APPENDIX H

Site Evaluation Requirements and Effect Determination Criteria – Marbled Murrelet

Appendix H1 Washington State Department of Transportation (WSDOT) 2014 Programmatic Biological Opinion – Supplemental Analysis: Effects Analysis for Marbled Murrelet within Washington Municipal Boundaries

Appendix H2: Marbled Murrelet Site Evaluation, Impacts, and Effect Determinations

Appendix H1

Washington State Department of Transportation (WSDOT)
2014 Programmatic Biological Opinion – Supplemental Analysis

Effects Analysis for Marbled Murrelet within Washington Municipal Boundaries

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September, 2014.

WSDOT has compiled a GIS file of the city and municipal boundaries in Washington as part of their catalog of spatial data (www.wsdot.wa.gov/mapsdata/geodatacatalog/) (Figure 1). This file may be useful as a geographic "screen" to identify areas that have an extremely low likelihood of marbled murrelet (murrelet) occupancy. The city boundaries include primarily, areas of urban and suburban development and settlement. However, some city boundaries also include large forested areas associated with municipal watersheds or lands that are managed for timber production. We completed a GIS analysis of potential murrelet nesting habitat located within city and municipal boundaries and also reviewed the Washington Department of Fish and Wildlife (WDFW) priority habitat and species database of murrelet detections in Washington to inform this analysis.

Status of Murrelets and Potential Murrelet Habitat in Municipal Boundaries

City and municipal boundaries in Washington encompass over 783,000 acres statewide. Within the range of the murrelet, cities encompass over 698,000 acres associated with 141 cities and towns (Table 1). Patterns of development and urbanization vary widely, with some cities encompassing large areas of forested land, including over 17,000 acres of potential murrelet nesting habitat. Much of this potential habitat occurs in small, isolated fragments, while other areas contain large tracts of forested lands associated with city watersheds away from urban areas (Figure 1).

Murrelet Surveys

The WDFW database of murrelet survey effort (point locations where audio/visual surveys have been conducted) indicate murrelet surveys have been documented either within a city boundary, or within a distance of 0.25 mile from a city boundary in 25 cities in western Washington:

Aberdeen	Federal Way	Olympia
Anacortes	Friday Harbor	Port Angeles*
Battle Ground	Granite Falls	Port Townsend
Bellingham	Hoquiam	Seattle*
Concrete	Issaquah*	Snohomish
Darrington*	Kelso	Sultan
Des Moines*	Lakewood	Tacoma
DuPont	Montesano	Tumwater
Everett*		

* Cities with murrelet presence detections in the city boundary or within a distance of 0.25 mile.

