1993). Some of the smaller populations are on land owned by sand-mining interests where mining-related activities, trash dumping, and access roads are destroying and degrading its habitat.

B. Overutilization for commercial, recreational, scientific or educational purposes. Fremontodendron mexicanum, Berberis nevinii and Nolina *interrata* are sold in the nursery trade. However, reportedly seed and cuttings of F. mexicanum and B. nevinii are derived from existing cultivars (Elena Benge, Tree of Life Nursery, San Juan Capistrano, California, pers. comm. 1995). Take of *N. interrata* plants from the wild for the nursery trade has been identified as a threat to the species (CDFG 1992). Access to most of the remaining locations of all four plant species is limited by private property boundaries and/or rugged terrain (CNNDB 1992, unpublished Service

C. Disease or predation. No evidence suggests that disease or predation have affected the plant species under consideration herein.

D. The inadequacy of existing regulatory mechanisms. Existing regulatory mechanisms that could provide some protection for these species in the United States include: (1) listing under the California Endangered Species Act; (2) adequate consideration under the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA); (3) local laws and regulations; (4) section 404 of the Federal Clean Water Act, and section 1603 of the California Fish and Game Code; (5) occurrence with other species protected by the Federal Endangered Species Act; (6) adequate consideration in State or regional conservation planning efforts such as the Natural Community Conservation Planning Program and other wide range multispecies efforts; (7) land acquisition and management by Federal, State, or local agencies, or by private groups and organizations; and (8) inclusion in Appendix I of CITES.

The California Fish and Game Commission has listed *Nolina interrata, Mahonia* (=*Berberis*) *nevinii*, and *Ceanothus ophiochilus* as endangered under the Native Plant Protection Act (NPPA) (California Fish and Game Code, Div. 2, Chapter 10, section 1900 *et seq.*) and the California Endangered Species Act (CESA) (Div. 3, Chapter 1.5, section 2050 *et seq.*). *Fremontodendron mexicanum* is included on List 1B of the California Native Plant Society's Inventory of Rare and Endangered Plants, which, in accordance with section 1901, chapter 10 of the

California Fish and Game Code, makes it eligible for State listing. Although NPPA and CESA both prohibit the "take" of State-listed plants (Chapters 10 and 1.5, sections 1908 and 2080 respectively), these statutes appear to inadequately protect against the taking of such plants via habitat modification or land use change by the landowner. After the California Department of Fish and Game notifies a landowner that a State-listed plant grows on his or her property, State law requires only that the landowner notify the agency "at least 10 days in advance of changing the land use to allow salvage of such plant" (California Fish and Game Code, Chapter 10, section 1913).

The California Environmental Quality Act (CEQA) (Public Resources Code, section 21000 et seq.) requires a full disclosure of the potential environmental impacts of proposed projects. The public agency with primary authority or jurisdiction over the project is designated as the lead agency, and is responsible for conducting a review of the project and consulting with the other agencies concerned with the resources affected by the project. Section 15065 of the CEQA Guidelines requires a finding of significance if a project has the potential to "reduce the number or restrict the range of a rare or endangered plant or animal" including those that are eligible for listing under NPPA and CESA. Once significant effects are identified, the lead agency has the option to require mitigation for effects through changes in the project or to decide that "overriding social and economic considerations' make mitigation infeasible (California Public Resources Code, Guidelines. section 15093). In the latter case, projects may be approved that cause significant environmental damage, such as destruction of endangered plant species. Protection of listed plant species under CEQA is, therefore, dependent upon the discretion of the

lead agency While CEQA pertains to projects on non-Federal land, the National Environmental Policy Act (NEPA) (42 U.S.C. 4321 to 4347) requires disclosure of the environmental effects of projects within Federal jurisdiction. Species that are listed by the State, but not proposed or listed as threatened or endangered by the Federal government, are not protected when a proposed Federal action is considered a "categorical exclusion." NEPA requires that each of the project alternatives recommend ways to "protect, restore and enhance the environment" and "avoid and minimize any possible adverse effects," when implementation poses significant

adverse impacts. However, it does not require that the lead agency select an alternative with the least significant impact to the environment (40 CFR, 1500 *et seq.*).

Land-use planning decisions, at the local level, are made on the basis of environmental review documents, prepared in accordance with CEQA or NEPA, which often do not adequately address "foreseeable future" or "cumulative" impacts to non-listed species and their habitat. As with section 404 permits described below, the Service's comments through the NEPA and CEQA review processes are only advisory.

In 1991, the State of California established the Natural Community Conservation Planning (NCCP) Act to address conservation needs throughout the state. Chaparral and closed-coned coniferous forest habitats and two of the four species (Nolina interrata and Fremontodendron mexicanum) are being considered under the Multiple Species Conservation Program (MSCP) plan. This program, under development by the City of San Diego, County of San Diego, other coastal cities, and private land owners, is a component of the NCCP program. A draft plan for the MSCP has been developed but has not been approved. As currently proposed, while the plan will benefit the species, it will not preclude listing of *F*. mexicanum because of extremely limited numbers of populations (1 confirmed in the United States) and individuals (fewer than 100). While protection of N. interrata would likely be adequate within those areas covered by the MSCP (3 populations), the implementation of the MSCP would not likely preclude the need for listing this species because significant populations occur on unprotected lands east of the MSCP planning area. The County of San Diego is in the process of planning for conservation in the eastern portion of the county, but a draft plan is not expected in the near future.

The Service is working with Riverside and San Bernardino counties to create multispecies plans that may benefit Ceanothus ophiochilus and Berberis nevinii. Both plans are in the planning stage and it is uncertain to what degree they will be successful in providing protection for these species. However, these multispecies plans will likely provide significant benefits to both species. While B. nevinii is distributed beyond San Bernardino and Riverside counties, the implementation of adequate biologically sound multispecies plans in these counties may fulfill Endangered Species Act