

threaten 10 of the 14 populations of *Hesperolinon congestum*. If appropriate management actions are not taken to protect these two species, they are likely to become in danger of extinction in the near future. As a result, the preferred action is to list *Calochortus tiburonensis* and *Hesperolinon congestum* as threatened.

Alternatives to this action were considered but not preferred. Not listing the species or listing *Castilleja affinis* ssp. *neglecta*, *Ceanothus ferrisiae*, *Cirsium fontinale* var. *fontinale*, *Clarkia franciscana*, *Cordylanthus tenuis* ssp. *capillaris*, *Dudleya setchellii*, *Eriophyllum latilobum*, *Pentachaeta bellidiflora*, *Streptanthus albidus* ssp. *albidus*, and *Streptanthus niger* as threatened would not provide adequate protection and would not be in keeping with the Act.

### Critical Habitat

Section 4(a)(3) of the Act requires that, to the maximum extent prudent and determinable, the Secretary designate critical habitat concurrently with determining a species to be endangered or threatened. The Service finds that designation of critical habitat is not prudent for these species. Because the 12 plants face numerous anthropogenic threats (see Factors A and E in "Summary of Factors Affecting the Species") and occur predominantly on private land, the publication of precise maps and descriptions of critical habitat in the **Federal Register** would make these plants more vulnerable to incidents of vandalism and, therefore, could contribute to the decline of these species and increase enforcement problems. The listing of these species as endangered or threatened also publicizes the rarity of these plants and, thus, can make them attractive to researchers or collectors of rare plants. Furthermore, critical habitat designation is not prudent due to lack of benefit to the species. All 12 species discussed herein are restricted to serpentine soils. Several of the species, *Eriophyllum latilobum*, *Calochortus tiburonensis*, *Streptanthus niger*, and *Streptanthus albidus* ssp. *albidus* likely have always been confined to their present habitat. No areas outside of their present range are known to have supported these plants in the past; therefore, no additional sites exist that could be considered essential to the species' recovery. For these reasons, the Service finds that designation of critical habitat for the 12 species is not prudent because it would provide no additional benefits to the species beyond those they would receive by virtue of their designation as endangered or threatened species. The

proper agencies have been notified of the locations and importance of protecting the habitat of these species.

Protection of the habitat of these species 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 plants is not prudent at this time, because such designation likely would increase the degree of threat from vandalism, collecting, or other human activities.

### Available Conservation Measures

Conservation measures provided to species listed as endangered or threatened under the Act include recognition, recovery actions, requirements for Federal protection, and prohibitions against certain activities. Recognition through listing encourages and results in conservation actions by Federal, State, and private agencies, groups, and individuals. The Act provides for possible land acquisition and cooperation with the State and requires that recovery actions be carried out for all listed species. Such actions are initiated by the Service following listing. 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 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 proposed species 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 formal consultation with the Service.

Federal activities potentially affecting 1 or more of the 12 plants will likely involve recreation-related projects and perhaps grazing practices on Federal land. Populations of 3 of the 12 plants occur on Federal land. Two populations of *Hesperolinon congestum* and one of

*Castilleja affinis* ssp. *neglecta* occur on the Golden Gate National Recreation Area. Two populations of *Clarkia franciscana* occur at the Presidio.

The San Francisco Water Department owns 9,300 ha (23,000 acres) of land in San Mateo County. In 1969, a four-party agreement among the U.S. Department of the Interior, the State of California, San Mateo County, and the City and County of San Francisco established easements on the watershed lands to ensure that all future land use would be compatible with water quality criteria. These easements were granted to the U.S. Department of the Interior and are jointly administered by the San Francisco Water Department and the Golden Gate National Recreation Area. Populations of *Cirsium fontinale* var. *fontinale*, *Eriophyllum latilobum*, *Hesperolinon congestum*, and *Pentachaeta bellidiflora* occur on Water Department land.

*Hesperolinon congestum*, *Pentachaeta bellidiflora*, *Dudleya setchellii*, and *Streptanthus albidus* ssp. *albidus* co-occur with the bay checkerspot butterfly (*Euphydryas editha bayensis*) in San Mateo and Santa Clara counties. The bay checkerspot is listed as a threatened species under the Endangered Species Act. Permits for incidental take of this species granted under section 10(a) of the Act may affect the plant species listed above. Preparation of Habitat Conservation Plans for the bay checkerspot butterfly may, therefore, require internal section 7 consultation with regard to the four species listed above.

The 12 plants also may be affected by Federal mortgage programs, including the Veterans' Administration and the U.S. Department of Housing and Urban Development (Federal Home Administration loans), or by construction of roads and highways by the Federal Highway Administration. The Service is concerned over the loss of *Eriophyllum latilobum* during regular road maintenance and continuing soil slippage that results in plant loss; however, removal from roadways of debris containing *E. latilobum* plants or seeds that has fallen by natural causes into the roadway is not a violation of the Act.

At least one proposed project that may affect two of the plants also involves wetlands under the jurisdiction of the U.S. Army Corps of Engineers.

Listing these 12 plants will provide for development of a recovery plan (or plans) for them. Such plan(s) would bring together both State and Federal efforts for conservation of the plants. The plan(s) would establish a framework for agencies to coordinate