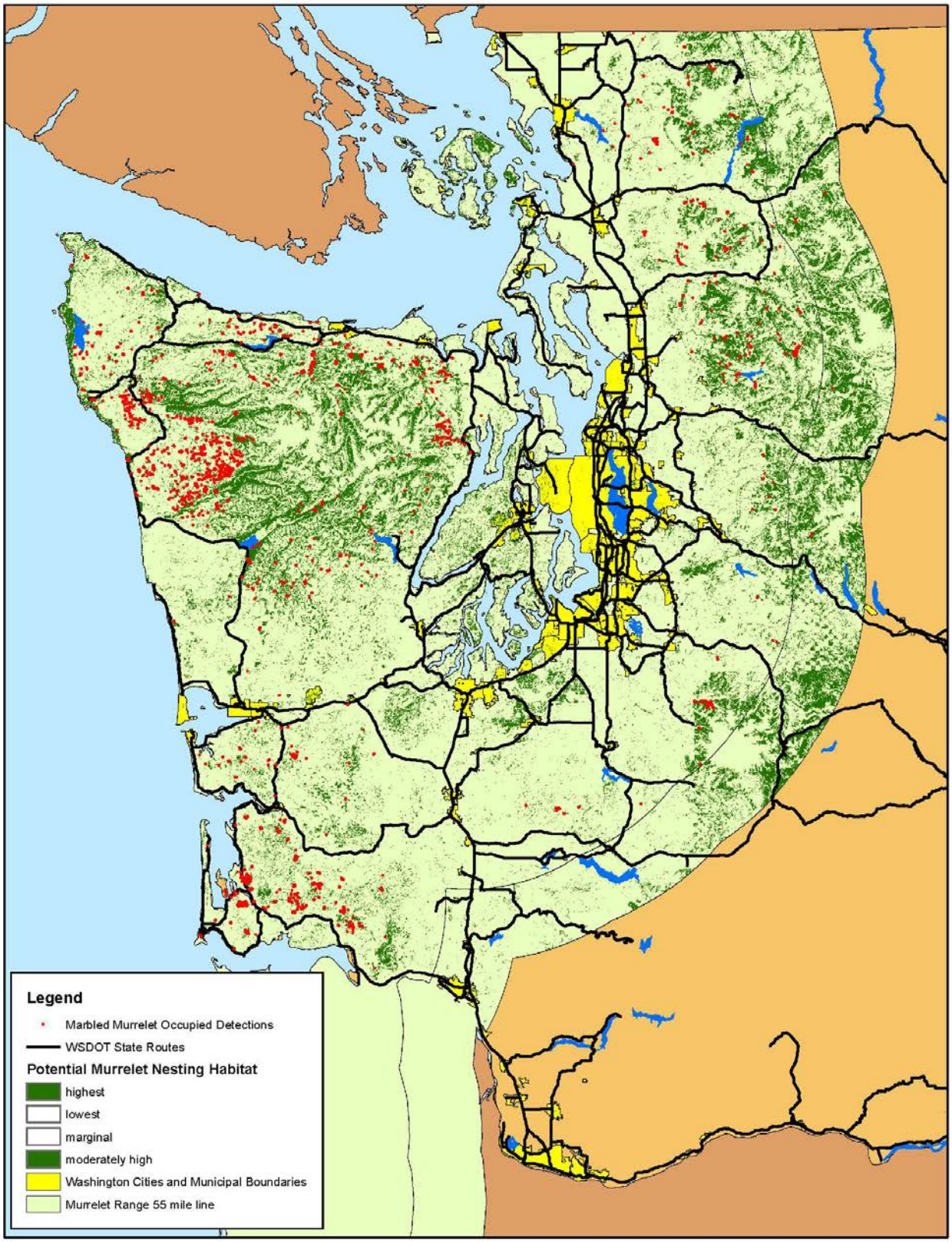

Figure 1. City boundaries and WSDOT roads within the range of the murrelet in Washington.

Within city boundaries, no surveys documented behaviors indicative of murrelet occupancy. Presence detections (murrelets heard or seen flying over the survey point location) were documented in six cities. These presence detections were not in areas with potential nesting habitat except in Everett, Darrington, and Port Angeles. In Everett, the murrelet presence detection was documented on a municipal property owned by the city of Everett located 14 miles east of city limits in the foothills of the Cascades. This presence detection is located several miles outside of the WSDOT action area. In Darrington, murrelet presence was detected approximately 0.25 miles south of the city boundary, and approximately one mile south of State Route 530. The nearest occupancy detection is located approximately 2 miles south of Darrington on National Forest lands.

There is occupied habitat adjacent to the city boundary in Port Angeles. Surveys conducted by WDNR on a small parcel adjacent to the city boundary documented murrelet presence and occupancy behaviors in 2001 (Figure 2). Though the detection locations are outside of the action area, the patch of contiguous forested area extends into the WSDOT action area. Because the stand is occupied, and we do not know where the actual nest site is, and because murrelets could choose alternate nest sites potentially closer to, or within the action area in future years, we assume that there is a potential for exposure of murrelets within the entirety of the contiguous stand.

