



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Washington Ecological Services
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Lacey, Washington 98503



Memorandum

To: Forest Land Managers within the Listed Range of the Marbled Murrelet

From: State Supervisor, Washington Fish and Wildlife Office
Lacey, Washington

Subject: Marbled Murrelet Inland Survey Protocol Update

The Pacific Seabird Group's (PSG) Marbled Murrelet Technical Committee recently completed a revision of the Marbled Murrelet Inland Survey Protocol, titled, *A Revised Protocol for Surveying Marbled Murrelets in Forests* (hereafter referred to as the revised 2024 Inland Survey Protocol). This document can be found on the PSG website:

<https://pacificseabirdgroup.org/psgpublications/technical-publications/>. The protocol is based on robust statistical analysis and new approach to the survey design to determine if habitat within a survey area is likely occupied by nesting murrelets. Survey areas are defined as the murrelet habitat within one-quarter mile (402 m) of the boundary of an area of interest, which may be a management activity footprint, or area of impact. When implemented as described, the 2024 Inland Survey Protocol should serve to provide adequate survey coverage, ensuring a high probability (greater than 95 percent confidence) of locating nesting marbled murrelets if they occur in the survey area. The U.S. Fish and Wildlife Service (Service) considers the 2024 Inland Survey Protocol the best available science related to evaluating potential murrelet occupancy within nesting habitat.

Five aspects of the marbled murrelet inland survey protocol techniques have changed significantly since the 2003 protocol:

- (1) Changes to the sampling effort, as well as an option for alternate sampling design that treats multiple presence detections as occupancy;
- (2) Change in terminology from Survey Sites to **Survey Strata** (Survey Stratum singular), as well as how the survey strata are applied within a survey area;
- (3) Updates to distances associated with **Survey Station** effective radius and stand contiguity;
- (4) Interpreting survey results, including circling behaviors; and
- (5) Updated datasheet.

PACIFIC REGION 1

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*PARTIAL

A summary of changes can be found in the protocol document and in the “crosswalk table” appended to this memo.

The expectation is that land managers will transition to the new protocol such that by 2026, all survey areas will be surveyed per the revised 2024 Inland Survey Protocol. We recommend project proponents, as appropriate, seek technical assistance from the Service to evaluate survey efforts during the transition so as to avoid the risk of incidental take. Additionally, we recognize that no single document can cover all possible management scenarios. Therefore, after the transition period, the U.S. Fish and Wildlife Service (Service) recommends seeking our technical assistance if you intend to alter your survey strategy in a manner inconsistent with the 2024 Inland Survey Protocol. In the 2024 Inland Survey Protocol management activities are defined as those activities which may impact marbled murrelets, including disturbance and habitat alteration. Some types of disturbance activities may cause impacts to murrelets that extend beyond the survey distance of one-quarter mile (402 m) from a project footprint, for instance prescribed burns, blasting, and the use of certain heavy-lift helicopters. In such cases, if protocol surveys were conducted as described in the 2024 Inland Survey Protocol, and a determination of “not occupied” was made, an additional assessment of potential impacts to murrelets beyond the one-quarter mile (402 m) distance may be needed. Please request our technical assistance if further clarification is needed.

Simultaneous to the publication of the revised 2024 Inland Survey Protocol was the publication of the PSG’s *Terrestrial Habitat Management Recommendations for Marbled Murrelets* (PSG Technical Publication 7; <https://pacificseabirdgroup.org/psg-publications/technical-publications/>) (hereinafter referred to as the Habitat Management Recommendations document). The protocol helps partners make an occupancy determination for the areas surveyed, while the Habitat Management Recommendations document includes methods for delineating (i.e., mapping) occupied sites beyond the survey area boundaries. The Habitat Management Recommendations document also includes information on other aspects of marbled murrelet habitat management, including how the integrity of the forested landscape, including marbled murrelet occupied areas, can be managed and maintained in ways that may contribute to the goals set forth in the Marbled Murrelet Recovery Plan (USFWS 1997), thereby aiding in the species’ recovery.

