigation measures as necessary to achieve no-net-loss of productive capacity of fish and shellfish habitat. The following shall apply to temporary bypass culvert, flume, or channel projects:

- (1) The temporary bypass culvert, flume, or channel shall be in place prior to initiation of other work in the wetted perimeter.
- (2) A sandbag revetment or similar device shall be installed at the inlet to divert the entire flow through the culvert, flume, or channel.
- (3) A sandbag revetment or similar device shall be installed at the downstream end of the culvert, flume, or channel to prevent backwater from entering the work area.
- (4) The culvert, flume, or channel shall be of sufficient size to pass flows and debris for the duration of the project.
- (5) For diversion of flow into a temporary channel the relevant provisions of WAC 222-110-080, channel change/realignment, shall apply.
- (6) Prior to releasing the water flow to the project area, all bank protection or armoring shall be completed. See board manual section 5 for project site preparation best management practices.
- (7) Upon completion of the project, all material used in the temporary bypass shall be removed from the site and the site returned to preproject conditions.
- (8) The department may require fish capture and safe transport from the project site to the nearest free-flowing water if fish could be adversely impacted as a result of the project. The department of fish and wildlife may assist in capturing and safely removing fish to free-flowing water if personnel are available.
- (9) Alteration or disturbance of the banks and bank vegetation shall be limited to that necessary to construct the project. All disturbed areas shall be protected from erosion within seven days of completion of the project using vegetation or other means. The banks shall be revegetated with native or other approved woody species, or stabilized with other approved erosion control techniques, and maintained as necessary to ensure survival. See board manual section 5 for technical guidance.

WAC 222-24-046 *Bank protection. [Effective 12/30/13]

Bio-engineering is the preferred method of bank protection where practical. Bank protection projects shall incorporate mitigation measures as necessary to achieve no-net-loss of productive capacity of fish and shellfish habitat. The following shall apply to bank protection projects:

- (1) Bank protection work shall be restricted to work necessary to protect eroding banks.

- (2) Bank protection material placement waterward of the ordinary high water line shall be restricted to the minimum amount necessary to protect the toe of the bank, or for installation of mitigation features approved by the department.
- (3) The toe shall be designed to protect the integrity of bank protection material.
- (4) Bank sloping shall be accomplished in a manner that avoids release of overburden material into the water. Overburden material resulting from the project shall be deposited so as not to reenter the water.
- (5) Alteration or disturbance of the bank and bank vegetation shall be limited to that necessary to construct the project. All disturbed areas shall be protected from erosion within seven days of completion of the project using vegetation or other means. The banks, including riprap areas, shall be revegetated with native or other approved woody species, or stabilized with other approved erosion control techniques, and maintained to ensure survival. See board manual section 5 for technical guidance.
- (6) Fish habitat components such as logs, stumps, and/or large boulders may be required as part of the bank protection project to mitigate project impacts. These fish habitat components shall be installed according to an approved design to withstand 100-year peak flows.
- (7) When rock or other hard materials are approved for bank protection, the following provisions shall apply:
 - (a) Bank protection material shall be angular rock. The project shall be designed and the rock installed to withstand 100-year peak flows. River gravels shall not be used as exterior armor, except as specifically approved by the department.
 - (b) Bank protection and filter blanket material shall be placed from the bank or a barge. Dumping onto the bank face shall be permitted only if the toe is established and the material can be confined to the bank face.

WAC 222-24-050 *Road maintenance and abandonment. *[Effective 10/3/2011]*

The goals for road maintenance are established in WAC 222-24-010. Guidelines for how to meet these goals and standards are in board manual section 3. Replacement will not be required for existing culverts functioning with little risk to public resources or for culverts installed under an approved forest practices application or notification and are capable of passing fish, until the end of the culvert's functional life.

The goals for road maintenance outlined in this chapter are expected to be achieved by October 31, 2016. The strategies for achieving the goals are different for large forest landowners and small forest landowners.

For large forest landowners, all forest roads must be improved and maintained to the standards of this chapter prior to October 31, 2016; however, large or small forest landowners may request an extension of up to five years, or October 31, 2021, as outlined in WAC 222-24-051 (8). Work performed toward meeting the standards must generally be even flow over the performance period with priorities for achieving the most benefit to the public resources early in the period. These goals will be achieved through the road maintenance and abandonment plan process outlined in WAC 222-24-051.

For small forest landowners, the goals will be achieved through the road maintenance and abandonment plan process outlined in WAC 222-24-0511, by participation in the state-led family forest fish passage program, and by compliance with the Forest Practices Act and rules. The purpose of the family forest fish passage program is to assist small forest landowners in providing fish

passage by offering cost-share funding and prioritizing projects on a watershed basis, fixing the worst fish passage barriers first. The department, in consultation with the departments of ecology and fish and wildlife, will monitor the extent, effectiveness, and progress of checklist road maintenance and abandonment plan implementation and report to the legislature and the board by December 31, 2008, and December 31, 2013.

WAC 222-24-051 *Large forest landowner road maintenance schedule. [Effective 10/3/11]

All forest roads must be included in an approved road maintenance and abandonment plan by July 1, 2006. This includes all roads that were constructed or used for forest practices after 1974. Inventory and assessment of orphan roads must be included in the road maintenance and abandonment plans as specified in WAC 222-24-052(4).

- * (1) Landowners must maintain a schedule of submitting plans to the department that cover 20% of their roads or land base each year.
- (2) For those portions of their ownership that fall within a watershed administrative unit covered by an approved watershed analysis plan, chapter 222-22 WAC, landowners may follow the watershed administrative unit-road maintenance plan, providing the roads they own are covered by the plan. A proposal to update the road plan to meet the current road maintenance standards must be submitted to the department for review on or before the next scheduled road maintenance plan review. If annual reviews are not required as part of the watershed analysis road plan, the plan must be updated by October 1, 2005. All roads in the planning area must be in compliance with the current rules by October 31, 2016 or by the extension deadline approved by the department under subsection (8) of this section.
- * (3) Plans will be submitted by landowners on a priority basis. Road systems or drainages in which improvement, abandonment or maintenance have the highest potential benefit to the public resource are the highest priority. Based upon a “worst first” principle, work on roads that affect the following are presumed to be the highest priority:
 - (a) Basins containing, or road systems potentially affecting, waters which either contain a listed threatened or endangered fish species under the federal or state law or a water body listed on the current 303(d) water quality impaired list for road related issues.
 - (b) Basins containing, or road systems potentially affecting, sensitive geology/soils areas with a history of slope failures.
 - (c) Road systems or basins where other restoration projects are in progress or may be planned coincident to the implementation of the proposed road plan.
 - (d) Road systems or basins likely to have the highest use in connection with future forest practices.
- * (4) Based upon a “worst first” principle, road maintenance and abandonment plans must pay particular attention to:
 - (a) Roads with fish passage barriers;
 - (b) Roads that deliver sediment to typed water;
 - (c) Roads with evidence of existing or potential instability that could adversely affect public resources;
 - (d) Roads or ditchlines that intercept ground water; and
 - (e) Roads or ditches that deliver surface water to any typed waters.
- * (5) Road maintenance and abandonment plans must include:

- (a) Ownership maps showing all forest roads, including orphan roads; planned and potential abandonment, all typed water, Type A and B Wetlands that are adjacent to or crossed by roads, stream adjacent parallel roads and an inventory of the existing condition; and
 - (b) Detailed description of the first years work with a schedule to complete the entire plan within the performance period; and
 - (c) Standard practices for routine road maintenance; and
 - (d) Storm maintenance strategy that includes prestorm planning, emergency maintenance and post storm recovery; and
 - (e) Inventory and assessment of the risk to public resources or public safety of orphaned roads; and
 - (f) The landowner or landowner representative's signature.
- * (6) Priorities for road maintenance work within plans are:
- (a) Removing fish passage barriers beginning on roads affecting the most habitat first, generally starting at the bottom of the basin and working upstream;
 - (b) Preventing or limiting sediment delivery (areas where sediment delivery or mass wasting will most likely affect bull trout habitat will be given the highest priority);
 - (c) Correcting drainage or unstable sidecast in areas where mass wasting could deliver to public resources or threaten public safety;
 - (d) Disconnecting road drainage from typed waters;
 - (e) Repairing or maintaining stream-adjacent parallel roads with an emphasis on minimizing or eliminating water and sediment delivery;
 - (f) Improving hydrologic connectivity by minimizing the interruption of surface water drainage, interception of subsurface water, and pirating of water from one basin to another; and
 - (g) Repair or maintenance work which can be undertaken with the maximum operational efficiency.
- * (7) Initial plans must be submitted to the department during the year 2001 as scheduled by the department.
- * (8) Requests to extend the completion date of road maintenance and abandonment plans may lead to the reapproval of the road maintenance and abandonment plan for up to five years, or October 31, 2021.
- (a) Landowner requests must be made at least one hundred twenty days prior to the plan's anniversary date of 2014 and must include:
 - (i) The length of time for the extension period; and
 - (ii) A revised road maintenance and abandonment plan according to subsections (3) through (6) of this section.
 - (b) The department shall provide forty-five days for the departments of ecology and fish and wildlife, affected tribes, and interested parties to review a revised road maintenance and abandonment plan.
 - (c) The approval or a denial of a road maintenance and abandonment plan's extension request will occur at least thirty days prior to the anniversary date of the initial plan's submittal.
 - (d) A landowner with an approved extension and revised road maintenance and abandonment plan must report work accomplished in accordance with subsection (9) of this section.

- * (9) Each year on the anniversary date of the plan's submittal, landowners must report work accomplished for the previous year and submit to the department a detailed description of the upcoming year's work including modifications to the existing work schedule. The department's review and approval will be conducted in consultation with the departments of ecology and fish and wildlife, affected tribes, and interested parties. The department will:
- (a) Review the progress of the plans annually with the landowner to determine if the plan is being implemented as approved; and
 - (b) The plan will be reviewed by the department and approved or returned to the applicant with concerns that need to be addressed within forty-five days of the plan's submittal.
 - (c) Additional plans will be signed by the landowner or the landowner's representative.
- * (10) The department shall require the use of standardized forms as referenced in board manual section 3 for landowners requesting extensions under subsection (8) of this section and for annual reporting under subsection (9) of this section.
- * (11) The department will facilitate an annual water resource inventory area (WRIA) meeting with landowners, the departments of fish and wildlife and ecology, affected tribes, the National Marine Fisheries Service, the U.S. Fish and Wildlife Service, affected counties, local U.S. Forest Service, watershed councils, and other interested parties. The purpose of the meeting is to:
- (a) Suggest priorities for road maintenance and abandonment planning; and
 - (b) Exchange information on road maintenance and stream restoration projects.
- * (12) Regardless of the schedule for plan development, roads that are currently used or proposed to be used for timber hauling must be maintained in a condition that prevents potential or actual damage to public resources. If the department determines that log haul on such a road will cause or has the potential to cause material damage to a public resource, the department may require the applicant to submit a plan to address specific issues or segments on the haul route.
- * (13) If a landowner is found to be out of compliance with the work schedule of an approved road maintenance and abandonment plan and the department determines that this work is necessary to prevent potential or actual damage to public resources, then the department will exercise its authority under WAC 222-46-030 (notice to comply) and WAC 222-46-040 (stop work order) to restrict use of the affected road segment.
- (a) The landowner may submit a revised maintenance plan for maintenance and abandonment and request permission to use the road for log haul.
 - (b) The department must approve use of the road if the revised maintenance plan provides protection of the public resource and maintains the overall schedule of maintenance of the road system or basin.
- * (14) If a landowner is notified by the department that their road(s) has the potential to damage public resources, the landowner must, within 90 days, submit to the department for review and approval a plan or plans for those drainages or road systems within the area identified by the department.
- * (15) The department will notify the departments of ecology and fish and wildlife, affected tribes, and interested parties if actions taken under this section result in a change to an approved road maintenance and abandonment plan.

- (16) When the department approves or denies a road maintenance and abandonment plan extension under subsection (8) of this section, that decision may be appealed to the appeals board in accordance with RCW 43.21B.110 and 43.21B.230.

WAC 222-24-0511 *Small forest landowner road maintenance planning. [Effective 12/30/13]

- (1) Small forest landowners who own a total of eighty acres or less forest land in Washington state are not required to submit any road maintenance and abandonment plan for any block of forest land that contains twenty contiguous acres or less.
- (2) Small forest landowners other than those described in subsection (1) of this section, are only required to submit a checklist road maintenance and abandonment plan when they submit a forest practices application or notification that includes timber harvest or salvage. The checklist must include all their forest roads that are used for the forest practice. Instead of a checklist, landowners may submit a road maintenance and abandonment plan as described in WAC 222-24-051 with the following modifications:
- They are not required to submit an annual report.
 - If they participate in the family forest fish passage program, they may schedule their barrier projects accordingly.
- (3) Forest roads must be maintained only to the extent necessary to prevent damage to public resources.
- *(4) If the department determines that a road will cause or has the potential to cause damage to a public resource, the department may require the applicant to submit a compliance schedule of work to fix the problem(s) identified by the department.
- (5) Fish passage barriers will be assessed on a watershed basis focusing on fixing the worst barriers first.
- (a) The department's family forest fish passage program is available to assist with the removal, replacement, or repair of fish passage barriers that were installed prior to May 14, 2003. The program includes limits on landowner costs and the opportunity for in-kind contributions. One hundred percent public funding shall be provided if an existing barrier was installed under an approved forest practices application or a hydraulics project approval acquired prior to December 29, 2013, and that barrier becomes a high priority for replacement.
- (b) Small forest landowners who participate in the family forest fish passage program are not required to remove, replace or repair barriers until cost share funding is available and higher priority barriers on lands within the watershed have been removed or funded. Small forest landowners participating in the program may make use of prioritization without any obligations to receive funding from the program.

WAC 222-24-052 Road maintenance.

- *(1) Forest roads. Forest roads are defined in WAC 222-16-010. To the extent necessary to prevent potential or actual damage to public resources, the following maintenance shall be conducted on forest roads, except as addressed in subsections *(5) and *(6) of this section:
- (a) Drainage structures shall be kept functional.
- (b) Ground water that has been captured by ditchline must be diverted onto stable portions of the forest floor by using ditchouts, culverts or drivable dips.
- (c) Road surface must be maintained as necessary to:

- (i) Minimize erosion of the surface and the subgrade; and
 - (ii) Minimize direct delivery of surface water to typed water; and
 - (iii) Minimize sediment entry to typed water; and
 - (iv) Direct any ground water that is captured by the road surface onto stable portions of the forest floor.
- (d) During and on completion of the following operations, the road surface shall be crowned, outsloped, or water barred and berms removed from the outside edge except those intentionally constructed for protection of fills:
- (i) Log, pulp, chip, or specialized forest product haul;
 - (ii) Rock haul; and
 - (iii) Road building.
- (e) Before the first winter rainy season following termination of operations, drainage structures must be cleared and the road surface must be crowned, outsloped, water barred or otherwise left in a condition which prevents accelerated erosion, interruption of water movement within wetlands, mass wasting, or direct delivery of water or sediment to a typed water. (See the board manual section 3 for specific guidance.)
- (f) Thereafter, except as provided in (d) of this subsection, the landowner must clear or repair ditches or drainage structures that are known or should be known to be nonfunctional and causing or likely to cause material damage to a public resource.
- (g) The landowner will not be liable for penalties or monetary damages, under the act, for damage occurring from a condition brought about by public use, unless the landowner fails to make repairs as directed by a notice to comply.
- (h) During the regular course of road maintenance on stream-adjacent parallel roads, down wood that is blocking vehicle passage shall be placed on the side of the road closest to the adjacent water.
- * (2) **Additional drainage structure maintenance.** If the department determines, based on a field inspection and physical evidence, that the above road maintenance has been or will be inadequate to protect public resources, and that additional measures will provide adequate protection, the department will require the landowner or operator to install additional or larger drainage structures or other drainage improvements identified as necessary by the department.
- * (3) **Abandoned roads.** An abandoned road is a road which the forest landowner has abandoned in accordance with procedures of (a) through (e) of this subsection. Roads are exempt from maintenance under this section only after (e) of this subsection is completed.
- (a) Roads are outsloped, water barred, or otherwise left in a condition suitable to control erosion and maintain water movement within wetlands and natural drainages;
 - (b) Ditches are left in a suitable condition to reduce erosion;
 - (c) The road is blocked so that four wheel highway vehicles cannot pass the point of closure at the time of abandonment;
 - (d) Water crossing structures and fills on all typed waters are removed, except where the department determines other measures would provide adequate protection to public resources; and

- (e) The department shall determine whether the road has been abandoned according to procedures of this subsection. If the department determines the road is properly abandoned, it must notify the landowner in writing within thirty days that the road is officially abandoned.
- * (4) **Orphaned roads.** An orphaned road is a road or railroad grade that the forest landowner has not used for forest practices activities since 1974. Many of these roads are overgrown or closed off, but have not satisfied the abandonment process.
 - (a) An inventory and assessment, of the risk to public resources, or public safety must be completed by the landowner in conjunction with the road maintenance and abandonment plan.
 - (b) Five years after the effective date of this rule, when the extent of any problems associated with the orphaned roads is known, the hazard-reduction statute will be evaluated to determine if it is still needed and if funds for cost-sharing are needed to effect repair or abandonment of orphan roads. See RCW 76.09.300.
 - (c) Landowners are not obligated under this rule to repair or abandon such roads before the end of the five year period, but they can voluntarily take this action.
- * (5) **Brush control.** Chemical control of roadside brush will be done in accordance with WAC 222-38-020.
- * (6) **Road surface treatment.**
 - (a) Apply oil to the road surface only when the temperature is above 55 degrees F and during the season when there is a minimal chance of rain for the next 48 hours. Use of waste oil is subject to RCW 70.95I.060(5).
 - (b) Water the road surface prior to application of oil to assist in penetration.
 - (c) Construct a temporary berm along the road shoulder wherever needed to control runoff of the applied chemical.
 - (d) Take extreme care to avoid excess application of road chemicals. Shut off the flow at all bridges.
 - (e) Dispose of the rinse water fluids on the road surface or in a place safe from potential contamination of water when cleaning out chemical storage and application equipment tanks used for storage and application of road treatment materials.
 - (f) Comply with WAC 222-38-020 when using dry road chemicals.

WAC 222-24-060 Rock quarries, gravel pits, borrow pits, and spoil disposal areas. Not covered by the Surface Mine Reclamation Act of 1971 (chapter 78.44 RCW).

- * (1) **Location of pits.** Except as approved by the department, rock quarries and gravel pits opened after January 1, 1975 shall be located above the 100-year flood level.
- * (2) **Location of spoil disposal areas.** Except as approved by the department, spoil disposal areas shall be located:
 - (a) Above the 100-year flood level.
 - (b) Where the final slope after disposal will be no steeper than 1 1/2:1.
 - (c) Where practical, on areas having low potential timber productivity.
 - (d) Where the risk of sediment delivery from soil erosion and/or mass soil movement is minimal.
 - (e) All spoils shall be placed to allow drainage without additional water ponding.

- (f) All spoils shall be located outside of Type A and Type B Wetlands and their wetland management zones. Spoils shall not be located within the boundaries of forested wetlands without written approval of the department and unless a less environmentally damaging location is unavailable. No spoil area greater than 0.5 acre in size shall be allowed within wetlands. (See WAC 222-24-015.)
- * (3) **Pit drainage.** During construction and use of rock quarries, gravel pits, or borrow pits, runoff water shall be either diverted onto a stable portion of the forest floor or be passed through one or more settling basins as approved by the department.
- * (4) **Rehabilitation required.** All rock quarries, gravel pits, spoil disposal areas and borrow pits used after January 1, 1975 shall be reclaimed within 2 years from the time the rock or gravel source is either exhausted or abandoned.
- * (5) **Rehabilitation standards.** Where rehabilitation is required:
- (a) Remove all deleterious material that has potential for damaging the public resource, the soil productivity, or that would prevent reforestation of an otherwise plantable area.
 - (b) Grade slopes to less than the angle of repose unless otherwise approved.
 - (c) Reforest in accordance with chapter 222-34 WAC to the extent practical.
 - (d) Seed nonforested exposed erodible soils with grass, clover or other ground cover.
- * (6) **Major spoil disposal operations.** Where a spoil disposal operation involves more than 1,000 cubic yards of spoils:
- (a) The spoils shall be placed to provide drainage onto a stable portion of the forest floor without water ponding within the disposal area;
 - (b) The site shall be reforested in accordance with chapter 222-34 WAC to the extent practical; and
 - (c) If significant erosion of the spoils develops, the eroding areas shall be water barred and any unreforested areas shall be matted, mulched, or seeded with grass or ground cover.

Chapter 222-30 WAC

TIMBER HARVESTING

WACs in this chapter were in effect 7/2001 except some have been amended since 7/2001. The effective dates of the amended WACs are shown after the WAC headings.

WAC

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Note: Rules marked with an asterisk () pertain to water quality protection and have been adopted or amended by the Forest Practices Board with agreement from the Department of Ecology per WAC 222-12-010.*

WAC 222-30-010 Policy--Timber harvesting.