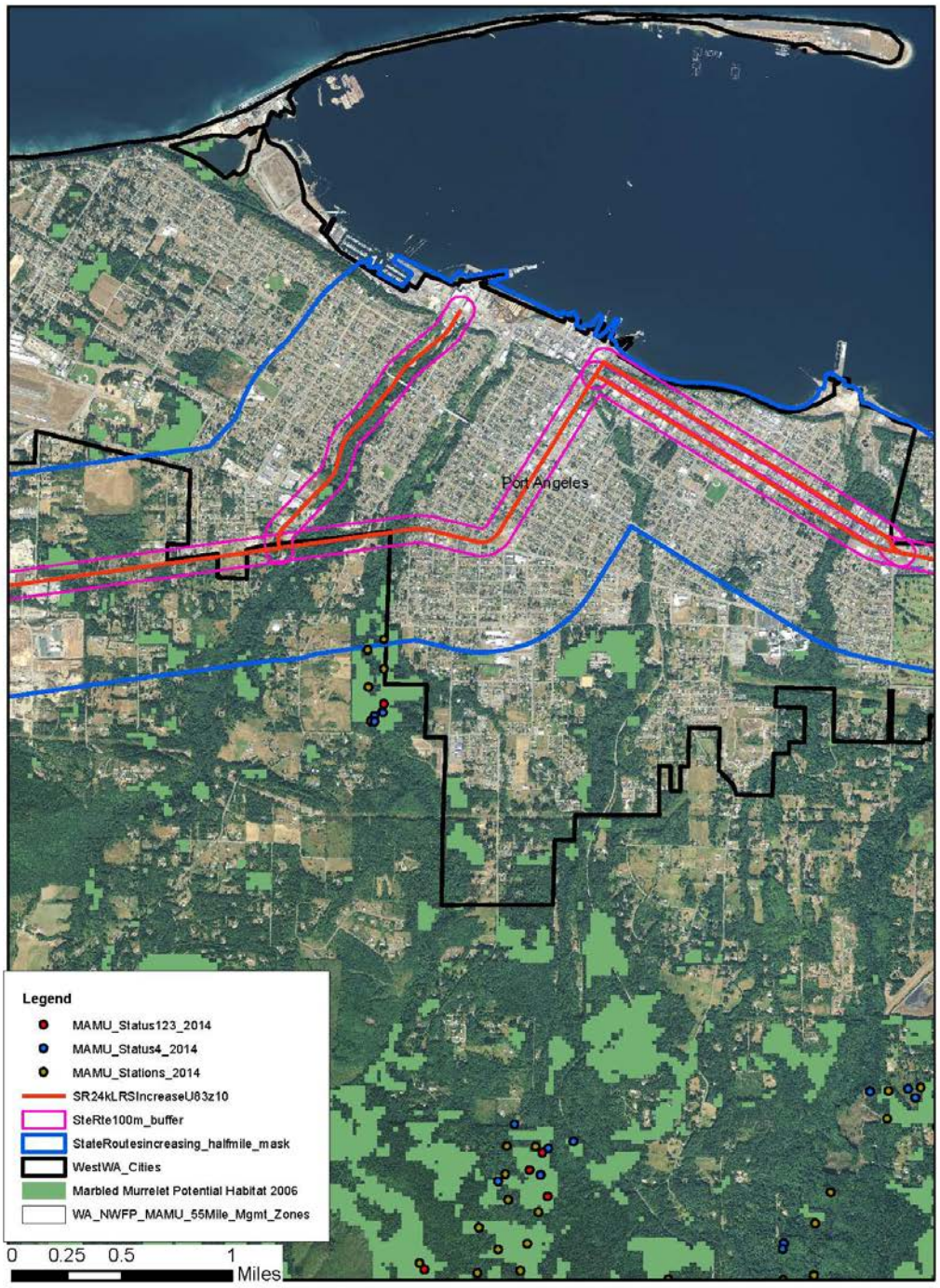

Figure 2. Potential murrelet nesting habitat and murrelet detections in the vicinity of Port Angeles. Port Angeles is the only city in Washington that has documented occupied murrelet habitat that overlaps the municipal boundary.

WSDOT Programmatic Activities within Washington Municipal Boundaries

WSDOT manages over 4,600 miles of highways within the range of the murrelet in Washington, including approximately 1,497 miles of roads located within municipal boundaries (Figure 2). This represents about 36 percent of the road network managed by WSDOT in western Washington. Management activities covered under the programmatic include a broad range of road maintenance and reconstruction activities, and stream crossing structures. For analysis purposes, WSDOT mapped a half-mile buffer adjacent to State Routes to represent the programmatic project action area. Within the municipal boundaries, there are approximately 3,905 acres of potential murrelet habitat located within the WSDOT action area, including about 316 acres located directly adjacent to roads (within a distance of 100 m) (Table 1). Most of the potential nesting habitat associated with municipalities is located outside of the WSDOT action area in more remote areas associated with city watersheds (Figure 1). There is murrelet occupancy adjacent to the city boundary in Port Angeles (Figure 2).

Table 1. Summary of potential murrelet nesting habitat within city and municipal boundaries, including habitat adjacent to WSDOT-managed roads.

Total area (acres) within city boundaries within the range of the murrelet	Acres of designated murrelet critical habitat within city boundaries	Total acres of potential murrelet nesting habitat within city boundaries	Acres of suitable murrelet nesting habitat within 0.5 mile of WSDOT roads	Acres of suitable murrelet nesting habitat within 100 m of WSDOT roads
698,973	0	17,456	3,905	316

Note: Due to rounding errors associated with GIS, the acreage values reported here may differ slightly from values reported elsewhere. Potential murrelet nesting habitat estimates are approximate values derived from 2006 habitat maps developed for the Northwest Forest Plan 15-year monitoring report (Raphael et al. 2011).

It is anticipated that WSDOT actions may remove up to 55 acres of upland vegetation per year distributed across an average of 51 projects per year within the range of the marbled murrelet in Washington, indicating an average of 1.1 acres of vegetation removal per project. Estimates of areas exposed to noise and visual disturbance associated with WSDOT activities range from 10 to 100 acres per project, depending on the activity type. All WSDOT activities are essentially confined to the existing road prism and adjacent right-of-ways. Vegetation removal for any given project is limited and, where necessary, is generally removed in narrow, linear strips along existing highway rights-of-way. However, vegetation removal may include removal of a limited number of suitable nest trees, or the removal trees with canopies that are intermingled with suitable nest trees.

Within portions of the action area that lie within municipalities, with the exception of Port Angeles, we expect that exposure of murrelets to stressors associated with programmatic projects is extremely unlikely. Suitable habitat within the WSDOT action area is limited and highly fragmented, and available survey data do not indicate murrelet presence or occupancy within the action area inside municipalities. Murrelets are not known to occupy forested areas less than five acres in size, and occur with lessoning probability as distance from another occupied stand increases (Meyer et al. 2002, p. 103). Further, small, fragmented patches of nesting habitat

within urban and suburban settings are subjected to high levels of human disturbance and generally support high densities of corvids (crows, ravens, and jays) that increase predation risk for murrelets, making these habitats less suitable for murrelets (Raphael et al. 2002, pp. 231-232). These factors may explain the lack of murrelet presence detections near cities where murrelet surveys have occurred.

Recommendation

Considering the full range of the effects associated with WSDOT programmatic road management activities and the current status of the murrelet and potential murrelet nesting habitat within municipal boundaries, it is our recommendation that these boundaries can be used as a "project screen" for projects covered under the WSDOT programmatic. For WSDOT programmatic projects located within a mapped city boundary, that project can be considered a "may affect, not likely to adversely affect" project regarding murrelets, regardless of project timing or vegetation impacts **unless it is within the city limits of Port Angeles. Projects occurring within Port Angeles shall be evaluated individually**.

