

REDWOOD NATIONAL AND STATE PARKS

2009 INCIDENTAL TAKE SUMMARY REPORT TO THE US FISH AND WILDLIFE SERVICE

**NORTHERN SPOTTED OWL
MARBLED MURRELET
WESTERN SNOWY PLOVER**

**Compiled by
Keith Bensen, Fish and Wildlife Biologist
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I. Summary

This incidental take report describes Redwood National and State Parks (RNSP) 2009 operations that may have adversely impacted potentially occupied northern spotted owl and marbled murrelet habitat and western snowy plover individuals.

Please note that the noise disturbance acreages presented here were calculated using a 500 foot buffer distance around most potential noise disturbance sources (except for those sources where vehicle backup warning signals were utilized – a 0.25 mile buffer distance was used in those instances). New noise disturbance buffer distance guidelines issued by the Arcata Office of US Fish and Wildlife Service in July of 2006 (USFWS ref. # 8-14-2006-2887) were used to calculate incidental take acreages. Per the guideline's instructions, the new noise disturbance buffer distances were to be applied to all incidental take reporting from 2007 onward. This year's reported noise disturbance acreages are lower than in years previous to 2007's report because all noise sources were assessed using a 0.25 mile buffer distance.

Approximately 2,177 acres of potentially occupied suitable marbled murrelet habitat at or within 500 feet to 0.25 miles, depending on the loudness of the noise source emanating from project activities, were potentially impacted by noise disturbance. Approximately 0.2 acres of suitable marbled murrelet habitat were degraded. Approximately 10,306.5 acres of suitable marbled murrelet habitat were subjected to an increased predation threat due to project activities and/or park visitor use.

Approximately 2,177 acres of unsurveyed spotted owl habitat at or within 500 feet to a quarter mile, depending on the loudness of the noise source emanating from project activities, were potentially impacted by noise disturbance.

No snowy plovers were observed to have been killed by vehicles driving on park beaches or by visitors walking on park beaches. It is highly unlikely that any unobserved plover deaths occurred because no plovers were observed nesting in RNSP in 2009. A separate report was

submitted to the USFWS containing information on beach vehicle use levels and law enforcement beach patrols.

Summaries of the status of all non-emergency projects with permitted 2009 incidental take are presented in the narrative statements below and in Table 1.

II. Potential Adverse Impacts Associated With Individual Biological Opinions

(BO Ref. # 81331-2008-F-0130) Annual Maintenance (Facilities, Roads, and Trails)

Brushing with power tools occurred along the lower 1.5 miles of the Redwood Creek Trail once per month in April, May and June for seven hours each. This resulted in 91 acres of potentially occupied marbled murrelet and spotted owl habitat being impacted by noise disturbance. Temporary trail bridge installation on Redwood Creek Trail occurred once in June for seven hours resulting in 10 acres of potentially occupied marbled murrelet and spotted owl habitat being impacted by noise disturbance.

One downed tree was removed during the noise restriction period along the Orick Horse Trails resulting in 17 acres of potentially occupied spotted owl and marbled murrelet habitat being impacted by noise disturbance.

Road maintenance work occurred during the marbled murrelet noise restriction period using heavy equipment with back-up warning signals on the L-1-1 Road and A-9-6 Road resulting in 18 acres of potentially occupied marbled murrelet habitat being impacted by noise disturbance.

Mowing and chainsaw work occurred in Elk Prairie Campground (aka Prairie Creek Campground) in mid May, before Memorial Day, resulting in 360 acres of potentially occupied marbled murrelet habitat being impacted by noise. All other facility maintenance in the three state parks occurred between Memorial Day and Labor Day, when ambient background noise is equal to, or greater than, noise generated by maintenance activities or work performed was below general ambient noise levels. No spotted owl habitat was impacted by facility maintenance in the state parks because recent surveys indicated that habitat within 0.25 miles of these sites was not occupied by spotted owls.

(BO Ref. No. 1-14-2001-888) Helicopter Use –

There was no law enforcement or fire management helicopter use during the marbled murrelet and spotted owl noise restriction period below 2,000 feet above suitable owl and murrelet habitat in 2009.