- *(1) This chapter covers all removal of timber from forest lands in commercial operations, commercial thinning, salvage of timber, relogging merchantable material left after prior harvests, postharvest cleanup, and clearing of merchantable timber from lands being converted to other uses. It does not cover removal of incidental vegetation or removal of firewood for personal use. To the extent practicable, the department shall coordinate activities using a multiple disciplinary planning approach.
- *(2) The goal of riparian rules is to protect aquatic resources and related habitat to achieve restoration of riparian function; and the maintenance of these resources once they are restored.
- *(3) The rules provide for the conversion and/or treatment of riparian forests which may be understocked, overstocked or uncharacteristically hardwood dominated while maintaining minimum acceptable levels of function on a landscape scale. The diversity of riparian forests across the landscapes is addressed by tailoring riparian prescriptions to the site productivity and tree community at any site.
- *(4) Wetland areas serve several significant functions in addition to timber production: Providing

fish and wildlife habitat, protecting water quality, moderating and preserving water quantity. Wetlands may also contain unique or rare ecological systems. The wetland management zone and wetland requirements specified in this chapter are designed to protect these wetland functions when measured over the length of a harvest rotation, although some of the functions may be reduced until the midpoint of the timber rotation cycle. Landowners are encouraged to voluntarily increase wetland acreage and functions over the long-term. Other laws or rules and/or permit requirements may apply. See chapter 222-50 WAC.

WAC 222-30-020 *Harvest unit planning and design. [Effective 3/24/21]

(1) Preapplication consultation and harvest-related forest practices hydraulic projects.

- (a) Landowners contemplating forest practices hydraulic projects related to timber harvest are encouraged to consult with the department and the department of fish and wildlife prior to submitting an application to help ensure that project plans and specifications meet fish protection standards.
- (b) Harvest-related forest practices hydraulic projects include, but are not limited to, projects associated with:
 - (i) Felling and bucking (WAC 222-30-050);
 - (ii) Cable yarding (WAC 222-30-060); and
 - (iii) Large woody material removal or repositioning (WAC 222-30-062).

(2) Logging system. The logging system, including forest biomass removal operations, should be appropriate for the terrain, soils, and timber type so that yarding or skidding can be economically accomplished and achieve the ecological goals of WAC 222-30-010 (2), (3) and (4) in compliance with these rules.

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

***(4) Western Washington riparian management zones.** (See WAC 222-30-021 and 222-30-023.)

***(5) Eastern Washington riparian management zones.** (See WAC 222-30-022 and 222-30-023.)

***(6) Riparian leave tree areas.** (See WAC 222-30-021, 222-30-022, and 222-30-023.)

***(7) Forested wetlands.** Within the wetland, unless otherwise approved in writing by the department, harvest methods shall be limited to low impact harvest or cable systems. Where feasible, at least one end of the log shall be suspended during yarding.

- (a) When forested wetlands are included within the harvest area, landowners are encouraged to leave a portion (thirty to seventy percent) of the wildlife reserve tree requirement for the harvest area within a wetland. In order to retain undisturbed habitat within forested wetlands, these trees should be left in clumps. Leave tree areas should be clumped adjacent to streams, riparian management zones, or wetland management zones where possible and they exist within forested wetlands. Green recruitment trees should be representative of the size and species found within the wetland. Leave nonmerchantable trees standing where feasible.
- (b) If a RMZ or WMZ lies within a forested wetland, the leave tree requirement associated with those areas may be counted toward the percentages in (a) of this subsection.
- (c) Where riparian associated wetlands are present in the outer zone of a RMZ, trees may be left in the zone to maximize wetland function. See WAC 222-30-021 *(1)(c)(ii).
- (d) If the conditions described in (a) and (b) of this subsection are met, the distribution requirements for wildlife reserve trees and green recruitment trees (subsection (12)(e) of this section) are modified as follows: For purposes of distribution, no point within the harvest unit shall be more than one thousand feet from a wildlife reserve tree and green recruitment tree retention area.

- (e) Approximate determination of the boundaries of forested wetlands greater than three acres shall be required. Approximate boundaries and areas shall be deemed to be sufficient for harvest operations.
- (f) The department shall consult with the department of fish and wildlife and affected Indian tribes about site specific impacts of forest practices on wetland-sensitive species in forested wetlands.

***(8) Wetland management zones (WMZ).** These zones shall apply to Type A and B Wetlands, as indicated in (a) of this subsection, and shall be measured horizontally from the wetland edge or the point where the nonforested wetland becomes a forested wetland, as determined by the method described in the board manual section 8, and shall be of an average width as described in (a) of this subsection. These zones shall not be less than the minimum nor more than the maximum widths described in (a) of this subsection. When these zones overlap a riparian management zone the requirement which best protects public resources shall apply.

***(a)** Wetland management zones (WMZ) shall have variable widths based on the size of the wetland and the wetland type, described as follows:

Wetland Management Zones

Wetland Type	Acres of Nonforested Wetland*	Maximum WMZ Width	Average WMZ Width	Minimum WMZ Width
A (including bogs)	Greater than 5	200 feet	100 feet	50 feet
A (including bogs)	0.5 to 5	100 feet	50 feet	25 feet
A (bogs only)	0.25 to 0.5	100 feet	50 feet	25 feet
B	Greater than 5	100 feet	50 feet	25 feet
B	0.5 to 5			25 feet
B	0.25 to 0.5	No WMZ required	No WMZ required	

*For bogs, both forested and nonforested acres are included.

- (b) Within the WMZ, leave a total of seventy-five trees per acre of WMZ greater than six inches dbh in Western Washington and greater than four inches dbh in Eastern Washington, twenty-five of which shall be greater than twelve inches dbh including five trees greater than twenty inches dbh, where they exist. Leave trees shall be representative of the species found within the WMZ.
- (c) Retain wildlife reserve trees where feasible. Type 1 and 3 wildlife reserve trees may be counted among, and need not exceed, the trees required in (b) of this subsection. Leave all cull logs on site.
- (d) Partial-cutting or removal of groups of trees is acceptable within the WMZ. The maximum width of openings created by harvesting within the WMZ shall not exceed one hundred feet as measured parallel to the wetland edge. Openings within WMZs shall be no closer than two hundred feet. Landowners are encouraged to concentrate leave trees within the WMZ to the wetland edge.

***(e)** Tractors, wheeled skidders, or other ground based harvesting systems shall not be used within the minimum WMZ width without written approval of the department.

- * (f) When ten percent or more of a harvest unit lies within a wetland management zone and either the harvest unit is a clearcut of thirty acres or less or the harvest unit is a partial cut of eighty acres or less, leave not less than fifty percent of the trees required in (b) of this subsection.
- * (9) **Type A or B Wetlands.** Within the boundaries of Type A or B Wetlands the following shall apply:
 - (a) Individual trees or forested wetland areas less than 0.5 acre in size may occur. These trees have a high habitat value to the nonforested wetland. Leave individual trees or forested wetlands less than 0.5 acre. These trees may be counted toward the WMZ requirements.
 - (b) Harvest of upland areas or forested wetlands which are surrounded by Type A or B Wetlands must be conducted in accordance with a plan, approved in writing by the department.
 - (c) No timber shall be felled into or cable yarded across Type A or B Wetlands without written approval of the department.
 - (d) Harvest shall not be allowed within a Type A Wetland which meets the definition of a bog.
- (10) **Future productivity.** Harvesting shall leave the land in a condition conducive to future timber production except:
 - (a) To the degree required for riparian management zones; or
 - (b) Where the lands are being converted to another use or classified urban lands as specified in WAC 222-34-050.
- (11) **Wildlife habitat.** This subsection is designed to encourage timber harvest practices that would protect wildlife habitats, provided, that such action shall not unreasonably restrict landowners action without compensation.
 - (a) The applicant should make every reasonable effort to cooperate with the department of fish and wildlife to identify critical habitats (state) as defined by the board. Where these habitats are known to the applicant, they shall be identified in the application or notification.
 - (b) Harvesting methods and patterns in established big game winter ranges should be designed to ensure adequate access routes and escape cover where practical.
 - (i) Where practical, cutting units should be designed to conform with topographical features.
 - (ii) Where practical on established big game winter ranges, cutting units should be dispersed over the area to provide cover, access for wildlife, and to increase edge effect.
- (12) **Wildlife reserve tree management.** In areas where leaving wildlife reserve trees under this section will not create a significant fire hazard, or significant hazard to overhead power lines and operations that are proposed in the vicinity of wildlife reserve trees will not create a significant safety or residential hazard nor conflict with achieving conformance with the limitation of or performance with the provisions of chapter 76.04 RCW (snag falling law) and chapter 49.17 RCW (safety), wildlife reserve trees will be left to protect habitat for cavity nesting wildlife in accordance with the following:
 - (a) For the purposes of this subsection the following defines eastern and western Washington boundaries for wildlife reserve tree management. Beginning at the International Border and Okanogan National Forest boundary at the N1/4 corner Section 6, T. 40N, R. 24E., W.M., south and west along the Pasayten Wilderness boundary to the west line of Section 30, T. 37N, R. 19E.,

Thence south on range line between R. 18E. and R. 19E., to the Lake Chelan-Sawtooth Wilderness at Section 31, T. 35N, R. 19E.,
Thence south and east along the eastern wilderness boundary of Lake Chelan-Sawtooth Wilderness to the west line of Section 18, T. 31N, R. 19E. on the north shore of Lake Chelan,
Thence south on the range line between R. 18E. and R. 19E. to the SE corner of T. 28N, R. 18E.,
Thence west on the township line between T. 27N, and T. 28N to the NW corner of T. 27N, R. 17E.,
Thence south on range line between R. 16E. and R. 17E. to the Alpine Lakes Wilderness at Section 31, T. 26N, R. 17E.,
Thence south along the eastern wilderness boundary to the west line of Section 6, T. 22N, R. 17E.,
Thence south on range line between R. 16E. and R. 17E. to the SE corner of T. 22N, R. 16E.,
Thence west along township line between T. 21N, and T. 22N to the NW corner of T. 21N, R. 15E.,
Thence south along range line between R. 14E. and R. 15E. to the SW corner of T. 20N, R. 15E.,
Thence east along township line between T. 19N, and T. 20N to the SW corner of T. 20N, R. 16E.,
Thence south along range line between R. 15E. and R. 16E. to the SW corner of T. 18N, R. 16E.,
Thence west along township line between T. 17N, and T. 18N to the SE corner of T. 18N, R. 14E.,
Thence south along range line between T. 14E. and R. 15E. to the SW corner of T. 14N, R. 15E.,
Thence south and west along Wenatchee National Forest boundary to the NW corner of T. 12N, R. 14E.,
Thence south along range line between R. 13E. and R. 14E. to the SE corner of T. 10N, R. 13E.,
Thence west along township line between T. 9N, and T. 10N to the NW corner of T. 9N, R. 12E.,
Thence south along range line between R. 11E. and R. 12E. to the SE corner of T. 8N, R. 11E.,
Thence west along township line between T. 7N, and T. 8N to the Gifford Pinchot National Forest boundary,
Thence south along forest boundary to the SE corner of Section 33, T. 7N, R. 11E.,
Thence west along township line between T. 6N, and T. 7N to the SE corner of T. 7N, R. 9E.,
Thence south along Skamania-Klickitat County line to Oregon-Washington.

- (b) In Western Washington, for each acre harvested three wildlife reserve trees, two green recruitment trees, and two down logs shall be left. In Eastern Washington for each acre harvested two wildlife reserve trees, two green recruitment trees, and two down logs shall be left. Type 1 wildlife reserve trees may be counted, at the landowner's option, either as a wildlife reserve tree or as a green recruitment tree. If adequate wildlife reserve trees are not available, no additional green recruitment trees will be required as substitutes. Landowners shall not under any circumstances be required to leave more than two green

recruitment trees per acre for the purpose of wildlife reserve tree recruitment, or be required to leave Type 3 or 4 wildlife reserve trees.

- (c) In Western Washington, only those wildlife reserve trees ten or more feet in height and twelve or more inches dbh shall be counted toward wildlife reserve tree retention requirements. In Eastern Washington, only those wildlife reserve trees ten or more feet in height and ten or more inches dbh shall be counted toward wildlife reserve tree retention requirements. Green recruitment trees, ten or more inches dbh and thirty or more feet in height and with at least one-third of their height in live crown, left standing after harvest may be counted toward green recruitment tree requirements. Green recruitment trees and/or wildlife reserve trees left to meet other requirements of the rules or those left voluntarily by the landowner shall be counted toward satisfying the requirements of this section. Large, live defective trees with broken tops, cavities, and other severe defects are preferred as green recruitment trees. Only down logs with a small end diameter greater than or equal to twelve inches and a length greater than or equal to twenty feet or equivalent volume shall be counted under (a) of this subsection. Large cull logs are preferred as down logs.
- (d) In the areas where wildlife reserve trees are left, the largest diameter wildlife reserve trees shall be retained to meet the specific needs of cavity nesters. Where the opportunity exists, larger trees with numerous cavities should be retained and count as recruitment trees.
- (e) In order to facilitate safe and efficient harvesting operations, wildlife reserve trees and recruitment trees may be left in clumps. For purposes of distribution, no point within the harvest unit shall be more than eight hundred feet from a wildlife reserve tree or green recruitment tree retention area. Subject to this distribution requirement, the location of these retention areas and the selection of recruitment trees shall be at the landowner's discretion. Closer spacing of retention areas through voluntary action of the landowner is encouraged. Wildlife reserve tree and green recruitment tree retention areas may include, but are not limited to, riparian management zones, riparian leave tree areas, other regulatory leave areas, or voluntary leave areas that contain wildlife reserve trees and/or green recruitment trees.
- (f) In order to provide for safety, landowners may remove any Type 3 or 4 wildlife reserve tree, which poses a threat to humans working, recreating, or residing within the hazard area of that tree. In order to provide for fire safety, the distribution of wildlife reserve tree retention areas, described in (e) of this subsection, may be modified as necessary based on a wildlife reserve tree management plan proposed by the landowner and approved by the department.

*(13) **Channel migration zones.** No harvest, construction or salvage will be permitted within the boundaries of a channel migration zone except for the construction and maintenance of road crossings in accordance with applicable rules and the creation and use of yarding corridors consistent with WAC 222-24-020(6), 222-30-060(1), and 222-30-045(2).

(14) **Bankfull width.** No harvest or construction will be permitted within the bankfull width of any Type S or F Water or any buffered length of Type Np Water, except for the construction and maintenance of road crossings in accordance with applicable rules and creation and use of yarding corridors consistent with WAC 222-30-020*(6) and 222-24-060(1). No salvage may take place within the bankfull width of any typed water (see WAC 222-30-045).

WAC 222-30-021 *Western Washington riparian management zones. [Effective 12/30/13]

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

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

None of the limitations on harvest in each of the three zones listed below will preclude or limit the construction and maintenance of roads for the purpose of crossing streams in WAC 222-24-030 and 222-24-050, or the creation and use of yarding corridors in WAC 222-30-060(1). The shade requirements in WAC 222-30-040 must be met regardless of harvest opportunities provided in the inner zone RMZ rules. See board manual section 1.

- (a) **Core zones.** No timber harvest or construction is allowed in the core zone except operations related to forest roads as detailed in subsection (1) of this section. Any trees cut for or damaged by yarding corridors in the core zone must be left on the site. Any trees cut as a result of road construction to cross a stream may be removed from the site, unless used as part of a large woody debris placement strategy or as needed to reach stand requirements.
- (b) **Inner zones.** Forest practices in the inner zone must be conducted in such a way as to meet or exceed stand requirements to achieve the goal in WAC 222-30-010(2). The width of the inner zone is determined by site class, bankfull width, and management option. Timber harvest in this zone must be consistent with the stand requirements in order to reach the desired future condition targets.

"Stand requirement" means a number of trees per acre, the basal area and the proportion of conifer in the combined inner zone and adjacent core zone so that the growth of the trees would meet desired future conditions. The following table defines basal area targets when the stand is one hundred forty years old.

Site Class	Desired future condition target basal area per acre (at 140 years)
I	325 sq. ft.
II	325 sq. ft.
III	325 sq. ft.
IV	325 sq. ft.
V	325 sq. ft.

Growth modeling is necessary to calculate whether a particular stand meets stand requirement and is on a trajectory towards these desired future condition basal area target. The appropriate growth model will be based on stand characteristics and will include at a minimum, the following components: The number of trees by diameter class, the percent of conifer and hardwood, and the age of the stand. See board manual section 7.

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

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

- (A) Conversion activities in the **inner zone** of any harvest unit are only allowed where all of the following are present:
- Existing stands in the combined core and inner zone do not meet stand requirements (WAC 222-30-021 (1)(b));
 - There are fewer than fifty-seven conifer trees per acre eight inches or larger dbh in the conversion area;
 - There are fewer than one hundred conifer trees per acre larger than four inches dbh in the conversion area;
 - There is evidence (such as conifer stumps, historical photos, or a conifer understory) that the conversion area can be successfully reforested with conifer and support the development of conifer stands;
 - The landowner owns five hundred feet upstream and five hundred feet downstream of the harvest unit;
 - The core and inner zones contain no stream adjacent parallel roads;
 - Riparian areas contiguous to the proposed harvest unit are owned by the landowner proposing to conduct the conversion activities, and meet shade requirements of WAC 222-30-040 or have a seventy-five foot buffer with trees at least forty feet tall on both sides of the stream for five hundred feet upstream and five hundred feet downstream of the proposed harvest unit (or the length of the stream, if less);
 - If the landowner has previously converted hardwood-dominated stands, then post-harvest treatments must have been performed to the satisfaction of the department.
- (B) In addition to the conditions set forth above, permitted conversion activities in the **inner zone** of any harvest unit are limited by the following:
- Each continuous conversion area is not more than five hundred feet in length; two conversion areas will be considered "continuous" unless the no-harvest area separating the two conversion areas is at least half the length of the larger of the two conversion areas.
 - Type S and F (Type 1, 2, or 3) Water: Up to fifty percent of the inner zone area of the harvest unit on one side of the stream may be converted provided that:
 - ◆ The landowner owns the opposite side of the stream and the landowner's riparian area on the opposite bank meets the shade requirements of WAC 222-30-040 or has a seventy-five foot buffer of trees at least forty feet tall or:
 - ◆ The landowner does not own land on the opposite side of the stream but the riparian area on the opposite bank meets the shade requirements of WAC 222-30-040 or has a seventy-five foot buffer of trees at least forty feet tall.
 - Not more than twenty-five percent of the inner zone of the harvest unit on both

- sides of a Type S or F Water may be converted if the landowner owns both sides.
- (C) Where conversion is allowed in the **inner zone**, trees within the conversion area may be harvested except that:
- Conifer trees larger than twenty inches dbh shall not be harvested;
 - Not more than ten percent of the conifer stems greater than eight inches dbh, exclusive of the conifer noted above, within the conversion area may be harvested; and
 - The landowner must exercise reasonable care in the conduct of harvest activities to minimize damage to all residual conifer trees within the conversion area including conifer trees less than eight inches dbh.
- (D) Following harvest in conversion areas, the landowner must:
- Reforest the conversion area with **conifer** tree species suitable to the site in accordance with the requirements of WAC 222-34-010; and
 - Conduct post-harvest treatment of the site until the conifer trees necessary to meet acceptable stocking levels in WAC 222-34-010(2) have crowns above the brush or until the conversion area contains a minimum of one hundred fifty conifer trees greater than eight inches dbh per acre.
 - Notify the department in writing within three years of the approval of the forest practices application for hardwood conversion, if the hardwood conversion has been completed.
- (E) **Tracking hardwood conversion.** The purpose of tracking hardwood conversion is to determine if hardwood conversion is resulting in adequate enhancement of riparian functions toward the desired future condition while minimizing the short term impacts on functions. The department will use existing or updated data bases developed in cooperation with the Washington Hardwoods Commission to identify watershed administrative units (WAUs) with a high percentage of hardwood-dominated riparian areas and, thus have the potential for excessive hardwood conversion under these rules. The department will track the rate of conversion of hardwoods in the riparian zone: (1) Through the application process on an annual basis; and (2) at a WAU scale on a biennial basis as per WAC 222-30-120 through the adaptive management process which will develop thresholds of impact for hardwood conversion at the watershed scale.
- (ii) **Harvest options.**
- (A) No inner zone management. When the existing stands in the combined core and inner zone do not meet stand requirements, no harvest is permitted in the inner zone. When no harvest is permitted in the inner zone or the landowner chooses not to enter the inner zone, the width of core, inner and outer zones are as provided in the following table:

No inner zone management RMZ widths for Western Washington

Site Class	RMZ width	Core zone width (measured from outer edge of bankfull width or outer edge of CMZ of water)	Inner zone width (measured from outer edge of core zone)		Outer zone width (measured from outer edge of inner zone)	
			stream width ≤10'	stream width >10'	stream width ≤10'	stream width >10'
I	200'	50'	83'	100'	67'	50'
II	170'	50'	63'	78'	57'	42'
III	140'	50'	43'	55'	47'	35'
IV	110'	50'	23'	33'	37'	27'
V	90'	50'	10'	18'	30'	22'

- (B) Inner zone management. If trees can be harvested and removed from the inner zone because of surplus basal area consistent with the stand requirement, the harvest and removal of the trees must be undertaken consistent with one of two options:
- (I) **Option 1. Thinning from below.** The objective of thinning is to distribute stand requirement trees in such a way as to shorten the time required to meet large wood, fish habitat and water quality needs. This is achieved by increasing the potential for leave trees to grow larger than they otherwise would without thinning. Thinning harvest under option 1 must comply with the following:
- Residual trees left in the combined core and inner zones must meet stand requirements necessary to be on a trajectory to desired future condition. See board manual section 7 for guidelines.
 - Thinning must be from below, meaning the smallest dbh trees are selected for harvest first, then progressing to successively larger diameters.
 - Thinning cannot decrease the proportion of conifer in the stand.
 - Shade retention to meet the shade rule must be confirmed by the landowner for any harvest inside of seventy-five feet from the outer edge of bankfull width or outer edge of CMZ, whichever is greater.
 - The number of residual conifer trees per acre in the inner zone will equal or exceed fifty-seven.

