

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

Endangered and Threatened Wildlife and Plants; Determination of Threatened Status With Critical Habitat for Six Plants and One Insect in Ash Meadows, Nevada and California; and Endangered Status With Critical Habitat for One Plant in Ash Meadows, Nevada and California

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Final rule.

SUMMARY: The Service determines the Ash Meadows blazing star, Ash Meadows gumplant, Ash Meadows milk-vetch, Ash Meadows ivesia, Ash Meadows sunray, spring-loving centaury, and Ash Meadows naucorid to be threatened and designates their critical habitat. The Service also determines the Amargosa niterwort to be an endangered species with critical habitat. These actions are being taken because these species are restricted to the Ash Meadows region and ground water basin in Nye County, Nevada, and Inyo County, California, where they are facing intensifying threats. The loss of habitat by recent agricultural and municipal development activities, the clearing of land for road construction, the removal of ground water and diversion of surface spring flow, and local mining activities threaten the integrity of the species' habitat and, therefore, their survival. The Service also announces in the "Proposed Rules" section of today's Federal Register the opening of a 60-day comment period of whether additional areas should be added to the designated critical habitat of two of the subject species.

DATES: The effective date of this rule is June 19, 1985.

ADDRESSES: The complete file for this rule is available for inspection during normal business hours at the U.S. Fish and Wildlife Service, Suite 1692, Lloyd 500 Building, 500 N.E. Multnomah Street, Portland, Oregon 97232.

FOR FURTHER INFORMATION CONTACT: Wayne S. White, Chief, Division of Endangered Species, at the above address. (503/231-8131 or FTS 429-8131).

SUPPLEMENTARY INFORMATION:**Background**

The Ash Meadows region is a unique and diverse desert wetland located east of the Amargosa River in California and Nevada. This wetland is maintained by flow from several dozen springs and

seeps which are fed by an extensive ground water system that extends more than 100 miles northwest of Ash Meadows. Hundreds of plant and animal species, many of them endemic, are associated with this wetland and depend upon it for survival. The eight species that are the subjects of this final rule occur only in Ash Meadows. These eight species are briefly described below:

1. The spring-loving centaury (*Centaurium namophilum* Reveal, Broome, & Beatley) was first recognized in 1973 (Reveal et al. 1973). Even though *Centaurium namophilum* was described in 1973, it had been collected as early as 1891 by Coville and Funston (Reveal et al. 1973). The spring-loving centaury is an erect annual reaching 4.5 decimeters (dm) in height, and has pink flowers. It is found on "moist to wet clay soils along the banks of streams or in seepage areas" (Mozingo and Williams 1980) and is often found with the Ash Meadows gumplant.

The Service originally proposed endangered status for the spring-loving centaury (48 FR 46590; October 13, 1983) under the scientific name *Centaurium namophilum* var. *namophilum* Broome. As discussed later in the summary of comments, the Service no longer accepts the validity of varietal designations for *Centaurium namophilum*. Further, *Centaurium namophilum* var. *nevadense* is now considered a synonym of *Centaurium exaltatum* (Griseb.) W. Wright. Populations of *Centaurium namophilum* formerly occurred outside Ash Meadows at Furnace Creek and Tecopa Springs, Inyo County, California. All known living populations of *Centaurium namophilum* are now restricted to Ash Meadows, Nevada.

2. The Ash Meadows gumplant (*Grindelia fraxino-pratensis* Reveal & Beatley) was described by Reveal and Beatley in 1971, although it had been collected as early as 1885 by Beatley (Reveal and Beatley 1971). It is an erect biennial or perennial reaching 7 to 10 dm in height with yellow flowers in heads measuring 8 to 10 millimeters (mm) in diameter (Mozingo and Williams 1980). Its primary habitat is saltgrass meadows along streams and pools, but it occasionally occurs in alkali clay soils in drier areas (Cochrane 1981). It is found in both Nevada and California.

3. The Ash Meadows ivesia (*Ivesia eremica* (Coville) Rydberg) was first described as *Potentilla eremica* in 1892. It is a perennial with a tuft of leaves emerging from a woody root crown. The inflorescences bear few flowers and these have petals about 7 mm long. The Ash Meadows ivesia occurs only in Nevada in saline seep areas of light-

colored clay uplands (Mozingo and Williams 1980).

