

Redwood
National and State Parks

National Park Service
U.S. Department of the Interior

California State Parks
Department of Parks & Recreation



2010 INCIDENTAL TAKE SUMMARY REPORT TO THE US FISH AND WILDLIFE SERVICE

NORTHERN SPOTTED OWL MARBLED MURRELET WESTERN SNOWY PLOVER

I. Summary

This incidental take report describes Redwood National and State Parks (RNSP) 2010 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 3,161 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 17.4 acres of suitable marbled murrelet habitat were degraded. Approximately 10,375 acres of suitable marbled murrelet habitat were subjected to an increased predation threat due to project activities and/or park visitor use.

Approximately 2,329 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 2010. 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 2010 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 May and June for 135 hours total work time. 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 34 hours resulting in 10 acres of potentially occupied marbled murrelet and spotted owl habitat being impacted by noise disturbance. One downed tree was removed with a chainsaw for one hour in June along the middle section of Redwood Creek Trail for an additional 17 acres of habitat impacted by noise disturbance.

Downed trees were 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.

No heavy equipment road maintenance work occurred along roads with allowable incidental take during the spotted owl or marbled murrelet noise restriction period.

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 2010.

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

Lost Man Creek Erosion Control and Disturbed Land Restoration Plan

This report summarizes 5 years of road restoration activities in Lost Man Creek. The projects took place between 2006 and 2010. At the end of each year (2006-2009) a report was generated describing potential impacts associated with activities during that year. However, due to the fact that road removal was “piecemeal” over the years it was not possible to report certain parameters such as entire road lengths removed and total area of ground disturbance associated with each road, as were outlined in the 2006 biological assessment. This report summarizes the estimated versus actual impacts over the lifespan of the program.

All of the roads analyzed in the 2006 assessment were removed with the exception of the A131. No marbled murrelet surveys have taken place since 2007.

Total Estimated Length of Roads to be Removed (miles)	Total Actual Length of Roads Removed (miles)	Total Estimated Area of Ground Disturbance (acres)	Total Actual Area of Ground Disturbance (acres)	Total Estimated Acres of Marbled Murrelet Habitat Degraded	Actual Acres of Marbled Murrelet Habitat Degraded	Total Estimated Acres of Marbled Murrelet Habitat Subject to Increased Predation (Corvid) Threat	Actual Acres of Marbled Murrelet Habitat Subject to Increased Predation Threat
28.2	27.6	215.8	155.7	33.5	17.4	96.5	85.5

(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 2010 during regular, bimonthly breeding season protocol surveys. A separate report was submitted to the USFWS containing information on monitoring results, 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 2010 and thus no disturbance occurred from those sources. The East Side Trail was not completed in 2010 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). A new trail, The Berry Glenn Trail (named the Elk Meadow – Lady Bird Johnson Trail Connector in the proposed action of the 2006 RNSP Trail and Backcountry Management Plan biological assessment) was completed and opened to the public in late October 2010. No additional increased predation threat to marbled murrelets caused by park visitors was experienced this year due to the new trail because it opened after the murrelet breeding season. The new trail will be added to the effects of existing visitor use facilities in 2011.

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 2010 and thus no disturbance occurred from those sources. The East Side Trail was not completed in 2010 and so no disturbance occurred due to the use of chainsaws to clear fallen trees.

No snowy plovers were recorded during regular surveys in the 2010 breeding season in RNSP, so no disturbance of breeding birds is expected to have occurred due to visitor use of park beaches. Up to four 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
C	Lop and Scatter	30 August	Ongoing	Chainsaw use only, foot access, no heavy equipment use. Work within 0.25 miles of habitat but outside of 500 feet. Work within 500 feet after 15 September.
D	Lop and Scatter	30 August	Ongoing	Chainsaw use only, foot access, no heavy equipment use. Work within 0.25 miles of habitat but outside of 500 feet. Work within 500 feet after 15 September.

F	Lop and Scatter	30 August	Ongoing	Chainsaw use only, foot access, no heavy equipment use. Work within 0.25 miles of habitat but outside of 500 feet. Work within 500 feet after 15 September.
I	Lop and Scatter	30 August	Ongoing	Chainsaw use only, foot access, no heavy equipment use. Work within 0.25 miles of habitat but outside of 500 feet. Work within 500 feet after 15 September.
A	Biomass Removal (heavy equipment)	4 October	27 October	Heavy equipment used to fell and skid logs. Work within 0.25 miles of habitat all completed after 15 September.

In addition, the biological opinion required a reporting of all shrub growth monitoring results. This was the second year of forest thinning work done on this project. Monitoring plots from units thinned in 2009 were revisited in 2010 but no shrub growth had occurred due to the heavy slash/mulch layer. Shrub growth, when it occurs in out years, will be reported in a separate report in future years.

III. Report Compiled By

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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	0	0	NSPO surveys
Down Tree Removal	34	34	
Brushing Trails	91	91	
Temporary Bridge Installation	10	10	
Campground Maintenance	360	0	NSPO surveys
Sub Total	495	135	
Helicopter Use/1-14-2001-888	0	N/A	
Watershed Restoration in Lost Man Cr/1-14-2001-1010	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	3,161	2,329	
	Marbled Murrelet Habitat Acres Degraded	Marbled Murrelet Habitat Acres Subject to Increased Predation*	
Watershed Restoration in Lost Man Cr/1-14-2001-1010	17.4	85.5	
Trail Plan/8-14-2003-1517	N/A	10,289	
Total Degraded Habitat and Increased Predation Incidental Take	17.4	10,374.5	

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