grasses that exclude *A. ilicifolia* from areas of otherwise suitable habitat (Winter 1991). Several populations of *Dudleya stolonifera* are threatened by trampling and the invasion of exotic plant species (Marsh 1992). All four taxa in this proposal are subject to displacement by exotic plant species.

Although many coastal sage scrub and chaparral species are adapted to periodic fires, the taxa in this proposal are threatened by fire that can result in the extirpation of individuals or entire populations of these species. In addition, the disruption in natural fire cycles can also result in the conversion of coastal sage scrub or chaparral habitats into non-native grasslands (Tyrrel 1982). For example, several catastrophic wildfires in 1993 burned over 16,000 ha (40,000 ac) of coastal sage scrub and associated habitats in Orange and San Diego Counties (Service, unpublished data). These fires affected three of the six remaining populations of *Dudleya stolonifera*. Due to the intensity of these burns, it is possible that some of the affected D. stolonifera populations will not fully

Dudleya stolonifera, Hemizonia conjugens, Acanthomintha ilicifolia, and Monardella linoides ssp. viminea generally persist as small, isolated populations surrounded by urban or agricultural development. Much of the remaining habitat for these taxa is degraded, and is threatened by off-road vehicle activity, the invasion of nonnative plants, and trampling by cattle and humans. These four species are in danger of extinction throughout all or a significant portion of their ranges. The Service has carefully assessed the best scientific and commercial information available regarding the past, present, and future threats faced by these four taxa in determining to propose this rule. Based on this evaluation, the Service finds that the preferred action is to list Dudleya stolonifera, Hemizonia conjugens, Acanthomintha ilicifolia, and Monardella linoides ssp. viminea as endangered. These four taxa are threatened by one or more of the following factors: urbanization, agricultural conversion, off-road vehicle activity, stochastic events, overcollecting, trampling, and the invasion of nonnative species.

Critical habitat is not being proposed for these taxa for the reasons discussed below.

Critical Habitat

Critical habitat is defined in section 3 of the Act as: (i) the specific areas within the geographical area occupied

by a species, at the time it is listed in accordance with the Act, on which are found those physical or biological features (I) essential to the conservation of the species and (II) that may require special management considerations or protection and; (ii) specific areas outside the geographical area occupied by a species at the time it is listed, upon a determination that such areas are essential for the conservation of the species. "Conservation" means the use of all methods and procedures needed to bring the species to the point at which listing under the Act is no longer necessary.

Section 4(a)(3) of the Act, as amended, and implementing regulations (50 CFR 424.12) require that, to the maximum extent prudent and determinable, the Secretary designate critical habitat at the time a species is listed. Service regulations (50 CFR 424.12(a)(1)) state that designation of critical habitat is not prudent when one or both of the following situations exist—(1) The species is threatened by taking or other human activity, and identification of critical habitat can be expected to increase the degree of threat to the species, or (2) such designation of critical habitat would not be beneficial to the species.

The Service finds that the designation of critical habitat is not prudent for these four species at this time. Publication of precise maps and descriptions of critical habitat would increase the degree of threat to the four taxa from take or vandalism and could contribute to their decline. The listing of these species under the Act publicizes the rarity of the plants and, thus, can make them attractive to researchers, curiosity seekers, or collectors of rare plants. *Dudleya stolonifera* and *Monardella linoides* ssp. *viminea* are known to be in cultivation.

Most populations of Acanthomintha ilicifolia, Dudleya stolonifera, and Hemizonia conjugens are on privately owned land with little or no Federal involvement. Therefore, the designation of critical habitat would provide no additional benefit for these taxa. Several populations of Monardella linoides ssp. viminea are found on Federal land at Miramar Naval Air Station. In addition, this taxon generally occurs along streams and washes where Federal involvement may occur through section 404 of the Clean Water Act. All appropriate Federal and State agencies and local planning agencies have been notified of the locations and importance of protecting habitat for these species. Protection of habitat for the four taxa will be addressed through the recovery process and through the section 7

consultation process. Therefore, the Service finds that designation of critical habitat for these species is not prudent at this time, because such designation would increase the degree of threat from vandalism, collecting, or other human activities and because it is unlikely to aid in the conservation of the taxa.

Available Conservation Measures

Conservation measures provided to species listed as endangered or threatened under the Endangered Species Act include recognition, recovery actions, requirements for Federal protection, and prohibitions against certain activities. Recognition through listing results in public awareness and conservation actions by Federal, State, local, and private agencies, groups, and individuals. The Act provides for possible land acquisition and cooperation with the States and requires that recovery plans be developed for all listed species. The protection required of Federal agencies and the prohibitions against certain activities involving listed plants are discussed, in part, below.

Section 7(a) of the Act, as amended, requires Federal agencies, to evaluate their actions with respect to any species that is proposed or listed as endangered or threatened and with respect to its critical habitat, if any is being designated. Regulations implementing this interagency cooperation provision of the Act are codified at 50 CFR part 402. Section 7(a)(4) of the Act requires Federal agencies to confer with the Service on any action that is likely to jeopardize the continued existence of a species proposed for listing or result in destruction or adverse modification of proposed critical habitat. If a species is listed subsequently, section 7(a)(2) requires Federal agencies to ensure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of such a species or to destroy or adversely modify its critical habitat. If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency must enter into consultation with the

Federal agencies expected to have involvement with *Monardella linoides* ssp. *viminea* include the Army Corps of Engineers and the Environmental Protection Agency due to their permit authority, under section 404 of the Clean Water Act. *M. linoides* ssp. *viminea* occurs on Miramar Naval Air Station. This base will likely be involved through military activities or potential transfer of excess Federal lands. The Forest Service has jurisdiction over several populations of