4. The Ash Meadows blazing star (*Mentzelia leucophylla* Brandegee) was described by Brandegee (1899) based on material collected by Purpus in 1898 (Reveal 1978a). It is a biennial or short-lived perennial with one to several white stems that reach a height of 5 dm, and its light yellow flowers occur in broad inflorescences (Mozingo and Williams 1980). It occurs only in Nevada on sandy or saline clay soils along canyon washes and on alkaline mounds. It is often found with the Ash Meadows milk-vetch and the Ash Meadows sunray (Mozingo and Williams 1980).

5. The Ash Meadows milk-vetch (*Astragalus phoenix* Barneby) was described in 1970, although it was collected as early as 1898 by Carl Anton Purpus (Barneby 1970). It is "a low matted perennial forming mounds 40 to 50 cm across" and its "pinkish to purple flowers are borne on short, erect stems in the mat and commonly number only one or two per inflorescence" (Mozingo and Williams 1980). The flowers are about 25 mm long. The Ash Meadows milk-vetch is found only in Nevada on "dry, hard, white, barren saline, clay flats, knolls, and slopes" (Mozingo and Williams 1980).

6. The Ash Meadows sunray (*Enceliopsis nudicaulis* (A. Gray) A. Nelson var. *corrugata* Cronquist) was described in 1972 from material collected by Cronquist in 1966 (Cronquist 1972), although Mozingo and Williams (1980) reported that earlier collections were made by others. This perennial plant occurs in clumps 1 to 4 dm high, and has flower heads borne singly on leafless stalks. The ray flowers have yellow corollas and the disk is 2 to 3.5 centimeters (cm) across. It occurs only in Nevada in dry washes on whitish saline soil associated with outcrops of pale, hard limestone.

7. The Amargosa niterwort (*Nitrophila mohavensis* Munz and Roos) was first collected by J. C. and A. R. Roos and then described by Munz and J. C. Roos in 1955. The plants are long lived and low (up to 8 cm high) with small bright green leaves and small, inconspicuous flowers (Reveal 1978b). It is found on salt-encrusted alkaline flats at the south end of Carson Slough on both sides of the Nevada/California border (Beatley 1977).

8. The Ash Meadows naucorid (*Ambrysus amargosus* La Rivers) is an insect (Order Hemiptera, Family Naucoridae) that was described in 1953 based on material collected by Ira La Rivers and T. Frantz in 1951 (La Rivers 1953). It has been found only at Point of

Rocks Springs and their outflow streams. It is a small aquatic insect reaching about 6 mm in length that is apparently unable to fly.

Many other plant and animal species are endemic to Ash Meadows. The Service proposed the Ash Meadows turban snail (*Fluminicola erythropoma*) as threatened on April 28, 1978 (41 FR 17742); that proposal was withdrawn on December 10, 1979 (44 FR 70796) for administrative reasons as a result of the 1978 Amendments to the Endangered Species Act. Current evidence indicates that this species, as proposed, actually comprised more than one species. This area has an extraordinarily diverse freshwater molluscan fauna, which is currently being studied by Dr. Dwight Taylor of Tiburon, California. Of special interest is the presence of two species flocks or complexes of snails that are found within a 5-mile radius in Ash Meadows, and that give Ash Meadows the highest concentration of endemic species in an area of comparable size within the United States. Most of these mollusc species have not been scientifically described and named. Of the molluscs found in Ash Meadows, eight species are included in Category 1, and two species are in Category 2, of the May 22, 1984 (49 FR 21664), notice of review for invertebrate wildlife. One beetle, the Devils Hole warm spring riffle beetle (*Stenelmis calida calida*), is also included in this notice (Category 2) and is endemic to Ash Meadows.

Five endemic fishes have been recorded from Ash Meadows. The Devils Hole pupfish (*Cyprinodon diabolis*) was listed as endangered on March 11, 1967 (32 FR 4001), and the Warm Springs pupfish (*Cyprinodon nevadensis pectoralis*) was listed as endangered on October 13, 1970 (35 FR 16047). The Ash Meadows Amargosa pupfish (*Cyprinodon nevadensis mionectes*) and the Ash Meadows speckled dace (*Rhinichthys osculus nevadensis*) were listed as endangered with critical habitat on September 2, 1983 (48 FR 40178). A fifth endemic Ash Meadows fish species, the Ash Meadows poolfish (*Empetrichthys merriami*), is now extinct.

