

endangered species. *Eriastrum densifolium* ssp. *sanctorum* occurs patchily on the higher floodplain terraces of the Santa Ana River from Redlands east to the mouth of the Santa Ana Canyon in San Bernardino County, southern California. A disjunct stand occurs on Lytle Creek in the city of San Bernardino. *Centrostegia leptoceras* is currently known from five small isolated populations. The total area occupied by this species is less than 4 hectares (10 acres). Historic and present threats facing these plants include encroaching developments within the floodplain, sand and gravel mining, grazing by domestic animals, and competition from exotic plants. This rule implements the protection and recovery provisions of the Endangered Species Act (Act) of 1973, as amended, for these two plants.

DATES: The effective date of this rule is October 28, 1987.

ADDRESSES: The complete file for this rule is available for inspection, by appointment, during normal business hours at the U.S. Fish and Wildlife Service, Lloyd 500 Building, 500 N.E. 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

Eriastrum densifolium ssp. *sanctorum* was first collected by Hall. This subspecies was described as *Gilia densifolia* var. *sanctorum* by Milliken (1904) and renamed as *Huegelia densifolia* var. *sanctorum* by Jepson (1925). Wootton and Standley (1913) proposed the replacement of *Huegelia* with *Eriastrum*; Mason (1945) accepted the new genus name. *Centrostegia leptoceras* was first collected by Lobb in 1849. It was described by Gray in 1870 (Torrey and Gray 1870); and then placed in the genus *Chorizanthe* by Watson (1877). Goodman (1934) transferred it back to *Centrostegia*.

Eriastrum densifolium ssp. *sanctorum* is a shrub occasionally reaching one meter (3.3 feet) in height. This plant has gray-green stems and leaves. The bright blue flowers are up to 30 millimeters (1.4 inches) long and are contained in heads of about 20 blossoms each. *Centrostegia leptoceras* is a small prostrate annual. The diameter of the basal rosette of a mature plant varies between about 3 and 10 centimeters (1.4 and 4.5 inches). The flowering stalks are from 5 to 15 centimeters (2.3 to 6.8 inches) in length, and bear three-lobed bracts at the nodes. The leaves and bracts turn bright

red with age. One to three involucre containing several flowers each occur at an axil and are 4 to 6 millimeters (0.2 to 0.3 inches) long (Munz 1974).

Eriastrum densifolium ssp. *sanctorum* is endemic to the Santa Ana River drainage of southern California. Formerly this subspecies was a conspicuous shrub in the alluvial fan scrub community on the higher floodplain terraces of the Santa Ana River and its tributaries in Orange, Riverside and San Bernardino Counties. The range of elevations occupied by this plant was from about 150 to 600 meters (500 to 2,000 feet) (Craig 1934, Mason 1945).

Centrostegia leptoceras was formerly more widespread, and occurred on old sandy benches or floodplain terraces containing alluvial fan scrub vegetation in Los Angeles, San Bernardino, and Riverside Counties (Munz 1974). This plant is currently known from only five localities, totaling less than 4 hectares (10 acres) in extent, in San Bernardino and Riverside Counties (Krantz 1984).

Alluvial fan scrub receives little natural disturbance. Sheet flood flows probably occur once every one to two hundred years, and such scouring appears to maintain this plant community. The perennial vegetative cover where *Eriastrum densifolium* ssp. *sanctorum* and *Centrostegia leptoceras* occur is relatively low (seldom over 50 percent); annual cover is also fairly low (Zemba and Kramer 1984). The plant community is characterized by old *Juniperus californica* (California juniper), *Cercocarpus betuloides* (mountain mahogany) and *Eriodictyon trichocalyx* (Yerba Santa). *Eriastrum densifolium* ssp. *sanctorum* is found in disjunct stands within this habitat, and tends to occupy areas with slight surface disturbance (Zemba and Kramer 1984). Conversely, *Centrostegia leptoceras* exists almost exclusively in small isolated areas lacking any evidence of surface disturbance (Reveal and Krantz 1979; Krantz 1984).