Option 1. Thinning from below.

Site class	RMZ width	Core zone width (measured from outer edge of bankfull width or outer edge of CMZ of water)	Inner zone width (measured from outer edge of core zone)		Outer zone width (measured from outer edge of inner zone)	
			stream width ≤10'	stream width >10'	stream width ≤10'	stream width >10'
I	200'	50'	83'	100'	67'	50'
II	170'	50'	63'	78'	57'	42'
III	140'	50'	43'	55'	47'	35'
IV	110'	50'	23'	33'	37'	27'
V	90'	50'	10'	18'	30'	22'

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

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

Option 2. Leaving trees closest to water.

Site class	RMZ width	Core zone width (measured from outer edge of bankfull width or outer edge of CMZ of water)	Inner zone width				Outer zone width (measured from outer edge of inner zone)	
			stream width ≤10'	stream width ≤10'	stream width >10'	stream width >10'	stream width ≤10'	stream width >10'
				minimum floor distance		minimum floor distance		
			(measured from outer edge of core zone)	(measured from outer edge of core zone)	(measured from outer edge of core zone)	(measured from outer edge of core zone)		
I	200'	50'	84'	30'	84'	50'	66'	66'
II	170'	50'	64'	30'	70'	50'	56'	50'
III	140'	50'	44'	30'	**	**	46'	**

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

- (iii) **Where the basal area components of the stand requirement cannot be met** within the sum of the areas in the inner and core zone due to the presence of a stream-adjacent parallel road in the inner or core zone, a determination must be made of the approximate basal area that would have been present in the inner and core zones if the road was not occupying space in the core or inner zone and the shortfall in the basal area component of the stand requirement. See definition of "stream-adjacent parallel road" in WAC 222-16-010.
 - (A) Trees containing basal area equal to the amount determined in (b)(iii) of this subsection will be left elsewhere in the inner or outer zone, or if the zones contain insufficient riparian leave trees, substitute riparian leave trees will be left within the RMZ width of other Type S or F Waters in the same unit or along Type Np or Ns Waters in the same unit in addition to all other RMZ requirements on those same Type S, F, Np or Ns Waters.
 - (B) When the stream-adjacent road basal area calculated in (b)(iii) of this subsection results in an excess in basal area (above stand requirement) then the landowner may receive credit for such excess which can be applied on a basal area-by-basal area basis against the landowner's obligation to leave trees in the outer zone of the RMZ of such stream or other waters within the same unit, provided that the number of trees per acre in the outer zone is not reduced to less than ten trees per acre.

- (C) When the basal area requirement cannot be met, as explained in (b)(iii) of this subsection, the shortfall may be reduced through the implementation of an acceptable large woody debris placement plan. See board manual section 26 for guidelines.
- (iv) If a harvest operation includes both yarding and harvest activities within the RMZ, all calculations of basal area for stand requirements will be determined as if the yarding corridors were constructed prior to any other harvest activities. If trees cut or damaged by yarding are taken from excess basal area, these trees may be removed from the inner zone. Trees cut or damaged by yarding in a unit which does not meet the basal area target of the stand requirements cannot be removed from the inner zone. Any trees cut or damaged by yarding in the core zone may not be removed.
- (c) **Outer zones.** Timber harvest in the outer zone must leave twenty riparian leave trees per acre after harvest. "**Outer zone riparian leave trees**" are trees that must be left after harvest in the outer zone in Western Washington. Riparian leave trees must be left uncut throughout all future harvests:

Outer zone riparian leave tree requirements

Application	Leave tree spacing	Tree species	Minimum dbh required
Outer zone	Dispersed	Conifer	12" dbh or greater
Outer zone	Clumped	Conifer	12" dbh or greater
Protection of sensitive Features	Clumped	Trees representative of the overstory including both hardwood and conifer	8" dbh or greater

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

- (i) **Dispersal strategy.** Riparian leave trees, which means conifer species with a diameter measured at breast height (dbh) of twelve inches or greater, must be left dispersed approximately evenly throughout the outer zone. If riparian leave trees of twelve inches dbh or greater are not available, then the next largest conifers must be left. If conifers are not present, riparian leave trees must be left according to the clumping strategy in (c)(ii) of this subsection.
- (ii) **Clumping strategy.** Riparian leave trees must be left clumped in the following way:
 - (A) Clump trees in or around one or more of the following **sensitive features** to the extent available within the outer zone. When clumping around sensitive features, riparian leave trees must be eight inches dbh or greater and representative of the overstory canopy trees in or around the sensitive feature and may include both hardwood and conifer species. Sensitive features are:
 - (I) Seeps and springs;
 - (II) Forested wetlands;
 - (III) Topographic locations (and orientation) from which leave trees currently on the site will be delivered to the water;
 - (IV) Areas where riparian leave trees may provide windthrow protection;
 - (V) Small unstable, or potentially unstable, slopes not of sufficient area to

- be detected by other site evaluations. See WAC 222-16-050 (1)(d).
- (VI) Archaeological sites or historic archaeological resources as defined in RCW 27.53.030;
 - (VII) Historic sites eligible for listing on the National Register of Historic Places or the Washington Heritage Register as determined by the Washington state department of archaeology and historic preservation. See WAC 222-16-050 (1)(f); or
 - (VIII) Sites containing evidence of Native American cairns, graves or glyptic records as provided for in chapters 27.44 and 27.53 RCW. See WAC 222-16-050 (1)(f).
- (B) If sensitive features are not present, then clumps must be well distributed throughout the outer zone and the leave trees must be of conifer species with a dbh of twelve inches or greater. When placing clumps, the applicant will consider operational and biological concerns. Tree counts must be satisfied regardless of the presence of stream-adjacent parallel roads in the outer zone.
- (iii) **Large woody debris in-channel placement strategy.**
 - (A) In order to reduce the number of required outer zone trees, a landowner may design a LWD placement plan for department approval consistent with guidelines in board manual sections 5 and 26. Landowners are encouraged to consult with the department and the department of fish and wildlife while designing the plan and prior to submitting a forest practices application.
 - (B) Reduction of trees in the outer zone must not go below a minimum of ten trees per acre.
 - (C) If this strategy is chosen, a complete forest practices application must include the LWD placement plan.
 - (iv) **Twenty riparian leave trees must be left after harvest** with the exception of the following:
 - (A) If a landowner agrees to implement a placement strategy, see (iii) of this subsection.
 - (B) If trees are left in an associated channel migration zone, the landowner may reduce the number of trees required to be left according to the following:
 - (I) Offsets will be measured on a basal area-for-basal area basis.
 - (II) Conifer in a CMZ equal to or greater than six inches dbh will offset conifer in the outer zone at a one-to-one ratio.
 - (III) Hardwood in a CMZ equal to or greater than ten inches dbh will offset hardwood in the outer zone at a one-to-one ratio.
 - (IV) Hardwood in a CMZ equal to or greater than ten inches dbh will offset conifer in the outer zone at a three-to-one ratio.
- * (2) **Western Washington protection for Type Np and Ns Waters.**
- (a) An **equipment limitation zone** is a thirty foot wide zone measured horizontally from the outer edge of the bankfull width of a Type Np or Ns Water where equipment use and other forest practices that are specifically limited by these rules. It applies to all perennial and seasonal streams.
 - (i) On-site mitigation is required if any of the following activities exposes the soil on more than ten percent of the surface area of the zone:
 - (A) Ground based equipment;
 - (B) Skid trails;

- (C) Stream crossings (other than existing roads); or
- (D) Cabled logs that are partially suspended.
- (ii) Mitigation must be designed to replace the equivalent of lost functions especially prevention of sediment delivery. Examples include water bars, grass seeding, mulching, etc.
- (iii) Nothing in this subsection (2) reduces or eliminates the department’s authority to prevent actual or potential material damage to public resources under WAC 222-46-030 or 222-46-040 or any related authority to condition forest practices notifications or applications.
- (b) **Sensitive site and RMZs protection along Type Np Waters.** Forest practices must be conducted to protect Type Np RMZs and sensitive sites as detailed below:
 - (i) A fifty foot, no-harvest buffer, measured horizontally from the outer edge of bankfull width, will be established along each side of the Type Np Water as follows:

Required no-harvest, 50-foot buffers on Type Np Waters.

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

- (ii) No timber harvest is permitted in an area within fifty feet of the outer perimeter of a soil zone perennially saturated from a headwall seep.
- (iii) No timber harvest is permitted in an area within fifty feet of the outer perimeter of a soil zone perennially saturated from a side-slope seep.
- (iv) No timber harvest is permitted within a fifty-six foot radius buffer patch centered on the point of intersection of two or more Type Np Waters.
- (v) No timber harvest is permitted within a fifty-six foot radius buffer patch centered on a headwater spring or, in the absence of a headwater spring, on a point at the upper most extent of a Type Np Water as defined in WAC 222-16-030(3) and 222-16-031.
- (vi) No timber harvest is permitted within an alluvial fan.
- (vii) At least fifty percent of a Type Np Waters’ length must be protected by buffers on both sides of the stream (2-sided buffers). Buffered segments must be a minimum of one hundred feet in length. If an operating area is located more than five hundred feet upstream from the confluence of a Type S or F Water and the Type Np Water is more than one thousand feet in length, then buffer the Type Np Water according to the following table. If the percentage is not met by protecting sensitive sites listed in (b)(i) through (vii) of this subsection, then additional buffers are required on the Type Np Water to meet the requirements listed in the table.

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

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

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

- (A) Low gradient areas;
- (B) Perennial water reaches of nonsedimentary rock with gradients greater than twenty percent in the tailed frog habitat range;
- (C) Hyporheic and ground water influence zones; and
- (D) Areas downstream from other buffered areas.

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

- (c) None of the limitations on harvest in or around Type Np Water RMZs or sensitive sites listed in (b) of this subsection will preclude or limit:
 - (i) The construction and maintenance of roads for the purpose of crossing streams in WAC 222-24-030 and 222-24-050.
 - (ii) The creation and use of yarding corridors in WAC 222-30-060(1).

To the extent reasonably practical, the operation will both avoid creating yarding corridors or road crossings through Type Np Water RMZ or sensitive sites and associated buffers, and avoid management activities which would result in soil compaction, the loss of protective vegetation or sedimentation in perennially moist areas.

Where yarding corridors or road crossings through Type Np Water RMZs or sensitive sites and their buffers cannot reasonably be avoided, the buffer area must be expanded to protect the sensitive site by an area equivalent to the disturbed area or by providing comparable functions through other management initiated efforts.

Landowners must leave additional acres equal to the number of acres (including partial acres) occupied by an existing stream-adjacent parallel road within a Type Np Water

RMZs or sensitive site buffer.

WAC 222-30-022 *Eastern Washington riparian management zones. [Effective 12/30/13]

For eastside forests, riparian management is intended to provide stand conditions that vary over time. It is designed to mimic eastside disturbance regimes within a range that meets functional conditions and maintains general forest health. These desired future conditions are a reference point on the pathway to restoration of riparian functions, not an end point of riparian stand development. These rules apply to all typed waters on forest land in Eastern Washington, except as provided in WAC 222-30-023. RMZs are measured horizontally from the outer edge of the bankfull width or channel migration zone, whichever is greater, and extend to the limits as described in the following section.

Eastern Washington RMZ for streams with bankfull width of less than or equal to 15 feet wide

Site Class	Total RMZ Width	Core Zone Width From outer edge of bankfull width or outer edge of CMZ, whichever is greater	Inner Zone Width	Outer Zone Width
I	130'	30'	45'	55'
II	110'	30'	45'	35'
III	90'	30'	45'	15'
IV	75'	30'	45'	0'
V	75'	30'	45'	0'

Eastern Washington RMZ for streams with bankfull width of greater than 15 feet wide

Site Class	Total RMZ Width	Core Zone Width From outer edge of bankfull width or outer edge of CMZ, whichever is greater	Inner Zone Width	Outer Zone Width
I	130'	30'	70'	30'
II	110'	30'	70'	10'
III	100'	30'	70'	0'
IV	100'	30'	70'	0'
V	100'	30'	70'	0'

*(1) **Eastern Washington RMZs on Type S and F Waters** have three zones: The core zone is nearest to the edge of the bankfull width or outer edge of the CMZ, whichever is greater. The

inner zone is the middle zone, and the outer zone is furthest from the water. Permitted forest practices vary by timber habitat type and site class.

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

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

- (a) **Core zones.** The core zone extends thirty feet measured horizontally from the edge of the bankfull width or outer edge of the CMZ, whichever is greater, for all timber habitat types. No harvest or construction is allowed in the core zone except as detailed in subsection (1) of this section. Any trees cut for or damaged by yarding corridors must be left on site. Any trees cut as a result of road construction to cross a stream may be removed from the site unless used as part of a large woody debris replacement strategy.
- (b) **Inner zones.** Width and leave tree requirements of the inner zone vary by timber habitat type as outlined below.
 - (i) **Ponderosa pine timber habitat type.**
 - (A) The width of the inner zone is seventy feet measured horizontally from the outer edge of the core zone on streams greater than fifteen feet bankfull width or forty-five feet measured horizontally from the outer edge of the core zone on streams with a bankfull width of fifteen feet or less.
 - (B) No harvest is allowed in the inner zone except as described in (b)(i)(C) or (D) of this subsection, and as allowed for stream crossings and yarding corridors as described in this subsection (1).
 - (C) **Stands with a high basal area:** Harvest is permitted in the inner zone if the basal area in the inner zone is greater than one hundred ten square feet per acre for conifer and hardwood trees equal to or greater than six inches dbh. The harvest must leave at least fifty trees per acre AND subject to (b)(i)(C)(III) of this subsection, a minimum leave tree basal area of at least sixty square feet per acre. The trees to be left shall be selected as follows:
 - (I) The twenty-one largest trees per acre must be left; and
 - (II) An additional twenty-nine trees per acre that are 10-inch dbh or greater must be left. If there are less than twenty-nine ten-inch dbh or greater trees per acre, leave the twenty-nine largest trees. If there are more than twenty-nine ten-inch dbh or greater trees per acre, leave twenty-nine ten-inch dbh or greater trees per acre based on the following priority order:
 - Trees that provide shade to water;
 - Trees that lean towards the water;
 - Trees of the preferred species, as defined in WAC 222-16-010;
 - Trees that are evenly distributed across the inner zone.
 - (III) If more than fifty trees per acre are needed to meet the minimum leave tree basal area of sixty square feet per acre, then additional trees greater than six-inch dbh must be left. If the minimum basal area cannot be met with fewer than one hundred trees of at least six inches dbh, then no more than one hundred trees per acre of the largest remaining trees will be required to be left regardless of the basal area.

- (D) **Stands with low basal areas and high density:** Thinning is permitted if the basal area of all species is less than sixty square feet per acre AND there are more than one hundred trees per acre. The thinning must leave a minimum of one hundred trees per acre. The trees to be left must be selected as follows:
- (I) The fifty largest trees per acre must be left; and
 - (II) An additional fifty trees per acre that are greater than six inches dbh must be left. If there are not fifty six-inch dbh or greater trees per acre, then all six-inch dbh or greater trees per acre must be left plus the largest remaining trees to equal fifty trees per acre. Select the additional fifty trees based on the following priority order:
 - Trees that provide shade to water;
 - Trees that lean towards the water;
 - Trees of the preferred species, as defined in WAC 222-16-010;
 - Trees that are evenly distributed across the inner zone.
- (E) To the extent down wood is available on site prior to harvest, at least twelve tons of down wood per acre must be left following harvest as follows:
- (I) Six pieces greater than sixteen inches diameter and twenty feet in length; and
 - (II) Four pieces greater than six inches in diameter and twenty feet in length.
 - (III) Landowner/operator is not required to create down wood.
- (F) See **stream-adjacent parallel roads for all timber habitat types** in (iv) of this subsection if there is a stream-adjacent parallel road in this zone.
- (ii) **Mixed conifer timber habitat type.**
- (A) The width of the inner zone is seventy feet measured horizontally from the outer edge of the core zone on streams greater than fifteen feet bankfull width or forty-five feet measured horizontally from the outer edge of the core zone on streams with a bankfull width of fifteen feet or less.
 - (B) No harvest is allowed in the inner zone except as described in (b)(ii)(C) or (D) of this subsection, and as allowed for stream crossings and yarding corridors as described above in subsection (1).
 - (C) **Stands with a high basal area:**
 - (I) Harvest is permitted in the inner zone if the combined conifer and hardwood basal area for trees greater than six inches dbh is:
 - Greater than one hundred ten square feet per acre on low site indexes (site index less than ninety); or
 - Greater than one hundred thirty square feet per acre on medium site indexes (site index between ninety and one hundred ten); or
 - Greater than one hundred fifty square feet per acre on high site indexes (site index greater than one hundred ten).
 - (II) The harvest must leave at least fifty trees per acre AND a minimum leave tree basal area of at least:
 - seventy square feet per acre on low site indexes; or
 - ninety square feet per acre on medium site indexes; or
 - one hundred ten square feet per acre on high site indexes.
 - (III) The trees to be left shall be selected as follows:
 - The twenty-one largest trees per acre must be left; and
 - An additional twenty-nine trees per acre that are ten-inch dbh or greater must be left. If there are less than twenty-nine ten-inch dbh or greater trees

- per acre, leave the twenty-nine largest trees. If there are more than twenty-nine ten-inch dbh or greater trees per acre, leave twenty-nine ten-inch dbh trees per acre based on the following priority order:
- Trees that provide shade to water;
 - Trees that lean towards the water;
 - Trees of the preferred species, as defined in WAC 222-16-010; or
 - Trees that are evenly distributed across the inner zone.
- If more than fifty trees per acre are needed to meet the minimum leave tree basal area for the site index in (b)(ii)(C)(II) of this subsection, then additional trees greater than six inches dbh must be left. If the minimum basal area cannot be met with fewer than one hundred trees at least six inches dbh, then no more than one hundred trees per acre of the largest remaining trees will be required to be left regardless of the basal area.
- (D) **Stands with low basal areas and high density:** Thinning is permitted if the basal area of all species is less than the minimum requirements for the site index in (b)(ii)(C)(II) of this subsection AND there are more than one hundred twenty trees per acre. The thinning must leave a minimum of one hundred twenty trees per acre. The trees to be left shall be selected as follows:
- (I) The fifty largest trees per acre must be left; and
 - (II) An additional seventy trees per acre greater than six inches dbh must be left. If there are not seventy six-inch dbh or greater trees per acre, then all six-inch dbh or greater trees per acre must be left plus the largest remaining trees to equal seventy trees per acre. Select the additional seventy trees based on the following priority order:
 - Trees that provide shade to water;
 - Trees that lean towards the water;
 - Trees of the preferred species, as defined in WAC 222-16-010; or
 - Trees that are evenly distributed across the inner zone.
- (E) To the extent down wood is available on site prior to harvest, twenty tons of down wood per acre is required to be left following harvest as follows:
- (I) Eight pieces greater than sixteen inches diameter and twenty feet in length; and
 - (II) Eight pieces greater than six inches in diameter and twenty feet in length.
 - (III) Landowner/operator is not required to create down wood.
- (F) **See stream-adjacent parallel roads for all timber habitat types** in (b)(iv) of this subsection if there is a parallel road in this zone.
- (iii) **High elevation timber habitat type.**
- (A) The width of the inner zone is forty-five feet measured horizontally from the outer edge of the core zone on streams equal to or less than fifteen feet bankfull width or seventy feet measured horizontally from the outer edge of the core zone on streams with a bankfull width of greater than fifteen feet.
 - (B) Follow stand requirements for Western Washington riparian management zones, WAC 222-30-021 (1)(b).

Note: Option 2 is not permitted for eastside use, because of the minimum floor (100') constraint.