The Tecopa birds-beak (*Cordylanthus tecopenis*) is included in Category 2 of the November 28, 1983 (48 FR 53640), notice of review supplement for plant taxa. It is not endemic to Ash Meadows, but is a rare member of plant communities associated with desert aquatic ecosystems in Ash Meadows and elsewhere.

Much of Ash Meadows has been disturbed by past development and much of the habitat occupied by endemic plants and animals has been

eliminated. An extensive marsh in Carson Slough was destroyed when it was mined for peat in the early 1960's; roads were built through plant habitats; many thousands of acres were cleared and plowed for crop production; and aquatic environments were eliminated or severely altered by ground water pumping, water diversion, and/or impoundment.

Early homesteaders attempted to farm Ash Meadows, using the free flowing water from the springs for irrigation. These efforts failed because of the absence of adequate water and because the salty, clay soils were not suitable for crops. Agricultural practices in the late 1960's and early 1970's included the plowing of large tracts of land, and the installation of ground water pumps and diversion ditches to support a cattle feed operation. These practices resulted in the destruction of many populations of plants and animals and their wetland habitats by alteration of the land surface and lowering of the water table. In 1976, the Supreme Court limited the amount of ground water pumping in Ash Meadows to ensure sufficient water levels in the only known habitat of the endangered Devils Hole pupfish. The agricultural interests in Ash Meadows sold approximately 23 square miles of land to a real estate developer, Preferred Equities Corporation (PEC), in 1977.

While the U.S. Bureau of Land Management has jurisdiction over most of Ash Meadows, approximately 11,173 acres of land and all of the certified water rights previously owned by PEC were recently purchased by the U.S. Fish and Wildlife Service to establish the Ash Meadows National Wildlife Refuge (NWR). This purchase stopped the municipal and agricultural development of Calvada Lakes, which had been initiated by PEC and designed to support a population of 55,000 people. The purchase was undertaken to protect the large number of candidate, proposed, and listed plants and animals found in Ash Meadows.

The terrestrial habitats of the Ash Meadows ecosystem are as fragile as the aquatic habitats. The endemic plant species are dependent upon the unique hydrological characteristics of the basin and nearly all require undisturbed soils for sustenance and propagation.

Previous governmental actions affecting the subject species of this final rule began with section 12 of the Endangered Species Act of 1973, which directed the Secretary of the Smithsonian Institution to prepare a report on those plants considered to be endangered, threatened, or extinct. This report, designated as House Document

No. 94-51, was presented to Congress on January 9, 1975. On July 1, 1975, the Service published a notice in the *Federal Register* (40 FR 27823) of its acceptance of this 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) of the Act, as amended), and of its intention thereby to review the status of the plant taxa named within. These plant taxa included all the plant taxa included in the present rule.

On June 18, 1976, the Service published a proposed rule in the *Federal Register* (41 FR 24523) to determine approximately 1,700 vascular plant taxa to be endangered species pursuant to section 4 of the Act. These 1,700 plant taxa were selected 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. The proposed rule included proposals of endangered status for the spring-loving centauray, Ash Meadows ivesia, Ash Meadows blazing star, Ash Meadows milk-vetch, and Amargosa niterwort. General comments on the proposal were summarized in an April 26, 1978, *Federal Register* publication (43 FR 17909).

The Endangered Species Act amendments of 1978 placed time limits for final action on proposed listings. On December 10, 1979 (44 FR 79796), the Service published a notice of the withdrawal of the June 18, 1976, proposal because the time period for final action on the proposal had expired.

On December 15, 1980, the Service published a notice of review of plant taxa (45 FR 82480). That notice identified the seven plant taxa that are subjects of the present proposal as taxa for which the Service had sufficient biological information to support their being proposed to be listed as endangered or threatened species.

On February 24, 1983, while a proposed rule was being prepared, the Service received a petition from the Northern Nevada Native Plant Society. This petition requested that the Amargosa niterwort, Ash Meadows milk-vetch, Ash Meadows blazing star, spring-loving centauray, and Ash Meadows sunray be listed as endangered and that the Ash Meadows gumplant be listed as threatened.

The Service proposed the above six species, as well as the Ash Meadows ivesia and Ash Meadows naucorid, as endangered species with critical habitat on October 13, 1983 (48 FR 46590). This proposal was to list all considered species as endangered because the development proposed by PEC would

have resulted in elimination of most habitats occupied by Ash Meadows endemic species.