The Service recognizes agencies and land managers within the range of the marbled murrelet may operate under established regulations and policies for implementing forest management, including delineation of occupied sites. Many of these policies have been evaluated by the Service under Endangered Species Act (ESA) section 7 consultation with Federal partners, or through Habitat Conservation Plans, and have been determined to be consistent with ESA

consultation regulations. Literature cited within PSG’s Management Recommendations publication is commonly used in many existing consultations, and thus, the Habitat Management Recommendations document does not constitute new information that may affect the murrelet in a manner or extent not previously considered.

As a reminder to Federal agencies, per section 7(a)(1) of the ESA, all Federal agencies shall utilize their authorities in furtherance of the purposes of the ESA by carrying out programs for the conservation of threatened and endangered species.

One point of clarification: Based on data from 137 nests from southern British Columbia to northern Oregon, the Service has determined that the nesting season for the marbled murrelet in Washington is best defined as the period from **April 1 to September 23** (USFWS 2012). The end date of September 15 identified in the Glossary of the 2024 Inland Survey Protocol (p. v) was inadvertently conflated with Oregon’s nesting season end date, though the in-text reference to the dates (p. 9) was correct. The same mistake was repeated in the Glossary of the Habitat Management Recommendations document (p. iv).

If you have any questions regarding marbled murrelet surveys, please contact your nearest USFWS project leader: Brad Thompson (USFWS Washington Ecological Services Office, 360790-8187), Kessina Lee (USFWS Oregon Fish and Wildlife Office, 971-442-0560), or Vicky Ryan (USFWS Arcata Fish and Wildlife Office, 707-825-5123).

References:

U.S. Fish and Wildlife Service. 2012. Marbled murrelet nesting season and analytical framework for section 7 consultation in Washington. Washington Fish and Wildlife Office, Lacey, Washington. June 20, 2012. 9 pp.

“Crosswalk table” describing the differences and similarities between the 2003 and 2024 inland survey protocols for the marbled murrelet.

Area of Protocol	2003 Inland Survey Protocol	2024 Inland Survey Protocol
<i>Habitat</i>		
Platform	At minimum, “a relatively flat surface at least 10 cm (4 in) in diameter and 10 m (33 ft) high in the live crown of a coniferous tree.”	"Relatively flat surface on a limb or deformity (≥10 cm (4 inches) in diameter and ≥10 m (33 ft) above the ground in the live crown of a coniferous tree)."

Habitat to survey	(1) mature (with or without an old-growth component) and old-growth coniferous forests; <u>and</u> (2) younger coniferous forests that have platforms. Generally limited to habitat within the project footprint or continuous habitat within 0.25 mile of the footprint.	A forest stand with at least one coniferous platform tree, or as consulted upon with your regulatory agency. Includes all habitat within the project footprint and contiguous habitat within 0.25 mile of the footprint.
Area of Protocol	2003 Inland Survey Protocol	2024 Inland Survey Protocol
Continuous potential habitat (as defined in 2003 protocol) or Contiguous habitat (as defined in the new protocol)	Coniferous forest that contains no gaps in suitable forest cover wider than 100 m (328 ft).	Areas of mapped habitat that are within the project footprint or ≤ 200 m (656 ft) from the project footprint or from habitat contiguous with the footprint out to 0.25 miles. The 200 m (656 ft) gap is measured as the distance between platform trees.
<i>Sampling effort</i>		
Consecutive years of survey effort	2	2
Area of Protocol	2003 Inland Survey Protocol	2024 Inland Survey Protocol

<p>Survey area</p>	<p>Entire area under observation; large areas divided into “survey sites.” The minimum area surveyed should be the potential habitat that falls within the proposed project area and within 0.25 mile (402 m) of the project area boundary that is contiguous with the project area.</p>	<p>Entire area under observation; large survey areas are divided into survey strata. The survey area is the unit at which surveys are conducted and occupancy classification is determined. As with 2003 protocol, habitat more than 0.25 mile from the project footprint does not need to be surveyed.</p>
<p>Survey site (2003 protocol) or Survey stratum (2024 protocol)</p>	<p>A survey site is the unit by which survey visits are designed and carried out, and the unit to which the requisite number of visits applies. Recommends limiting the size of the survey site to 61 ha (150 acres). When the survey area is small (<~61 ha), the site encompasses the entire survey area.</p>	<p>Similar approach but slightly different terminology. Strata are still a maximum of 150 acres (+ 10%), but there are no more than three strata allowed in a survey area.</p>