- (C) To the extent down wood is available prior to harvest, thirty tons per acre of down wood per acre must be left following harvest as follows:

- (I) Eight pieces greater than sixteen inches diameter and twenty feet in length; and
- (II) Eight pieces greater than six inches in diameter and twenty feet in length.
- (III) Landowner/operator is not required to create down wood.
- (D) See **stream-adjacent parallel roads for all timber habitat types** in (b)(iv) of this subsection if there is a parallel road in this zone.
- (iv) **Stream-adjacent parallel roads for all timber habitat types in the inner zone.** The shade rule, WAC 222-30-040, must be met whether or not the inner zone includes a stream-adjacent parallel road. Where a stream-adjacent parallel road exists in the inner zone and the minimum required basal area cannot be met due to the presence of the road, then the location of the road determines the allowable operations as follows:
 - (A) For streams with a bankfull width that is greater than fifteen feet:
 - (I) If the edge of the road closest to the stream is seventy-five feet or more from the outer edge of bankfull width of the stream or outer edge of CMZ, whichever is greater, **no harvest is permitted in the inner zone.** This includes trees within the inner zone on the uphill side of the road.
 - (II) No harvest is permitted within the inner zone on the streamside of the road. If the edge of the road closest to the stream is less than seventy-five feet from the outer edge of bankfull width of the stream or outer edge of CMZ, whichever is greater then:
 - Additional leave trees equal in total basal area to the trees lost due to the road must be left near the streams in or adjacent to the unit to be harvested; (See board manual section 7.)
 - Where the additional leave trees providing fish habitat for water quality function are determined to be not available or not practical by the department, landowners and operators will employ site specific management activities to replace lost riparian functions that may include placement of large woody debris in streams. (See board manual section 7.)
 - (B) For streams with a bankfull width less than fifteen feet:
 - (I) If the edge of the road closest to the stream is fifty feet or more from the outer edge of bankfull width or outer edge of CMZ, whichever is greater, no harvest is permitted in the inner zone. This includes trees within the inner zone on the uphill side of the road.
 - (II) No harvest is permitted within the inner zone on the stream side of the road. If the edge of the road closest to the stream is less than fifty feet from the bankfull width or CMZ, whichever is greater then:
 - Additional leave trees equal in total basal area to the trees lost due to the road must be left near the streams in or adjacent to the unit to be harvested. (See board manual section 7.)
 - Where the additional leave trees providing fish habitat for water quality function are determined to be not available or not practical by the department, landowners and operators will employ site specific management activities to replace lost riparian functions that may include placement of large woody debris in streams. (See board manual section 7.)
 - (C) **Wildlife reserve trees.** Leave all wildlife reserve trees within the inner zone of the riparian management zone where operations in the vicinity do not violate the safety regulations (chapter 296-54 WAC and chapter 49.17 RCW administered by the department of labor and industries, safety division). Live wildlife reserve trees will

contribute to the basal area requirements for inner zone leave trees and to leave tree counts if they are among the twenty-one largest trees per acre; or meet the requirement of an additional twenty-nine leave trees per acre as per (b)(ii)(E) of this subsection.

- (c) **Outer zones.** This zone has three categories based on timber habitat type: Ponderosa pine, mixed conifer and high elevation. The width of this zone is zero to fifty-five feet measured horizontally from the outer edge of the inner zone depending on the site class and stream width. (See WAC 222-16-010 definition of "RMZ outer zone.")
- (i) Tree counts that must be left per acre, regardless of the presence of an existing stream-adjacent parallel road in the zone, are:
- (A) Ponderosa pine habitat type - Ten dominant or codominant trees.
 - (B) Mixed conifer habitat type - Fifteen dominant or codominant trees.
 - (C) High elevation habitat type - See requirements for Western Washington RMZs in WAC 222-30-021 (1)(c).
- (ii) Outer zone leave tree requirements in (c)(i) of this subsection may be reduced to five trees per acre in the ponderosa pine zone, eight trees per acre in the mixed forest habitat type and ten trees per acre in the high elevation habitat type, if the landowner voluntarily implements a LWD placement plan consistent with board manual sections 5 and 26. Landowners are encouraged to consult with the department of fish and wildlife while designing the plan and prior to submitting a forest practices application. If this strategy is chosen, a complete forest practices application must include the LWD placement plan.

***(2) Eastern Washington protection along Type Np and Ns Waters.**

- (a) An **equipment limitation zone** is a thirty-foot wide zone measured horizontally from the outer edge of bankfull width of a Type Np or Ns Water where equipment is limited. It applies to all perennial and seasonal streams.
- (i) On-site mitigation is required if any of the following activities exposes the soil more than ten percent of the surface area of the zone:
- (A) Ground based equipment;
 - (B) Skid trails;
 - (C) Stream crossings (other than existing roads); or
 - (D) Cabled logs that are partially suspended.
- (ii) Mitigation must be designed to replace the equivalent of lost functions, especially prevention of sediment delivery. Examples include water bars, grass seeding, mulching, etc.
- (iii) Nothing in this subsection reduces or eliminates the department's authority to prevent actual or potential material damage to public resources under WAC 222-46-030 or 222-46-040 or any related authority to condition forest practices notifications or applications.
- (b) **Type Np Waters.**
 Within fifty horizontal feet of the outer edge of bankfull width of the stream, the landowner must identify either a partial cut and/or clearcut strategy for each unit to be harvested: Once approved by the department, the selected strategy will remain in effect until July 1, 2051. If a landowner transfers title of the harvest unit, the landowner must provide written notice of this continuing obligation to the new owner and send a copy to the department. See WAC 222-20-055.
- (i) **For partial cuts:**
- (A) Basal areas requirements are the same as those specified for the timber habitat type in the Eastern Washington RMZ inner zone.

- (B) Where a stream-adjacent parallel road exists, the basal area required in (b)(i)(A) of this subsection is required to be left. (See stream-adjacent parallel roads for Type Np Waters in (c) of this subsection.)
- (C) The trees to be included in the basal area determination and left after harvest must include:
- (I) The ten largest trees per acre;
 - (II) Up to an additional forty trees per acre greater than or equal to ten inches dbh must be left. If all or some of the trees are not at least ten inches dbh, then the largest of the remaining trees must be left. Select trees based on the following priority order:
 - Provide streambank stability;
 - Provide shade to water;
 - Lean towards the water;
 - Preferred species, as defined in WAC 222-16-010; or
 - Evenly distributed; and
 If the basal area target has not been met with the trees required above, up to an additional fifty trees are required greater than six inches in dbh based on the above priority order.
- (D) Side slope seeps must be protected with a fifty-foot partial cut buffer that meets the basal area and leave tree requirements of (b)(i)(A), (B), and (C) of this subsection. The buffer shall be measured from the outer perimeter of the perennially saturated soil zone.
- (ii) **For clearcuts:**
 When the clearcut strategy in this subsection is selected, the landowner must simultaneously designate a two-sided no-harvest fifty-foot buffer along the stream reach in the harvest unit that:
- (A) Is equal in total length to the clearcut portion of the stream reach in the harvest unit; and
 - (B) Meets the upper end of basal area requirements for each respective timber habitat type in the Eastern Washington RMZ inner zone. See WAC 222-30-022 (1) (b) (i), (ii) or (iii).
 - (C) The streamside boundary of all clearcuts must:
 - (I) Not exceed in total thirty percent of the length of the stream reach in the harvest unit;
 - (II) Not exceed three hundred continuous feet in length;
 - (III) Not be located within five hundred feet of the intersection of a Type S or F Water; and
 - (IV) Not occur within fifty feet of the following sensitive sites as defined in WAC 222-16-010:
 - The outer perimeter of a soil zone perennially saturated from a headwall seep;
 - The outer perimeter of a soil zone perennially saturated from a side-slope seep;
 - The center of a headwater spring;
 - An alluvial fan;
 - The center point of intersection of two or more Type Np Waters.
 -

- (c) **Stream-adjacent parallel roads for Type Np Waters.** If a road exists in a Type Np RMZ and the basal area required to be left cannot be met within fifty feet of the outer edge of bankfull width of the stream measured horizontally due to the presence of the road, then the distance of the road to the stream determines the allowable operations as follows:
- (i) A road that is within thirty to forty-nine feet measured horizontally from the outer edge of bankfull width of the stream requires:
 - (A) A total of one hundred feet of riparian management zone measured horizontally (both sides of the stream count towards the total) must be left in a manner to provide maximum functions for nonfish use streams. If harvest is taking place on only one side of the stream, then fifty feet of RMZ width must be left, regardless of presence of a stream-adjacent parallel road. The width of the road is not counted as part of the total width of the RMZ.
 - (B) The location of the riparian management zone required in (A) of this subsection shall be based on the following priority order:
 - (I) Preferred: The area between the stream and the stream side edge of the road.
 - (II) The area that provides the most shade to the channel.
 - (III) The area that is most likely to deliver large woody debris to the channel.
 - (ii) A road that is within less than thirty feet from the outer edge of bankfull width of the stream measured horizontally requires, in addition to (c)(i)(A) and (B) of this subsection, that all trees between the stream and the streamside edge of the road must be left.

WAC 222-30-023 Riparian management zones for exempt 20-acre parcels. [Effective 12/16/10]

Note: Compliance with this section does not ensure compliance with the federal Endangered Species Act or the Clean Water Act.

On parcels of 20 contiguous acres or less, landowners with total parcel ownership of less than 80 forested acres shall not be required to leave the riparian buffers described in WAC 222-30-021 and 222-30-022. These landowners are required to follow applicable watershed analysis riparian prescriptions in effect as of January 1, 1999, or if there are no watershed analysis riparian prescriptions in effect these landowners are required to follow the riparian management zone rules below.

- * (1) Western Washington RMZs for exempt 20-acre parcels.** Riparian management zones are measured horizontally from the outer edge of bankfull width of a Type S or F Water and extend to the line where vegetation changes from wetland to upland plant community, or the line required to leave sufficient shade as required by WAC 222-30-040, whichever is greater, but must not be less than 29 feet in width nor more than the maximum widths described in (f) of this subsection, provided that the riparian management zone width shall be expanded as necessary to include wetlands or ponds adjacent to the stream. When the riparian management zone overlaps a Type A or B Wetland or a wetland management zone, the requirement which best protects public resources shall apply.
- (a) Harvest units shall be designed so that felling, bucking, yarding or skidding, and reforestation can be accomplished in accordance with these rules, including those rules relating to stream bank integrity and shade requirements to maintain stream temperature. Where the need for additional actions or restrictions adjacent to waters not covered by the following become evident, WAC 222-12-050 and 222-12-060 may apply.
 - (b) When requested in writing by the applicant, the department shall assist in preparation of an alternate plan for the riparian management zone.
 - (c) Landowners must meet the following shade requirements in effect January 1, 1999, to

- maintain stream temperature.
- * (i) Determination of adequate shade. The temperature prediction method in (c)(ii) and (iii) of this subsection shall be used to determine appropriate shade levels for flowing Type S and F Waters to prevent excessive water temperatures which may have detrimental impact on aquatic resources.
 - * (ii) Temperature prediction method. In addition to the riparian management zone requirements described in (f) of this subsection, leave trees shall be retained within the maximum riparian management zones on flowing Type S and F Waters as provided by the method described in the board manual which includes the following considerations:
 - (A) Minimum shade retention requirements; and
 - (B) Regional water temperature characteristics; and
 - (C) Elevation; and
 - (D) Temperature criteria defined for stream classes in chapter 173-201A WAC.
 - * (iii) Leave tree requirements for shade. The method described in (c)(ii) of this subsection shall be used to establish the minimum shade cover based on site-specific characteristics. When site-specific data indicate that preharvest conditions do not meet the minimums established by the method, no additional shade removal from riparian management zones will be allowed.
 - (iv) Waivers. The department may waive or modify the shade requirements where:
 - (A) The applicant agrees to a staggered setting program producing equal or greater shade requirements to maintain stream temperature; or
 - (B) The applicant provides alternative means of stream temperature control satisfactory to the department; or
 - (C) The temperature method indicates that additional shade will not affect stream temperature.
 - (d) For wildlife habitat within the riparian management zone, leave an average of 5 undisturbed and uncut wildlife trees per acre at the ratio of 1 deciduous tree to 1 conifer tree equal in size to the largest existing trees of those species within the zone. Where the 1 to 1 ratio is not possible, then substitute either species present. Forty percent or more of the leave trees shall be live and undamaged on completion of harvest. Wildlife trees shall be left in clumps whenever possible.
 - (e) When 10 percent or more of the harvest unit lies within any combination of a riparian management zone of Type S or F Waters or a wetland management zone and the harvest unit is a clearcutting of 20 acres or less, leave not less than 50 percent of the trees required in (f) of this subsection.
 - (f) Within the riparian management zone, trees shall be left for wildlife and fisheries habitat as provided for in the chart below. Fifty percent or more of the trees shall be live and undamaged on completion of the harvest. The leave trees shall be randomly distributed where feasible; some clumping is allowed to accommodate operational considerations. The number, size, species and ratio of leave trees, deciduous to conifer, is specified by the bed material and average width of the water type within the harvest unit. Trees left according to (c) of this subsection may be included in the number of required leave trees in this subsection.

**Western Washington Riparian Leave Tree Requirements
For exempt 20-acre parcels**

Water Type/Average Width	RMZ Maximum Width	Ratio of Conifer to Deciduous/ Minimum Size Leave Trees	# Trees/1000 ft. each side	
			Gravel/Cobble <10" Diameter	Boulder/Bedrock
S or F Water greater than or equal to 75'	115'	representative of stand	58 trees	29 trees
S Water less than 75' and F Water less than 75' and greater than or equal to 10'	86'	representative of stand	115 trees	60 trees
F Water less than 10' and greater than or equal to 5'	58'	2 to 1 12" or next largest available ¹	86 trees	29 trees
F Water less than 5'	29'	1 to 1 6" or next largest available ¹	29 trees	29 trees

¹"Or next largest available" requires that the next largest trees to those specified in the rule be left standing when those available are smaller than the sizes specified.

Ponds or lakes which are Type S or F Waters shall have the same leave tree requirements as boulder/bedrock streams.

***(2) Eastern Washington riparian management zones for exempt 20-acre parcels.** These zones shall be measured horizontally from the outer edge of bankfull width of Type S or F Waters and extend to the line where vegetation changes from wetland to upland plant community, or to the line required to leave sufficient shade as required by WAC 222-30-040, whichever is greater, but shall not be less than the minimum width nor more than the maximum widths described in (c) of this subsection, provided that the riparian management zone width shall be expanded as necessary to include wetlands or ponds adjacent to the stream. When the riparian management zone overlaps a Type A or B Wetland or a wetland management zone, the requirement which best protects public resources shall apply.

- (a) Harvest units shall be designed so that felling, bucking, yarding or skidding, and reforestation can be accomplished in accordance with these rules, including those rules relating to stream bank integrity and shade requirements to maintain stream temperature. Where the need for additional actions or restrictions adjacent to waters not covered by the following become evident, WAC 222-12-050 and 222-12-060 may apply.
- (b) When requested in writing by the applicant, the department shall assist in preparation of an alternate plan for the riparian management zone.
- (c) Within the riparian management zone, trees shall be left for wildlife and fisheries habitat as provided for below. Fifty percent or more of the trees shall be live and undamaged on completion of the harvest. The leave trees shall be randomly distributed where feasible; some

clumping is allowed to accommodate operational considerations.

- (i) The width of the riparian management zone shall be based on the adjacent harvest type as defined in WAC 222-16-010 "Partial cutting." When the adjacent unit harvest type is:
 - Partial cutting - The riparian management zone width shall be a minimum of 35 feet to a maximum of 58 feet on each side of the stream.
 - Other harvest types - The riparian management zone shall average 58 feet in width on each side of the stream with a minimum width of 35 feet and a maximum of 345 feet on each side of the stream.
- (ii) Leave tree requirements within the riparian management zones of Type S or F Waters:
 - (A) Leave all trees 12 inches or less in diameter breast height (dbh); and
 - (B) Leave all wildlife reserve trees within the riparian management zone where operations in the vicinity do not violate the state safety regulations (chapter 296-54 WAC and chapter 49.17 RCW administered by department of labor and industries, safety division); and
 - (C) Leave 18 live conifer trees per acre between 12 inches dbh and 20 inches dbh distributed by size, as representative of the stand; and
 - (D) Leave 4 live conifer trees per acre 20 inches dbh or larger and the 2 largest live deciduous trees per acre 16 inches dbh or larger. Where these deciduous trees do not exist, and where 2 wildlife reserve trees per acre 20 inches or larger do not exist, substitute 2 live conifer trees per acre 20 inches dbh or larger. If live conifer trees of 20 inches dbh or larger do not exist within the riparian management zone, then substitute the 5 largest live conifer trees per acre; and
 - (E) Leave 3 live deciduous trees per acre between 12 inches and 16 inches dbh where they exist.
- (iii) Minimum leave tree requirements per acre for Type S or F Waters. Trees left for (c)(ii) of this subsection shall be included in the minimum counts.
 - (A) On streams with a boulder/bedrock bed, the minimum leave tree requirements shall be 75 trees per acre 4 inches dbh or larger.
 - (B) On streams with a gravel/cobble (less than 10 inches diameter) bed, the minimum leave tree requirement shall be 155 trees per acre 4 inches dbh or larger.
 - (C) On lakes or ponds, the minimum leave tree requirement shall be 86 trees per acre 4 inches dbh or larger.

Note: See the board manual for guidelines for calculating trees per acre and average RMZ widths.

- (d) When 10 percent or more of the harvest unit lies within any combination of a riparian management zone of Type S or F Waters or a wetland management zone and the harvest unit is 20 acres or less, leave not less than 50 percent of the trees required in (c) of this subsection. (See WAC 222-16-010 "Partial cutting.")
- *(3) Riparian leave tree areas for exempt 20-acre parcels.** The department will require trees to be left along Type Np Waters where such practices are necessary to protect public resources. Where such practices are necessary, leave at least 29 conifer or deciduous trees, 6 inches in diameter or larger, on each side of every 1000 feet of stream length within 29 feet of the stream. The leave trees may be arranged to accommodate the operation.
- (4) For the purposes of this section RMZ means: A specified area alongside Type S and F Waters where specific measures are taken to protect water quality and fish and wildlife habitat.

WAC 222-30-025 Even-aged harvest--Size and timing. [Effective 7/1/05]

Except as provided in WAC 222-30-110, unit size and timing of timber harvesting by even-aged harvest methods is subject to the following requirements:

- (1) Timber harvest which would result in an area larger than one hundred twenty acres and smaller than or equal to two hundred forty acres harvested by even-aged harvest methods on land owned or controlled by one landowner shall be reviewed by an interdisciplinary team, if the department determines that review is necessary. The area harvested by even-aged harvest methods, for the purposes of this subsection, shall be determined in accordance with subsection (3) of this section.
- (2) Timber harvest which would result in an area larger than two hundred forty acres harvested by even-aged harvest methods on land owned or controlled by one landowner shall be prohibited. The area harvested by even-aged harvest method for the purposes of this subsection shall be determined in accordance with subsection (3) of this section.
- (3) In calculating areas harvested by even-aged harvest methods, the area harvested by even-aged harvest methods shall include the acreage of that harvest unit and, all contiguous acreage harvested by even-aged harvest methods which is owned or controlled by the same landowner, except that acreage harvested by even-aged harvest methods sharing 10% or less of the common perimeter with the harvest unit under consideration shall not be considered contiguous for the purposes of this section.
- (4) Harvest units shall be designed so that each harvest unit meets at least one of the following criteria:
 - (a) At least thirty percent of the unit's perimeter is in stands of trees that are thirty years of age or older;
 - (b) At least sixty percent of the unit's perimeter is in stands of trees that are fifteen years of age or older; or
 - (c) At least ninety percent of the unit's perimeter is in stands of trees that have survived on site a minimum of five growing seasons or, if not, have reached an average height of four feet.Evaluation of unit perimeters is subject to the conditions specified in subsection (6) of this section.
- (5) The requirements of subsections (2), (3), and (4) of this section shall apply only to timber harvest by even-aged harvest methods and shall not apply to timber harvest to salvage timber damaged by wind, disease, insects, fire, or other natural causes or to forest practices involving the clearing of land of brush or understocked hardwoods to convert to managed hardwoods or conifers.
- (6) In evaluating the perimeters of harvest units pursuant to subsection (4) of this section, the following conditions shall apply:
 - (a) The following shall be treated as fully stocked, mature stands that will not be counted as contiguous acreage harvested by even-aged methods for the purposes of subsections (1) and (2) of this section and which will be counted as thirty-year-old stands for the purposes of subsection (4) of this section:
 - (i) In Western Washington, a wetland management zone that is twice the width required by WAC 222-30-021 and 222-30-023(1) along Type S or F Waters;
 - (ii) In Eastern Washington, wetland management zone that is the width required by WAC 222-30-022 and 222-30-023(2);
 - (iii) Designated upland management areas;
 - (iv) Lands in a shoreline of state-wide significance where harvest is limited under RCW 90.58.150;
 - (v) The portions of a perimeter consisting of land in uses other than forest land, such as land in agricultural or residential use and natural openings, and land not owned or

controlled by the landowner who has proposed the harvest unit subject to the application under consideration;

- *(vi) Along Type S and F Waters, a continuous buffer meeting the requirements of WAC 222-30-021 and 222-30-022;
 - *(vii) Along Type Np Waters, a continuous 50-foot wide no-harvest, no-salvage buffer.
- (b) A stand of trees other than those described in (a) of this subsection shall be treated as a certain age class only if the stand is at least three hundred feet wide;
- (c) Timber harvest units subject to an approved application or a notification for timber harvesting shall be treated as if the timber harvesting operation proposed in the application or notification were completed and regeneration not yet established.