Literature Cited

Meyer, C.B., S.L. Miller, and C.J. Ralph. 2002. Multi-scale landscape and seascape patterns associated with marbled murrelet nesting areas on the U.S. west coast. Landscape Ecology 17:95-115.

Raphael, M.G., D. Evans Mack, J.M. Marzluff, and J. Luginbuhl. 2002. Effects of forest fragmentation on populations of the marbled murrelet. Studies in Avian Biology 25:221-235.

Raphael, M.G., G.A. Falxa, K.M. Dugger, B.M. Galleher, D. Lynch, S.L. Miller, S.K. Nelson, and R.D. Young. 2011. Northwest Forest Plan – the first 15 years (1994-2008): status and trend of nesting habitat for the marbled murrelet. Gen. Tech. Rep. PNW-GTR-848. Portland, OR. U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 52 pp.

Appendix H2: Marbled Murrelet Site Evaluation, Impacts, and Effect Determinations

WSDOT biologists will use a three-step approach when determining potential project effects to murrelets.

1. Conduct a site evaluation to determine if there is suitable habitat within the project action area.

    a. Suitable habitat is currently defined by the USFWS's Washington Fish and Wildlife Office as: *"Any contiguous coniferous-dominated forested area[1], greater than five acres, less than or equal to 55 miles from marine waters, with greater than or equal to one platform[2]."*

    b. Use GIS and aerial photos and a site visit, if necessary, to evaluate the potential for suitable habitat to occur in the action area. If suitable habitat is present, the biologist will consider the site occupied during the nesting season (April 1-September 23), for the purposes of the biological assessment. Note that in the following section on effect determination guidance, threshold distances are measured from the edge of suitable habitat (not individual platform trees).

2. Make an effect determination by applying the applicable thresholds for disturbance and habitat impacts (described in detail below) to WSDOT projects.

3. Consult with USFWS liaison or species lead when necessary to determine the type of habitat present in the project analysis area. Details on these steps are provided below.

Site Evaluation

The purpose of the site evaluation is to determine if potential nesting platforms are present within the project analysis area. Determining if there are potential nesting platforms can be a complex process because platforms are difficult to observe and murrelets nest within a wide range of forest conditions with variation in tree species, tree diameters, stand size, and stand composition.

The project analysis area for murrelets is either the action area or the threshold distance areas, whichever is smaller. For example if the project action area is defined by noise and extends out ½ mile, but due to the type of activities, the threshold distance of effects to murrelets is ¼ mile, only the habitat within the ¼ mile area should be evaluated rather than all of the habitat within the action area. The full action areas should be evaluated for other species unless there are species-specific thresholds or analysis areas that are in effect.

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[1] Contiguous coniferous-dominated forested area greater than five acres = A forested area dominated by conifers that is greater than or equal to 328 ft from any other similar forested area(s), or is otherwise surrounded by non-habitat (i.e., rock, impervious surface, pasture, lake, etc.), and containing trees that are at least ½ the site potential tree height.

[2] Platform = relatively flat surface at least four inches wide, at least 33 feet high in a coniferous tree, with cover from the live crown of the same tree, or an adjacent tree.

A. Pre-Site Evaluation Activities

GIS data and other materials can initially aid this analysis in the following ways:

Some sites may be excluded immediately from further consideration based on lack of coniferous forest cover within the project analysis area, or distance from the marine environment. Activities greater than 70 miles from the marine environment are considered to have no effect on marbled murrelets. Activities between 55 and 70 miles from the marine environment that have suitable murrelet habitat would be more appropriately categorized as having a discountable chance of exposure to murrelets (a may effect, not likely to adversely affect call for murrelets) although projects with habitat impacts could affect habitat distribution and quality. Projects which impact suitable habitat between 55 and 70 miles cannot assume that such impacts are discountable and must analyze habitat impacts using the same conditions that are used for murrelet habitat 0-55 miles from marine waters. For projects located within a mapped city boundary (see **Effects Analysis for Marbled Murrelet within Washington Municipal Boundaries.)**, that project can be considered a "may affect, not likely to adversely affect" project regarding murrelets if the city is covered in this guidance, regardless of project timing or vegetation impacts unless it is within the city limits of Port Angeles. Projects occurring within Port Angeles cannot assume informal impacts under the Municipal Boundary guidance. They should be analyzed using all of the other murrelet conditions in this consultation. (Counties that do not have marbled murrelet on the USFWS county list will also be excluded);

- The biologist will use the following data layers to help with the evaluation: marbled murrelet critical habitat, murrelet detection sections/detection sites[3], and murrelet potential habitat (Davis et al. 2011). While the Davis layer provides information on northern spotted owl habitat, the nesting/ roosting habitat layer can be used as a surrogate for potentially suitable marbled murrelet nesting habitat. If critical habitat/detection sections/sites/potential habitat are within the project analysis area, a site evaluation will automatically be conducted;
- If there is no critical habitat/detection section/potential habitat within the project analysis area, but aerial photos or on-the-ground knowledge indicate that there is a minimum of 5 acres of contiguous conifer-dominated forest cover with trees that are ≥ 15 inches dbh within the project analysis area, the biologist will conduct the site evaluation. These stands may be outside the WSDOT right-of-way and property boundaries may need to be reviewed. In this case, only the portion of the stand(s) that lies within the project analysis area should be evaluated, if access is permitted. WSDOT will not be able to obtain right-of-entry for adjacent private properties.