A public hearing regarding the proposal to list seven plants and one insect in Ash Meadows and to designate their critical habitats was held in Amargosa, Nevada on April 24, 1984. The testimony recorded at this hearing and all written comments received by May 25, 1984, are part of the public record and have been carefully considered in the drafting of this final rule. In response to comments regarding the proposal and the Federal acquisition of additional Ash Meadows lands, the Service altered this final rule, to more accurately reflect the status of the subject species; whereas these species were all proposed as endangered with critical habitat, this final rule recognizes only the Amargosa niterwort as endangered with critical habitat, and recognizes the Ash Meadows milk-vetch, Ash Meadows gumplant, Ash Meadows ivesia, Ash Meadows sunray, spring-loving centaury, Ash Meadows blazing star, and Ash Meadows naucorid as threatened with critical habitat. The critical habitat boundaries designated here are the same as those proposed. Additional areas may be added to the critical habitat of the Ash Meadows gumplant and the Amargosa niterwort, pending an additional period of comment.

Summary of Comments and Recommendations

In the October 13, 1983, proposed rule (48 FR 46590) 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 agencies, county governments, Federal agencies, scientific organizations, and other interested parties were contacted and requested to comment. Newspaper notices of the proposal, inviting general public comment, are published in the *Tonopah Times* and *Pahrump Valley Times-Star* on November 24, 1983. A total of 25 comments were received through May 25, 1984, from parties including individuals, organizations, and government agencies; 13 of these were received during a public hearing held on April 24, 1984, in Amargosa, Nevada.

Ms. Deborah Fox, attorney for Mr. James Owen, stated that Mr. Owen was not properly notified of the proposal. The Service replies that its proposal was made public through newspaper notices published in the *Pahrump Valley Times-Star* and *Tonopah Times* on November 24, 1983. The Governor of Nevada, Nye County officials, and private land

owners whose lands contain populations of these species were notified of the proposal by certified mail during the week of April 16, 1984. Mr. Owen was not specifically notified because none of the proposed species are found on land he owns.

Ms. Fox; Robert N. Revert; Commissioner, Nye County, Nevada; and Mr. Hank Records, Amargosa Valley resident, all commented that the proposal was inappropriate because of inadequate scientific evidence and because the development planned by PEC will not occur, since all of its land in Ash Meadows planned for development had been sold to The Nature Conservancy (TNC). The U.S. Bureau of Land Management (BLM) also questioned the necessity for listing in consideration of TNC acquisition of PEC lands. Section 3 of the Act defines "threatened species" as any species that is likely to become an endangered species throughout all or a significant portion of its range in the foreseeable future, and an "endangered species" as any species that is in danger of extinction throughout all or a significant portion of its range. The recent acquisition of land for the Ash Meadows NWR may afford some protection for the following specified portions of the remaining habitat of the species indicated: Ash Meadows naucorid—100 percent, Ash Meadows ivesia—45 percent, Ash Meadows milk-vetch—30 percent, Ash Meadows sunray—39 percent, spring-loving centaury—37 percent, Ash Meadows gumplant—26 percent, Ash Meadows blazing star—37 percent, and Amargosa niterwort—0 percent. Habitat presently occupied by each of these species, except the Amargosa niterwort, is reduced from what it was known to occupy historically. Continued threats to the livelihood of these species include trampling and grazing by wild and free roaming horses, introduction of exotic plants and/or animals, mining, road construction, and ground water depletion. The Service has determined that the threats to the continued existence of the subject species, and their present status resulting from past activities, warrant listing of these species as endangered or threatened with critical habitat.

Ms. Fox and Commissioner Revert also commented that the Service had not completed an economic analysis of the proposed listing and critical habitat designation for the seven plants and one insect. The Service replies that the 1982 amendments to the Act require that determinations to list species as threatened or endangered be based

solely on the best available scientific and commercial information on the species. Economic impacts may not be considered in making a listing determination. The Act specifies, however, that the economic impact of designating a particular area as critical habitat must be considered. The Service has accordingly prepared an economic analysis for the areas determined in this rule to be critical habitat.

Commissioner Revert also commented that the listing is a major Federal action requiring preparation of an Environmental Impact Statement. The Service replies that, as presented in the notice published in the *Federal Register* on October 25, 1983 (48 FR 49244), it is not required to prepare Environmental Impact Statements in connection with listing species under the Endangered Species Act.

