




**DEPARTMENT OF
NATURAL RESOURCES**

Forest Practices Division
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May 4, 2023

TO: Forest Practices Board 

FROM: Marc Engel, Senior Policy Planner, Forest Regulation

SUBJECT: Marbled Murrelet Assessment and Rule Making

Members of the Wildlife Working Group (WWG) have reviewed and amended the proposed Marbled Murrelet rules in Attachment 1 to add further clarity to the WDFW and WWG agreed changes, attached.

DNR and WDFW will provide a summary of the Marbled Murrelet habitat and forest practices rules assessment; proposed rule and board manual guidance changes; and recommended rule making process for the Board's consideration at the May meeting. If you have any questions please contact Marc Engel at 360 628-1107 or marc.engel@dnr.wa.gov or Darric Lowery at 360 628-7137 or Darric.Lowery@dfw.wa.gov.

ME
Attachment

DRAFT
Rule Proposal for Marbled Murrelet
FOREST PRACTICES BOARD
May 2023

WAC 222-10-042 Marbled murrelets. 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:**

(a) ~~Suitable marbled murrelet habitat with at least a 50% probability of occupancy is assumed to have a high likelihood of marbled murrelet occupancy. It is currently assumed that 5 platforms per acre meets the 50% 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)~~ Suitable marbled murrelet habitat with at least a 30% ~~but less than 50%~~ probability of occupancy has a sufficiently high likelihood of marbled murrelet occupancy to warrant a survey. ~~This additional information is necessary for the department to evaluate the environmental impact of the forest practice.~~ It is currently assumed that 2 platforms per acre meets the 30% 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% probability of occupancy is assumed to have a high likelihood of marbled murrelet occupancy. It is currently assumed that 7 platforms per acre meets the 60% 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% 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 fifty 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.

Attachment 1

1 (4) The adjacent forested area within 300 feet of “suitable marbled murrelet habitat” described in
2 subsections (2) and (3) is assumed to be necessary for buffering potentially occupied habitat
3 as defined in WAC 222-16-080 (1)(h)(v). This additional information on the forested area
4 within 300 feet of “suitable habitat” is necessary for the department to evaluate the
5 environmental impact of the forest practice. Without survey information, forest practices that
6 will adversely impact this buffer may have a probable significant adverse impact on the
7 environment.

8 (5) When determining whether a forest practice will have a probable significant adverse impact
9 on the environment, the department shall, in consultation with the department of fish and
10 wildlife, evaluate the impacts on the state-wide, regional (Southwest Washington, Olympic
11 Peninsula, Hood Canal, North Puget Sound, South Puget Sound and South Cascades) and
12 local (within the marbled murrelet detection area) marbled murrelet populations and
13 associated habitats. The department should consider a variety of information including but not
14 limited to survey data, habitat quality and patch size, the amount of edge in relation to the area
15 of habitat, amount of interior habitat, distance from saltwater, detection rates, the amount and
16 quality of habitat, the likelihood of predation and the recovery goals for the marbled murrelet.

17 (56) The platform assumptions set forth above are based on regional data. Applicants or others
18 may submit information to the department which was gathered in conjunction with a marbled
19 murrelet survey agreement with the department of fish and wildlife, and other reliable
20 information that is more current, or specific to the platform numbers in the marbled murrelet
21 suitable habitat definition. The department shall use such information in making its
22 determinations under this section where the department finds, in consultation with the
23 department of fish and wildlife, that the information is more likely to be valid for a particular
24 WRIA or physiographic province. If the department does not use the information, it shall
25 explain its reasons in writing to the applicant.
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WAC 222-12-090 Forest practices board manual.

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

- 34 (1) **Method for determination of adequate shade requirements on streams** needed for use
35 with WAC 222-30-040.
- 36 (2) Standards for identifying channel migration zones and bankfull channel features.
- 37 (3) **Guidelines** for forest roads.
- 38 (4) **Guidelines** for clearing slash and debris from Type Np and Ns Waters.
- 39 (5) **Guidelines** for forest practices hydraulic projects.
- 40 (6) **Guidelines** for determining acceptable stocking levels.
- 41 (7) **Guidelines** for riparian management zones.
- 42 (8) **Guidelines** for wetland delineation.
- 43 (9) **Guidelines** for wetland replacement or substitution.
- 44 (10) A list of nonnative wetland plant species.

