

Potential dredging and filling of this seasonal wetland threatens the species with extinction. To a lesser extent, off-road vehicle (ORV) use and trash dumping threaten the species. Moreover, routine highway maintenance adjacent to the vernal lake and trampling of the lake bed by hikers impact the plant and its habitat. This final rule will implement the full protection provided by the Endangered Species Act of 1973, as amended.

**DATE:** The effective date of this rule is January 22, 1987.

**ADDRESS:** The complete file for this rule is available for inspection, by appointment, during normal business hours at the Regional Office, U.S. Fish and Wildlife Service, Lloyd 500 Building, 500 NE. Multnomah Street, Suite 1692, Portland, Oregon 97232.

**FOR FURTHER INFORMATION CONTACT:** Mr. Wayne S. White, Chief, Division of Endangered Species, at the above address (503/231-6131 or FTS 429-6131).

**SUPPLEMENTARY INFORMATION:**

**Background**

*Eryngium constancei* (Loch Lomond coyote-thistle), a perennial herb of the parsley family, annually produces slender, weak scapes (leafless flowering stalks) up to 30 centimeters (12 inches) in height from its over-wintering rootstock (Sheikh 1978 and 1983). The basal leaves, divided by septa (internal partitions), range from 10 to 20 centimeters (4 to 8 inches) in length. Slender petioles, 8 to 12 centimeters (3 to 5 inches) in length and usually longer than the leaf blade, bear diminutive spines. A dense "down" of minute hairs, unique to *Eryngium constancei*, covers the leaves and especially the scapes. This character together with the species' sparse flowers distinguish *Eryngium constancei* from its closest relative, *Eryngium aristulatum* var. *aristulatum*, and all other species of western North American *Eryngium* (Sheikh 1978 and 1983).

This species was first collected by Robert Hoover in 1941. M. Yusuf Sheikh and Lincoln Constance recollected *Eryngium constancei* from the vernal lake near the community of Loch Lomond in southern Lake County, California in 1973. Later Sheikh (1983) described *Eryngium constancei* along with two other *Eryngium* taxa. Sheikh, as part of his doctoral study completed in 1978, intensively searched for and failed to discover additional populations of the plant at other localities. Subsequent searches made in 1984 by two botanists employed by the State of California did not reveal any new populations of the plant.

*Eryngium constancei* grows abundantly within the borders of the meadow-like bed of the Loch Lomond lake at an elevation of 2,800 feet (853 meters). Cabins and a paved road (State Route 175) largely encircle the southern and eastern sides of the lake bed. A forest of ponderosa pine (*Pinus ponderosa*) and California black oak (*Quercus kelloggii*) surrounds the periphery of the lake. Plants associated with the coyote-thistle on the vernal lake bed include *Cuscuta howelliana* (Boggs Lake dodder), *Eleocharis* (spikerush), *Downingia* (downingia), *Gratiola ebracteata* (hedge hyssop), *Lilaea scilloides* (flowering quillwort), *Minulus tricolor* (three-colored monkeyflower), *Plagiobothrys* (alloarya), and two Federal candidate species, *Navarretia pauciflora* (few-flowered navarretia) and *Navarretia plieantha* (many-flowered navarretia). The latter species is listed as endangered by the State of California Department of Fish and Game (CDFG). The soil of the lake bed consists of a fine, powdery, volcanic, silty clay. The terrain about the lake to the south and west generally faces the northeast and attains an elevation of 3,300 feet (990 meters). The unusual combination of edaphic (soil-related), topographic, and hydrologic features of the vernal lake and its watershed may explain the unique presence of the species at Loch Lomond.

On December 15, 1980, the Service published a revised notice of review for plants in the Federal Register (45 FR 82508). *Eryngium constancei*, an unpublished new species (see Sheikh 1978), was included in this notice as a category-1 species. Category 1 includes taxa for which the Service has sufficient biological information to support proposing to list as endangered or threatened. After Sheikh (1983) published the description of this plant, the Service reevaluated the biological information supporting the listing of *Eryngium constancei*. The species was moved into category 2 (includes species for which information indicates that listing is possibly appropriate, but for which further information is required to support a proposal) in 1983 (48 FR 53650) due to the absence of any perceived threat to the species at the time and because data from outside sources had not yet been fully analyzed. In the Federal Register of August 1, 1985 (50 FR 31187), the Service published an emergency rule listing *Eryngium constancei* as an endangered species because: (1) Significant portions (15 percent) of this species' only known habitat had been adversely modified. (2)