[3] Murrelet detection section GIS data is obtained quarterly from the Washington Department of Fish and Wildlife. Marbled murrelet occupied sites are defined as sites where occupancy has been documented through PSG protocol surveys.(Evans Mack, D., W. P. Ritchie, S. K. Nelson, E. Kuo-Harrison, P. Harrison, and T. E. Hamer. 2003. Methods for surveying marbled murrelets in forests: a revised protocol for land management and research. Pacific Seabird Group. Arcata, California, USA.). Detection sections are sections where presence has been document by audio detections or fly overs, and occupancy has been identified through survey. Occupancy is point data.

B. Criteria for the Site Evaluation

The pre-site evaluation activities may identify the need for the site evaluation. Alternatively, the biologist may identify the need for the site evaluation during the site visit. The site evaluation will proceed under these additional conditions:

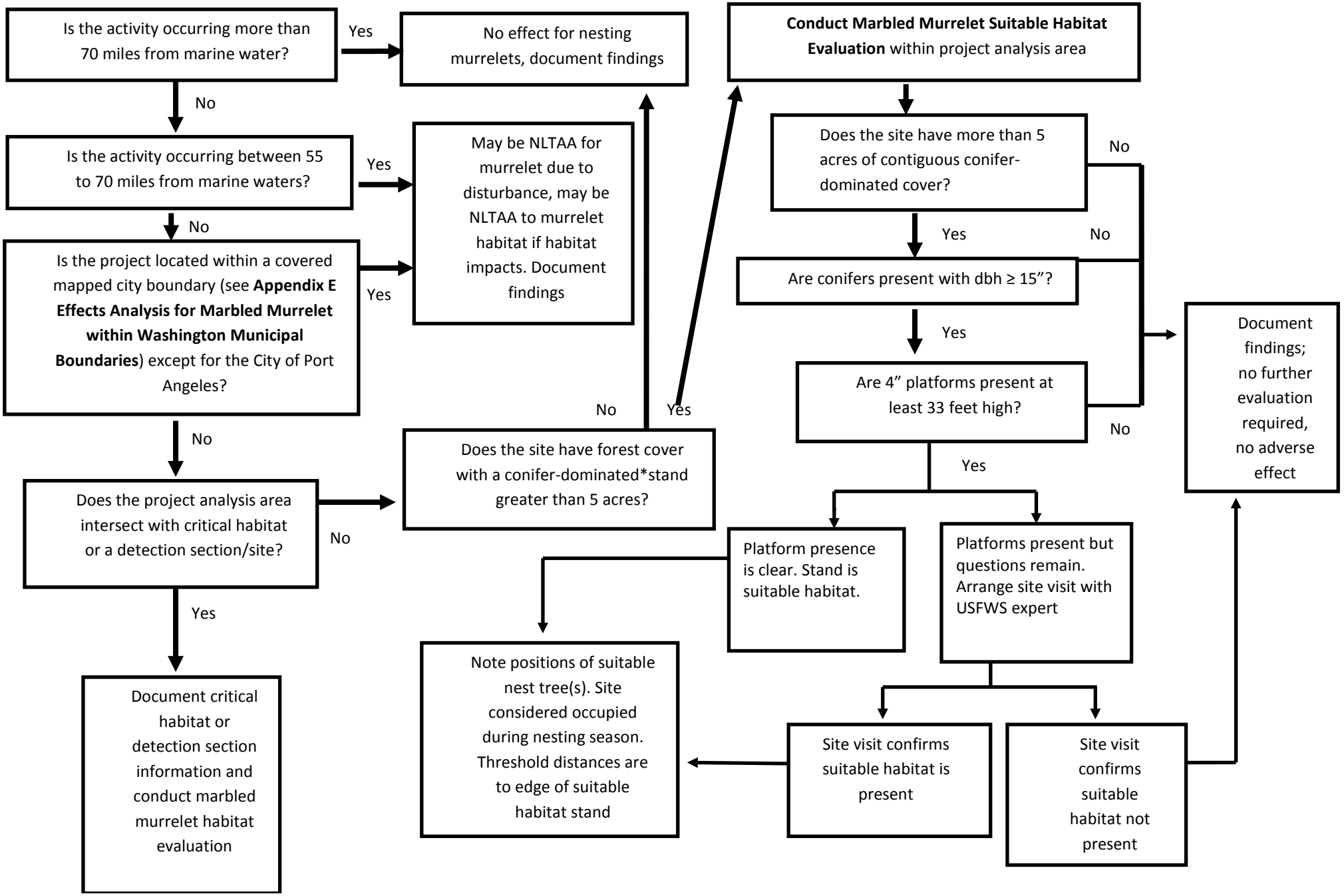
1. The biologist will determine if the minimum 5 acre contiguous coniferous forested stand within the project analysis area has trees that are ≥ 15 inches dbh. If these conditions are not found, the stand does not have suitable nesting habitat. A contiguous coniferous dominated stand includes any trees that are within 328 feet (100 meters) of the larger stand and all of the stands meet the minimum tree diameter condition. For example a conifer stand that is located on both sides of a stream corridor or a roadway would be considered a contiguous stand.