The Secretary of the Smithsonian Institution, as directed by section 12 of the Act, prepared a report on those native U.S. plants considered to be endangered, threatened, or extinct in the United States. This report (House Document No. 94-51), which included *Centrostegia leptoceras* but not *Eriastrum densifolium* ssp. *sanctorum*, was presented to Congress on January 9, 1975. On July 1, 1975, the Service published a notice in the Federal Register (40 FR 27823) accepting the report as a petition within the context of Section 4(c)(2) of the Act (petition acceptance is now governed by Section 4(b)(3)(A)) and giving notice of its

intention to review the status of the plant taxa named therein, including *Centrostegia leptoceras*. On June 16, 1976, the Service published a proposed rule in the Federal Register (41 FR 24523) to determine approximately 1,700 vascular plant species, including *Centrostegia leptoceras*, to be endangered species pursuant to section 4 of the Act. This list was assembled on the basis of comments and data received by the Smithsonian Institution and the Service in response to House Document No. 94-51 and the July 1, 1975, Federal Register publication. General comments on the 1976 proposal were summarized in an April 26, 1978, Federal Register publication (43 FR 17909).

In 1978, amendments to the Endangered Species Act required that all proposals over two years old be withdrawn. A 1-year grace period was given to those proposals already more than 2 years old. Subsequently, on December 10, 1979, the Service published a notice (44 FR 70796) of the withdrawal of the portion of the June 16, 1976, proposal that had not been made final, along with four other proposals that had expired. This notice of withdrawal included *Centrostegia leptoceras*.

The Service published an updated notice of review for plants on December 15, 1980 (45 FR 82840). This notice included *Centrostegia leptoceras* and *Eriastrum densifolium* ssp. *sanctorum*. On February 15, 1983, the Service published a notice (48 FR 6752) of its prior finding that the listing of these two species may be warranted in accordance with section 4(b)(3)(A) of the Act as amended in 1982. Such a finding requires the petition to be recycled, pursuant to section 4(b)(3)(C)(i) of the Act. On October 13, 1983, October 12, 1984, and again on October 11, 1985, further findings were made that the listing of *Centrostegia leptoceras* and *Eriastrum densifolium* ssp. *sanctorum* was warranted, but precluded by other pending listing actions, in accordance with section 4(b)(3)(B)(iii) of the Act. The proposed rule to list both species as endangered was published in the Federal Register on April 9, 1986 (51 FR 12180).

Summary of Comments and Recommendations

In the April 9, 1986, proposed rule (51 FR 12180) and associated notifications, all interested parties were requested to submit factual reports or information that might contribute to the development of a final rule. Appropriate State and Federal agencies, county governments, landowners, scientific organizations,

and other interested parties were contacted and requested to comment. Newspaper notices that invited public comment were published in the Los Angeles Times (May 7, 1986), the Los Angeles Herald Examiner (May 6, 1986), the San Bernardino Sun Telegram (May 6, 1986), the San Jacinto Valley Register (May 5, 1986), and the Riverside Press Enterprise (May 8, 1986). A public hearing was requested by the Environmental Management Agency of Orange County and was held on July 7, 1986. The public comment period was reopened for an additional 30 days on June 24, 1986 (51 FR 22955).

Oral and written comments were received from a total of 16 agencies and individuals. Nine commenters supported the proposed rule, two suggested that the rule be split—listing *Eriastrum densifolium* ssp. *sanctorum* separately from *Centrostegia leptoceras*. One commenter, a representative of a sand and gravel mining company, opposed the listing of *Eriastrum densifolium* ssp. *sanctorum*. No other opposing testimony was received. The written comments and oral testimony received (from five individuals) at the public hearing are grouped below and discussed by issue.

Issue 1: Critical habitat should be designated for these species.

Response: The Service believes that the danger posed by designating critical habitat would outweigh the potential benefits. As discussed in the "Summary of Factors Affecting the Species" section below under Factor "B," both species could be adversely affected by curiosity seekers. Designation of critical habitat would increase the degree of threat facing these species.

Issue 2: A question was raised regarding the applicability of a Habitat Conservation Plan for *Eriastrum densifolium* ssp. *sanctorum* and *Centrostegia leptoceras*. This plan was suggested as an early means of designing recovery actions.

Response: A Habitat Conservation Plan is specifically defined in section 10(a) of the Act. It provides for the preservation of certain areas of an animal species' habitat and grants a permit to developers for incidental take (as defined in section 9 of the Act). The prohibition of take only applies for plants that are deliberately removed from lands under Federal jurisdiction; consequently, plants are not protected from incidental take. Such taking of plants on lands under Federal jurisdiction is addressed through the consultation process as described in section 7 of the Act. Therefore, as defined in section 10(a) of the Act, it would not be appropriate to design a Habitat Conservation Plan for these two

species. However, the Service recognizes the importance of establishing management objectives for conserving and enhancing endangered species, and anticipates developing a recovery plan for these two plants.

