In March 1993, the U.S. Forest Service (Forest Service) released its Scientific Analysis Team Report (Thomas et al. 1993). In this report, the Forest Service proposed several interim measures designed to preserve options for management of marbled murrelets and their habitat until the Marbled Murrelet Recovery Plan could be completed and implemented. The measures included-(1) the protection of all marbled murrelet nesting habitat within 83 kilometers (50 miles) of the marine environment in Washington and Oregon north of Oregon State Highway 42 and within 58 kilometers (35 miles) of the marine environment in the remainder of Oregon and California; and, (2) the protection of amounts of "recruitment" habitat (young stands likely to develop into suitable nesting habitat) equivalent to 50 percent of the total amount of existing suitable nesting habitat. Also, seasonal restrictions on timber harvest operations in and near suitable nesting habitat were identified to avoid disturbing nesting marbled murrelets.

In July 1993, the Service, Forest Service, U.S. Bureau of Land Management, National Park Service, National Marine Fisheries Service, and U.S. Environmental Protection Agency released the Report of the Forest Ecosystem Management Assessment Team (FEMAT Report) (USDA et al. 1993a). From this report the President identified Option 9 as the preferred management option. Option 9 is described as Alternative 9 in the Final Supplemental Environmental Impact Statement on Management of Habitat for Late-Successional and Old-Growth Forest Related Species Within the Range of the Northern Spotted Owl (USDA et al. 1993b). Alternative 9 was adopted through the Record of Decision for Amendments to the Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl (ROD) and is referred to as the Northwest Forest Plan (USDA and USDI 1994).

Within the range of the marbled murrelet, the Northwest Forest Plan designates a system of Late-Successional Reserves, which provides large areas expected to eventually develop into contiguous, unfragmented forest. This reserve system was constructed in part around the LSOGs designated by the Scientific Panel.

In addition to Late-Successional Reserves, the Northwest Forest Plan designates a system of Adaptive Management Areas, where efforts focus on answering management questions, and matrix areas, where most forest production occurs. Administratively withdrawn lands, as described in the individual National Forest or Bureau of Land Management land use plans, are also part of the Northwest Forest Plan.

Specific measures in the Northwest Forest Plan protect all forest sites occupied by marbled murrelets outside of the Federal reserve system. These measures include surveys prior to activities that may affect habitat and protection of contiguous marbled murrelet nesting and recruitment habitat (stands capable of becoming suitable nesting habitat within 25 years) within 0.8-kilometer (0.5-mile) of areas occupied by murrelets.

An assessment of population viability of marbled murrelets was conducted by the FEMAT and resulted in about a 60 percent likelihood (with a range of 50 to 75 percent) that the marbled murrelet population on Federal lands would be stable and well distributed after 100 years, regardless of which option was selected. An additional assessment based only on habitat conditions resulted in an 80 percent likelihood that marbled murrelet populations would remain stable and well distributed on Federal lands.

The Service recognizes the value of the Northwest Forest Plan (USDA and USDI 1994) and acknowledges its integral role in marbled murrelet conservation. The Northwest Forest Plan complements this critical habitat proposal by stressing the need for protection of large, unfragmented areas of suitable nesting habitat that are well-distributed throughout the species' range, with special emphasis on areas close to the marine environment.

The marbled murrelet Recovery Team continues to work on a Recovery Plan that will outline a strategy for recovery. The draft Marbled Murrelet (Washington, Oregon, and California Population) Recovery Plan (Draft Recovery Plan) (USFWS 1995) suggested the establishment of six Marbled Murrelet Conservation Zones where viable populations of murrelets should be maintained in Washington, Oregon, and California. The Recovery Team would designate the Marbled Murrelet Conservation Zones to address differing needs for recovery actions in portions of the marbled murrelet's range and to maintain well-distributed populations. The zones are generally described as-(1) the Puget Sound Conservation Zone includes all the waters of Puget Sound, the eastern waters of the Strait of Juan de Fuca and associated inland habitat within the range of the marbled murrelet; (2) the Western Washington Coast Range Conservation Zone includes the outer coast of Washington, the western waters of the Strait of Juan de Fuca and associated inland habitat

within the range of the marbled murrelet; (3) the Oregon Coast Range Conservation Zone includes most of the coastal waters of Oregon and associated inland habitat within the range of the marbled murrelet; (4) the Siskiyou Coast Range Conservation Zone includes a portion of the coastal waters of Oregon and California and associated inland habitat within the range of the marbled murrelet; (5) the Mendocino Conservation Zone includes a portion of the California coastal waters and associated inland habitat within the range of the marbled murrelet; and (6) the Santa Cruz Mountains Conservation Zone includes a portion of the central California coastal waters and associated inland habitat within the range of the marbled murrelet (USFWS 1995).

In addition, the Forest Service has assembled "Ecology and Conservation of the Marbled Murrelet," a compilation of original studies and literature reviews, that represents the most current treatise on marbled murrelets (Ralph *et al.* 1995a). The conservation assessment will aid in the management of marbled murrelets considering the difficulties associated with gaining information about this species. Ralph *et al.* (1995b) suggested adding additional conservation zones to include all of the murrelet populations in North America.

The Oil Pollution Act of 1990 addresses the development of a national planning and response system for spills in marine and freshwater environments. A variety of planning efforts are underway that address responses to worst-case discharges of oil or hazardous substances, and mitigation or prevention of a substantial threat of discharge from a vessel, offshore facility, or onshore facility. Planning efforts include the development of a national contingency plan, regional area contingency plans, and local geographic response plans. The Service has worked extensively with the U.S. Coast Guard, industry representatives, local and response communities, and other State, Federal, and Tribal natural resource trustees to develop area contingency plans and geographic response plans for Pacific coastal areas. These plans address mechanical recovery, use of dispersants, in-situ burning, shoreline cleanup, protection of sensitive areas, as well as protection, rescue, and rehabilitation of fish and wildlife. These planning efforts and associated spill exercises should help prevent or minimize the impact of spills on natural resources.

Mortality of marbled murrelets in commercial net fisheries in Washington has been addressed through changes in State regulations. In 1995, the State of