2. If the minimum 5 acre continuous coniferous forested stand within the project analysis area has trees that are ≥ 15 inches dbh but does not have any nesting platforms that are a minimum of 4 inches wide and a minimum of 33 feet above the ground, the stand does not have suitable nesting habitat.

3. A site is considered to have suitable nesting habitat if a platform tree is within a minimum 5 acre contiguous coniferous dominated stand within the project analysis area, has trees that are ≥ 15 inches dbh, and has any platform that is a minimum of 4 inches wide a minimum of 33 feet above the ground. Threshold distances for allowed activities are measured from the edge of the **suitable habitat** stand.

See **Figure 1** for a flowchart of the site evaluation process.

Figure 1. Marbled Murrelet Nesting Habitat Evaluation Flowchart



*Conifer stands have ≥ 60 percent conifer cover

Effect Determination Guidance

The USFWS uses standard threshold distances for several noise generating/disturbance activities to help determine potential effects to murrelets (ONF 2013) and that accepted methodology is applied here. The removal of understory vegetation and small trees, and suitable nest trees, both during and outside of the nesting season are treated differently in this programmatic due to the differences in how habitat impacts are conducted.

Disturbance, disruption, and/or physical injury distance thresholds for marbled murrelet during the nesting season (April 1 to September 23) are in the table below. Distances are to suitable habitat or a known occupied marbled murrelet stand.

Project Activity	**No Effect**	**NLAA** "may affect" disturbance distance	**LAA** disruption distance	**LAA** direct injury and/or mortality
Light maintenance (e.g., road brushing and grading) at administrative facilities, and heavily-used roads	> 0.25 mile	≤ 0.25 mile	NA	NA
Chainsaws (includes felling hazard/danger trees)	> 0.25 mile -	328 feet (110 yards) to 0.25 mile -	<328 feet (110 yards)	Potential for mortality if trees felled contain platforms
Heavy equipment for road construction, road repairs, bridge construction, culvert replacements, etc.	> 0.25 mile	328 feet (110 yards) to 0.25 mile	<328 feet (110 yards)	NA
Pile-driving (steel H piles, pipe piles), Rock Crushing Equipment	> 0.25 mile	363 feet (121 yards) to 0.25 mile	<363 feet (121 yards)	≤ 15 feet (5 yards) (injury)
Blasting	> 1 mile	0.25 mile to 1 mile	≤ 0.25 mile	≤ 300 feet (100 yards) (injury)
Short duration Activities		Certain activities* that are within or adjacent to suitable murrelet habitat may qualify for informal effects regardless of distance to activity from suitable habitat		

*The following activities may qualify for informal coverage if they take less than 3 days from start to finish, use the murrelet timing restriction (no work until 2 hours after sunrise, and stop work 2 hours before sunset), and if approved by USFWS during Early Coordination

- Geotechnical investigations
- Sign/guardrail installation with no pile driving
- Vegetation maintenance, non-chainsaw, non-habitat removal
- Striping/delineation
- Oil distribution truck or trailer
- Projects conducted after September 4.

Effect Determination Guidance for Habitat Impacts

WSDOT habitat impacts to suitable nesting habitat would typically occur next to permanent openings (existing roads) or temporary openings (harvested plantations). Most of these removals are linear and within the right-of-way. Occasionally removal of suitable nesting habitat would create a new canopy gap in a forest stand when a detour route was required.

For projects **outside designated critical habitat** that will result in habitat impacts or vegetation removal within suitable habitat, the following effect determination guidance is used for marbled murrelet:

- Removal of trees within suitable habitat that have 4" platforms, >33 feet high is LTAA for marbled murrelet at any time. (Note - avoid tree removal during nesting season)
- In suitable habitat, any vegetation removal creating new canopy gaps less than 0.25 acre and does not remove trees with suitable nesting structure will be NLTAA for marbled murrelet.
- In suitable habitat, any vegetation removal creating new canopy gaps equal to or greater than 0.25 acre will be LTAA for marbled murrelet. Projects creating canopy gaps (in suitable habitat) greater than 0.25 acre are generally excluded from coverage under this Opinion, unless coordinated with and approved by USFWS prior to submittal of the project notification form.
- Vegetation alteration within a canopy gap is not an effect to murrelet habitat (there may be disturbance effects)
- Removal of unsuitable habitat adjacent to suitable habitat is a disturbance effect to murrelet, and not an effect to murrelet habitat.

For projects that will result in habitat impacts or vegetation removal within the range of marbled murrelets in conifer dominated stands: if vegetation removal occurs on the periphery of existing permanent openings (roads, etc.) the limits described in this effect determination guidance may be exceeded if the site-specific characteristics of the vegetation and the project-specific characteristics of the proposed impacts will not adversely affect marbled murrelet or marbled

murrelet critical habitat. Exceptions to these limits would be coordinated with USFWS in advance, and documented in the project submittal materials.