Issue 3: It would be more appropriate to work towards propagation of these species than to fine tune their status (e.g., go through the listing process). *Eriastrum densifolium* ssp. *sanctorum*, for example, could be established in Orange County.

Response: The Service will pursue actions to improve the status of these species following listing during the recovery process. Recovery efforts may include establishing the plants in portions of their historic range where they have been extirpated; however, recognition of their endangered status via listing under the Act is an appropriate step in this process.

Issue 4: The listing of these plants may result in delays and increased costs to portions of the Santa Ana Mainstem project. The Service should evaluate the impacts of this U.S. Army Corps of Engineers (COE) project on the two plants, and specifically address required mitigation. Potential recovery actions and their effects on the Santa Ana River project should also be addressed.

Response: The COE's Santa Ana River Mainstem project is presently in Phase I. Phase II will not commence until there is congressional authorization. During Phase II specific project impacts and compensation or mitigation measures will be determined. Because the project is in its early stage and information is lacking, it would be premature for the Service to determine mitigation measures. Given that the COE is responsible for this project, it also would be inappropriate for the Service to provide information on project design. In general, the Service is concerned that certain project features (dam and borrow pit locations) may directly remove some individuals of *Eriastrum densifolium* ssp. *sanctorum*. Indirect effects such as increased urban development in the floodplain below the proposed Upper Santa Ana River Dam could adversely affect both species. Representatives of the Service and the COE have been and will continue to work together in the design of this project and remain optimistic about their ability to resolve these issues. When it is appropriate, the procedures described in Section 7 of the Act will be followed.

Issue 5: *Centrostegia leptoceras* and *Eriastrum densifolium* ssp. *sanctorum* are different species and listing actions ought to be handled separately.

Response: *Centrostegia leptoceras* and *Eriastrum densifolium* ssp. *sanctorum* occur in alluvial fan scrub. Their remaining ranges overlap, and historic ranges have been reduced due to similar causes. Therefore, the Service believes it is appropriate to list them jointly.

Issue 6: *Eriastrum densifolium* ssp. *sanctorum* may not qualify for Federal listing because it is too widespread, it is not vulnerable to competition from exotics as it is a taller shrub, it is not grazed upon by rabbits, and it occurs on disturbed sites.

Response: A species need not meet every listing criterion to be endangered. The total remaining range of *Eriastrum densifolium* ssp. *sanctorum* occurs in the drainage of the Santa Ana River of San Bernardino County. The range of this plant has been significantly reduced (see Factor "A" in the "Summary of Factors Affecting the Species" section). Most of the areas on which the plant occurs have been proposed for sand and gravel mining in the recent past.

Although adult *Eriastrum densifolium* ssp. *sanctorum* shrubs have been found in some places dominated by exotic species, seedlings have not been found in these sites. Transect data revealed that this plant occurs in relatively open areas where the total vegetation cover is usually less than 50 percent (Zemba and Kramer 1984). It is likely that this species requires full sun for growth and seed germination. Establishment of exotics in areas with stands of *Eriastrum densifolium* ssp. *sanctorum* may not adversely affect these mature plants; however, self-sustaining populations with all age classes represented have not been found in areas dominated by weedy exotics such as *Bromus* and *Brassica*.

The Service is not aware of any studies on the effects of herbivory on either species.

Eriastrum densifolium ssp. *sanctorum* has rarely been found in disturbed sites. Seedlings of this plant have sprouted in a few places that had been scraped or bulldozed. Some of the adult plants recovered after one locality west of Orange Street had been superficially scraped. In these cases, there was a nearby source of seed from mature plants. It appears that on occasion human-caused disturbance mimics natural disturbance required for seed germination. Most former alluvial fan scrub habitats that have been adversely affected by discing, scraping, or sand and gravel operations do not contain *Eriastrum densifolium* ssp. *sanctorum*. However, recent success in transplanting this plant offers some

hope that habitat restoration is possible. It will be important to determine the extent of seed set and germination in these transplanted patches of *Eriastrum densifolium* ssp. *sanctorum*.

Issue 7: The Service's notification of the public on this proposal was inadequate.

Response: The Service went through an extensive notification process to make the public aware of this proposal; this process satisfied the requirements of the Act and is described at the beginning of this section.

Issue 8: Several commenters requested the exact locations of these plants.