WAC 222-30-030 *Stream bank integrity.

In the RMZ core zone for Type S and F Waters and RMZs for Type Np Waters, the operator shall:

- (1) **Avoid disturbing brush** and similar understory vegetation;
- (2) **Avoid disturbing stumps** and root systems and any logs embedded in the bank;
- (3) **Leave high stumps** where necessary to prevent felled and bucked timber from entering the water;
- (4) Leave trees which display large root systems embedded in the bank.

WAC 222-30-040 Shade requirements to maintain water temperature.

- *(1) Within the bull trout overlay, all available shade will be retained within 75 feet from the edge of the bankfull width or the outer edge of the CMZ (whichever is greater) along Type S or F Waters. (See board manual, section 1.)
- *(2) Determination of adequate shade outside the bull trout overlay. The temperature prediction method mentioned in subsections (2) and (3) of this section shall be used to determine appropriate shade levels along Type S and F Waters to prevent excessive water temperatures, which may have detrimental impact on aquatic resources. No tree may be harvested within 75 feet from the edge of the bankfull width or the outer edge of the CMZ (whichever is greater) of any Type S or F Water if, according to the methodology, that tree is providing shade to the stream necessary to maintain compliance with temperature standards. If a landowner elects to remove any tree within 75 feet of any Type S or F Water, the landowner must demonstrate, using the methods in the board manual section 1, that the removal of the tree would not be contrary to the restrictions of this subsection.
- *(3) **Temperature prediction method.** In addition to the riparian management zone requirements, leave trees shall be retained in riparian management zones on Type S and F Waters as provided by the method described in the board manual which includes the following considerations:
 - (a) Minimum shade retention requirements; and
 - (b) Regional water temperature characteristics; and
 - (c) Elevation; and
 - (d) Temperature criteria defined for stream classes in chapter 173-201A WAC.
- *(4) Leave tree requirements for shade. The method described in subsection (3) of this section must be used to establish the minimum required shade cover based on site specific characteristics. When site specific data indicate that preharvest conditions do not meet the minimums established by the method, no additional shade removal from riparian management zones will be allowed.
- *(5) Shade requirements must be satisfied whether or not the inner zone includes a stream-adjacent parallel road. Nothing will preclude or limit the harvest of shade trees in connection with the construction and maintenance of road crossings or the creation and use of yarding corridors. (See WAC 222-30-060(1).)
- *(6) **Waivers.** The department may waive or modify the shade requirements where:

The temperature method indicates that additional shade will not affect water temperature.

WAC 222-30-045 Salvage logging within riparian management zones.

Salvage logging within a riparian management zone is based upon the zone (core, inner or outer) in which the tree was originally located, applicable riparian stand requirements and the extent of previous harvest activities in the zone.

- *(1) **Salvage logging within the outer edge of bankfull width of any typed water.** No salvage may take place within the outer edge of bankfull width of any typed water.
- (2) **Salvage logging in a core zone or channel migration zone.** No salvage may take place within the RMZ core zone or a channel migration zone, including any portion of those trees that may have fallen outside of these zones.
- (3) **Salvage logging in the inner zone.** Salvage may not take place within the inner zone if the stand requirements cannot be met by the residual stand. If the proposed salvage involves down tree(s) that originated from the inner zone, salvage of down wood may only be permitted if the down wood was not needed to meet stand requirements in the inner zone. Salvage of any existing down wood may not take place if the unremoved balance of down wood is insufficient to meet the regional down wood guidelines in (a) and (b) of this subsection. Salvage within the inner zone must be conducted to protect residual undamaged trees within the inner zone. Down wood guidelines for salvage in RMZ inner zones are:

(a) **In Western Washington:**

Logs with a solid core	< 1 foot diameter	1-2 foot diameter	> 2 foot Diameter	Total
Number of logs/acre	85	83	26	194

(b) **In Eastern Washington** ponderosa pine, mixed conifer, and high elevation habitat types:
Follow the down wood requirements for each habitat type in WAC 222-30-022.

- (4) **Salvage logging in the outer zone.** Salvage may not take place within the outer zone if the riparian leave tree requirements cannot be met by the residual standing or down trees. If the proposed salvage involves tree(s) that are down that originated from the outer zone, salvage may only be permitted of down wood if the down wood was not needed to meet riparian leave tree requirements in the outer zone.
- (5) Salvage logging in sensitive sites or Type Np riparian management zones. No salvage may take place within a sensitive site or a Type Np RMZ.

WAC 222-30-050 Felling and bucking. [Effective 12/30/13]

- *(1) **Felling along water.**
 - (a) Except when removing or repositioning large woody debris per WAC 222-30-062, no trees will be felled into or removed from Type S and F Waters RMZ core zones, sensitive sites, or Type A or B Wetlands except trees which cannot practically and safely be felled outside these areas using techniques in general use. Such felling and removing in Type S or F Waters shall incorporate mitigation measures necessary to achieve no-net-loss of productive capacity of fish and shellfish habitat as follows:
 - (i) Trees shall not be felled into or across the stream except where approved by the department.

- (ii) Trees or logs that enter a stream during felling shall remain where they enter unless parts or all of the trees or logs are specifically approved to be removed by the department.
- (iii) If limbs or other small debris enter the watercourse as a result of felling timber, they shall be removed concurrently with each change in yarding road or within seventy-two hours after entry into the watercourse and placed on stable locations outside the stream's influence. Limbs or other small debris shall be removed from dry watercourses prior to the normal onset of high flows. Large woody material which was in place prior to felling timber shall not be disturbed.
- (iv) Precautions shall be taken to minimize the release of sediment to waters downstream from the felling activity. See board manual section 5 for technical guidance.
- (b) Within RMZ inner and outer zones, and wetland management zones, fell trees favorable to the lead consistent with safety standards to yard or skid away from the waters. The use of directional felling, lining, jacking and staged felling techniques are required.
- (c) Trees may be felled into Type Np Water if logs are removed as soon thereafter as practical. See forest practices board manual section 4 guidelines for clearing slash and debris from Type Np and Ns Water.

*** (2) Bucking or limbing along water.**

No bucking or limbing shall be done on trees or portions thereof lying within the bankfull width of Type S, F or Np Waters, in the RMZ core zones, in sensitive sites, or in open water areas of Type A Wetlands, except as necessary to remove the timber from the water, or unless it is part of a proposal to remove or reposition large wood debris per WAC 222-30-062. Such bucking or limbing in Type S or F Waters shall incorporate the mitigation measures in subsection (1)(a) of this section.

*** (3) Felling near riparian management zones, wetland management zones and setting boundaries.**

Reasonable care shall be taken to avoid felling trees into riparian management zones, wetland management zones and areas outside the harvest unit.

(4) **Felling in selective and partial cuts.** Reasonable care shall be taken to fell trees in directions that minimize damage to residual trees.

(5) **Disturbance avoidance for northern spotted owls.** Felling and bucking within a SOSEA boundary shall not be allowed within 0.25 mile of a northern spotted owl site center between March 1st and August 31st provided that, this restriction shall not apply if:

- (a) The landowner demonstrates that the owls are not actively nesting during the current nesting season; or
- (b) The forest practice is operating in compliance with a plan or agreement developed for the protection of the northern spotted owl under WAC 222-16-080 (6)(a), (e), or (f).

(6) **Disturbance avoidance for marbled murrelets.** Felling and bucking shall not be allowed within 0.25 mile of an occupied marbled murrelet site during the daily peak activity periods within the critical nesting season, provided that, this restriction shall not apply if the forest practice is operating in compliance with a plan or agreement developed for the protection of the marbled murrelet under WAC 222-16-080 (6)(a) or (c).

WAC 222-30-060 Cable yarding. *[Effective 12/30/13]*

*** (1) Type S and F Waters and sensitive sites.** No timber shall be cable yarded in or across Type S or F Waters except where the logs will not materially damage the bed of waters, banks of sensitive sites, or riparian management zones. If yarding across Type S or F Waters is permitted, then yarding is limited to cable or other aerial logging methods. Any work in or above Type S or F Waters requires an approved forest practices application. Logs must be fully suspended above

the water unless otherwise allowed in the applicable forest practices application. Yarding corridors or full suspension shall be required to prevent damage to the bed, banks, and riparian vegetation. Yarding corridors must be no wider or more numerous than necessary to accommodate safe and efficient transport of logs. Generally, yarding corridors should be located no closer to each other than one hundred fifty feet (measured edge to edge) and should be no wider than thirty feet. Safety is a prime consideration in the location of yarding corridors. Total openings resulting from yarding corridors must not exceed twenty percent of the stream length associated with the forest practices application. When changing cable locations, care must be taken to move cables around or clear of the riparian vegetation to avoid damage to riparian vegetation.

Trees, logs, limbs, and other small debris that enter the water shall be managed as follows:

- (a) Trees or logs that enter Type S and F Waters with identifiable bed or banks during yarding shall remain where they enter unless parts or all of the trees or logs are specifically approved to be removed by the department.
 - (b) Logs transported across Type S or F Waters shall be suspended so no portion of the logs or limbs can enter the watercourse or damage the bed and banks.
 - (c) If limbs or other small debris enter Type S or F Waters with identifiable bed or banks as a result of yarding timber, they shall be removed concurrently with each change in yarding road or within seventy-two hours after entry and placed on stable locations outside the stream's influence. Limbs or other small debris shall be removed from dry portions of watercourses prior to the normal onset of high flows. Large woody material that was in place prior to yarding of timber shall not be disturbed.
- * (2) **Type A or B Wetlands.** No timber shall be cable yarded in or across Type A or B Wetlands except with approval by the department.
- * (3) **Deadfalls.** Logs which are firmly embedded in the bed or bank of Type S or F Waters shall not be removed or disturbed except with approval by the department.
- * (4) **Yarding in riparian management zones, sensitive sites, and wetland management zones.** Where timber is yarded from or across a riparian management zone, sensitive site, or wetland management zone reasonable care shall be taken to minimize damage to the vegetation providing shade to the stream or open water areas and to minimize disturbance to understory vegetation, stumps and root systems. Where practical and consistent with good safety practices, logs shall be yarded in the direction in which they lie and away from Type A or B Wetlands or Type S, F or Np Waters until clear of the wetland management zone or riparian management zone.
- * (5) **Precautions shall be taken to minimize the release of sediment** to waters downstream from the yarding activity. See board manual section 5 for technical guidance.
- (6) **Direction of yarding.**
- (a) Uphill yarding is preferred.
 - (b) Where downhill yarding is used, reasonable care shall be taken to lift the leading end of the log to minimize downhill movement of slash and soils.
- * (c) When yarding parallel to a Type S or F Water channel below the 100-year flood level or within the riparian management zone, reasonable care shall be taken to minimize soil disturbance and to prevent logs from rolling into the stream, lake, pond, or riparian management zone.
- (7) **Disturbance avoidance for northern spotted owls.** The operation of heavy equipment within a SOSEA boundary shall not be allowed within 0.25 mile of a northern spotted owl site center between March 1st and August 31st provided that, this restriction shall not apply if:
- (a) The landowner demonstrates that the owls are not actively nesting during the current nesting

- season; or
- (b) The forest practice is operating in compliance with a plan or agreement developed for the protection of the northern spotted owl under WAC 222-16-080 (6)(a), (e), or (f).
- (8) **Disturbance avoidance for marbled murrelets.** Yarding or operation of heavy equipment shall not be allowed within 0.25 mile of an occupied marbled murrelet site during the daily peak activity periods within the critical nesting season, provided that, this restriction shall not apply if the forest practice is operating in compliance with a plan or agreement developed for the protection of the marbled murrelet under WAC 222-16-080 (6)(a) or (c).

WAC 222-30-062 *Large woody removal or repositioning. [Effective 12/30/13]

Large woody debris removal or repositioning projects shall incorporate mitigation measures as necessary to achieve no-net-loss of productive capacity of fish and shellfish habitat. The following shall apply to large woody debris removal or repositioning:

- (1) Large woody debris removal from streams shall only be approved where necessary to address safety considerations, or where its removal would not diminish the fish habitat quality of the watercourse. The department may approve the repositioning of large woody debris within the watercourse to protect life and property or as needed to conduct a forest practices hydraulic project. Repositioned large woody material shall be placed or anchored to provide stable, functional fish habitat.
- (2) Large woody debris removal shall be conducted by equipment stationed on the bank, bridge, or other approved methods.
- (3) Unless otherwise authorized, large woody debris shall be suspended during its removal so no portion of the large woody debris or limbs can damage the bed or banks. Yarding corridors or full suspension shall be required to avoid damage to riparian vegetation. It may be necessary to cut the large woody debris in place, to a size that allows suspension during removal.
- (4) Smaller limb and bark debris associated with the large woody material shall be removed and disposed of so as not to reenter the typed water.
- (5) Large woody debris embedded in a bank or bed shall be left undisturbed and intact except where authorized for removal.
- (6) Large woody debris removal or repositioning shall be accomplished in a manner which minimizes the release of bedload, logs, or debris downstream.
- (7) Depressions created in gravel bars shall be filled, smoothed over, and sloped upwards toward the bank on a minimum two percent gradient.

WAC 222-30-065 Helicopter yarding. [Effective 12/30/13]

- (1) Helicopter operations within a SOSEA boundary shall not be allowed within 0.25 mile of a northern spotted owl site center between March 1 and August 31, provided that, this restriction shall not apply if:
 - (a) The landowner demonstrates that the owls are not actively nesting during the current nesting season; or
 - (b) The forest practice is operating in compliance with a plan or agreement developed for the protection of the northern spotted owl under WAC 222-16-080 (6)(a), (e), or (f).
- (2) Helicopter operations shall not be allowed:
 - (a) Over an occupied marbled murrelet site or the required managed buffer zone adjacent to that site during the critical nesting season; or
 - (b) Within 0.25 mile of an occupied marbled murrelet site during the daily peak activity periods within the critical nesting season.

- (c) Provided that, these restrictions shall not apply if the forest practice is operating in compliance with a plan or agreement developed for the protection of the marbled murrelet under WAC 222-16-080 (6)(a) or (c).

WAC 222-30-070 Ground-based logging systems. [Effective 12/30/13]

(1) Typed waters and wetlands.

- (a) Ground-based equipment shall not be used in Type S or F Water, except with approval by the department. Yarding across Type S or F Waters is limited to cable or other aerial logging methods.
- (b) Ground-based transport of logs across Type Np and Ns Waters shall minimize the potential for damage to public resources.
 - (i) Skidding logs and driving ground-based equipment through defined channels with flowing water is not allowed.
 - (ii) Ground-based transport of logs to landings across any Typed Np or Ns Water shall minimize the potential to damage public resources.
 - (iii) Whenever skidding across Type Np or Ns Waters, the direction of log movement between stream banks shall be designed to minimize sediment delivery to the stream.
- (c) In order to maintain wetland water movement and water quality, and to prevent soil compaction, ground-based logging systems shall not be used in Type A or B wetlands.
- (d) Where harvest in wetlands is permitted, ground-based logging systems shall be limited to low impact harvest systems. Ground-based logging systems operating in wetlands shall only be allowed during periods of low soil moisture or frozen soil conditions.
- (e) Locations of temporary stream crossings to Np Waters shall be shown on the base map of the forest practices application. Whenever skidding in or across Type Np or Ns Waters, the direction of log movement between stream banks shall be designed to minimize sediment delivery to the stream. BMPs for stream crossings can be found in board manual section 5.

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

- (a) Logging will be permitted within the riparian management zone subject to riparian management zone protection in chapter 222-30 WAC. However, any use of ground-based yarding machines within the zone must be as described in an approved forest practices application or otherwise approved in writing by the department.
- (b) When transporting logs in or through the riparian management zone with ground-based equipment, the number of routes through the zone shall be minimized.
- (c) Logs shall be transported so as to minimize damage to leave trees and vegetation in the riparian management zone, to the extent practical and consistent with good safety practices.

***(3) Wetlands management zones.**

- (a) Logging will be permitted within wetland management zones subject to restrictions in WAC 222-30-020(7).
- (b) Where feasible logs shall be skidded with at least one end suspended from the ground so as to minimize soil disturbance and damage to leave trees and vegetation in the wetland management zone.
- (c) Ground-based harvesting systems shall not be used within the minimum WMZ width unless described in an approved forest practices application or otherwise approved in writing by the department.

***(4) Deadfalls.** Logs firmly embedded in the bed or bank of Type S or F Waters shall not be removed or disturbed without approval from the department.

***(5) Moisture conditions.**

- (a) Ground-based logging systems shall not be used on exposed erodible soils or saturated soils if sediment delivery is likely to disturb a wetland, stream, lake or pond.
 - (b) When soil moisture is high and unrestricted operation of ground-based equipment would result in unreasonable soil compaction, operations shall be restricted to methods that minimize widespread soil compaction, or postponed until site conditions improve such that yarding may proceed without causing unreasonable soil compaction and the long-term impacts to soil productivity and moisture absorption capacity that can result.
- (6) **Protection of residual timber.** Reasonable care shall be taken to minimize damage from skidding to the stems and root systems of residual timber and to young reproduction.
- * (7) **Skid trail location and construction.**
- (a) Skid trails shall be kept to the minimum width.
 - (b) Reasonable care shall be taken to minimize the amount of sidecast required and shall only be permitted above the 100-year flood level.
 - (c) Skid trails shall be outsloped where practical, but be insloped where necessary to prevent logs from sliding or rolling downhill off the skid trail.
 - (d) Skid trails running parallel or near parallel to streams shall be located outside the no-harvest zone of all typed waters and at least thirty feet from the outer edge of the bankfull width of the unbuffered portions of Type Np or Ns Water unless approved in writing by the department.
 - (e) Skid trails shall cross the drainage point of swales at an angle to minimize the potential for delivering sediment to a typed water or where channelization is likely to occur. See board manual section 3.
- * (8) **Skid trail maintenance.**
- (a) Upon completion of use and termination of seasonal use, skid trails on slopes in exposed soils shall be water barred where necessary to prevent soil erosion.
 - (b) Skid trails located within two hundred feet horizontal distance of any typed water that directly delivers to the stream network shall use water bars, grade breaks, and/or slash to minimize sediment delivery to the stream. Water bars shall be placed at a frequency to minimize gullying and soil erosion. In addition to water barring, skid trails with exposed soil that is erodible and may be reasonably expected to cause damage to a public resource shall be seeded with a noninvasive plant species (preferably a species native to the state) and adapted for rapid revegetation of disturbed soil, or treated with other erosion control measures acceptable to the department.
- * (9) **Slope restrictions.** Ground-based systems shall not be used on slopes where in the opinion of the department this method of operation would cause actual or potential material damage to a public resource.
- (10) **Disturbance avoidance for northern spotted owls.** The operation of heavy equipment within a SOSEA boundary shall not be allowed within 0.25 mile of a northern spotted owl site center between March 1st and August 31st, provided that, this restriction shall not apply if:
- (a) The landowner demonstrates that the owls are not actively nesting during the current nesting season; or
 - (b) The forest practice is operating in compliance with a plan or agreement developed for the protection of the northern spotted owl under WAC 222-16-080 (6)(a), (e), or (f).
- (11) **Disturbance avoidance for marbled murrelets.** Operation of heavy equipment shall not be allowed within 0.25 mile of an occupied marbled murrelet site during the daily peak activity periods within the critical nesting season, provided that, this restriction shall not apply if the forest practice is operating in compliance with a plan or agreement developed for the protection

of the marbled murrelet under WAC 222-16-080 (6)(a) or (c).

WAC 222-30-080 Landing cleanup.

Except as approved by the department, the following rules shall be met within 60 days after completion of hauling logs from any landing, or as soon thereafter as practical.

- * (1) **Drainage.**
 - (a) Clean any ditches and culverts obstructed by dirt or debris during operation(s).
 - (b) Establish a slope that will prevent water from accumulating on the landing or running from the landing down any erodible fill.
- * (2) **Other erosion control measures.**
 - (a) Cut slopes shall be cut back to an angle expected to remain stable.
 - (b) Where exposed soil is unstable or erodible and may be reasonably expected to cause damage to a public resource, it shall be seeded with grass, clover or ground cover or compacted, riprapped, water barred, benched or mulched, or be treated by other means approved by the department.
- (3) **Cleanup.**
 - (a) Slash accumulations which would prevent reforestation of otherwise plantable fills, sidecast or cut slopes of landings shall be disposed of or be piled on the landing floor for future disposal.
 - (b) Slash shall not be buried in any filled portion of the landing in connection with landing cleanup operations.
 - (c) All cables, machine parts and other inorganic debris resulting from harvest operation(s) shall be removed at the time of landing cleanup.

WAC 222-30-090 Postharvest site preparation.