Marbled Murrelet Suitable Habitat (But Not Critical Habitat) Effect Determination Guidance

Project Activity	No Effect	May Affect, Not Likely to Adversely Affect	Likely to Adversely Affect
Upland Vegetation Removal and Management Riparian and Wetland Vegetation Removal and Management	Marbled murrelet is not on County list; or Marbled murrelet is on County list but the stand does not contain suitable murrelet nesting structure and is not within the project analysis area.	In suitable habitat, any vegetation removal creating new canopy gaps less than 0.25 acre and that does not remove trees with suitable habitat nesting structure. Project removes suitable habitat including trees with platforms within mapped city municipal boundary (except for Port Angeles) in Western Washington (Check guidance to see if city is covered)	In suitable habitat, any vegetation removal creating new canopy gaps equal to or greater than 0.25 acre (if approved for PBO coverage by USFWS); or Removal of trees within suitable habitat that have 4" wide platforms > 33 feet high

Upon approval of USFWS, additional habitat impacts that are adjacent to permanent openings may be allowed under the PBA.

Effect Determination Guidance for Designated Critical Habitat

The WSDOT regions contain all or part of different marbled murrelet critical habitat areas. Most of the critical habitat is in the Western Washington regions, but there are small critical habitat areas on SR 2 (North Central Region) and I-90 (South Central Region). Portions of SR 2, SR 4, SR 6, SR 12, I-90, SR 101, SR 112, SR113, SR 165, SR 410, SR 508, and SR 542 are located within or near designated marbled murrelet critical habitat (**Table 1**).

Proposed projects that occur within or adjacent to designated critical habitat and result in removal (clearing and/or grubbing) of vegetation may affect a critical habitat unit. However, most WSDOT projects involve removal (clearing and/or grubbing) of vegetation located adjacent to an existing transportation corridor and will not likely alter the PCEs. Projects that do not alter the PCEs will not adversely affect the critical habitat unit.

Presence of nesting habitat within a critical habitat unit will be evaluated by a biologist (see **Figure 1**). A biologist will also evaluate forest stands with trees ≥ 15 inches dbh and the presence of 4" wide platforms 33 feet above the ground to determine nesting tree suitability.

For projects **inside designated critical habitat** that will result in habitat impacts or vegetation removal within the range of marbled murrelets in conifer-dominated stands the following effect

determination guidance has been developed for marbled murrelet and marbled murrelet critical habitat: See Figure 2.

- Removal of trees with suitable nesting structure is LTAA for marbled murrelet and marbled murrelet critical habitat.
- If the stand lies within critical habitat and is within 0.5 mile of suitable habitat that is also within critical habitat, any vegetation removal creating new canopy gaps less than 0.25 acre and does not remove trees with suitable nesting structure, will be NLTAA for marbled murrelet critical habitat.
- If the stand lies within critical habitat and is within 0.5 mile of suitable habitat that is also within critical habitat, projects that remove conifer trees that are ½ the site potential tree height or taller and creates a new canopy gap equal to or greater than 0.25 acre will be LTAA for marbled murrelet critical habitat (removal of PCE 2).

For projects that will result in habitat impacts or vegetation removal within the range of marbled murrelets in conifer dominated stands: if vegetation removal occurs on the periphery of existing permanent openings (roads, etc.) the limits described in this effect determination guidance may be exceeded if the site-specific characteristics of the vegetation and the project-specific characteristics of the proposed impacts will not adversely affect marbled murrelet or marbled murrelet critical habitat. Exceptions to these limits would be coordinated with USFWS in advance, and documented in the project submittal materials.

Marbled Murrelet Critical Habitat Effect Determination Guidance

Project is within designated CH with habitat impacts or vegetation removal (See Figure 2)

Project Activity	No Effect	May Affect, Not Likely to Adversely Affect	Likely to Adversely Affect
Upland Vegetation Removal and Management Riparian and Wetland Vegetation Removal and Management	Marbled murrelet is not on County list; or Project does not occur in critical habitat Note: **any** type of habitat removal within critical habitat (suitable or non-suitable habitat removal) will have a not likely to adversely affect or an adverse effect determination.	If stand is in critical habitat and is within 0.5 mile of suitable habitat that is also within critical habitat, any vegetation removal creating new canopy gaps less than 0.25 acre and does not remove trees with suitable nest structure; or Removal of suitable habitat adjacent to a permanent opening (e.g., existing roads) if approved by the USFWS	If stand is in critical habitat and is within 0.5 mile of suitable nesting habitat that is also located within critical habitat, and projects that remove conifer trees that are ½ of the site potential tree height or taller and creates a new canopy gap ≥ 0.25 acre. If trees with suitable nesting structure are removed.

Figure 2. Schematic illustration of highway project with impacts to vegetation located within a marbled murrelet critical habitat unit and the effect determinations to critical habitat based on distance from suitable habitat.