The BLM further commented that the listing of the Ash Meadows naucorid serves little purpose because its habitat is included within the designated critical habitat of the endangered Ash Meadows Amargosa pupfish. The Service recognizes that the naucorid occurs within the designated critical habitat for this pupfish; however, available biological information shows that the naucorid occurs only in extremely limited habitat and its existence could easily be jeopardized by a single, local action that may have little or no impact on the Ash Meadows Amargosa pupfish. This listing and critical habitat designation is, therefore, appropriate to clarify and emphasize the location of habitat essential to this naucorid.

The BLM identified zeolite and potassium mining claims within Ash Meadows whose development may be impacted by listing the seven plants and one insect. The Service recognizes mining as a threat to several of these species and would become involved in Section 7 consultation as required by the Act, to ensure that all proposed activities requiring Federal actions or permits would proceed without jeopardizing the continued existence of an affected species.

Comments in support of the listing of one, several, or all subject species of this proposal were submitted by nine organizations. These are the Northern Nevada Native Plant Society (NNNPS), California Native Plant Society, Nevada Wildlife Federation, Sierra Club Public Lands Committee, Smithsonian Institution National Museum of Natural History, Defenders of Wildlife, International Union for Conservation of Nature, The Nature Conservancy, and California Department of Fish and Game. The U.S. Army Corps of

Engineers submitted comments stating their jurisdiction in Ash Meadows pursuant to Section 404 of the Clean Water Act, and noting that actions affecting any plants or animals listed in the future will be subject to the same permitting process now required for actions affecting species presently listed in Ash Meadows.

H.D. Carper, Director, California Department of Fish and Game, noted that the greatest threat to the existence of the Amargosa niterwort and Ash Meadows gumplant was the development planned by PEC, and since that threat has passed, a listing of threatened is more appropriate. Mr. Carper further commented that critical habitat for the Ash Meadows gumplant and Amargosa niterwort should be expanded to include all of the known habitat of these two species. The Service has determined that endangered status is appropriate for the Amargosa niterwort because the species is located only in a restricted habitat that is vulnerable to the threats of ground water depletion and road construction, and that is totally outside of the boundaries of the Ash Meadows NWR. The Service has responded to the comment regarding critical habitat by opening a comment period announced in the "Proposed Rules" section of today's Federal Register on the addition of more area for the Amargosa niterwort and Ash Meadows gumplant critical habitats to include all of the species' known habitats. A determination of whether these areas will be added to the critical habitat designated herein will be made following the closing of that comment period.

Defenders of Wildlife supported the proposal and urged the Service to initiate status surveys and when appropriate list an additional species of plant and 17 species of animals that are either endemic to Ash Meadows or are rare and found within and outside of Ash Meadows. The Service is in the process of preparing management guidance for its activities that will occur on the Ash Meadows NWR. It is believed that information provided by status surveys will guide these management activities so they can be conducted in a manner that will benefit the subject species.

Eleven comments regarding the proposal were received from individuals. All of these comments were received during the public hearing held in Amargosa, Nevada on April 24, 1984. Comments received during this hearing did not always specifically address the proposal; many were presented as comments against all activities proposed

by the Service in Ash Meadows. Mr. Ken Redelsperger requested additional time to comment. The Service considered all comments received through May 25, 1984. This gave the public a total of 225 days to comment on the proposal.

Mr. C.L. Barr, President, Industrial Mining Ventures (IMV) commented that IMV had mining claims for clay on 1,900 acres of BLM land in the Ash Meadows area. The listing of species under the Endangered Species Act does not specifically prohibit mining activities on public or private lands. Activities occurring on public lands must, however, proceed through Section 7 consultation with the Service if they may affect a listed species, and be implemented only in a manner that does not jeopardize the continued existence of any listed species.

Mr. Ed Rigler commented that the U.S. Government had spent far too much money on the Ash Meadows project and wanted to know to which government agency he could go to refute the Service's interest in Ash Meadows. The Service replies that actions taken in Ash Meadows are a result of Congressional mandates directed by the 1973 Endangered Species Act, as amended. The Service makes decisions about including species on the Lists of Endangered and Threatened Wildlife and Plants from information it receives, in writing or from transcripts of public hearings, from knowledgeable government agencies, individuals, and institutions.