Response: For the reasons discussed under Issue 1 above and in the section dealing with Critical Habitat below, the Service believes that giving exact locations would increase the degree of threat facing these species.

Issue 9: Increased persistent flooding could result in the extinction of the plants.

Response: These plants occur naturally on the higher floodplain terraces, and are probably adapted to a certain range of flood conditions. Too high a frequency of flooding may result in the extirpation of some populations. However, elimination of all flood flows also appears to eliminate the plants; some flooding appears to maintain the sparsely vegetated conditions under which these plants thrive.

In summary, no substantive comments or data received in response to the proposal indicated that *Eriastrum densifolium* ssp. *sanctorum* or *Centrostegia leptoceras* are more widespread or less vulnerable to disturbance or degradation of habitat than previously thought. Some anecdotal evidence was presented suggesting that *Eriastrum densifolium* ssp. *sanctorum* has recovered from disturbance at certain sites; however, Service personnel who are familiar with this plant's habitat and range believe these sites represent exceptional cases. Both species occupy restricted ranges that are vulnerable to encroaching development.

Summary of Factors Affecting the Species

After a thorough review and consideration of all information available, the Service has determined that *Eriastrum densifolium* ssp. *sanctorum* and *Centrostegia leptoceras* should be classified as 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 applications to *Eriastrum densifolium* (Benth.) Mason ssp. *sanctorum* (Milliken) Mason and *Centrostegia leptoceras* Gray are as follows:

A. *The present or threatened destruction, modification, or curtailment of its habitat or range.* *Eriastrum densifolium* ssp. *sanctorum* once occurred on the higher floodplain terraces along the Santa Ana River and its tributaries in Orange, Riverside, and San Bernardino Counties. It has been extirpated from Orange and Riverside Counties. In Orange County, urban development, citrus groves, horse stables, and urban parks occur to the edge of the Santa Ana River. In Riverside County, the higher floodplain terraces contain urban neighborhoods, ranches and agriculture, and sand and gravel mines. The terraces that have not been built upon or converted to agriculture have been overgrazed. In San Bernardino County where the Santa Ana River has been channelized (mostly with earthen banks), urban and agricultural developments occur to its edge. *Eriastrum densifolium* ssp. *sanctorum* now occurs in isolated stands along the Santa Ana River in San Bernardino County between 360 and 630 meters (1,200 and 2,000 feet) in elevation. One disjunct population remains on Lytle Creek at 360 meters (1,200 feet) in elevation. Approximately 720 hectares (1,800 acres) remain (Krantz 1986 pers. comm.).

Centrostegia leptoceras once occurred in alluvial fan scrub of Los Angeles, San Bernardino, and Riverside Counties. Currently it is known from 5 localities totaling less than 4 hectares (10 acres) in extent. Populations occur adjacent to Lytle Creek, the Santa Ana River, Temescal Creek, and the San Jacinto River (Krantz 1984). A population also remains adjacent to Bautista Creek in Riverside County. The alluvial fan scrub of Los Angeles County has been replaced by the ever-expanding cities of the Los Angeles Basin. Most former San Bernardino localities have been overtaken by urbanization or sand and gravel mines.

Extant populations of *Eriastrum densifolium* ssp. *sanctorum* and *Centrostegia leptoceras* in San Bernardino County are further threatened by proposed sand and gravel mines. The BLM is preparing a management plan for these areas. Proposed land uses in the plan include the conservation of these plants, sand and gravel mining, shooting ranges and other activities. In addition, an indirect

effect of flood-control dams proposed by the COE in the Upper Santa Ana River Canyon and Lytle Creek could be relaxation of zoning restrictions that now apply to floodplain development. Such zoning changes could allow increased urbanization downstream from the dams and lead to the extinction of *Eriastrum densifolium* ssp. *sanctorum* and to the extirpation of *Centrostegia leptoceras* in San Bernardino County. In Riverside County, the San Jacinto River Temescal Creek and Bautista Canyon drainages are also sites of urbanization and agricultural developments. These activities have reduced the range of *Centrostegia leptoceras* on these drainages. Off-road vehicle activity and trash dumping has adversely affected some areas supporting *Centrostegia leptoceras*.

B. *Overutilization for commercial, recreational, scientific, or education purposes.* Neither of these species is known to have suffered as a result of collecting or other utilization. However, *Eriastrum densifolium* ssp. *sanctorum* is extremely attractive when in flower and could be sought by collectors, and *Centrostegia leptoceras* is found on easily distributed sites that could be damaged by curiosity seekers.