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**DEPARTMENT OF THE INTERIOR**

**Fish and Wildlife Service**

**50 CFR Part 17**

**Endangered and Threatened Wildlife and Plants; Determination of Endangered Status for *Eryngium constancei* (Loch Lomond Coyote-Thistle)**

**AGENCY:** Fish and Wildlife Service, Interior.

**ACTION:** Final rule.

**SUMMARY:** The Service determines *Eryngium constancei* (Loch Lomond coyote-thistle) to be an endangered species. This plant is restricted to the bed of a 7-acre vernal lake near the mountain community of Loch Lomond in southern Lake County, California.

protection provided under laws and regulations did not not preclude modification of the remainder of the vernal lake, and (3) field searches in 1984 confirmed no new populations of this plant at other sites in the area. On March 26, 1986, the Service proposed the Loch Lomond coyote-thistle as an endangered species (51 FR 10412) prior to the expiration of the emergency rule on March 29, 1986. The Service now determines this plant to be endangered with the publication of this final rule.

#### Summary of Comments and Recommendations

In the March 26, 1986, proposed rule (51 FR 10412) and associated notifications, all interested parties were requested to submit factual reports or information that might contribute to the development of a final decision on the proposed rule. Appropriate State agencies, county governments, Federal agencies, scientific organizations, and other interested parties were contacted and requested to comment. Newspaper notices were published in the *Oakland Tribune* and *Santa Rosa Press-Democrat* on April 17, 1986, and the *San Francisco Examiner* on April 18, 1986.

Eight comments were received during the open comment period: one from a private individual, two from conservation organizations, two from other Federal agencies, and three from State and local government agencies. Five comments expressed support for listing and three offered no position. CDFG, one of the five commenters voicing support for listing, concurred with the Service regarding the desirability of not designating critical habitat at this time. In its comment letter, CDFG noted that shortly the plant will be proposed for listing as an endangered species by the California Fish and Game Commission. In June 1986, the California Fish and Game Commission did propose *Eryngium constancei* for addition to the State list.

In 1984, the owner of the species' habitat dredged and filled about 15 percent of the lake bed. One commenter claimed that *Eryngium constancei* no longer grew in this portion of the lake bed. The Service responds that a survey by Lake County biologists in late May revealed the presence of small, widely scattered plants in the disturbed area.

The California Department of Transportation (Caltrans), although supporting listing, commented that occasional culvert replacement and associated routine road maintenance for State Route 175 will impact a few individuals of *Eryngium constancei*. Because such activities would necessitate formal section 7 consultation

with the Federal Highway Administration, Caltrans recommended the final rule acknowledge the need for highway maintenance. The Service recognizes that listings and subsequent section 7 consultations may affect activities planned by State agencies via the authorities and funding provided by other Federal agencies. Nevertheless, the Service has found that modifications or alternative designs typically allow projects to proceed while providing adequate protection for the species. Specific procedures for conflict resolution are provided in sections 7 and 10(a) of the Act.

One comment from an owner of property within the watershed of the vernal lake near Loch Lomond expressed neither support nor opposition to the listing. The commenter indicated, however, that no actions should be undertaken favoring *Eryngium constancei* that limit the landowner's use of the property. The commenter further noted that the lake bed property, which includes a resort, has had a long history of recreational use and that the community of Loch Lomond is part of a rapidly growing area providing urban services and homesites. The Service responds that a recovery plan will be prepared specifying all actions necessary to preserve, enhance, and eventually recover the Loch Lomond coyote-thistle. These tasks must be based on the best available biological data. The Service will seek comments from all affected parties during the development of the recovery plan for *Eryngium constancei* and will incorporate pertinent comments in the final plan. The Service recognizes that under certain circumstances the presence of an endangered plant species may affect a private landowner's planned activities, if such actions require Federal funding or approval. Under the section 7 process, however, planned activities can proceed as long as plans or alternative designs provide sufficient protection for the species.

Although the Service acknowledges that impacts may result to certain activities as a result of listing a species as endangered, the Service cannot consider such impacts in making a decision on a listing proposal. The Service may base its final listing decision solely on "the best available scientific and commercial information regarding a species' status without reference to possible economic or other impacts of such determination" (50 CFR 424.11(b) (1985)). Therefore, the potential impacts raised by Caltrans and the private property owner were not considered by the Service in reaching a final decision on this listing.