(BO Ref. No. 8-14-2006-2836) Lost Man Creek Erosion Control and Disturbed Land Restoration

Reported here are statistics relative to projected versus actual acres of marbled murrelet habitat degraded and acres of marbled murrelet habitat subjected to increased predation threat, and whether or not these actions resulted in incidental take. Because many roads were not treated as

anticipated at the start of the project, total ground disturbance and road length figures will be reported in the final report at the end of the project in 2010 (originally intended to end in 2009 but an extension was granted due to a few roads not completed in 2009).

In summary, in 2009 there were 1.7 ac of habitat degraded of which 0.2 ac may have resulted in incidental take by rendering the habitat unsuitable near occupied sites. A total of 35.9 ac may have been impacted such that there may be increased corvid predation resulting in incidental take near occupied sites. This year no acres were impacted by noise disturbance.

With one exception, all project work was begun on or after the start date (month and day) described in the BA. Work on the A400 was slated to begin on 7/10/08 but instead was started on 6/15/2009 outside of any murrelet/old growth buffers and in an area with completed spotted owl surveys.

The description of the roads and acre figures in this table are presented as they were in the 2006 BA.

Roads Treated in 2009	Projected Acres of MAMU Habitat Degraded	Actual Acres of MAMU Habitat Degraded	<i>Incidental Take?</i>	Projected Acres of MAMU Habitat Subject to Increased Predation	Actual Acres of MAMU Habitat Subjected to Increased Predation	<i>Incidental Take?</i>
A112 (Completed in 2008 but reported here in 2009)	0.4	0.2	N	3.2	1.6	N
A140- 2009	0	0	N	5.3	0.04	N
A141	0.2	0	N	4.7	0	N
A160- 2009 OG Buffer	0.7	0.2	Y	13.8	17.2	Y
A160 + Spur- 2008	0.5	1.2	N	2.0	1.8	N
A300 MAMU Buffer	0	0	N	0.3	0.3	Y
A300	0.3	0	N	5.8	3.8	N
A400	0.2	0.1	N	0.8	0.7	N
Totals	2.3	1.7 (0.2 Take)	—	35.9	25.4 (17.5 Take)	—

Cumulatively between 2006 and 2009, 3.7 ac of residual old growth habitat were projected to be degraded that may have resulted in incidental take. The actual total for these three years was 0.9

ac degraded. Between 2006 and 2009, 71.7 ac were projected to provide increased habitat for corvids that may result in incidental take. The actual figure currently stands at 38.6 ac with increased predation threat.

No marbled murrelet surveys have taken place since 2007.

(BO Ref. No. 8-14-2005-2558) Mill Creek and Lost Man Creek Trails Culvert Replacement

No work occurred during the breeding season within suitable marbled murrelet habitat, or in the 500 foot buffer, in 2009.

(BO Ref. No. 81331-2008-F-031) Vehicle Beach Access

No snowy plovers were observed to have been killed by vehicles driving on park beaches. It is highly unlikely that any unobserved plover deaths occurred because no plovers were observed nesting in RNSP in 2009 during regular, bimonthly breeding season protocol surveys. A separate report was submitted to the USFWS containing information on beach vehicle use levels and law enforcement beach patrols.

(BO Ref. No. 8-14-2003-1517) Trail and Backcountry Management Plan

Marbled murrelets were disturbed by noise generated by park visitors using existing facilities (i.e. roads and campgrounds) across 2,171 acres of suitable habitat. No new facilities which would cause noise disturbance of marbled murrelets were completed in 2009 and thus no disturbance occurred from those sources. The East Side Trail was not completed in 2009 and so no disturbance occurred due to the use of chainsaws to clear fallen trees. Marbled murrelets experienced an increased risk of predation across 10,289 acres of suitable habitat due to park visitor use of existing facilities (e.g. campgrounds, trailheads, picnic areas, trailheads). No new facilities were completed in 2009 which would cause an additional increased predation threat through use by park visitors.

Spotted Owls were disturbed by noise generated by park visitors using exiting facilities (i.e. roads and campgrounds) across 2,059 acres of suitable habitat. No new facilities which would cause noise disturbance of spotted owls were completed in 2009 and thus no disturbance occurred from those sources. The East Side Trail was not completed in 2009 and so no disturbance occurred due to the use of chainsaws to clear fallen trees.

