

# Pacific Seabird Group



DEDICATED TO THE STUDY AND CONSERVATION OF PACIFIC SEABIRDS AND THEIR ENVIRONMENT

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Del Waters, Director  
California Department of Forestry and Fire Protection  
1416 Ninth Street  
PO Box 944246  
Sacramento, CA 94244-2460

## **Re: Impacts to the Marbled Murrelet from loss of suitable nesting habitat in California**

Dear Mr. Waters:

On behalf of the Pacific Seabird Group (PSG), we are providing comments on proposed harvesting of suitable Marbled Murrelet (*Brachyramphus marmoratus*) nesting habitat in northern and central California. We are concerned that the cumulative impacts of multiple timber harvests in both occupied and unoccupied habitat could significantly impact conservation efforts for the Marbled Murrelet, which is listed as threatened under the federal Endangered Species Act (ESA) and listed as endangered under the California Endangered Species Act.

PSG is an international, non-profit organization that was founded in 1972 to promote the knowledge, study, and conservation of Pacific seabirds. It has a membership drawn from the entire Pacific basin, including Canada, Mexico, Russia, Japan, China, Australia, New Zealand, and the USA. Among PSG's members are biologists and scientists who have research interests in Pacific seabirds, government officials who manage seabird refuges and populations, and individuals who are interested in marine conservation. For two decades, PSG has taken an active lead in resolving many scientific aspects of the biology and conservation of Marbled Murrelets. PSG has served as an unbiased forum for government, university, and private sector biologists to discuss and resolve such issues.

The U.S. Fish & Wildlife Service listed the Marbled Murrelet in 1992 primarily because of significant losses of nesting habitat through logging and development in coastal forests of

Washington, Oregon, and California (USFWS 1992). An objective of the Marbled Murrelet recovery plan (USFWS 1997) is to stabilize and then recover the population by maintaining and/or increasing productivity and removing and/or minimizing threats to survivorship. Protecting terrestrial habitat, both occupied and unoccupied, including maintaining nesting habitat, protecting and enhancing blocks of contiguous forest cover as large as possible, and maintaining and enhancing buffer habitat is essential for the long-term recovery of this species (USFWS 1997:131-146). In fact, because so much murrelet habitat has been lost or depleted in California, remaining suitable habitat is especially important, regardless of its size, if murrelets are to have a good chance of surviving over the next 100 years.<sup>1</sup>

### **Marbled Murrelet Nesting Habitat**

The amount of mature and late-seral habitat suitable for murrelet nesting in coastal areas is significantly below historic minima. The current amount of old-growth forest in California has been reduced by more than 96% from pre-logging levels (Larsen 1991). This is especially true from Mendocino county south through San Mateo county, where Marbled Murrelet populations have been particularly impacted by the reduced amount of remaining suitable nesting habitat. This reduction in suitable habitat could result in reduced population dispersal and create a “genetic bottleneck.”

Suitable habitat should be well-distributed to reduce the probability that natural or human-caused catastrophe will threaten the survival of the species (USFWS 1996, 2006). Additionally, large contiguous blocks of nesting habitat are important for minimizing the effects of predation and windthrow. However, while large contiguous blocks create the best habitat, remaining unoccupied habitat is important, regardless of its size, in light of the fact that so little old-growth remains in California. Moreover, without a long-term strategy for Marbled Murrelet habitat conservation on State and private lands in northern and central California, the demise of the murrelet population will likely be accelerated. Allowing projects in suitable but unoccupied habitat to proceed will likely result in unacceptable habitat losses which will hinder the recovery of the Marbled Murrelet in California.