C. *Disease or predation.* Historically, cattle grazing affected many of the areas once supporting *Eriastrum densifolium* ssp. *sanctorum* and *Centrostegia leptoceras*. In some areas, plant species composition was undoubtedly altered significantly by grazing animals. Although grazing may have contributed to the extirpation of these species in some places, areas that are now grazed are so altered that they no longer appear to be capable of supporting either plant, even if grazing were to cease. Grazing does not appear to be a threat in those areas still supporting these species.

D. *The inadequacy of existing regulatory mechanisms.* The California Fish and Game Commission has listed both species as endangered. This designation gives these plants some protection from take, but not habitat destruction. Under the California Endangered Species Act of 1985, State lead agencies are required to consult with the Department of Fish and Game when their projects may affect State-listed species. In the case of *Eriastrum densifolium* ssp. *sanctorum* and *Centrostegia leptoceras*, few (if any) State projects are anticipated. A general prohibition exists against destroying or removing vegetation on BLM land without a permit to do so. The County of San Bernardino has required some sand and gravel operators to avoid populations of *Eriastrum densifolium*

ssp. *sanctorum* and conduct transplant efforts. However, these regulations have not been effective in reducing habitat loss.

E. *Other natural or manmade factors affecting its continued existence.* *Eriastrum densifolium* ssp. *sanctorum* and *Centrostegia leptoceras* do not occur in areas dominated by weedy exotics such as *Bromus rubens* and *Brassica geniculata*. As a prostrate annual that apparently requires full sun and can only tolerate minimal, if any, disturbance, *Centrostegia leptoceras* is especially sensitive to invasion of taller annual species. All known localities of this plant are near areas dominated by weedy exotics. Some herbicide spraying by the San Bernardino County Department of Agriculture for vegetation control may have inadvertently reduced the quality of habitat of these species (Gardner, San Bernardino County Agriculture Commission 1986 pers. comm.).

The Service has carefully assessed the best scientific and commercial information available regarding the past, present, and future threats faced by these species in determining to make this rule final. Based on this evaluation, the preferred action is to list *Eriastrum densifolium* ssp. *sanctorum* and *Centrostegia leptoceras* as endangered. This preference reflects the strong likelihood that without the protection of the Endangered Species Act of 1973, as amended, these plant species would become extinct throughout their ranges.

Critical Habitat

Section 4(a)(3) of the Act, as amended, requires that to the maximum extent prudent and determinable, the Secretary designate any habitat of a species which is considered to be critical habitat at the time the species is determined to be endangered or threatened. The Service finds that designation of critical habitat is not prudent for these species at this time. Two of the five localities for *Centrostegia leptoceras* are in Federal ownership. *Eriastrum densifolium* ssp. *sanctorum* occurs on Federal lands; however, it is a conspicuous and attractive shrub. Designation of critical habitat for *Eriastrum densifolium* ssp. *sanctorum* and *Centrostegia leptoceras* would likely focus attention upon these plants and their rare and vulnerable status, and might encourage vandalism or taking for collections or commercial purposes. As mentioned above, *Eriastrum densifolium* ssp. *sanctorum* is an attractive shrub when flowering and could easily be subjected to horticultural collecting if its habitat were closely identified through publication of maps and descriptions. *Centrostegia*

leptoceras, although not a likely horticultural subject, is confined to extremely localized sites that could easily be disturbed by foot traffic if they were made known to curiosity-seekers. All involved parties and landowners will be notified of the location and importance of protecting these species habitats. The potential danger posed to these species by designating critical habitat outweighs the minimal protection that such designation would provide. Therefore, it would not be prudent to determine critical habitat for these plants at this time.

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 provided 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 prohibitions against taking 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)(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.

Two Federal agencies have proposed projects that may affect *Eriastrum densifolium* ssp. *sanctorum* and *Centrostegia leptoceras*. The COE, Los Angeles District, has proposed to construct dams on the Upper Santa Ana River Canyon and Lytle Creek Canyon. The Service is concerned that these dams might increase urbanization and agricultural developments in areas occupied by *Eriastrum densifolium* ssp. *sanctorum* and *Centrostegia leptoceras*,

and physically alter flooding conditions necessary to maintain these plants. The Service will continue to work with the COE in protecting this plant. The COE is concerned about the survival of these plants and has expressed support for conserving them. The BLM has proposed to develop a habitat management plan for lands occupied by these plants. Competing interests such as sand and gravel mining and shooting ranges may be included in the BLM's plan. One of its goals is to provide for the protection of these plants on its land (Baier 1986). Listing of *Eriastrum densifolium* ssp. *sanctorum* and *Centrostegia leptoceras* will provide further encouragement to the BLM to conserve these plants.

