concentrated in areas of proposed timber sales or limited research locations. A small fraction of the suitable nesting habitat has been surveyed to date, and surveys have not been uniformly spread throughout the range of the species. Therefore, known occupied sites provide only a partial indication of the potential areas used by the species. In addition, there are a significant number of known occupied sites within Redwood National Park that are not currently on the database and are therefore not reported here. The proposed critical habitat includes 665 (93 percent) of the 715 known occupied sites on Federal lands.

The Service does not have specific information about the amount of suitable nesting habitat or habitat containing one or more of the primary constituent elements on non-Federal lands within the species' range, although the Service is aware of at least 264 known occupied sites on non-Federal lands, of which 181 (68 percent) are within proposed critical habitat. The Service continues to seek information and comments about the location of suitable nesting habitat and occupied sites on non-Federal lands.

## Available Conservation Measures

Two of the principal purposes of the Act, as stated in section 2(b), are to provide a means to conserve the ecosystems upon which endangered and threatened species depend and to provide a program for the conservation of listed species. The Act mandates the conservation of species through several different mechanisms, such as-sections 7(a)(1) and 7(a)(2) (requiring Federal agencies to further the purposes of the Act by carrying out conservation programs and ensuring that Federal actions will not likely jeopardize the continued existence of the listed species); section 9 (prohibition of taking of listed species); section 10 (habitat conservation plans); and section 6 (cooperative State and Federal grants).

## Recovery Planning

Designation of critical habitat would not offer specific direction for managing marbled murrelet nesting or foraging habitat and would not provide a management or conservation plan for the species. Recovery plans typically provide guidance for conservation, which may include population goals and the identification of areas that may need protection or special management. Recovery plans usually include management recommendations for designating critical habitat. The Service continues to work closely with the

Marbled Murrelet Recovery Team relative to critical habitat.

The Act joins the recovery planning and critical habitat processes through its definition of conservation. However, critical habitat does not replace, and cannot be replaced by, recovery planning. Critical habitat will not, in itself, lead to the recovery of the species. Critical habitat provides one of several measures available to contribute toward the conservation of a species.

Recovery planning is an "umbrella" that guides all of these activities and promotes a species' conservation. Recovery plans provide guidance, which may include population goals and identification of areas that are in need of protection or special management. Recovery plans also include management recommendations for areas proposed or designated as critical habitat. Critical habitat promotes recovery by highlighting areas that should be given additional consideration in planning processes. Critical habitat helps focus conservation activities by identifying areas that contain essential habitat features (primary constituent elements) and that require special management or protection. Although the recommendations contained in recovery plans are not legally binding, critical habitat provides a regulatory mechanism when a Federal nexus is present to increase immediate protection of these primary constituent elements and essential areas and preserve options for the long-term conservation of the species.

## Section 7 Consultation

Section 7(a)(2) of the Act requires Federal agencies to insure that activities they authorize, fund, or carry out are not likely to destroy or adversely modify designated critical habitat. This Federal responsibility accompanies, and is in addition to, the requirement in section 7(a)(2) of the Act that Federal agencies insure that their actions are not likely to jeopardize the continued existence of any listed species. A Federal agency must consult with the Service if its proposed action may affect a listed species or critical habitat.

Regulations implementing this interagency cooperation provision of the Act are codified at 50 CFR 402.

Destruction or adverse modification of critical habitat is defined as "\* \* \* a direct or indirect alteration that appreciably diminishes the value of critical habitat for both the survival and recovery of a listed species. Such alterations include, but are not limited to, alterations adversely modifying any of those physical or biological features

that were the basis for determining the habitat to be critical." 50 CFR 402.02. Jeopardy is defined at 50 CFR 402.02 as any action that would be expected to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild.

Survival and recovery, mentioned in the definitions of "adverse modification" and "jeopardy", are directly related. Survival may be viewed as a linear continuum between recovery and extinction of a species. The closer a species is to recovery, the greater the certainty of the species' continued survival. The terms "survival" and "recovery" are related by the degree of certainty that the species will persist during a given period of time. Survival relates to viability. Factors that influence a species' viability include population numbers, distribution throughout its range, vulnerability to chance catastrophic events, and reproductive success.

The definition of critical habitat in the Act indicates that the purpose of critical habitat is to contribute to a species' conservation. The section 7 requirement that Federal agencies insure that their actions do not result in destruction or adverse modification of critical habitat applies to actions that would impair survival and recovery of a listed species. As a result of this connection between critical habitat and recovery, the requirement that Federal agencies insure against destruction or adverse modification of critical habitat enables the critical habitat to contribute to the recovery of the species.

After a proposal of critical habitat, section 7(a)(4) of the Act and implementing regulations (50 CFR 402.10) require Federal agencies to confer with the Service on any action that is likely to result in the destruction or adverse modification of the proposed critical habitat. Conference reports provide advisory conservation recommendations to assist a Federal agency in identifying and resolving conflicts that may be caused by the proposed action.

If an agency requests, and the Service concurs, a formal conference report may be issued. Formal conference reports on proposed critical habitat contain an opinion that is prepared in accordance with 50 CFR 402.14 as if the proposed critical habitat were already designated. Such a formal conference report may be adopted as a biological opinion pursuant to 50 CFR 402.10(d) when critical habitat is finally designated, if no significant information or changes in the action occur that would alter the content of the opinion.