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

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

- (1) Cutting, slashing, or other treatment of all noncommercial tree species, other competing vegetation, and nonmerchantable size trees commonly known as "whips" which will not reasonably utilize the growing capacity of the soil except in wetland management zones, riparian management zones; or
- (2) Pile or windrow slash; or
- (3) Mechanically scatter slash; or
- (4) Leave the cutover area in a condition for controlled broadcast burning, and subsequently burn.

WAC 222-30-100 Slash disposal or prescribed burning. *[Effective 12/30/13]*

- (1) **Slash disposal or prescribed burning are prohibited in the core zone.**
- (2) **Slash disposal techniques:**

* (a) Any conventional method of slash disposal may be used, except in Type A or B Wetlands, wetland management zones, and RMZ core and inner zones, Type Np RMZs, sensitive sites, and on sites where the department determines that a particular method would cause unreasonable risk to leave trees, public resources or site productivity. Conventional methods

of slash disposal include the following: Controlled broadcast burning; pile or windrow and burn; pile or windrow without burning; mechanical scatter and compaction; scarification; chip, mulch or lop and scatter; burying; and physical removal from the forest lands:

Provided, That on land shown to have low productivity potential the landowner or operator shall obtain the department's approval of its regeneration plan prior to utilizing controlled broadcast burning as a slash disposal technique. In riparian management inner zones, slash disposal shall be by hand, unless approved by the department. Slash disposal methods that employ machine piling, mechanical scatter and/or compaction, scarification or other techniques that result in soil disturbance shall not be allowed in equipment limitation zones. Scarification shall not be allowed within wetlands. Machine piling is not allowed in Type A and B Wetlands. Department approval, through a burning permit, is required for burning within an equipment limitation zone.

- (b) All slash burning requires a burning permit from the department which provides for compliance with the smoke management plan and reasonable care to protect Type A and B Wetlands, wetland management zones, riparian management zones, equipment limitation zones, soil, residual timber, public resources, and other property.
- (3) **Slash isolation, reduction, or abatement** is required when the department determines there is an extreme fire hazard according to law (see chapter 332-24 WAC).
- (4) **Slash disposal** is required where the forest landowner has applied for and been granted an extension of time for reforestation on the grounds that slash disposal is necessary or desirable before reforestation.
- * (5) **Removing slash and debris** from streams.
 "Slash" or "debris" which can reasonably be expected to cause significant damage to the public resource shall be removed from Type S, F or Np Waters, to above the 100-year flood level and left in a location or manner minimizing risk of re-entry into the stream, lake or pond and if substantial accumulations of slash exist below the 100-year flood level of Type S, F or Np Waters, slash disposal is required. See WAC 222-16-025(4) for general provisions that apply to forest practices hydraulic projects in Type S and F Waters, and board manual section 4 Guidelines for clearing slash and debris from Type Np and Ns Waters.
- * (6) **Fire trails.**
 - (a) Construct drainage structures as needed to control erosion.
 - (b) Reasonable care shall be taken to minimize excavation during fire trail construction and sidecast shall only be permitted above the 100-year flood level.
 - (c) Fire trails shall not be located within Type A or B Wetlands, wetland management zones, equipment limitation zones or riparian zones without prior written approval of the department. Hand constructed fire trails are preferred within forested wetlands. When machine built fire trails are necessary for control of burning, trail width and excavation shall be minimized.
- (7) **Disturbance avoidance for northern spotted owls.** Burning within a SOSEA boundary shall not be allowed within 0.25 mile of a northern spotted owl site center between March 1st and August 31st, provided that, this restriction shall not apply if:
 - (a) The landowner demonstrates that the owls are not actively nesting during the current nesting season; or
 - (b) The forest practice is operating in compliance with a plan or agreement developed for the protection of the northern spotted owl under WAC 222-16-080 (6)(a), (e), or (f).
- (8) **Disturbance avoidance for marbled murrelets.** Slash disposal or prescribed burning shall not be allowed within 0.25 mile of an occupied marbled murrelet site during the critical nesting

season, provided that, this restriction shall not apply if the forest practice is operating in

compliance with a plan or agreement developed for the protection of the marbled murrelet under WAC 222-16-080 (6)(a) or (c).

WAC 222-30-110 Timber harvesting on islands. *[Effective 7/1/05]*

On an island:

- (1) A landowner shall not harvest by clearcut so that more than forty contiguous acres of that landowner's forest land are in a clearcut condition;
- (2) Forest land harvested by clearcut remains in the clearcut condition until it has reached canopy closure or it has been reforested for at least ten years;
- (3) Clearcut harvest units are contiguous unless separated by a buffer at least two hundred feet wide that has reached canopy closure, has been reforested for at least ten years, or is in a land use other than timber production.
- (4) Within two hundred feet of the bankfull width of saltwater timber harvest shall be by selective harvest only, so that no more than thirty percent of the merchantable trees are harvested in any ten-year period: Provided, That other timber harvesting methods may be permitted in those limited instances where the topography, soil conditions, or silvicultural practices necessary for regeneration render selective harvest ecologically detrimental: Provided further, That harvest by clearcut on lands being converted to another use may be approved.
- (5) The requirements of this section shall not apply to timber harvest or salvage timber damaged by wind, disease, insects, fire, or other natural causes.

WAC 222-30-120 Rate of harvest monitoring. *[Effective 12/22/08]*

- (1) Purpose. A monitoring program will be established to determine the rate of timber harvest so that this information will be available, in combination with other information, for examining the relationship of the rate of timber harvest to sustainability of the timber industry and protection of public resources.
- (2) Monitoring program. The department shall monitor the rate at which forest land is harvested. The geographic base for monitoring will be a water resource inventory area.
- (3) Annual report to the board. In addition to the report provided for in WAC 222-08-160, the department shall report monitoring results to the board, annually, beginning in August 1992, including:
 - (a) A summary of rate of harvest by water resource inventory area; and
 - (b) Any other information considered to be significant in understanding the status of the rate of harvest.

Actual reporting periods may be modified as dictated by the availability of satellite imagery.

Chapter 222-34 WAC

REFORESTATION

WACs in this chapter were in effect 7/2001 except some have been amended since 7/2001. The effective dates of the amended WACs are shown after the WAC headings.

WAC

222-34-010	Required reforestation--West of Cascades Summit	34-1
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222-34-030	Reforestation--Plans--Reports--Inspections.....	34-4
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Note: Rules marked with an asterisk () pertain to water quality protection and have been adopted or amended by the Forest Practices Board with agreement from the Department of Ecology per WAC 222-12-010.*

WAC 222-34-010 Required reforestation--West of Cascades Summit. [Effective 7/1/05]

(1) Reforestation - where required.

- (a) Unless the harvest application indicates that the land will be converted to another use, or the lands are identified in WAC 222-34-050 as having a likelihood of conversion to urban uses, reforestation is required for forest lands harvested after January 1, 1975 in the following instances:
 - (i) Clearcutting; or
 - (ii) Partial cutting where 50 percent or more of the timber volume is removed within any 5-year period, unless the department determines that the live trees remaining will reasonably utilize the timber growing capacity of the soils.
- (b) Reforestation is not required where:
 - (i) Individual dead, dying, down or windthrown trees are salvaged; or
 - (ii) A tree or trees not constituting a merchantable stand are removed from lands in actual use for other purposes; for example, removal of individual trees from lands used for farming or grazing; or
 - (iii) Trees are removed under a thinning program reasonably expected to maximize the long-term production of commercial timber; or
 - (iv) An average of 190 vigorous, undamaged, well-distributed seedlings per acre of a commercial tree species are established on the area harvested (up to 20 percent of the harvested area may contain fewer than 190 seedlings per acre, but no acre of the harvested area with timber growing capacity may contain less than 150 seedlings per acre); or
 - (v) A minimum of 100 vigorous, undamaged, well-distributed saplings or merchantable trees per acre of a commercial species or combinations thereof, remain on the area harvested.

- (2) **Reforestation standards.** A harvested area is reforested when that area contains an average of 190 or more vigorous, undamaged commercial species seedlings per acre that have survived on

the site for at least 1 growing season. Up to 20 percent of the harvested area may contain fewer than 190 seedlings per acre, but no portion of the harvested area with timber growing capacity may contain less than 150 seedlings per acre. The department may determine that less than an average of 190 seedlings per acre is acceptable if fewer seedlings will reasonably utilize the timber growing capacity of the site.

- (3) **Competing vegetation.** Competing vegetation shall be controlled to the extent necessary to allow establishment, survival, and growth by commercial species.
- (4) **Artificial regeneration standards.**
 - (a) **Satisfactory reforestation - clearcuts.** Satisfactory reforestation of a clearcut harvest occurs if within 3 years of completion of harvest, or a period of from 1 to 10 years as determined by the department in the case of a natural regeneration plan, the site is restocked to at least the acceptable stocking levels described in subsection (2) of this section: Provided, That regeneration failures from causes beyond the applicant's control will not result in violation of this section, but supplemental planting or reforestation may be required except in riparian management zones (see WAC 222-34-030(4)). The department may grant an extension of time for planting or seeding if suitable seedlings or seeds are unavailable, or if weather conditions or other circumstances beyond the forest land owner's control require delay in planting or seeding.
 - (i) **Reforestation species.** Where the species proposed for reforestation after timber harvesting differs from the removed stand, the department may approve use of the proposed species where the reforestation plan reveals that the proposed species is preferable from any of the following standpoints:
 - (A) Site data indicates better potential production for the proposed species than the existing species.
 - (B) Control of forest insects or diseases.
 - (C) Greater economic return.
 - (ii) **Seedling or seeding standards.** Except as approved by the department to qualify as acceptable reforestation, the seedlings or seeds must be from an appropriate seed source zone. The department shall establish seed zones and guidelines for their use.
 - (b) **Satisfactory reforestation - partial cuts.** Where reforestation is required in connection with a partial cut, the harvest application shall include a plan for stocking improvement. The plan shall be approved unless the department determines that it will not reasonably utilize the timber growing capacity of the site.
- (5) **Natural regeneration standards.** A natural regeneration plan may be approved as acceptable reforestation if:
 - (a) A seed source of well formed trees of commercial tree species, capable of seed production is available.
 - (b) The owner of the seed source agrees in writing not to harvest the seed source for the time period specified in the plan, or until issuance of a satisfactory reforestation inspection report.
 - (c) The seed source must consist of:
 - (i) Seed blocks of sizes and locations shown on the plan and satisfactory to the department; or
 - (ii) An average of at least 8 individually marked, well-distributed, undamaged, vigorous, windfirm seed trees per acre of plantable area and no inadequately stocked area is more than 400 feet from the nearest seed tree; and
 - (iii) Competing vegetation shall be controlled to the extent necessary to allow

establishment, survival, and growth by commercial species.

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

WAC 222-34-020 Required reforestation--East of Cascades Summit. [Effective 7/1/05]

(1) **Reforestation - where required.**

- (a) Unless the harvest application indicates that the land will be converted to another use, or the lands are identified in WAC 222-34-050 as having a likelihood of conversion to urban use, reforestation is required for forest lands harvested after January 1, 1975 in the following instances:
- (i) Clearcutting; or
 - (ii) Partial cutting where 50 percent or more of the timber volume is removed within any 5-year period, unless the department determines that the live trees remaining will reasonably utilize the timber growing capacity of the soils.
- (b) Reforestation is not required where:
- (i) Individual dead, dying, down or windthrown trees are salvaged; or
 - (ii) A tree or trees not constituting a merchantable stand are removed from lands in actual use for other purposes, for example, removal of individual trees from lands used exclusively for farming or cultivated pasture; or
 - (iii) Trees are removed under a thinning program reasonably expected to maximize the long-term production of commercial timber; or
 - (iv) An average of 150 vigorous, undamaged, well-distributed seedlings per acre of a commercial tree species are established on the area harvested (up to 20 percent of the harvested area may contain fewer than 150 seedlings per acre, but no acre of the harvested area with timber growing capacity may contain less than 120 seedlings per acre); or
 - (v) A minimum of 100 vigorous, undamaged, well-distributed advanced regeneration, saplings or merchantable trees per acre of a commercial tree species or combinations thereof, remain on the area harvested.
- (2) **Reforestation standards.** A harvest area is reforested when that area contains an average of 150 or more vigorous, undamaged commercial species seedlings per acre that have survived on the site for at least 1 growing season. Up to 20 percent of the harvested area may contain fewer than 150 seedlings per acre, but no portion of the harvested area with timber growing capacity may contain less than 120 seedlings per acre. The department may determine that less than an average of 150 seedlings per acre is acceptable if fewer seedlings will reasonably utilize the timber growing capacity of the site.
- (3) **Competing vegetation.** Competing vegetation shall be controlled to the extent necessary to allow establishment survival and growth by commercial species.
- (4) **Artificial regeneration standards.**
- (a) **Satisfactory reforestation - clearcuts.** Satisfactory reforestation of a clearcut harvest occurs if within 3 years of completion of harvest or a period of from 1 to 10 years as determined by the department in the case of a natural regeneration plan, the site is restocked to at least the acceptable stocking levels described in subsection (2) of this section: Provided, That regeneration failures from causes beyond the applicant's control will not result in a violation of this section, but supplemental planting may be required except in riparian management zones (see WAC 222-34-030(4)).
- The department may grant an extension of time** for planting or seeding if suitable

seedlings or seeds are unavailable, or if weather conditions or other circumstances beyond the forest landowner's control require delay in planting or seeding.

- (i) **Reforestation species.** Where the species proposed for reforestation after timber harvesting differs from the removed stand, the department may approve use of the proposed species where the reforestation plan reveals that the proposed species is preferable from any of the following standpoints:
 - (A) Site data indicates better potential production for the proposed species than the existing species.
 - (B) Control of forest insects or diseases.
 - (C) Greater economic return.
- (ii) **Seedling and seed standards.** Except as approved by the department to qualify as acceptable reforestation, the seedlings and seed must be from an appropriate seed source zone. The department shall establish seed zones and guidelines for their use.
- (b) **Satisfactory reforestation - partial cuts.** Partial cuts not meeting the specifications of subsection (1)(b)(iv) or (v) of this section shall have a seed source as required in subsection (5)(c)(ii) of this section.
- (5) **Natural regeneration standards.** A natural regeneration plan may be approved by the department as acceptable reforestation if:
 - (a) A seed source of well-formed, vigorous trees of commercial tree species capable of seed production is available.
 - (b) The owner of the seed source agrees in writing not to harvest the seed source for the time period specified in the plan or until issuance of a satisfactory reforestation inspection report.
 - (c) The seed source consists of one of the following, or combinations thereof:
 - (i) Seed blocks which total a minimum of 5 percent of the area of each 40 acre subdivision or portion thereof harvested: Provided, That the seed block should be reasonably windfirm, at least 1/2 acre in size, and reserved in locations shown on the plan and approved by the department; or
 - (ii) A minimum of 4 undamaged seed trees per acre, well distributed over each 40 acre subdivision or portion thereof harvested: Provided, That the distance from seed trees of harvested areas that are not adequately stocked should not be more than 200 feet. Seed trees shall be of commercial tree species, vigorous and of seed-bearing age and size.
- (6) **Any alternate plan** for natural reforestation may be approved if it provides a practical method of achieving acceptable stocking levels as described in subsection (2) of this section within a period of 1 to 10 years.

WAC 222-34-030 Reforestation--Plans--Reports--Inspections. *[Effective 12/22/08]*

- (1) **Reforestation plans.** Reforestation plans must be submitted with the application or notification except where no reforestation is required. The department shall designate difficult regeneration areas utilizing silvicultural information. When a forest practice is proposed for such an area, the department may require additional information regarding harvest systems and post harvest site preparation, as well as regeneration. The department shall approve the reforestation plan for difficult regeneration areas if it determines that such a plan will achieve acceptable stocking according to WAC 222-34-010 and 222-34-020.
- (2) **Reforestation reports.** The landowner, forest landowner, or his/her designee shall file a report with the department either at the time of completion of planting or reforestation or at the end of the normal planting season. When artificial seeding is used the report shall be filed 2 growing seasons after seeding.

- (3) **The reports in subsection (2) of this section must contain at least the following:**
- (a) The original forest practices application or notification number.
 - (b) Species reforested, planted, or seeded.
 - (c) Age of stock planted or seed source zone.
 - (d) Description of actual area reforested, planted, or seeded.
- (4) **Inspection; supplemental planting or reforestation directives.**
- (a) Within 12 months after a reforestation report is received, the department shall inspect the reforested lands. The department shall issue written notice to the landowner, forest landowner, or his/her designee stating whether supplemental planting or reforestation or further inspection is required within 30 days after the deadline for inspection or the reforestation shall be deemed satisfactory.
 - (b) If the inspection shows that acceptable stocking levels have not been achieved, the department shall direct the forest landowner to perform supplemental planting in accordance with the planting standards of WAC 222-34-010 (3) and (4)(a)(ii), 222-34-020 (3) and (4)(a)(ii): Provided, That:
 - (i) In lieu of such supplemental planting, the department and the forest landowner may agree on a supplemental reforestation plan.
 - (ii) Supplemental planting or reforestation shall not be required where in the opinion of the department planting or reforestation is not feasible due to rocky ground, dry conditions, excessively high water table or other adverse site factors and the department determines that there is little probability of significantly increasing the stocking level.
 - (iii) Where supplemental planting or reforestation has been required by the department, the landowner, forest landowner, or his/her designee shall file a report of supplemental planting or reforestation upon completion.
 - (iv) Except where stocking improvement is necessary to protect public resources and is feasible, further supplementary planting shall not be required where acceptable stocking levels have not been achieved after two properly performed supplemental plantings.
 - (c) Within 12 months after a supplemental planting or reforestation report is received, the department shall inspect the reforested lands.
 - (d) **Evidence of compliance.** The department shall within 30 days after the deadline for inspection or reinspection and when requested by the forest landowner confirm in writing whether acceptable stocking levels have been achieved, provided field conditions do not prevent the department from properly evaluating the reforestation.
 - (e) Where a natural regeneration plan has been approved by the department, the department may allow up to 10 years to achieve acceptable stocking levels.

WAC 222-34-040 Site preparation and rehabilitation.

- * (1) Heavy equipment.** Heavy equipment shall not be used in connection with site preparation or rehabilitation work:
- (a) When, because of soil moisture conditions or the type of soils, undue compaction or unnecessary damage to soil productivity would occur or erosion would result in damage to water quality; or
 - (b) Within riparian management zones, Type A and B Wetlands, wetland management zones, or within equipment limitation zones of Type Np and Ns Waters on slopes of 30 percent or less. On slopes greater than 30 percent heavy equipment shall not operate within 50 feet of Type S through Ns Waters unless a site specific plan has been approved by the department.

- * (2) **Surface water drainage.** Where site preparation or rehabilitation involves contouring or terracing of slopes, drainage ditches, or similar work:
 - (a) The gradient of ditches or other artificial water courses in erodible soils shall not cause significant stream, lake, pond, or wetland siltation.
 - (b) Ditches and other artificial water courses shall not discharge onto any road, landing or fill.
 - (c) Ditches and other artificial water courses shall not be constructed to discharge onto the property of other parties without their consent.
- * (3) **Stream channel realignment.** Where work involves deepening, widening, straightening or relocating the channel; or bulkheading, riprapping or otherwise stabilizing the banks of a Type S or F Water, a hydraulic project approval is always required, and the work shall be done only:
 - (a) After consultation with any party having an appropriation permit or registered right to appropriate waters from the affected stream segment in cases of streams used for domestic water supplies.
 - (b) Where no significant adverse effects on either the peak or minimum water levels or flows downstream can be expected.
 - (c) In a manner not expected to result in long-term damage to public resources or to adjacent or downstream property.

(NOTE: OTHER LAWS AND RULES AND/OR PERMIT REQUIREMENTS MAY APPLY. SEE CHAPTER 222-50 WAC)

WAC 222-34-050 Urban and other lands exempted from the reforestation requirements.

- (1) **Those lands which** an applicant has declared are to be converted to a nonforest use and are in fact converted within 3 years of completion of harvest.
- (2) **Those lands the** department determines should be exempted in whole or in part where the forest land has the likelihood of future conversion as defined in WAC 222-16-060. The applicant is encouraged to propose an alternate plan for reforestation on these lands.
- (3) **Utility rights of way.** Reforestation is not required for initial clearing or reclearing of utility rights of way in actual use for utility purposes or scheduled for construction of utility facilities within 10 years from the date of completion of harvest, provided that if the scheduled facility is not completed, the area shall be reforested within 1 year.
- (4) **Public lands.** Reforestation is not required on the following lands, unless required by regulation of the agency owning or acquiring the lands:
 - (a) Lands owned in fee by a public agency which has budgeted for construction within 10 years a specific project inconsistent with commercial timber production.
 - (b) Lands being acquired by public agency for construction within 10 years of a project inconsistent with timber production, if at the time of completion of harvest the public agency has entered into a binding contract for the purchase of the lands or initiated legal proceedings for the condemnation of the lands.

Chapter 222-38 WAC

FOREST CHEMICALS

WAC

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Note: Rules marked with an asterisk ()pertain to water quality protection and have been adopted or amended by the Forest Practices Board with agreement from the Department of Ecology per WAC 222-12-010.*

WAC 222-38-010 Policy--Forest chemicals.