Attachment 1

- 1 (11) The standard methodology for conducting watershed analysis shall specify the quantitative
2 methods, indices of resource conditions, and definitions, for conducting watershed analysis
3 under chapter 222-22 WAC. The methodology shall also include a cultural resource module
4 that shall specify the quantitative and qualitative methods, indices of resource conditions, and
5 guidelines for developing voluntary management strategies for cultural resources. Except for
6 cultural resources, the department, in consultation with Timber/Fish/Wildlife's Cooperative
7 Monitoring, Evaluation and Research Committee (CMER), may make minor modifications to
8 the version of the standard methodology approved by the board. Substantial amendments to
9 the standard methodology requires approval by the board.
- 10 (12) **Guidelines** for forest chemicals.
- 11 (a) A list of special concerns related to aerial application of pesticides developed under
12 WAC 222-16-070(3).
- 13 (b) Guidelines for aerial applications of pesticides and other forest chemicals under
14 chapter 222-38 WAC.
- 15 (13) **Guidelines** for determining fish use for the purpose of typing waters under WAC 222-16-031.
- 16 (14) **Survey protocol for marbled murrelets.** The most current Pacific Seabird Group terrestrial
17 survey protocol dated January 6, 2003, and formally titled *Methods for Surveying Marbled*
18 *Murrelets in Forests: A Revised Protocol for Land Management and Research*, shall be used
19 when surveying for marbled murrelets in a stand. Surveys are valid if they were conducted in
20 compliance with the board-recognized Pacific Seabird Group survey protocols in effect at the
21 beginning of the season in which the surveys were conducted.
- 22 (15) The department shall, in consultation with the department of fish and wildlife, develop:
- 23 (a) platform-Platform protocols for use by applicants in estimating the number of
24 platforms, and by the department in reviewing and classifying forest practices under
25 WAC 222-16-050. These protocols shall include:
- 26 (ai) A sampling method to determine platforms per acre in the field;
- 27 (bij) A method to predict the number of platforms per acre based on information
28 measurable from typical forest inventories. The method shall be derived from
29 regression models or other accepted statistical methodology, and incorporate
30 the best available data; and
- 31 (eiii) Other methods determined to be reliable by the department, in consultation
32 with the department of fish and wildlife.
- 33 (b) Guidance for applications classified by the department under WAC 222-16-080 (1) (h)
34 (v) to be Class IV-Special forest practices for lands designated as critical habitat
35 (state) for marbled murrelet (*Brachyramphus marmoratus*) for the following two
36 forest practices activities:
- 37 (i) Harvesting within a 150-foot no-cut inner zone buffer of a 300-foot managed
38 buffer zone adjacent to an occupied marbled murrelet site.
- 39 (ii) Harvesting within a 150-foot outer zone managed buffer of a 300-foot managed
40 buffer zone adjacent to an occupied marbled murrelet site that results in less than a
41 residual stand relative density of 35 for Douglas-fir or red alder dominant species
42 group or a residual stand relative density of 50 for Western hemlock dominant
43 species group.
- 44 (16) **Guidelines** for evaluating potentially unstable slopes and landforms.
- 45 (17) **Guidelines** for the small forest landowner forestry riparian easement program.
- 46 (18) **Guidelines** for rivers and habitat open space program.
- 47 (19) **Guidelines** for hardwood conversion.

Attachment 1

- 1 (20) **Guidelines** for financial assurances.
- 2 (21) **Guidelines** for alternate plans.
- 3 (22) **Guidelines** for adaptive management program.
- 4 (23) **Guidelines** for field protocol to locate mapped divisions between stream types and perennial stream identification.
- 5
- 6 (24) **Guidelines** for interim modification of bull trout habitat overlay.
- 7 (25) **Guidelines** for bull trout presence survey protocol.
- 8 (26) **Guidelines** for placement strategy for woody debris in streams.
- 9

10
11 **WAC 222-16-010 *General definitions.**

12 Unless otherwise required by context, as used in these rules:

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

14 **"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.

15 **"Alluvial fan"** see "sensitive sites" definition.