The Act and its implementing regulations found at 50 CFR 17.61, 17.62, and 17.63 set forth a series of general trade prohibitions and exceptions that apply to all endangered plant species. 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 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 and 17.63 also provide for the issuance of permits to carry out otherwise prohibited activities involving endangered species under certain circumstances. Because transplant techniques have been recently developed for *Eriastrum densifolium* ssp. *sanctorum*, and because it is an attractive shrub, trade permits may be sought for this plant. It is anticipated that few trade permits would ever be sought or issued for *Centrostegia leptoceras* since 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).

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Author

The primary author of this final rule is Karla J. Kramer, U.S. Fish and Wildlife Service, 24000 Avila Road, Laguna Niguel, California 92656.

List of Subjects in 50 CFR Part 17

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

Regulations Promulgation

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

PART 17—[AMENDED]

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, 98 Stat. 1411 (16 U.S.C. 1531 *et seq.*); Pub. L. 98-625, 100 Stat. 3500 (1986), unless otherwise noted.

2. Amend § 17.12(h) by adding the following, under family names indicated, to the List of Endangered and Threatened Plants:

§ 17.12 Endangered and threatened plants.

* * * * *
 (h) * * *

Species	Scientific name	Common name	Historic range	Status	When listed	Critical habitat	Special rules
Polemoniaceae—Phlox family:							
	<i>Eriastrum densifolium</i> ssp. <i>sanctorum</i>	Santa Ana River woolly-star	U.S.A. (CA)	E	291	NA	NA
Polygonaceae—Buckwheat family:							
	<i>Centrostegia leptoceras</i>	Slender-horned spineflower	U.S.A. (CA)	E	291	NA	NA

Dated: September 21, 1987.
 Susan Recce,
 Acting Assistant Secretary for Fish and Wildlife and Parks.
 [FR Doc. 87-22374 Filed 9-25-87; 8:45 am]
 BILLING CODE 4310-55-M

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 675

[Docket No. 61225-7052]

Groundfish of the Bering Sea and Aleutian Islands Area

AGENCY: National Marine Fisheries Service (NMFS), NOAA, Commerce.

ACTION: In-season adjustment and notice of closure to directed fishing.

SUMMARY: NOAA announces the apportionment of amounts of Alaska groundfish to the domestic annual

processing (DAP) portion of the domestic annual harvest (DAH) under provisions of the fishery management plan (FMP) for the Groundfish Fishery of the Bering Sea and Aleutian Islands Area and the closure of the Aleutian Islands area to directed fishing for sablefish. Groundfish are apportioned according to the regulations implementing the FMP. The intent of these actions is to assure optimum use of these groundfish while conserving sablefish stocks.

DATES: Effective: September 23, 1987. Comments will be accepted through October 8, 1987.

ADDRESSES: Comments should be mailed to Robert W. McVey, Director, Alaska Region, National Marine Fisheries Service, P.O. Box 21668, Juneau, AK 99802, or be delivered to Room 453, Federal Building, 709 West Ninth Street, Juneau, Alaska.

FOR FURTHER INFORMATION CONTACT: Janet E. Smoker (Resource Management Specialist, NMFS), 907-586-7230.

SUPPLEMENTARY INFORMATION: The FMP governs the groundfish fishery in the exclusive economic zone under the Magnuson Fishery Conservation and Management Act. The FMP was developed by the North Pacific Fishery Management Council (Council) and implemented by rules appearing at 50 CFR 611.93 and Part 675. The total allowable catches (TACs) for various groundfish species are apportioned initially among DAH, reserves and total allowable level of foreign fishing (TALFF). The reserve amount, in turn, is to be apportioned to DAH and/or TALFF during the fishing year, under 50 CFR 611.93(b) and 675.20(b). As soon as practicable after April 1, June 1, August 1 and on such other dates as are necessary, the Secretary of Commerce apportions to DAH all or part of the reserve that he finds will be harvested by U.S. vessels during the remainder of the year, except that part or all of the reserve may be withheld if an apportionment would adversely affect