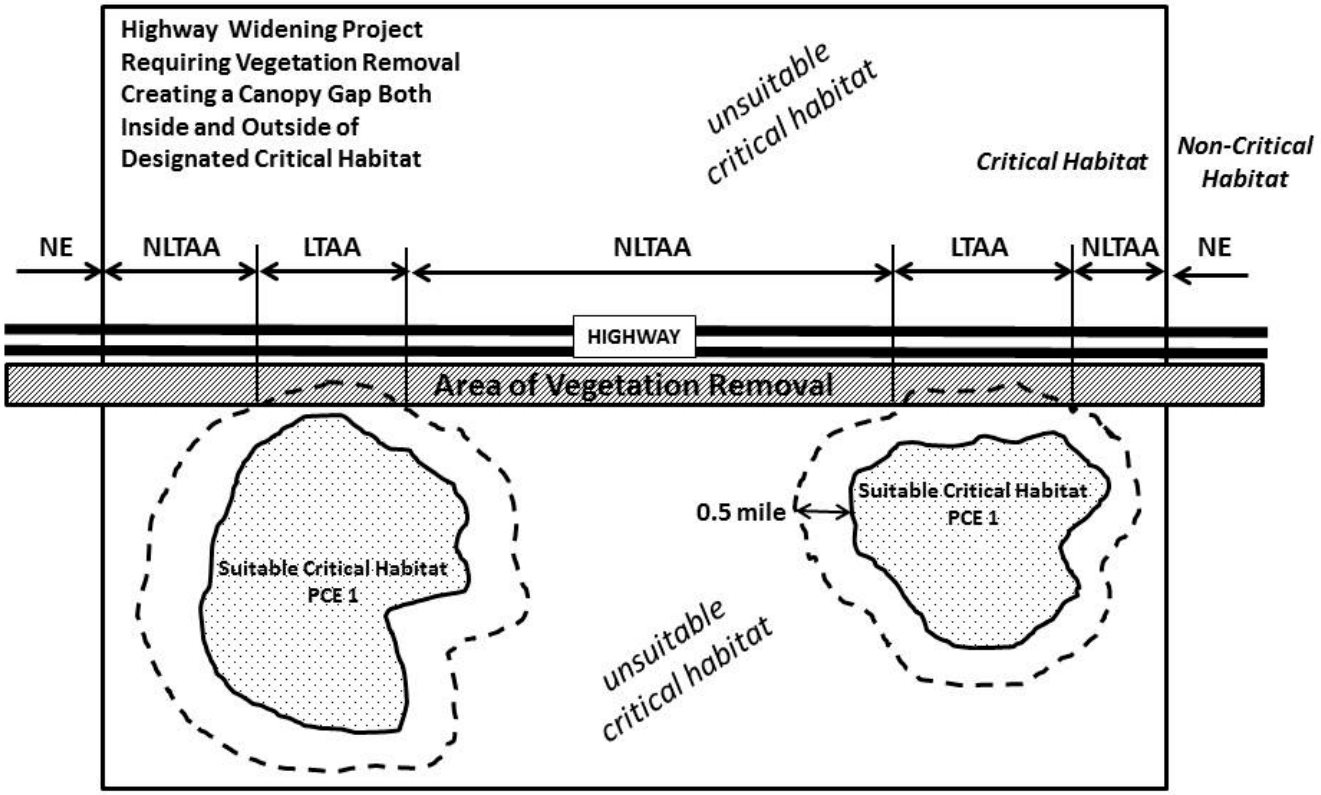


Table 1: Location of Marbled Murrelet Critical Habitat within Regions

State Highway	Mileposts at or within 0.25 Mile of Critical Habitat Boundaries		
2	31.73	–	32.89
	39.92	–	41.14
	43.20	–	44.62
	47.93	–	48.18
	48.36	–	48.57
	55.53	–	56.76
	56.76		62.09
4	0.00	–	0.37
	0.38	–	1.47
	5.50	–	5.66
	39.88	–	40.29
	40.41	–	41.03
6	6.68	–	7.12
	10.54	–	12.21
	15.16	–	16.17
	16.57	–	16.86
	21.16	–	22.62
	24.38	–	25.24
	32.58	–	32.84
12	29.99	–	31.45
	31.71	–	32.83
	36.19	–	37.46
90	47.7		48.9
	49.2		49.4
101	28.80	–	32.56
	32.77	–	33.59
	44.91	–	46.51
	117.40	–	118.93
	119.55	–	121.62
	122.58	–	125.48
	128.21	–	130.65
	175.94	–	176.33
	182.02	–	183.01
	183.09	–	184.31
	184.85	–	185.17
	230.52	–	237.23
	238.82	–	239.97
	240.28	–	240.55
	240.84	–	241.38
	269.20	–	269.71
	296.60	–	299.83
	300.49	–	301.68
112	50.30	–	51.25
	51.54	–	51.64
	59.84	–	60.57
113	1.81	–	3.42
	3.52	–	4.89
	5.41	–	6.34
165	0.00	–	4.07
401	5.51	–	5.81
410	38.31	–	39.50
	40.04		48.95
508	22.65	–	23.37
542	0.00	–	0.37
	33.81	–	54.64