16 **"Appeals board"** means the pollution control hearings board established in RCW 43.21B.010.

17 **"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.

18 ...

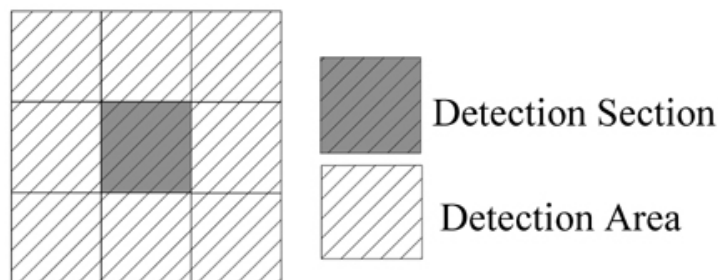
19 **"Critical habitat (federal)"** means the habitat of any threatened or endangered species designated as critical habitat by the United States Secretary of the Interior or Commerce under Sections 3 (5)(A) and 4 (a)(3) of the Federal Endangered Species Act.

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

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

22 ...

23 **"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.



36

Attachment 1

1 **"Marbled murrelet nesting platform"** means any horizontal tree structure such as a limb, an area
2 where a limb branches, a horizontal surface created by multiple leaders, a deformity created by
3 mistletoe infection or branch break, or a debris/moss platform or stick nest equal to or greater than 7
4 inches in diameter-width including associated moss if present, that is 50 feet or more above the
5 ground in western hemlock trees 32-24 inches dbh and greater (~~generally over 90 years of age~~) and in
6 other conifer trees 32 inches dbh and greater and is capable of supporting nesting by marbled
7 murrelets.

8 ...

9 **"Occupied marbled murrelet site"** means:

- 10 (1) A contiguous area of suitable marbled murrelet habitat where at least one of the following
11 marbled murrelet behaviors or conditions occur:
 - 12 (a) A nest is located; or
 - 13 (b) Downy chicks or eggs or egg shells are found; or
 - 14 (c) Marbled murrelets are detected flying below, through, into or out of the forest canopy;
15 or
 - 16 (d) Birds calling from a stationary location within the area; or
 - 17 (e) Birds circling above a timber stand within one tree height of the top of the canopy; or
- 18 (2) A contiguous forested area, which does not meet the definition of suitable marbled murrelet
19 habitat, in which any of the behaviors or conditions listed above has been documented by the
20 department of fish and wildlife and which is distinguishable from the adjacent forest based on
21 vegetative characteristics important to nesting marbled murrelets.
- 22 (3) For sites defined in (1) and (2) above, the sites will be presumed to be occupied based upon
23 observation of circling described in (1)(e), unless a two-year survey following the 2003-most
24 current Pacific Seabird Group (PSG) terrestrial survey protocol has been completed and an
25 additional third-year of survey following a method listed below is completed and none of the
26 behaviors or conditions listed in (1)(a) through (d) of this definition are observed. The
27 landowner may choose one of the following methods for the third-year survey:
 - 28 (a) Conduct a third-year survey with a minimum of nine visits conducted in compliance
29 with 2003 PSG protocol. If one or more marbled murrelets are detected during any of
30 these nine visits, three additional visits conducted in compliance with the protocol of
31 the first nine visits shall be added to the third-year survey. Department of fish and
32 wildlife shall be consulted prior to initiating third-year surveys; or
 - 33 (b) Conduct a third-year survey designed in consultation with the department of fish and
34 wildlife to meet site specific conditions.
- 35 (4) For sites defined in (1) above, the outer perimeter of the occupied site shall be presumed to be
36 the closer, measured from the point where the observed behaviors or conditions listed in (1)
37 above occurred, of the following:
 - 38 (a) 1.5 miles from the point where the observed behaviors or conditions listed in (1) above
39 occurred; or
 - 40 (b) The beginning of any gap greater than 300 feet wide lacking one or more of the
41 vegetative characteristics listed under "suitable marbled murrelet habitat"; or
 - 42 (c) The beginning of any narrow area of "suitable marbled murrelet habitat" less than 300
43 feet in width and more than 300 feet in length.
- 44 (5) For sites defined under (2) above, the outer perimeter of the occupied site shall be presumed
45 to be the closer, measured from the point where the observed behaviors or conditions listed in
46 (1) above occurred, of the following:

Attachment 1

- 1 (a) 1.5 miles from the point where the observed behaviors or conditions listed in (1) above
- 2 occurred; or
- 3 (b) The beginning of any gap greater than 300 feet wide lacking one or more of the
- 4 distinguishing vegetative characteristics important to murrelets; or
- 5 (c) The beginning of any narrow area of suitable marbled murrelet habitat, comparable to
- 6 the area where the observed behaviors or conditions listed in (1) above occurred, less
- 7 than 300 feet in width and more than 300 feet in length.
- 8 (6) In determining the existence, location and status of occupied marbled murrelet sites, the
- 9 department shall consult with the department of fish and wildlife and use only those sites
- 10 documented in substantial compliance with guidelines or protocols and quality control
- 11 methods established by and available from the department of fish and wildlife.

12 ...

13 **"Public resources"** means water, fish, and wildlife and in addition means capital improvements of

14 the state or its political subdivisions.

15 ...

16 **"Suitable marbled murrelet habitat"** means for the purpose of conducting a protocol survey, a

17 contiguous forested area containing trees capable of providing nesting opportunities: with

18 ~~With~~ all of the following indicators unless the department, in consultation with the department of fish

19 and wildlife, has determined that the habitat is not likely to be occupied by marbled murrelets:

- 20 (a) Within 50 miles of marine waters;
- 21 (b) At least forty percent of the dominant and codominant trees are ~~Douglas fir, western hemlock,~~
- 22 ~~western red cedar or sitka spruce~~ conifer tree species;
- 23 (c) Two or more nesting platforms per acre;
- 24 (d) At least 7.5 acres in size, ~~including the contiguous forested area within 300 feet of nesting~~
- 25 ~~platforms, with similar forest stand characteristics (age, species composition, forest structure)~~
- 26 ~~to the forested area in which the nesting platforms occur~~ (minimum convex polygon), of
- 27 qualifying platform-bearing trees.

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

29 ...

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

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33 **WAC 222-16-080 Critical habitats (state) of threatened and endangered species.**

- 34 (1) Critical habitats (state) of threatened or endangered species and specific forest practices
- 35 designated as Class IV-Special are as follows:
- 36 (a) Gray wolf (*Canis lupus*) - harvesting, road construction, or site preparation within 1
- 37 mile of a known active den site, documented by the department of fish and wildlife,
- 38 between the dates of March 15 and July 30 or 0.25 mile from the den site at other
- 39 times of the year.
- 40 (b) Grizzly bear (*Ursus arctos*) - harvesting, road construction, aerial application of
- 41 pesticides, or site preparation within 1 mile of a known active den site, documented by
- 42 the department of fish and wildlife, between the dates of October 1 and May 30 or 0.25
- 43 mile at other times of the year.
- 44 (c) Mountain (woodland) caribou (*Rangifera tarandus*) - harvesting, road construction,
- 45 aerial application of pesticides, or site preparation within 0.25 mile of a known active
- 46 breeding area, documented by the department of fish and wildlife.

