

analysis for *P. hickmanii* are addressed in this Summary of Comments and Recommendations section.

Additionally, an addendum to the economic analysis, incorporating the comments received on the economic analysis, has been completed and is available upon request (see **ADDRESSES**). We believe this economic analysis and its addendum along with this final rule do properly consider the economic and other impacts of designating particular areas as critical habitat.

Comment 10: The Service has improperly bifurcated or separated its consideration of the economic impacts and scientific analysis by not preparing the economic analysis at the time of the proposed critical habitat designation.

Response: Pursuant to section 4(b)(2) of the Act, we are to evaluate, among other relevant factors, the potential economic effects of the designation of critical habitat for *Polygonum hickmanii*. We published our proposed designation in the **Federal Register** on February 15, 2001 (66 FR 10469). At that time, our Division of Economics and their consultants, Industrial Economics, Inc., initiated the draft economic analysis. The draft economic analysis was made available for public comment and review beginning on November 21, 2002 (67 FR 70199), as well as in a previous 30-day open comment period associated with *Chorizanthe robusta* var. *hartwegii* (September 19, 2001, 66 FR 48227). Following the 15-day public comment period on the proposal and draft economic analysis opened on November 21, 2002, a final addendum to the economic analysis was developed. Both the draft economic analysis and final addendum were used in the development of this final designation of critical habitat for *P. hickmanii*. Please refer to the Economic Analysis section of this final rule for a more detailed discussion of these documents.

Comment 11: The Service has not provided a fair and meaningful opportunity for comment on its proposed critical habitat designation.

Response: In our proposed rule to list *Polygonum hickmanii* as endangered on November 9, 2000 (65 FR 67335), we found that designating critical habitat was prudent, but we stated that we would propose critical habitat concurrently with *Chorizanthe robusta* var. *hartwegii* in the future. An open comment period was held at that time to receive comments on the proposed listing, as well as the prudence determination. We published a proposed rule to designate critical habitat for *P. hickmanii* on February 15, 2001 (66 FR 10469), and accepted

comments from the public for 60 days, until April 16, 2001. The comment period was reopened from November 21, 2002, to December 6, 2002 (67 FR 70199), to allow for additional comments on the proposed designation and comments on the draft economic analysis of the proposed critical habitat.

We contacted all appropriate State and Federal agencies, county governments, elected officials, and other interested parties and invited them to comment. In addition, we invited public comment through the publication of a legal notice in the Santa Cruz Sentinel on November 16, 2000, after the proposed rule to list was published, and again on February 24, 2001, after the proposed critical habitat designation was published. We provided notification of the draft economic analysis through telephone calls, letters, and news releases faxed and/or mailed to affected elected officials, local jurisdictions, and interest groups. Additionally, the public had two opportunities to request a public hearing, but none was requested.

Comment 12: The Service should prepare and consider an environmental impact statement in keeping with the National Environmental Policy Act of 1969 (NEPA).

Response: We have determined that an Environmental Assessment and/or an Environmental Impact Statement, as defined under the authority of NEPA, need not be prepared in connection with regulations adopted pursuant to section 4(a) of the Endangered Species Act, as amended. A notice outlining our reason for this determination was published in the **Federal Register** on October 25, 1983 (48 FR 49244). Also, the public involvement and notification requirements under both the Endangered Species Act and the Administrative Procedure Act provide ample opportunity for public involvement in the process, similar to the opportunities for public involvement and economic analysis of effects that would be provided in the NEPA process.

Summary of Factors Affecting the Species

Section 4(a)(1) of the Act (16 U.S.C. 1531 *et seq.*) and regulations (50 CFR part 424) promulgated to implement the Act set forth the procedures for adding species to the Federal lists. A species may be determined to be an endangered or threatened species due to one or more of the five factors described in section 4(a)(1) of the Act. These factors and their application to *Polygonum hickmanii* are as follows:

A. The Present or Threatened Destruction, Modification, or Curtailment Of Its Habitat or Range

In addition to the colonies of *Polygonum hickmanii* at the Glenwood and Polo Ranch sites, other colonies of *P. hickmanii* may have occurred in Scotts Valley prior to publication of the species name in 1995. An existing housing development bordering the south side of the Glenwood site (Glen View) was built in the mid-1980s, and one development bordering the south side of the Polo Ranch site (Navarra Drive) was built in the 1970s. However, the environmental analyses done at those times would not have recognized *P. hickmanii* as a distinct taxon.

None of the occupied habitat for *Polygonum hickmanii* is targeted for direct destruction. However, all occupied habitat will be subject to habitat alteration resulting from current and proposed projects. At the Glenwood site, construction of a high school was initiated in June 1998. The colony of *P. hickmanii* on this site is within an area designated as a grassland preserve intended to protect a number of sensitive plant species, including *P. hickmanii*, *Minuartia californica* (California sandwort), *Plagiobothrys diffusus* (San Francisco popcorn flower), and the endangered *Chorizanthe robusta* var. *hartwegii*. The preserve is 2 ha (4 ac) in size and is adjacent to a wetland preserve of slightly smaller size. The combined area of the two preserves form a 3.6 ha (9 ac) area, linear in shape, sandwiched between high school playing fields to the north and the existing Glen View development (also known as Casa Way) to the south. The colony of *P. hickmanii* is 18 m (60 ft) away from the edge of the preserve nearest to the playing field. A management plan for the grasslands preserve includes prescriptions for boundary protection, habitat enhancement, control of nonnative plant species, and a 10-year monitoring program (BRG 1998). Although the effectiveness of this management plan has not yet been demonstrated, *P. hickmanii* will likely still be subject to habitat alteration due to the small size of the preserve and its proximity to other land uses. Problems with managing small preserves within urban areas have been documented previously (Jensen 1987, Clark *et al.* 1998, Howald 1993, Service 1995). See Factor E for additional discussion of inadequate preserve design on the long-term conservation of plants.

The kinds of habitat alteration that are anticipated to result from the high school project include changes in