- * (1) Chemicals perform important functions in forest management. The purpose of these regulations is to regulate the handling, storage and application of chemicals in such a way that the public health, lands, fish, wildlife, aquatic habitat, wetland and riparian management zone vegetation will not be significantly damaged, and water quality will not be endangered by contamination. This section in no way modifies the state department of agriculture regulations governing chemicals.
- * (2) These rules are intended to implement best management practices designed to eliminate the direct entry of pesticides to water. Best management also includes minimizing the entry of forest chemicals into channel migration zones, wetland management zones, sensitive sites, or the core or inner zones of riparian management zones and buffers on Type Np Waters. Significant damage for purposes of this section includes any damage that would inhibit or preclude the existing vegetation from protecting public resources.

(NOTE: Other laws and rules and/or permit requirements may apply. See chapter 222-50 WAC.)

WAC 222-38-020 Handling, storage, and application of pesticides.

- * (1) **No pesticide leakage, contamination, pollution.**
Transportation, handling, storage, loading, application, and disposal of pesticides shall be consistent with applicable label requirements and other state and federal requirements.
- * (2) **Mixing and loading areas.**
 - (a) Mix pesticides and clean tanks and equipment only where any accidental spills would not enter surface water, channel migration zone or wetlands.
 - (b) Storage and loading areas should be located where accidental spillage of pesticides will not enter surface water or wetlands. If any pesticide is spilled, immediate appropriate procedures should be taken to contain it.
 - (c) Use devices or procedures to prevent "back siphoning" such as providing an air gap or reservoir between the water source and the mixing tank.
- * (3) **Riparian management and wetland management zones.** Pesticide treatments within the RMZ core or inner zones, Type Np RMZs, sensitive sites or wetland management zones shall be by hand unless the department has approved a site specific plan with another method of treatment.

***(4) Aerial application of pesticides.**

- (a) To keep pesticides out of the water and wetlands, a buffer will be maintained during operations on all Type S and F Waters and Type Np and Ns surface waters and Type A and B Wetlands, as set forth in (a)(i) of this subsection. To protect riparian vegetation, pesticides must not be applied to the core and inner zone, channel migration zone of any Type S or F Waters, to Type Np RMZ's, to sensitive site buffers, or to Type A or B Wetland management zones. In addition, operators must maintain an offset from the outer edge of the inner zone and wetland management zones as set forth in (a)(i) and (ii) of this subsection. (See the board manual, section 12 for a detailed example.) Where the buffer and offset widths overlap, the distance of offset must be whichever distance is greater from Type S or F Waters or Type A or B Wetlands for the applicable conditions. Aerial applications of pesticides in and around Type Np or Ns Waters with surface water and Type B Wetlands must be buffered according to (a)(iii) of this subsection. (Note: These application requirements do not apply to B.t. (*Bacillus thuringiensis*). When applying B.t., the operator must meet all label requirements.)

(i) Buffers on Type S and F Waters.

		DETERMINING WIND FACTOR (See the board manual section 12 for detailed examples.)			
		Favorable		Calm or Unfavorable	
NOZZLE TYPE	APPLICATION HEIGHT	BUFFER ON WATER	OFFSET FROM INNER ZONE	BUFFER ON WATER	OFFSET FROM INNER ZONE
Regular Nozzle*	Low (16 ft.)	Width of the inner zone	As needed for safety	100 ft., or the inner zone, whichever is greater	50 ft.
	Medium (17-50 ft.)	Width of the inner zone	As needed for safety	250 ft.	N/A
	High (51-65 ft.)	Width of the inner zone	As needed for safety	325 ft.	N/A
Raindrop Nozzle (or other nozzles that result in the same size spray droplets)**	Low (16 ft.)	Width of the inner zone	As needed for safety	Width of inner zone	20 ft.
	Medium (17-50 ft.)	Width of the inner zone	As needed for safety	Width of inner zone	20 ft.
	High (51-65 ft.)	Width of the inner zone	As needed for safety	125 ft. or the inner zone, whichever is greater	20 ft.

*Coarse spray droplets = approximately 9% of spray-droplet volume \leq 150 μ

**Ultra coarse spray droplets = approximately 1% of spray-droplet volume \leq 150 μ

(ii) Buffers on Type A and B Wetlands.

		DETERMINING WIND FACTOR (See the board manual section 12 for detailed examples.)			
		Favorable		Calm or Unfavorable	
NOZZLE TYPE	APPLICATION HEIGHT	BUFFER ON WETLAND	OFFSET FROM WMZ	BUFFER ON WETLAND	OFFSET FROM WMZ
Regular Nozzle*	Low (16 ft.)	Width of the WMZ	As needed for safety	150 ft.	N/A
	Medium (17-50 ft.)	Width of the WMZ	As needed for safety	250 ft.	N/A
	High (51-65 ft.)	Width of the WMZ	As needed for safety	325 ft.	N/A
Raindrop Nozzle (or other nozzles that result in the same size spray droplets)**	Low (16 ft.)	Width of the WMZ	As needed for safety	Width of WMZ	20 ft.
	Medium (17-50 ft.)	Width of the WMZ	As needed for safety	Width of WMZ	20 ft.
	High (51-65 ft.)	Width of the WMZ	As needed for safety	125 ft. or the width of the WMZ, whichever is greater	20 ft.

*Coarse spray droplets = approximately 9% of spray-droplet volume ≤ 150 u

**Ultra coarse spray droplets = approximately 1% of spray-droplet volume ≤ 150 u

(iii) Buffers on Type Np or Ns Waters with surface water present and Type B Wetlands less than 5 acres.

		DETERMINING WIND FACTOR (See the board manual section 12 for detailed examples.)	
		Favorable	Calm or Unfavorable
Nozzle Type	Buffer	Buffer	Buffer
Regular Nozzle	50 ft.		100 ft.
Raindrop Nozzle (or other nozzles that result in the same size spray droplets) *	50 ft.		70 ft.

*Coarse spray droplets = approximately 9% of spray-droplet volume ≤ 150 u

**Ultra coarse spray droplets = approximately 1% of spray-droplet volume ≤ 150 u

- (b) The initial swath of aerial pesticides must be applied parallel to the applicable buffer strip identified in (a) of this subsection unless a deviation is approved in advance by the department. Drift control agents shall be required adjacent to buffer strips. Operators applying aerial pesticides must avoid applications that might result in drift causing direct entry of pesticides into riparian management core and inner zones, channel migration zones, sensitive sites, Type A and B Wetlands, wetland management zones, and all typed waters, except segments of Type Np and Ns Waters with no surface water present.
 - (c) Operators applying aerial pesticides must use a bucket or spray device capable of immediate shutoff.
 - (d) Operators applying aerial pesticides must shut off spray equipment during turns and over open water.
 - (e) Operators applying aerial pesticides near residences or agricultural land must either:
 - (i) Leave at least a 200 foot no application buffer strip around residences and 100 foot no application buffer strip adjacent to lands used for agriculture; or
 - (ii) Apply the pesticides using the widest buffer for the applicable wind conditions as determined by the applicable tables in (a) of this subsection. These provisions do not apply where the residences or agricultural land that could be affected by drift from the aerial application of the pesticide is owned by the forest landowner or where the aerial application is acceptable to the resident or landowner.
 - (f) The landowner shall identify for the operator the units to be sprayed and the untreated areas within the units with appropriately marked aerial photos or detailed planimetric maps. Before application of the pesticide an over-flight of the area shall be made by the pilot with the marked photos or maps. Stream and wetland buffers required under (a) of this subsection must be clearly visible from the air. The department may require additional field delineation of buffers where the operation is dependent on the use of ground cover features to determine unit area locations and where such ground cover is not readily distinguished from the no spray buffer areas.
 - (g) Aerial chemical application areas shall be posted by the landowner by signing at significant points of regular access at least 5 days prior to treatment. Posting shall remain at least 15 days after the spraying is complete. The department may require an extended posting period in areas where human use or consumption of plant materials is probable. Posting at formal, signed trailheads that are adjacent to aerially treated units is required. The signs will contain the name of the product used, date of treatment, a contact telephone number, and any applicable restrictions.
- * (5) **Ground application of pesticides with power equipment.** Ground application of pesticides with power equipment is prohibited within the core and inner zone, channel migration zone of Type S and F Waters, unless necessary to meet requirements for noxious weed control. In addition, operators shall maintain a 25 foot no application buffer strip around Type A or B Wetlands and on all sides of all other surface waters. Provided, however, That dry stream segments (i.e., channels with no surface water at the time of application) do not require a buffer.
- * (6) **Hand application of pesticides.** Pesticides being applied by hand must only be applied to specific targets, such as vegetation, trees, stumps, and burrows, or as bait or in traps. No pesticides may be applied by hand within the core zone, channel migration zone of Type S and F Waters unless necessary to meet requirements for noxious weed control.
- * (7) **Limitations on application.** Pesticides shall be applied only in accordance with all limitations:
- (a) Printed on the United States Environmental Protection Agency container registration label, and/or
 - (b) Established by regulation of the state department of agriculture.

- (c) Established by state and local health departments (in municipal watersheds).
 - (d) Established by the Federal Occupational Safety and Health Administration, or the state department of labor and industries, as they relate to safety and health of operating personnel and the public.
 - (e) The department or the department of agriculture may suspend further use of any equipment responsible for chemical leakage until the deficiency has been corrected to the satisfaction of the department suspending its usage.
- * (8) **Container disposal.** Pesticide containers shall be either:
- (a) Removed from the forest and disposed of in the manner consistent with label directions; or
 - (b) Removed and cleaned for reuse in a manner consistent with any applicable regulations of the state department of agriculture or the state or local health departments.
- * (9) **Daily records - aerial application of pesticides.** On all aerial applications of pesticides, the operator shall maintain for 7 years daily records of spray operations as required by the state department of agriculture WAC [16-228-1320](#).
- * (10) **Reporting of spills.** All potentially damaging chemical spills shall be immediately reported to the department of ecology. Emergency telephone numbers for reporting spills shall be available at the department's regional offices.

WAC 222-38-030 Handling, storage, and application of fertilizers. .

- * (1) **Storage and loading areas.** Storage and loading areas should be located where accidental spillage of fertilizers will not enter surface water or wetlands. If any fertilizer is spilled, immediate appropriate procedures shall be taken to contain it.
- * (2) **Riparian management zone and wetland management zone.** Fertilizer treatments within a riparian management zone or wetland management zone shall be by hand unless the department has approved a site specific plan with another method of treatment.
- * (3) **Aerial application of fertilizer.**
- (a) Proposed fertilization units shall be planned to avoid and to minimize the direct or indirect introduction of fertilizer into waters and wetlands.
 - (b) Leave a 25 foot buffer from the edge of the channel migration zone on all Type S and F Waters, except as noted in (f) of this subsection.
 - (c) When the helicopter flight path during fertilizer application is parallel to a water course or the WMZ edge, the centerline of the initial swath should be adjusted to prevent direct application within the buffers or WMZs.
 - (d) Leave at least a 200 foot buffer strip around residences and a 100 foot buffer strip adjacent to lands used for agriculture unless such residence or farmland is owned by the forest landowner or the aerial application is acceptable to the resident or landowner.
 - (e) The landowner shall identify for the operator the units to be fertilized and the untreated areas within the units with appropriately marked aerial photos or detailed planimetric maps. Before application of the fertilizer, an over-flight of the area shall be made by the pilot with the marked photos or maps.
 - (f) Where the department has been provided information by the department of ecology indicating that water quality in downstream waters is likely to be impaired by entry of fertilizer into waters, such waters shall be protected by site specific conditioning.
- * (4) **Ground and hand application of fertilizers.** Prevent fertilizer from entering Type A and B Wetlands and all typed waters, except segments of Type Np and Ns Waters with no surface water present.

- * (5) **Reporting of fertilizer spills.** All fertilizer spills involving streams, lakes, wetlands, or other waters of the state shall be immediately reported to the department of ecology. Emergency telephone numbers for reporting spills shall be available at the department's regional offices.

WAC 222-38-040 Handling, storage, and application of other forest chemicals.

- * (1) **Waters and wetlands.** Do not allow direct entry of other forest chemicals into any water or Type A or B Wetlands, except segments of Type Np and Ns Waters with no surface water present.
- * (2) **Storage, mixing, and loading areas.**
- (a) Mix other forest chemicals and clean tanks and equipment only where any accidental spills would not enter surface water or wetlands.
 - (b) Storage and loading areas should be located where accidental spillage of other forest chemicals will not enter surface water or wetlands. If any chemical is spilled, immediate appropriate procedures should be taken to contain it.
 - (c) Use devices or procedures to prevent "back siphoning" such as providing an air gap or reservoir between the water source and the mixing tank.
 - (d) Water protection requirements in subsection (1) of this section may be waived when emergency use of fire retardants is necessary to control wildfire.

Chapter 222-42 WAC

SUPPLEMENTAL DIRECTIVES

WAC

222-42-010 Supplemental directives..... 1

WAC 222-42-010 Supplemental directives. *[Effective 12/22/08]*

- (1) **Purpose of supplemental directives.** The department may issue supplemental directives to the forest landowner, timber owner and operator, advising them to take or not take as part of any forest practices operations specified actions the department determines to be preferred courses of action or minor changes in the operation to provide greater assurance that the purposes and policies set forth in RCW 76.09.010 of the act will be met.
- (2) **Content of supplemental directives.** Supplemental directives shall indicate the reason for their issuance.
- (3) **Form, service.** All supplemental directives shall either be in writing, or be confirmed in writing. The supplemental directive shall be given to the operator and a copy mailed promptly to the forest landowner and to the timber owner if different than the forest landowner.
- (4) **Directive constitutes approval.** No other approval of the department shall be necessary to conduct forest practice operations in compliance with the terms of a supplemental directive.
- (5) **Informal discussions.** The department shall provide an opportunity for an informal discussion before issuing, withdrawing or modifying a supplemental directive.

Chapter 222-46 WAC

CONSULTATION AND ENFORCEMENT

WACs in this chapter were in effect 7/2001 except some have been amended since 7/2001. The effective dates of the amended WACs are shown after the WAC headings.

WAC

222-46-010 Policy--Enforcement.	46-1
222-46-012 Representatives on inspections.	46-1
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222-46-070 Injunctions, civil suits, disapprovals.	46-7
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WAC 222-46-010 Policy--Enforcement. It is the policy of the act and the board to encourage informal, practical, result-oriented resolution of alleged violations and actions needed to prevent damage to public resources. It is also the policy of the act and the board to provide, consistent with the principles of due process, effective procedures for enforcement. It is the policy of the board to use a progressive approach to enforcement, and civil penalties should be one of the least used enforcement mechanisms; such an approach usually begins with consultation and voluntary efforts to achieve compliance while generally reserving civil penalties to more serious infractions. This part of these regulations provides the following enforcement procedures: Informal conferences; notices to comply; stop work orders; corrective actions by the department; civil penalties; injunctions and other civil judicial relief; and criminal penalties. Civil penalties shall be appropriate to the violation or its potential to damage public resources.

WAC 222-46-012 Representatives on inspections. In connection with any watershed analysis, any review of a pending application by an interdisciplinary team appointed by the department, any compliance studies, any effectiveness monitoring, or other research that has been agreed to by a landowner, the department will invite representatives of other agencies necessary to provide specific expertise to resolve issues that have been raised, tribes, and interest groups to accompany a department representative and, at the landowner's election, the landowner, on any such inspections. Reasonable efforts must be made by the department to notify the landowner of the persons being invited onto the property and the purposes for which they are being invited.

WAC 222-46-015 Enforcement within the CRGNSA special management area. The department shall administer and enforce the forest practices regulations, including the requirement that the CRGNSA guidelines apply to all forest practices in the SMA, in cooperation with the U.S. Forest Service and the Columbia River Gorge commission.

WAC 222-46-020 Informal conferences. *[Effective 12/22/08]*

- (1) **Opportunity mandatory.** The department shall afford the operator and/or a designated representative reasonable opportunities to discuss proposed enforcement actions at an informal conference prior to taking further enforcement action, unless the department determines that there may be imminent damages to the public resource. Informal conferences may be used at any stage in enforcement proceedings, except that the department may refuse to conduct informal conferences with respect to any matter then pending before the appeals board or a court.
- (2) **Reports required.** Department personnel in attendance at informal conferences shall keep written notes of the date and place of the conference, the persons in attendance, the subject matter discussed, and any decisions reached with respect to further enforcement action. Copies of the conference notes shall be forwarded to the landowner and the timber owner.
- (3) **Records available.** Copies of written notes shall be sent to each participant in the conference, be kept in the department files until one year after final action on the application involved, and be open to public inspection.
- (4) **Local governmental entity conditions.** If the proposed enforcement actions involve conditions imposed pursuant to WAC 222-20-040(3), then the local governmental entity shall be involved in the informal conference.

WAC 222-46-030 Notice to comply. *[Effective 12/16/10]*

If a violation, a deviation, material damage or potential for material damage to a public resource has occurred and the department determines that a stop work order is unnecessary, then the department shall issue and serve upon the operator and/or landowner a notice.

- (1) The notice shall clearly set forth:
 - (a) **The specific** nature, extent, and time of failure to comply with the approved application; or identifying the damage or potential damage; and/or
 - (b) The relevant provisions of the Forest Practices Act or of the forest practices rules relating thereto;
 - (c) **The right** of the operator, landowner, or timber owner to a hearing before the department; and
 - (d) **The specific** course of action ordered by the department to be followed by the operator to correct such failure to comply and to prevent, correct and/or compensate for material damage to public resources which resulted from any violation, unauthorized deviation, or willful or negligent disregard for potential damage to a public resource; and/or those courses of action necessary to prevent continuing damage to public resources where the damage is resulting from the forest practice activities but has not resulted from any violation, unauthorized deviation, or negligence.
- (2) **Local governmental entity conditions.** If the notice to comply involves a condition imposed pursuant to WAC 222-20-040(3), then the specific course of action ordered by the department shall include a requirement that the operator obtain approval of the local governmental entity of the action to be taken.
- (3) **The department** shall mail a copy of the notice to comply to the forest landowner and the timber owner at the addresses shown on the application, showing the date of service upon the operator. The department shall also mail a copy to the local governmental entity if a condition imposed pursuant to WAC 222-20-040(3) is involved.
- (4) **Such notice to comply shall become a final order** of the department: Provided, That no direct appeal to the appeals board will be allowed from such final order. Such operator shall undertake the course of action so ordered by the department unless, within fifteen days after

the date of service of such notice to comply, the operator, forest landowner, or timber owner, shall request the department in writing to schedule a hearing. If so requested, the department shall schedule a hearing on a date not more than twenty days after receiving such request. The local governmental entity shall participate in the hearing if a condition imposed pursuant to WAC 222-20-040(3) is involved. Within ten days after such hearing, the department shall issue a final order either withdrawing its notice to comply or clearly setting forth the specific course of action to be followed by such operator. Such operator shall undertake the course of action so ordered by the department unless within thirty days after the date of receipt of such final order, the operator, forest landowner, or timber owner appeals such final order to the appeals board. No person shall be under any obligation under this section to prevent, correct, or compensate for any damage to public resources which occurs more than one year after the date of completion of the forest practices operations involved exclusive of reforestation, unless such forest practices were not conducted in accordance with forest practices rules: Provided, That this provision shall not relieve the forest landowner from any obligation to comply with forest practices rules pertaining to providing continuing road maintenance. No action to recover damages shall be taken under this section more than two years after the date the damage involved occurs.

WAC 222-46-040 Stop work orders. *[Effective 12/16/10]*

- (1) **The department** shall have the authority to serve upon an operator a stop work order which shall be a final order of the department if:
 - (a) There is any violation of the provisions of the Forest Practices Act or these rules; or
 - (b) There is a deviation from the approved application; or
 - (c) Immediate action is necessary to prevent continuation of or to avoid material damage to a public resource.
- (2) **The stop work order** shall set forth:
 - (a) The specific nature, extent, and time of the violation, deviation, damage, or potential damage;
 - (b) An order to stop all work connected with the violation, deviation, damage, or potential damage;
 - (c) The specific course of action needed to correct such violation or deviation or to prevent damage and to correct and/or compensate for damage to public resources which has resulted from any violation, unauthorized deviation, or willful or negligent disregard for potential damage to a public resource. The stop work order shall also set forth those courses of action necessary to prevent continuing damage to public resources where the damage is resulting from the forest practices activities but has not resulted from any violation, unauthorized deviation, or negligence. If the stop work order involves a condition imposed pursuant to WAC 222-20-040(3), then the specific course of action ordered by the department shall include a requirement that the operator obtain approval of the local governmental entity of the action to be taken.
 - (d) The stop work order shall also set forth the right of the operator to a hearing before the appeals board.
- (3) The department shall immediately file a copy of such order with the appeals board and mail a copy thereof to the timber owner and forest landowner at the addresses shown on the application. The department shall also mail a copy to the local governmental entity if a condition imposed pursuant to WAC 222-20-040(3) is involved.
- (4) The operator, timber owner, or forest landowner may commence an appeal to the appeals

board within thirty days from the date of receipt of the order by the operator. If such appeal is commenced, a hearing shall be held not more than twenty days after copies of the notice of appeal were filed with the appeals board. Such proceeding shall be a contested case within the meaning of chapter 34.05 RCW.