Attachment 1

- 1 (d) Oregon silverspot butterfly (*Speyeria zerene hippolyta*) - harvesting, road construction,
2 aerial or ground application of pesticides, or site preparation within 0.25 mile of an
3 individual occurrence, documented by the department of fish and wildlife.
- 4 (e) Sandhill crane (*Grus canadensis*) - harvesting, road construction, aerial application of
5 pesticides, or site preparation within 0.25 mile of a known active nesting area,
6 documented by the department of fish and wildlife.
- 7 (f) Northern spotted owl (*Strix occidentalis caurina*).
- 8 (i) **Within a SOSEA boundary** (see maps in WAC 222-16-086), except as
9 indicated in (f)(ii) of this subsection, harvesting, road construction, or aerial
10 application of pesticides on suitable spotted owl habitat within a median home
11 range circle that is centered within the SOSEA or on adjacent federal lands.
- 12 (ii) **Within the Entiat SOSEA**, harvesting, road construction, or aerial application
13 of pesticides within the areas indicated for demographic support (see WAC
14 222-16-086(2)) on suitable spotted owl habitat located within a median home
15 range circle that is centered within the demographic support area.
- 16 (iii) **Outside of a SOSEA**, harvesting, road construction, or aerial application of
17 pesticides, between March 1 and August 31 on the seventy acres of highest
18 quality suitable spotted owl habitat surrounding a northern spotted owl site
19 center located outside a SOSEA. The highest quality suitable habitat shall be
20 determined by the department in cooperation with the department of fish and
21 wildlife. Consideration shall be given to habitat quality, proximity to the
22 activity center and contiguity.
- 23 (iv) **Small parcel northern spotted owl exemption.** Forest practices proposed on
24 the lands owned or controlled by a landowner whose forest land ownership
25 within the SOSEA is less than or equal to 500 acres and where the forest
26 practice is not within 0.7 mile of a northern spotted owl site center shall not be
27 considered to be on lands designated as critical habitat (state) for northern
28 spotted owls.
- 29 (g) Pacific pond turtle (*Actinemys marmorata*) - harvesting, road construction, aerial
30 application of pesticides, or site preparation within 0.25 mile of a known individual
31 occurrence, documented by the department of fish and wildlife.
- 32 (h) Marbled murrelet (*Brachyramphus marmoratus*).
- 33 (i) Harvesting, other than removal of down trees outside of the critical nesting
34 season, or road construction within an occupied marbled murrelet site.
- 35 (ii) Harvesting, other than removal of down trees outside of the critical nesting
36 season, or road construction within suitable marbled murrelet habitat within a
37 marbled murrelet detection area.
- 38 (iii) Harvesting, other than removal of down trees outside of the critical nesting
39 season, or road construction within suitable marbled murrelet habitat
40 containing 7 platforms per acre outside a marbled murrelet detection area.
- 41 (iv) Harvesting, other than removal of down trees outside of the critical nesting
42 season, or road construction outside a marbled murrelet detection area within a
43 marbled murrelet special landscape and within suitable marbled murrelet
44 habitat with 5 or more platforms per acre.
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Attachment 1

- 1 (v) Harvesting within a 300 foot managed buffer zone adjacent to an occupied
2 marbled murrelet site that results in ~~less than a residual stand stem density of~~
3 ~~75 trees per acre greater than 6 inches in dbh; provided that 25 of which shall~~
4 ~~be greater than 12 inches dbh including 5 trees greater than 20 inches in dbh;~~
5 ~~where they exist a no-cut inner buffer of 150 feet and a managed 150 foot outer~~
6 ~~buffer which will leave a residual stand relative density of less than 35 for~~
7 ~~Douglas-fir or red alder dominant species group or residual stand relative~~
8 ~~density of less than 50 for Western hemlock-spruce dominant species group.~~
9 ~~The inner zone of the buffer shall begin at the edge of the outer extent of the~~
10 ~~platform trees of the occupied habitat.~~ The primary consideration for the
11 design of managed buffer zone widths and leave tree retention patterns shall be
12 to ~~mediate-help minimize~~ edge effects. The width of the buffer zone may be
13 reduced in some areas to a minimum of 200 feet and extended to a maximum
14 of 400 feet as long as the average of 300 feet is maintained. Landowner shall
15 consult with WDFW on managed buffer prescriptions.
16 (vi) Except that the following shall not be critical habitat (state):
17 (A) Where a landowner owns less than 500 acres of forest land within 50
18 miles of saltwater and the land does not contain an occupied marbled
19 murrelet site or the 300-foot average buffer of an occupied marbled
20 murrelet site; or
21 (B) Where a protocol survey (see WAC 222-12-090(14)) has been
22 conducted and no murrelets were detected. The landowner is then
23 relieved from further survey requirements. However, if an occupied
24 marbled murrelet site is established, this exemption is void.
25 (2) The following critical habitats (federal) designated by the United States Secretary of the
26 Interior or Commerce, or specific forest practices within those habitats, have been determined
27 to have the potential for a substantial impact on the environment and therefore are designated
28 as critical habitats (state) of threatened or endangered species.
29 (3) For the purpose of identifying forest practices which have the potential for a substantial
30 impact on the environment with regard to threatened or endangered species newly listed by
31 the Washington fish and wildlife commission and/or the United States Secretary of the
32 Interior or Commerce, the department shall after consultation with the department of fish and
33 wildlife, prepare and submit to the board a proposed list of critical habitats (state) of
34 threatened or endangered species. This list shall be submitted to the board within 30 days of
35 the listing of the species. The department shall, at a minimum, consider potential impacts of
36 forest practices on habitats essential to meeting the life requisites for each species listed as
37 threatened or endangered. Those critical habitats (state) adopted by the board shall be added
38 to the list in subsection (1) of this section. See WAC 222-16-050 (1)(b).
39 (4) For the purpose of identifying any areas and/or forest practices within critical habitats
40 (federal) designated by the United States Secretary of the Interior or Commerce which have
41 the potential for a substantial impact on the environment, the department shall, after
42 consultation with the department of fish and wildlife, submit to the board a proposed list of
43 any forest practices and/or areas proposed for inclusion in Class IV - Special forest practices.
44 The department shall submit the list to the board within 30 days of the date the United States
45 Secretary of the Interior or Commerce publishes a final rule designating critical habitat
46 (federal) in the Federal Register. Those critical habitats included by the board in Class IV -
47 Special shall be added to the list in subsection (2) of this section. See WAC 222-16-050