Mr. Robert Bieganski asked what the Service had planned to remedy current problems regarding water management in Ash Meadows. Furthermore, he asked why a farming operation was allowed to continue in Ash Meadows when the Service is supposedly interested in protecting the area from threats posed by local development for agriculture. The Service replies that management schemes will be developed in the near future to guide programs that will direct water flow. Approximately 2,000 acres of Ash Meadows is currently leased for farming until the end of 1984. This lease was agreed upon to minimize the economic impact of Service acquisition on the lessee, who had been leasing agricultural lands from PEC.

During the public hearing, Ms. Betty Boyd voiced her doubt of the fact that there are plants and animals restricted to Ash Meadows. The Service replies that it has reviewed and concurs with scientific literature accepted by botanists, ichthyologists, and entomologists as correctly identifying a

large number of plants and animals endemic to Ash Meadows.

Discussion by Dr. Stanley Welsh, Arnold Theim, and John Kartesz during the February, 1984, meeting of the NNNPS included consideration of the taxonomic status of the Ash Meadows ivesia and spring-loving centaury. Mr. Kartesz stated that from his analysis of herbarium specimens, he believes *Centaureum namophilum* (spring-loving centaury) is not distinguishable from *Centaureum exaltatum*. Mr. Theim stated that his informal field analysis of these taxa leads him to believe that these two species of *Centaureum* are indeed specifically distinct. The Service considered additional information presented in recent literature and concludes from information presented in Cronquist et al. (1984) that *Centaureum namophilum* is specifically distinct from *Centaureum exaltatum*, that the varieties recognized by Broome (1981) are not supportable, and that *Centaureum namophilum* is endemic to the Death Valley area of Nevada and California, although it has been extirpated outside Ash Meadows.

Mr. Kartesz also voiced his doubt of the taxonomic validity of *Ivesia eremica* (Ash Meadows ivesia). Based on his analysis of herbarium specimens, he does not believe *Ivesia eremica* is different from *Ivesia kingii*. Mr. Theim took exception to the opinion; basing his opinion on his field studies of *Ivesia kingii* and *Ivesia eremica*, he believes the two taxa are valid. The Service investigated these opinions and concludes from the best available scientific information that *Ivesia eremica* is a valid taxon; however, its proper taxonomic rank cannot be determined at this time. Dr. Barbara Ertter, University of Texas at Austin, is presently conducting taxonomic studies of the genus *Ivesia* and believes from field investigations conducted during 1983 and 1984 that *Ivesia eremica* is a distinguishable taxon endemic to Ash Meadows. She believes that an appropriate taxonomic rank will be determined following the accumulation of information she has planned for the next several years.

Summary of Factors Affecting the Species

After a thorough review and consideration of all information available, the Service has determined that the Ash Meadows blazing star, Ash Meadows gumplant, Ash Meadows sunray, Ash Meadows milkvetch, Ash Meadows ivesia, spring-loving centaury, and Ash Meadows naucorid should be listed as threatened species with critical

habitat and that the Amargosa niterwort should be listed as an endangered species with critical habitat. Procedures found at section 4(a)(1) of the Endangered Species Act (16 U.S.C. 1531 *et seq.*) and regulations promulgated to implement the listing provisions of the Act (codified at 50 CFR Part 424; recently revised at 49 FR 38900, October 1, 1984) 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 *Enceliopsis nudicaulis* (Gray) Nels. var. *corrugata* Cronquist (Ash Meadows sunray), *Mentzelia leucophylla* Brandege (Ash Meadows blazing star), *Grindelia fraxinoprattensis* Reveal & Beatley (Ash Meadows gumplant), *Astragalus phoenix* Barneby (Ash Meadows milk-vetch), *Ivesia eremica* (Coville) Rydberg (Ash Meadows ivesia), *Centaureum namophilum* Reveal, Broome, & Beatley (spring-loving centaury), *Nitrophila mohavensis* Munz & Roos (Amargosa niterwort), and Ash Meadows naucorid (*Ambrysus amargosus*) are given below. Each factor is discussed first in a summary of general application to the Ash Meadows ecosystem and then in a specific manner for each taxon.