- (5) The operator shall comply with the order of the department immediately upon being served, but the appeals board if requested shall have authority to continue or discontinue in whole or in part the order of the department under such conditions as it may impose pending the outcome of the proceeding.

WAC 222-46-050 Corrective action.

(1) **Normal time schedule.**

- (a) **Written notice.** If an operator fails to undertake and complete any course of action with respect to a forest practice, as required by a final order of the department or a final decision of the appeals board or any court pursuant to RCW 76.09.080 and 76.09.090 of the Forest Practices Act, the department may determine the cost thereof and give written notice of such cost to the operator, the timber owner and the owner of the forest land upon or in connection with which such forest practice was being conducted.
- (b) **Failure to act.** If such operator, timber owner, or forest landowner fails within 30 days after such notice is given to undertake such course of action, or having undertaken such course of action fails to complete it within a reasonable time as set forth by the department, the department may expend any funds available to undertake and complete such course of action and such operator, timber owner, and forest landowner shall be jointly and severally liable for the actual, direct cost thereof, but in no case more than the amount set forth in the notice from the department.
- (c) **Failure to pay.** If not paid within 60 days after the department completes such course of action and notifies such forest landowner in writing of the amount due, such amount shall become a lien on such forest land and the department may collect such amount in the same manner provided in chapter 60.04 RCW for mechanics' liens.

- (2) **Immediate corrective action.** When the operator has failed to obey a stop work order issued under the provisions of RCW 76.09.080, the department may take immediate action to prevent continuation of or avoid material damage to public resources. If a final order or decision fixes liability with the operator, timber owner, or forest landowner, they shall be jointly and severally liable for such emergency costs which may be collected in the manner provided for in RCW 76.09.120.

WAC 222-46-060 Civil penalties. *[Effective 12/16/10]*

- (1) **Amount of penalty.** Every person who violates any provisions of RCW 76.09.010 through 76.09.280 or of the forest practices rules adopted pursuant thereto, or who converts forest land to a use other than commercial timber operation within three years after completion of the forest practice without the consent of the county, city, or town, shall be subject to a penalty in an amount of not more than ten thousand dollars for each such violation. Each and every such violation shall be a separate and distinct violation. In case of a failure to comply with a stop work order, every day's continuance thereafter shall be a separate and distinct violation.
- (2) **Penalty assessments** shall consider the following:
 - (a) Repairability of the adverse effect from the violation;
 - (b) Whether the violation of the act or rules was intentional;
 - (c) Cooperation with the department;

- (d) Previous violation history;
 - (e) Severity of the impact or the potential for material damage to public resources; and
 - (f) The extent to which a penalty to be imposed on a forest landowner for a forest practices violation committed by another should be reduced because the owner was unaware of the violation and did not receive substantial economic benefits from the violation.
- (3) **Calculation of penalty.** The department shall evaluate any violation to determine if a civil penalty is warranted. When penalties are to be assessed they shall be calculated using the following process:
- (a) Determine the base penalty; see WAC 222-46-065.
 - (b) The penalty may be adjusted using factors specific to the incident and the site. The following additional factors will be independently considered and added to the base penalty to calculate the civil penalty:
 - (i) **Repairability:**
Repairability shall be based on the length of time natural restoration or implementation of a restoration plan will take and whether repair can be achieved. The penalty will be substantially increased when natural restoration will not occur within three years and the damage cannot be effectively corrected. For this factor, up to double the base penalty may be added to the penalty.
 - (ii) **Intention:**
In making a determination of intent, the department shall consider, but not be limited to, the following considerations: The foreseeability of the violation; whether precautions were taken to avoid the violation; whether an informal conference or enforcement action was served on the violator prior to the violation. For this factor, up to double the base penalty may be added to the penalty.
 - (iii) **Cooperation:**
The department shall consider whether the violator did or did not make any attempt to correct the problem. Timeliness of action(s) and/or ignoring or evading agency contacts or directives shall determine if the penalty shall be increased. For this factor, up to double the base penalty may be added to the penalty.
 - (iv) **Previous violation(s):**
The department shall consider whether the violator has previous violations of a forest practices rule or regulation as documented in an enforcement action. The department may consider company organizations and assignment of operational responsibilities when evaluating previous violations. A history of violations with adverse impacts or potential for adverse impacts or that shows a pattern of ignoring the rules or the act, shall result in a substantially larger penalty.
Enforcement actions for the purposes of this section shall include notices to comply, stop work orders, civil penalties, and criminal citations when those enforcement actions are associated with forest practices violations. For this factor, up to quadruple the base penalty may be added to the penalty.
 - (v) **Severity:**
The department shall adjust the penalty based on the extent and magnitude of the damage or potential damage to public resources. For this factor, up to quadruple the base penalty may be added to the penalty.
 - (vi) **Landowner involvement:**
If in the opinion of the department, the landowner exercised reasonable prudence in the development of timber sale contracts or supervision of the forest practices

- operations, was unaware of the forest practices violation, and the landowner received no substantial economic benefit from the violation, then the landowner generally would not be assessed a civil penalty.
- (c) In accordance with RCW 76.09.170, the penalty may not exceed ten thousand dollars for each and every violation.
- (d) The department shall determine whether all or a portion of the penalty should be assessed against the operator, landowner, and/or timber owner. The department should consider the responsible party, the degree of control, the sophistication of the party and whether different parties conducted different violations.
- (4) **Other participants.** Every person who through an act of commission or omission procures, aids or abets in the violation shall be considered to have violated the provisions of this section and shall be subject to the penalty provided for in this section.
- (5) **Government employees.** No penalty shall be imposed under this section upon any governmental official, an employee of any governmental department, agency, or entity, or a member of any board created by the act for any act or omission in his/her duties in the administration of the act or of these rules.
- (6) **Written notice.** The penalty shall be imposed by a notice in writing, either by certified mail with return receipt requested or by personal service, to the person incurring the same from the department describing the violation with reasonable particularity.
- (7) **Remission or mitigation.** Within fifteen days after the notice is received, the person incurring the penalty may apply in writing to the supervisor of the department or his or her designee for the remission or mitigation of such penalty. Upon receipt of the application, the department may remit or mitigate the penalty upon whatever terms the department in its discretion deems proper: Provided, That the department deems such remission or mitigation to be in the best interests of carrying out the purposes of the act. The department shall have authority to ascertain the facts regarding all such applications in such reasonable manner and under such rules as they may deem proper. The reviewer may reduce, dismiss or not change the civil penalty.
- (8) **Right of appeal.** Any person incurring any penalty hereunder may appeal the same to the appeals board. Such appeals shall be filed within thirty days after the date of receipt of the penalty unless an application for remission or mitigation is made to the department. When such an application for remission or mitigation is made, such appeals shall be filed within thirty days of receipt of notice from the department setting forth the disposition of the application for remission or mitigation. Concurrently with the filing of any appeal to the appeals board as provided in this section, the appellant shall file a copy of the appeal with the department region from which the penalty was issued and a copy with the office of the attorney general.
- (9) **Penalties due.** The penalty imposed under this section shall become due and payable thirty days after receipt of a notice imposing the same unless application for remission or mitigation is made or an appeal is filed. When such an application for remission or mitigation is made, any penalty incurred under this section shall become due and payable thirty days after receipt of notice setting forth the disposition of such application unless an appeal is filed from such disposition. Whenever an appeal of the penalty incurred is filed, the penalty shall become due and payable only upon completion of all administrative and judicial review proceedings and the issuance of a final order or decision confirming the penalty in whole or in part.
- (10) **Enforcement.** If the amount of any penalty is not paid to the department within thirty days after it becomes due and payable, the attorney general, upon the request of the department,

shall bring an action in the name of the state of Washington in the superior court of Thurston county or of any county in which such violator may do business, to recover such penalty, interest, costs, and attorneys' fees. In all such actions the procedure and rules of evidence shall be the same as an ordinary civil action except as otherwise provided in the Forest Practices Act. In addition to or as an alternative to seeking enforcement of penalties in superior court, the department may bring an action in district court as provided in Title 3 RCW, to collect penalties, interest, costs, and attorneys' fees.

- (11) **Liens.** Penalties imposed under this section for violations associated with a conversion to a use other than commercial timber operation shall be a lien upon the real property of the person assessed the penalty. The department may collect such amounts in the same manner provided in chapter 60.04 RCW for mechanics' liens.
- (12) Any person incurring a penalty is also responsible for the payment of all costs and attorneys' fees incurred with the penalty as well as interest accruing on the unpaid penalty amount.

WAC 222-46-065 Base penalty schedule. All other WAC or RCW violations not specifically mentioned in this list shall have a base penalty of five hundred dollars.

Violations of the following shall have a base penalty of two thousand dollars:

Statute or Rule	Description
WAC 222-20-010 RCW 76.09.050	Operation without an approved forest practices application/notification.
WAC 222-20-010 RCW 76.09.060	Willful misrepresentation of information on the forest practices application/notification.
WAC 222-20-050 RCW 76.09.060	Conversion of land without consent of the county, city or town.
WAC 222-20-040 WAC 222-20-060 RCW 76.09.060	Significant, in the opinion of the department, deviation from an approved forest practices application/notification.

WAC 222-46-070 Injunctions, civil suits, disapprovals. *[Effective 12/16/10]*

- (1) **The department** may take any necessary action to enforce any final order or final decision.
- (2) (a) The department may disapprove any forest practices application or notification submitted by any person who has failed to comply with a final order or decision as set forth in RCW 76.09.080, 76.09.090, or 76.09.110, or has failed to pay any civil penalties as provided in RCW 76.09.170. This disapproval will last for up to one year from the issuance of a notice of intent to disapprove notifications and applications under this section, or until the violator pays all outstanding civil penalties and complies with all validly issued and outstanding notices to comply and stop work orders, whichever is longer.
- (b) For purposes of this subsection, "validly issued" means a stop work order or notice to comply for which no appeal or request for hearing has been filed; or if appealed, it has not been declared invalid by a final order or decision and all appeals are exhausted.
- (c) The department shall provide written notice of its intent to disapprove future applications or notifications, and shall forward copies of such notice to any affected

landowner, timber owner or operator. The disapproval period shall run from thirty days following the date of actual notice or from the date all appeals, if any, have been exhausted.

- (d) Any person provided notice of intent to disapprove an application or notification may seek review from the appeals board within thirty days of the date of notice.
 - (e) While the notice of intent to disapprove is in effect, the violator(s) may not serve as a person in charge of, be employed by, manage, or otherwise participate to any degree in forest practices.
- (3) **A county** may bring injunctive, declaratory, or other actions for enforcement for forest practices activities within its jurisdiction in the superior court as provided by law against the department, the forest landowner, timber owner or operator to enforce the forest practices regulations or any final order of the department or the appeals board. No civil or criminal penalties shall be imposed for past actions or omissions if such actions or omissions were conducted pursuant to an approval or directive of the department. A county may not commence injunctions, declaratory actions, or other actions for enforcement under this subsection unless the department fails to take appropriate actions after ten days' written notice to the department by the county of a violation of the forest practices rules or final orders of the department or the appeals board.

WAC 222-46-080 Criminal penalty. In addition to the penalties imposed pursuant to RCW 76.09.170 of the act, any person who conducts any forest practice or knowingly aids or abets another in conducting any forest practice in violation of any provisions of RCW 76.09.010 through 76.09.280 or 90.48.420, or these regulations, shall be guilty of a gross misdemeanor and upon conviction thereof shall be punished by a fine of not less than \$100.00 nor more than \$1,000.00, or by imprisonment for a term of not more than 1 year or by both fine and imprisonment for each separate violation. Each day upon which violation occurs shall constitute a separate violation.

WAC 222-46-090 Financial assurances. *[Effective 12/16/10]*

- (1) The purpose in requiring financial assurances is to ensure that the landowner or operator has sufficient resources to cover any penalties and mitigation measures, which might be assessed.
- (2) The department may require financial assurance prior to the conduct of any further forest practices from an operator or landowner who within the preceding three-year period has:
 - (a) Operated without an approved forest practices application, other than an unintentional operation in connection with an approved application outside the approved boundary of such an application;
 - (b) Continued to operate in breach of, or failed to comply with, the terms of an effective stop work order or notice to comply; or
 - (c) Failed to pay any civil or criminal penalty.
- (3) The department must deny any application or notification for failure to submit financial assurances as required.
- (4) In deciding whether to require financial assurances, the department shall consider:
 - (a) The organizational size of the operator or landowner;
 - (b) Whether the violation was self-reported;
 - (c) The cooperation exhibited when the violation was discovered; and
 - (d) Any other factors the department believes indicate that financial assurances are, or are not, warranted.

- (5) When the department determines that a financial assurance is required, a notice will be issued to the landowner or operator with violations listed above. The notice cannot be appealed. The financial assurances will be required with all future forest practices activities submitted within the time frame indicated in the notice. The notice shall include the following:
- (a) A reference to subsection (6) of this section which identifies the criteria for establishing the amount of the financial assurance;
 - (b) The types of financial assurance which can be submitted;
 - (c) The time period during which financial assurances will be required with every future application or notification;
 - (d) A statement that the department must deny any application or notification from a landowner or operator who submits an application or notification without their required financial assurance;
 - (e) A statement that an application or notification can be appealed pursuant to RCW 76.09.205, and the requirement to submit financial assurances may be challenged at that time.
- (6) The amount shall be set by the department within 10 days of receipt of a Class III or IV application, or within 3 days of receipt of a Class II notification. Applicants who have been notified of a financial assurance requirement are encouraged to use the early review process for applications outlined in WAC 222-20-090. In establishing the amount of the financial assurances to be required, the department shall begin with the following base amounts:
- Class II Notifications - \$10,000
 - Class III Applications - \$30,000
 - Class IV General Applications - \$20,000
 - Class IV Special Applications - \$50,000
- The base amounts listed above are **based** on an estimate of the potential for civil penalties, fees and required mitigation that could result from noncompliance with forest practices rules and department directives on forest practices applications **or notifications** of that classification. The base amounts can be increased or decreased depending on application specific factors including, but not limited to, size of the proposed harvest area, miles of new road construction and road maintenance, proximity to water, proximity to unstable soils, proximity to threatened or endangered species, and types of violations committed by the applicant in the past. In addition, the department should consider the risk to the state of the applicant being unable to pay civil penalties or perform required mitigation work. In weighing this risk, the department should consider the applicant's past history of payment to the department, and any other financial information the applicant chooses to submit to the department. The base amount of financial assurance to be required may be increased or decreased depending on the department's assessment of this risk.
- (7) The financial assurance provided shall protect the department and the state from the risk that the landowner or operator may be financially unable to pay civil penalties, fees and/or perform mitigation work required by the department, including mitigation work performed by the department pursuant to RCW 76.09.120, because of violations of the Forest Practices Act or rules. The department may, for any reason, refuse any financial assurance not deemed adequate. The financial assurance provided may be in the following form:
- (a) Bank letter of credit;
 - (b) Cash deposit;
 - (c) Savings account assignment; **or**

- (d) Corporate surety bond executed in favor of the department.
- (8) The department may obtain compensation from a financial assurance whenever the landowner or operator has failed to pay a civil penalty that is due and owing or has failed to complete mitigation as required. Payment for a specific civil penalty or mitigation does not relieve the surety, operator or landowner of financial responsibility for any other civil penalty or mitigation.
- (9) Liability under the financial assurance shall be maintained until all forest practices under the forest practices notification or application issued by the department are completed or until the notification or application expires, and all of the landowner or operator's obligations under the Forest Practices Act and rules are completed to the satisfaction of the department including payment of civil penalties and completion of required mitigation work. Liability under the financial assurance may be released only upon written notification by the department. Notification shall be given upon completion of compliance or acceptance of a substitute financial assurance.
- (10) Financial assurances are estimates only. Nothing in this section shall be construed to limit the department's authority to assess and collect civil penalties and fees and to require mitigation work in amounts that exceed existing financial assurance.

Chapter 222-50 WAC

RELATIONSHIP TO OTHER LAWS AND REGULATIONS

WACs in this chapter were in effect 7/2001 except some have been amended since 7/2001. The effective dates of the amended WACs are shown after the WAC headings.

WAC

222-50-010 Policy.....	50-1
222-50-020 Other agency requirements.....	50-1
222-50-030 Interagency agreements.....	50-1
222-50-040 Safety and health.....	50-2
222-50-050 Forest fire prevention and suppression.....	50-2
222-50-060 Other regulatory programs administered by the department.....	50-2

WAC 222-50-010 Policy. A major policy of the Forest Practices Act and the board is to work toward a comprehensive, statewide system of laws and rules for forest practices which avoids unnecessary duplication and provides for interagency input and cooperation to the extent that can be accomplished without interfering with the authority of the affected federal, state, regional and local agencies.

WAC 222-50-020 Other agency requirements. *[Effective 12/30/13]*

- (1) Many other laws and rules apply to the conduct of forest practices. Other agencies administer some of these other regulatory programs. Permits may be required by such agencies prior to the conduct of certain forest practices. The governor’s office of regulatory assistance maintains a list of state, regional, and local regulatory programs including those that apply to forest practices operations. Affected parties are urged to consult with the specified agencies and independent experts with respect to the regulatory requirements shown on the list.
- * (2) **Compliance with the Shoreline Management Act**, chapter 90.58 RCW, is required. The Shoreline Management Act is implemented by the department of ecology and the applicable local governmental entity. A substantial development permit must be obtained prior to conducting forest practices which are "substantial developments" within the "shoreline" area as those terms are defined by the Shoreline Management Act.
- (3) Wildlife protection, Title 77 RCW. Nothing in these rules is intended to interfere with any authority of the department of fish and wildlife to protect wildlife under any other statutes or regulations, or under any agreements with landowners.
- (4) Federal Endangered Species Act, 16 U.S.C. 1531 et seq., and other federal laws. The federal Endangered Species Act and other federal laws may impose certain obligations on persons conducting forest practices. Compliance with the Forest Practices Act or these rules does not ensure compliance with the Endangered Species Act or other federal laws.

WAC 222-50-030 Interagency agreements. The board recommends that the department negotiate interagency agreements with other governmental agencies. The board further recommends that such agreements include, to the extent acceptable to the other agency, provisions specifying:

- (1) **The law** and rules covered;
- (2) **Any geographical** or other limits on the authority and responsibility under the agreement;
- (3) **Priorities** and standards for resolution of any conflicts between such laws and regulations and the act and these rules;
- (4) **Procedures** for administrative appeals of actions taken;
- (5) **Provisions for** continuing cooperation between the department and the other agency or agencies regarding interpretation of the laws and regulations involved;
- (6) **Procedures for** termination of the interagency agreement; and
- (7) **Procedures for** processing applications and notifications.

The department is directed to provide copies of all such agreements to the board, and to make known to the public that such interagency agreements exist.

WAC 222-50-040 Safety and health. The forest practices rules contained in chapters 222-24 through 222-38 WAC are automatically superseded to the extent inconsistent with any applicable safety regulations, or with any orders or directives having the force of law and based on any applicable safety regulations, including:

- (1) **Chapter 296-54 WAC** (safety standards for logging operations, department of labor and industry's division of safety).
- (2) **Chapter 296-24 WAC** (general safety and health standards, department of labor and industry's division of safety).
- (3) **All applicable** Federal Occupational Safety and Health Administration regulations.
- (4) **Regarding aircraft**, chapters 12-24, 12-28, and 12-32 WAC (Washington aeronautics commission).
- (5) **Regarding explosives**, chapter 296-52 WAC (department of labor and industry) and all applicable federal regulations.
- (6) **Regarding chemicals**, chapter 16-228 WAC (department of agriculture) and all applicable federal regulations.
- (7) **All applicable** state and local sanitation regulations relating to municipal watersheds and sources of domestic water supply.

In such cases of conflict, the department is authorized to seek from other agencies such waivers or modifications in the applicable safety and health regulations as may be necessary for the department to be able to fully enforce the forest practices rules contained in chapters 222-24 through 222-38 WAC.

Applicants are cautioned that there may be additional safety and health laws and regulations that may be applicable in addition to those specifically listed above.

WAC 222-50-050 Forest fire prevention and suppression. All laws and rules relating to forest fire prevention and suppression apply in addition to these forest practices rules and, in cases of conflict, supersede the forest practices rules contained in chapters 222-24 through 222-38 WAC.

WAC 222-50-060 Other regulatory programs administered by the department. The board recommends that, to the extent permitted by law and when necessary the department adopt rules and policies under which approved applications and notifications can serve to eliminate or reduce the need for separate permits and approvals under regulatory programs administered by the department (such as the power driven machinery permits, RCW 76.04.275, dumping mill waste and forest debris permit, RCW 76.04.242, and surface mining permits, chapter 78.44 RCW) as applied to forest practices. The department is directed to notify the public of the existence of such rules and policies.