Attachment 1

- 1 (1)(b).
- 2 (5) (a) The critical habitats (state) of threatened and endangered species and specific forest
3 practices designated in subsections (1) and (2) of this section are intended to be
4 interim. These interim designations shall expire for a given species on the earliest of:
- 5 (i) The effective date of a regulatory system for wildlife protection referred to in
6 (b) of this subsection or of substantive rules on the species.
- 7 (ii) The delisting of a threatened or endangered species by the Washington fish and
8 wildlife commission and by the United States Secretary of Interior or
9 Commerce.
- 10 (b) The board shall examine current wildlife protection and department authority to
11 protect wildlife and develop and recommend a regulatory system, including baseline
12 rules for wildlife protection. To the extent possible, this system shall:
- 13 (i) Use the best science and management advice available;
- 14 (ii) Use a landscape approach to wildlife protection;
- 15 (iii) Be designed to avoid the potential for substantial impact to the environment;
- 16 (iv) Protect known populations of threatened and endangered species of wildlife
17 from negative effects of forest practices consistent with RCW 76.09.010; and
- 18 (v) Consider and be consistent with recovery plans adopted by the department of
19 fish and wildlife pursuant to RCW 77.12.020(6) or habitat conservation plans
20 or 16 U.S.C. 1533(d) rule changes of the Endangered Species Act.
- 21 (6) Regardless of any other provision in this section, forest practices applications shall not be
22 classified as Class IV-Special based on critical habitat (state) (WAC 222-16-080 and 222-16-
23 050 (1)(b)) for a species, if the forest practices are consistent with one or more of the
24 following:
- 25 (a) Documents addressing the needs of the affected species provided such documents have
26 received environmental review with an opportunity for public comment under the
27 National Environmental Policy Act, 42 U.S.C. section 4321 et seq.:
- 28 (i) A habitat conservation plan and incidental take permit; or an incidental take
29 statement covering such species approved by the Secretary of the Interior or
30 Commerce pursuant to 16 U.S.C. § 1536 (b) or 1539 (a); or
- 31 (ii) An “unlisted species agreement” covering such species approved by the U.S.
32 Fish and Wildlife Service or National Marine Fisheries Service; or
- 33 (iii) Other conservation agreement entered into with a federal agency pursuant to its
34 statutory authority for fish and wildlife protection that addresses the needs of
35 the affected species; or
- 36 (iv) A rule adopted by the U.S. Fish and Wildlife Service or the National Marine
37 Fisheries Service for the conservation of an affected species pursuant to 16
38 U.S.C. section 1533(d); or
- 39 (b) Documents addressing the needs of the affected species so long as they have been
40 reviewed under the State Environmental Policy Act;
- 41 (i) A landscape management plan; or
- 42 (ii) Another cooperative or conservation agreement entered into with a state
43 resource agency pursuant to its statutory authority for fish and wildlife
44 protection;
- 45 (c) A special wildlife management plan (SWMP) developed by the landowner and
46 approved by the department in consultation with the department of fish and wildlife;