No snowy plovers were recorded during regular surveys the 2009 breeding season in RNSP, so no disturbance of breeding birds is expected to have occurred due to visitor use of park beaches. Up to three snowy plovers were present at various times during the non-breeding season. Some disturbance of these individuals may have occurred due to visitor use of park beaches. This disturbance, however, was most likely of a low level because beach visitation during the fall, winter and spring is low in RNSP.

(BO Ref. No. 8-14-2004-2133/81331-2008-F-0027) South Fork Lost Man Creek Second Growth Management Plan

All forest thinning work was implemented using appropriate noise restriction buffers in relation to occupied suitable habitat, so there was no noise disturbance to marbled murrelets. The biological opinion, however, requires reporting of all forest thinning work within 0.25 miles of suitable, occupied habitat, regardless of timing. The following table summarizes that work. No incidental take was associated with this work. The unit names are the same as those described in the biological assessment associated with this consultation. Please refer to the maps within that document for locations of the units listed within the table.

Unit Name	Work Type	Work Start Date	Work Stop Date	Comments
MS	Lop and Scatter	10 August	16 August	Chainsaw use only, foot access, no heavy equipment use. Work within 0.25 miles of habitat but outside of 500 feet.
MS/N	Lop and Scatter	1 October	2 October	Chainsaw use only, foot access, no heavy equipment use. Work within 0.25 miles of habitat but outside of 500 feet.
NS/KS	Lop and Scatter	20 August 5 October	25 August 8 October	Chainsaw use only, foot access, no heavy equipment use. Work within 0.25 miles of habitat but outside of 500 feet.
O	Lop and Scatter	25 August	30 August	Chainsaw use only, foot access, no heavy equipment use. Work within 0.25 miles of habitat but outside of 500 feet.

In addition, the biological opinion required a reporting of all shrub growth monitoring results. This was the first year of forest thinning work done on this project, so there is no shrub growth monitoring to report. In future years, shrub growth monitoring results will be communicated in a separate report.

III. Contributors

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USFWS Biological Opinion Reference #'s: 1-14-201-888, 1-14-98-F-24, 8-14-2003-1517, 8-14-2004-2133, 8-14-2005-2558, 8-14-2006-2836, 81331-2008-F-0027, 81331-2008-F-0310

IV. Personal Communications

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SUMMARY OF MARBLED MURRELET AND SPOTTED OWL POTENTIAL INCIDENTAL TAKE IN REDWOOD NATIONAL AND STATE PARKS IN 2009			
BA/BO	Marbled Murrelet Habitat Acres Potentially Impacted by Noise Disturbance*	Northern Spotted Owl Habitat Acres Potentially Impacted by Noise Disturbance*	Comments
Annual Maintenance/81331-2008-F-0130			
Brushing and Grading Roads	18	0	NSPO surveys
Down Tree Removal	17	17	
Brushing Trails	91	91	
Temporary Bridge Installation	10	10	
Campground Maintenance	360	0	NSPO surveys
Sub Total	496	118	
Helicopter Use/1-14-2001-888	0	N/A	
Watershed Restoration in Lost Man Cr/1-14-2001-1010	0	0	NSPO surveys
Mill & Lost Trail Culvert Replacement/8-14-2005-2558	0	0	NSPO surveys
Trail Plan/8-14-2003-1517	2,171	2,059	NSPO surveys
SF Lost Man Crk Second Growth Manang. Plan/ 8-14-2004-2133	0	N/A	
Total Disturbance Incidental Take	2,667	2,177	
	Marbled Murrelet Habitat Acres Degraded	Marbled Murrelet Habitat Acres Subject to Increased Predation*	
Watershed Restoration in Lost Man Cr/1-14-2001-1010	0.2	17.5	
Trail Plan/8-14-2003-1517	N/A	10,289	
Total Degraded Habitat and Increased Predation Incidental Take	0.2	10,306.5	

* Acres potentially impacted are based on the assumption that all acres were occupied by the species of concern at the time of project implementation.