#### Summary of Factors Affecting the Species

After a thorough review and consideration of the best scientific and commercial information available, the Service has determined that *Eryngium constancei* should be classified as an endangered species. Procedures found at section 4(a)(1) of the Endangered Species Act (16 U.S.C. 1531 *et seq.*) and regulations (50 CFR Part 424) promulgated to implement the listing provisions of the Act were followed. 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). These factors and their application to *Eryngium constancei* Sheikh (Loch Lomond coyote-thistle) are as follows:

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

The predominant threat facing *Eryngium constancei* is the action planned by the landowner of the species' habitat to dredge and fill Loch Lomond lake, the only known habitat for this species. The portion of the lake bed dredged and filled in 1984 contained only a few individuals of *Eryngium constancei* in the summer of 1985. After the landowner graded the disturbed portion of the bed to restore its original topography, the area was reseeded with the coyote-thistle in late 1985. Lake County biologists observed small, widely scattered individuals in the rehabilitated area in late May 1986. The species, which abundantly covers the undisturbed portion of the lake bed, flourished in the disturbed area prior to the dredge and fill action in 1984. Consequently, any additional dredging and filling of the vernal lake basin would fill part of the lake, deepen the remaining portion, and would likely result in the extinction of the species.

Although in the emergency rule the Service noted that approximately 85 percent of the lake bed remains habitat for the plant, an inspection of the vernal lake on September 16, 1985, revealed that ORV use has impacted nearly all of this portion of the lake bed. Moreover, hikers walking on the lake bed and routine highway maintenance adjacent to the lake impact the plant and its habitat. Trash dumped on the lake basin further threatens the species.

A shallow manmade ditch dug from the approximate center of the lake empties through the outflow of the lake, Cole Creek, to the north. This ditch may reduce the potential storage of the Loch Lomond lake, resulting in a more

ephemeral, shallow body of water, which would otherwise flood the cabins and road surrounding the lake in the winter and spring. Although it is unknown whether the construction of this ditch directly impacted *Eryngium constancei* in the past, the presence of this ditch may reduce the size and quality of the habitat for the species.

Prior to the purchase of this site by the current owner, the Loch Lomond vernal lake or lake bed was used by the adjoining resort for baseball (Crane and Malloch 1985), softball, ice skating, volley ball, horseback riding, picnicking, and camping (Frank Mattina, G.T. Enterprises, pers. comm., May 27, 1986). The Service is uncertain what effect these activities might have had on this plant or its habitat.

*B. Overutilization for Commercial, Recreational, Scientific, or Educational Purposes*

Not applicable to this species.

*C. Disease or Predation*

Although it is unknown whether grazing by livestock occurs within the lake bed, the Service believes the effects of such grazing would be negligible.

*D. The Inadequacy of Existing Regulatory Mechanisms*

Although *Eryngium constancei* was emergency listed as an endangered species on August 1, 1985, this rule expired on March 29, 1986. The species is not listed by the State of California at this time, although it has been formally proposed for endangered status. Moreover, because the species is restricted to privately-owned land, existing laws provide limited protection for it.

*E. Other Natural or Manmade Factors Affecting its Continued Existence*

None known at this time.

The Service has carefully assessed the best scientific and commercial information available regarding the past, present, and future threats faced by this species in determining to make this rule final. Based on this evaluation, the preferred action is to list *Eryngium constancei* as endangered. Endangered as opposed to threatened status is appropriate because of the threat of physical alternation of the lake bed, the only known habitat for the plant, which would likely result in the extinction of *Eryngium constancei*. In addition, ORVs continue to use the lake bed and trash dumping remains a problem. Hikers trampling the lake basin and routine highway maintenance adjacent to the lake also impact the species. Critical

habitat is not being designated at this time for the reasons discussed below.

**Critical Habitat**

Section 4(a)(3) of the Act, as amended, requires that to the maximum extent prudent and determinable, the Secretary designate critical habitat at the time a species is determined to be endangered or threatened. The Service finds that determination of critical habitat is not prudent for this species at this time. Because this plant is highly vulnerable (see Factor A in "Summary of Factors Affecting the Species"), lacks Federal protection from taking on non-Federal lands, and is easily accessible, this finding is appropriate. Listing of the species as endangered publicizes its rarity and can make the plant attractive to collectors of rare plants, researchers, and vandals. Publication of precise maps and descriptions of critical habitat in the **Federal Register** would make this herb even more vulnerable and could contribute to the decline of the species.