Attachment 1

- 1 (d) A landowner option plan (LOP) for northern spotted owls developed pursuant to WAC
2 222-16-100(1);
- 3 (e) A cooperative habitat enhancement agreement (CHEA) developed pursuant to WAC
4 222-16-105; or
- 5 (f) A take avoidance plan issued by the U.S. Fish and Wildlife Service or the National
6 Marine Fisheries Service prior to March 20, 2000.
- 7 (g) Surveys demonstrating the absence of northern spotted owls at a northern spotted owl
8 site center have been reviewed and approved by the department of fish and wildlife
9 and all three of the following criteria have been met:
- 10 (i) The site has been evaluated by the spotted owl conservation advisory group,
11 and
- 12 (ii) As part of the spotted owl conservation advisory group's evaluation, the
13 department's representative has consulted with the department of fish and
14 wildlife, and
- 15 (iii) The spotted owl conservation advisory group has reached consensus that the
16 site need not be maintained while the board completes its evaluation of rules
17 affecting the northern spotted owl. The spotted owl conservation advisory
18 group shall communicate its findings to the department in writing within sixty
19 days of the department of fish and wildlife's approval of surveys demonstrating
20 the absence of northern spotted owls.

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

- 25 (7) The department, in consultation with the department of fish and wildlife, shall review each
26 SOSEA to determine whether the goals for that SOSEA are being met through approved
27 plans, permits, statements, letters, or agreements referred to in subsection (6) of this section.
28 Based on the consultation, the department shall recommend to the board the suspension,
29 deletion, modification or reestablishment of the applicable SOSEA from the rules. The
30 department shall conduct a review for a particular SOSEA upon approval of a landowner
31 option plan, a petition from a landowner in the SOSEA, or under its own initiative.
- 32 (8) The department, in consultation with the department of fish and wildlife, shall report annually
33 to the board on the status of the northern spotted owl to determine whether circumstances
34 exist that substantially interfere with meeting the goals of the SOSEAs.

Attachment 1

Board Manual Guidance for Marbled Murrelet FOREST PRACTICES BOARD May 2023

The accompanying guidance follows for insertion into Board Manual Section 15, per WAC 222-12-090 (15),

Specific forest practices on lands designated as Critical habitat (state) for Marbled Murrelet (*Brachyramphus marmoratus*) have been determined to have potential for a substantial impact on the environment and have been classified by the department to be Class IV-Special Forest Practices. The following two forest practices have been so classified as Class IV-Special Forest Practices under WAC 222-16-080 (1) (h) (v):

1. Harvesting within a 150-foot no-cut inner zone buffer of a 300-foot managed buffer zone adjacent to an Occupied marbled murrelet site.
2. 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 (Douglas-fir or red alder dominant species group) or a residual stand relative density of 50 (Western hemlock dominant species group).

The total width of the 300-foot managed 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; however, a 150-foot no-cut inner zone buffer adjacent to the Occupied marbled murrelet habitat will be retained in these reduced or extended buffer zones.

Per WAC 222-16-080 (1) (h) (v), the primary consideration for the design of managed buffer zone widths and leave tree retention patterns is to help minimize edge effects, including effects from prevailing wind patterns.

The following is simplified guidance for 1) field layout of an outer zone managed buffer within a 300-foot managed buffer adjacent to an Occupied marbled murrelet site to produce a residual stand Relative Density of at least 35 (Douglas-fir or red alder dominant species group) or a residual stand Relative Density of at least 50 (Western hemlock dominant species group) following harvest and 2) conducting the harvest within the outer zone managed buffer.

Simplified Guidance for field layout and conducting harvest within a Marbled Murrelet outer zone managed buffer

Tables referenced in this section were omitted for clarity. See WDFW 2023 – MAMU Briefing Report.

If you intend to utilize an outer zone managed buffer (managed buffer zone) adjacent to an Occupied marbled murrelet site, determine (mark in the field) the inner and outer edges of the proposed 150-foot managed buffer zone adjacent to the Occupied marbled murrelet site.

The tree retention requirements (the target leave tree stocking levels following harvest) are determined by calculating the quadratic mean diameter (QMD) of the stand within the managed

Attachment 1

buffer zone and by knowing the dominant species group (see “Dominant species group” information box) within your proposed managed buffer zone. The QMD method works well in even-aged stands where the dominant and codominant trees are of uniform diameter.