### **Continued Loss of Marbled Murrelet Habitat**

Despite the listing of the Marbled Murrelet as a threatened species, the amount of suitable murrelet habitat has continued to decline throughout its range. The loss and degradation of habitat has resulted from: (1) harvesting on private and State lands; (2) federal/private land

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<sup>1</sup> Suitable murrelet habitat includes stands of any size with at least one tree with limb diameters or platform structure >10 cm, or a residual/remnant tree with limb diameters or platform structure >10 cm. From research on Marbled Murrelet habitat use, it is clear that the species can utilize small patches of suitable habitat. Murrelets can also nest in large residual trees that often remain from past fire and management activities. These residual trees are often found at low densities, sometimes less than one tree/acre. Therefore, any assessment of habitat must include a walk-through of every acre of the area in question. Without this detailed assessment it is easy to miss small patches of habitat and residual trees (excerpted from PSG’s 1996 letter defining murrelet habitat).

exchanges; (3) logging (including selection logging and thinning) in suitable habitat and in buffers to suitable habitat; (4) misguided habitat conservation plans; (5) fragmentation effects from adjacent harvests and thinnings; and (6) a variety of natural and anthropogenic causes including fire, windthrow, and disturbance. The total loss of suitable nesting habitat between 1992 and 2003 was estimated to be about 226,000 acres or 10% of the estimated 2.2 million acres of suitable habitat (2003 estimate; McShane et al. 2004). Under the Northwest Forest Plan (USDA and USDI 1994a, b), habitat conservation plans, and other habitat management plans, new murrelet habitat will not be suitable for 50 to 200 years or more. The inability to create new murrelet habitat in the short term, combined with the continued harvesting of occupied and unoccupied habitat, ensures a downward trend in suitable murrelet habitat into the future. For these reasons it is imperative that current and potential nesting habitats be conserved.

### **Marbled Murrelet Populations Continue to Decline**

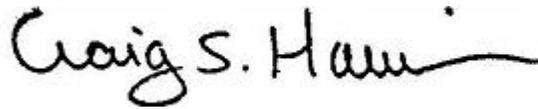
The Washington, Oregon, and California murrelet population is estimated to be 22,000 birds (McShane et al. 2004). Population modeling indicates that this population is declining and will be extinct in parts of Washington, Oregon and California within 100 years without changes in the amount and quality of nesting habitat and in demographic trends (McShane et al. 2004). Low fecundity levels across Washington, Oregon, and California as measured by nest success indicate a population that cannot currently maintain itself (Beissinger and Peery 2003, McShane et al. 2004, <http://www.reo.gov/monitoring/mm-overview.shtml>). In addition to the serious habitat loss that has occurred, murrelets are also experiencing poor nest success due primarily to nest predation, which in turn is significantly affected by forest fragmentation and proximity to human developments (Raphael et al. 2002, McShane et al 2004). Thus, in order to diminish the threat of nest predation, and increase murrelet reproduction, the forest landscape and its surroundings must be protected to provide blocks, contiguous blocks of suitable nesting habitat. It is thus critical to ensure that any remaining occupied and unoccupied murrelet habitat in California is protected, and enhanced when possible.

In summary: (1) murrelet populations continue to decline due to habitat loss, low fecundity, high nest predation rates, and low adult survival; (2) most current recovery efforts rely on a system of reserves on federal land that is extremely limited in central and northern California, and, with the loss of occupied and unoccupied murrelet habitat continuing, State Lands and private lands with potential habitat play a crucial role in maintaining nesting habitat and ensuring future murrelet recovery; and (3) land use contrary to recovery objectives must be avoided within and adjacent to suitable habitats, especially ones significant to the stability and recovery of regional populations of imperiled species. Continued loss and fragmentation of habitat will increase the risk of extinction of this unique seabird in California. We agree with the Evaluation Report on the 5-Year Status Review for the murrelet that:

It is unrealistic to expect that the species will recover before there is significant improvement in the amount and distribution of suitable nesting habitat (McShane et al. 2004: 6-34).

Without protection from further loss of suitable habitat and removing and/or minimizing threats to survivorship to allow for increased productivity, the Marbled Murrelet is likely to become extirpated in central and northern California in the foreseeable future.

Sincerely,



Craig S. Harrison  
Vice Chair for Conservation

cc: Ren Lohofener, Director, US Fish and Wildlife Service Region 8  
John McCamman, Director, California Department of Fish and Game  
Lester Snow, Secretary, California Natural Resources Agency  
California Department of Forestry and Fire Protection, Santa Rosa

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