**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 practices. Recognition through listing encourages and results in conservation actions by Federal, State, and private agencies, groups, and individuals. The Endangered Species Act provides for possible land acquisition and cooperation with the States 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 prohibition against collecting 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 (see revision at 51 FR 19926; June 3, 1986). 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 a listed 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. The only Federal involvement

anticipated with respect to the listing of *Eryngium constancei* is the issuance of dredge and/or fill permits (33 CFR Parts 323 and 325) by the U.S. Army Corps of Engineers for the vernal lake at Loch Lomond and the funding by the Federal Highway Administration of any maintenance activities for State Route 175 affecting the species.

The Act and its implementing regulations found at 50 CFR 17.61 and 17.62 set forth a series of general trade prohibitions and exceptions that apply to all endangered plants. All trade prohibitions of section 9(a)(2) of the Act, implemented by 50 CFR 17.61, apply. These prohibitions, in part, make it illegal for any person subject to the jurisdiction of the United States to import or export any endangered plant, transport it in interstate or foreign commerce in the course of a commercial activity, sell or offer it for sale in interstate or foreign commerce, or remove it from areas under Federal jurisdiction and reduce it to possession. Certain exceptions can apply to agents of the Service and State conservation agencies. The Act and 50 CFR 17.62 also provide for the issuance of permits to carry out otherwise prohibited activities involving endangered plant species under certain circumstances. International and interstate trade in *Eryngium constancei* is not known to exist. The Service anticipates few trade permits would ever be sought or issued because the species is not common in cultivation or in the wild. Requests for copies of the regulations on plants and inquiries regarding them may be addressed to the Federal Wildlife Permit Office, U.S. Fish and Wildlife Service, Washington, DC. 20240 (703/235-1903).

**National Environmental Policy Act**

The Fish and Wildlife Service has determined that an Environmental Assessment, as defined under the authority of the National Environmental Policy Act of 1969, need not be prepared in connection with regulations adopted pursuant to Section 4(a) of the Endangered Species Act of 1973, as amended. A notice outlining the Service's reasons for this determination was published in the **Federal Register** on October 25, 1983 (48 FR 49244).

**References Cited**

- Crane, N.L. and B.S. Malloch. 1985. A study of the rare plants for the Geysers-Calistoga Known Geothermal Resources Area. Pacific Gas and Electric Report. 129 pp.
- Sheikh, M.Y. 1978. A systematic study of west North American *Eryngium* (Umbelliferae: Apiaceae) Ph.D. dissertation, Univ. California, Berkeley.

Sheikh, M.Y. 1983. New taxa of western North American *Eryngium* (Umbelliferae). Madroño 30:93-101.

**Author**

The primary author of this rule is Jim A. Bartel, Sacramento Endangered Species Office, U.S. Fish and Wildlife Service, 2800 Cottage Way, Room E-1823, Sacramento, California 95825 (916/978-4866 or FTS 460-4866).

**List of Subjects in 50 CFR Part 17**

Endangered and threatened wildlife, Fish, Marine mammals, Plants (agriculture).

**Regulation Promulgation**

**PART 17—[AMENDED]**

Accordingly, Part 17, Subchapter B of Chapter I, Title 50 of the Code of Federal Regulations, is amended as set forth below:

1. The authority citation for Part 17 continues to read as follows:

**Authority:** Pub. L. 93-205, 87 Stat. 884; Pub. L. 94-359, 90 Stat. 911; Pub. L. 95-632, 92 Stat. 3751; Pub. L. 96-159, 93 Stat. 1225; Pub. L. 97-304, 96 Stat. 1411 (16 U.S.C. 1513 *et seq.*).

2. Amend § 17.12(h) by adding the following, in alphabetical order under the family Apiaceae, to the List of Endangered and Threatened Plants:

**§ 17.12 Endangered and threatened plants.**

\* \* \* \* \*  
(h) \* \* \*

Species		Historic range	Status	When listed	Critical habitat	Special rules
Scientific name	Common name					
Apiaceae—Parsley family:						
<i>Eryngium constancei</i> .....	Loch Lomond coyote-thistle.....	U.S.A. (CA).....	E	194E, 248	NA	NA