Use a sample cruise (using fixed-radius or variable plots) to determine the QMD of the trees within your delineated managed buffer zone, as well as the dominant species group (Douglas-fir, western hemlock or red alder) within this buffer.

Measure the dbh (diameter at breast height, i.e., 4.5 feet above the ground) of each sampled tree and note the dominant species group (Douglas-fir, western hemlock or red alder) of each tree that falls within cruise area. Determine for each tree you have measured whether it is a legacy tree (see description in Appendix B) or not a legacy tree. The vast majority of managed buffer zone stands adjacent to Occupied marbled murrelet sites will likely be even-aged but may have some legacy conifer trees, but identifying which trees are legacy trees is critically important to the proper calculation of QMD for the trees within the managed buffer.

Dominant species group: Dominant species group is determined by stem count of trees greater than or equal to 6” dbh. If there are more Douglas-fir stems than other conifer and hardwood tree species stems, choose Douglas-fir as the dominant species. If there are more other conifer stems than Douglas-fir and hardwood species stems, choose western hemlock as the dominant species group. If there are more red alder / hardwood stems than conifer stems, choose red alder as the dominant species group.

As you measure each tree, either a) directly enter the diameter and species group you have measured into the appropriate category (“Legacy” tree category or “Non-Legacy” tree category) in the “QMD Calculator” smartphone application (to be provided) or b) record (on any paper form of your choice) the diameter and species group of each measured tree, again making sure to note whether the tree is a Legacy or Non-Legacy and then input your data into the “QMD Calculator” computer application (to be provided).

The QMD Calculator will provide the calculated QMD for the Non-Legacy trees within your managed buffer zone stand, as well as the estimated number of Legacy trees within your managed buffer zone, based on your sample cruise. It will also provide the “Dominant species group”, Douglas-fir, western hemlock or red alder.

Use the identified “Dominant species group” category to determine which Modified Curtis Relative Density Calculator” table you should use (Douglas-fir / Red alder or Western Hemlock). Using the appropriate species table and the calculated non-Legacy QMD for your managed buffer zone, find the stand QMD in the table and determine the calculated number of conifers “Leave Trees/Acre (Minimum)” to retain after partial harvest.

Use this calculated minimum number of leave trees per acre to determine the actual trees you must retain within your managed buffer zone. **If there are no legacy conifer trees within your managed buffer zone, merely use this calculated minimum number of leave trees per acre for your field layout**

Attachment 1

of leave trees within your managed buffer zone, using the appropriate “Average Tree Spacing (Feet)” figure from the table as a guide. **If, however, you have any legacy conifer trees within your managed buffer zone**, all such legacy conifer trees within your managed buffer zone must be identified for leave. Once these legacy conifer trees have been identified for leave, the remaining minimum number of leave trees per acre to leave within the managed buffer zone should be calculated and then those remaining leave trees must be identified for leave during field layout. Strive to maintain pre-harvest levels of species diversity.

Mark leave trees, as appropriate, as specified under the “**Additional Preparation and Harvest Requirements**” section.

Additional Preparation and Harvest Requirements:

1. A representative sample of the proposed managed buffer zone must be laid out on the ground with leave trees marked prior to harvest and before the FPA is submitted to demonstrate how the managed buffer zone harvest will be implemented.
2. Reasonable care shall be taken to avoid damage to the stems and root systems of all residual trees within the managed buffer zone from falling, skidding or yarding. Any residual leave trees damaged must remain on site and do not count toward the residual retention requirements.
3. If Type Np, F or S waters and their associated riparian buffer zones occur within or overlaps an outer zone managed buffer, the most restrictive buffer zone leave tree / buffer zone prescription will be applied within the affected outer zone managed buffer.
4. Within the managed buffer zone, 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. When transporting logs in or through the managed buffer zone with ground-based equipment, the number of routes through the zone shall be minimized. Logs shall be transported to minimize damage to leave trees and vegetation in the managed buffer, to the extent practical and consistent with good safety practices.
5. Cable yarding within the managed buffer zone is subject to requirements listed in WAC 222-30-060 Cable Yarding.