A. *The present or threatened destruction, modification, or curtailment of its habitat or range.* The subjects of this action occur only in Ash Meadows and depend on the integrity of this fragile ecosystem and on flows from the Ash Meadows basin aquifer for their survival. A significant portion of plant habitat in Ash Meadows was eliminated in the 1960's when the Carson Slough was drained to facilitate peat mining. Following the cessation of peat mining, plowing for large-scale farming by Spring Meadows, Inc. removed most of the native plants in the northern portion of Ash Meadows and destroyed much of the habitat of the spring-loving centaury, Ash Meadows gumplant, Ash Meadows ivesia, Ash Meadows blazing star, Ash Meadows milk-vetch, and Ash Meadows sunray. Although Amargosa niterwort habitat was not plowed, free-flowing water to its habitat was interrupted by upstream plowing and reduction of spring flows resulting from ground water pumping.

The Ash Meadows aquifer is estimated to yield a total of 25,000 acre-feet annually; approximately 17,000 acre-feet of this discharged from springs in Ash Meadows (Winograd and Thordarson 1975, Dudley and Larson 1976). Cook and Williams (1982) analyzed the amount of available water within the Ash Meadows aquifer and

compared it to the amount of water certified to users within the area; they estimated that consumption of water is certified to exceed the annual yield of the aquifer by approximately 225 percent. Recent purchase of land and certified water rights for the Ash Meadows NWR ensures that discharge from springs will continue; however, the sensitive nature of spring discharge (Dudley and Larson 1976) suggests that any large-scale ground water manipulation may alter spring discharge. The dependence of the endemic species on limited spring discharge indicates that such changes may influence terrestrial and aquatic habitats so that they may no longer be inhabited by these species.

The Ash Meadows sunray is endemic to Ash Meadows (Beatley 1977), where it occupies dry washes and weathered saline soils. It is one of the more common species of plants endemic to Ash Meadows but its populations have been reduced during the past 15 years by habitat elimination for agricultural production, the initial phases of PEC's development, and road construction. Trampling by resident wild and free-roaming horses, off-road vehicle activity, and road development continue to detrimentally impact populations (Mozingo and Williams 1980). Acquisition of PEC lands includes only approximately 39 percent of the proposed critical habitat for this species, with the remainder of its habitat located on BLM and private lands in the area. The clearing of these private lands would eliminate approximately 20 percent of remaining habitat.

The Ash Meadows milk-vetch is one of the rarest plants endemic to Ash Meadows, with specific habitat requirements for particular arid, stable soils. Its populations are small and widely scattered over the eastern portion of Ash Meadows (Beatley 1977). Existing populations have been greatly reduced from those known over the past 15 years by land development during road construction and cropland establishment. Threats to this species include alterations of storm drainage patterns by road construction activities, mining on lands occupied by populations not located within the bounds of the Ash Meadows NWR, trampling by wild and free-roaming horses, and elimination during planned road construction. Approximately 30 percent of the habitat occupied by the Ash Meadows milk-vetch is located on lands the Service recently purchased for the Ash Meadows NWR.

The Ash Meadows gumplant is peripherally associated with riparian

areas in habitats where soil moisture is maintained by perched ground water distantly provided by spring discharge (Cochrane 1981). Situated in the transition zone between riparian areas intimately associated with springs and the arid desert uplands, this species is extremely vulnerable to decreases in spring discharge that would effectively reduce the available amount of perched ground water and dry its habitat. It is found in areas where mining claims for clays are located, and in proposed corridors for road construction. Its populations are reduced by the trampling and grazing of wild and free-roaming horses. Habitat presently occupied by the species has been dramatically reduced, from that known historically, by water diversion into pipes and concrete ditches, agricultural development, and ground water depletion. Approximately 26 percent of the known populations of the Ash Meadows gumplant are found on lands recently purchased by the Service to establish the Ash Meadows NWR.

The spring-loving centaury once occurred outside of Ash Meadows near Beatty, Nye County, Nevada; near Tecopa in Inyo County, California; and at Furnace Creek in Death Valley National Monument. It has not been recently found at these sites and is now considered extirpated outside of Ash Meadows (Reveal, Broome, and Beatley 1973). It is found in riparian areas in Ash Meadows bordering springs and seeps and is frequently associated with the Ash Meadows gumplant. Remaining populations are smaller and less numerous than those known historically, because of riparian habitat elimination attributed to ground water depletion, water diversion, spring alteration, peat mining in Carson Slough during the early 1960's, and land development for agriculture and municipal facilities. Threats to its continued existence include ground water depletion causing decreases in spring discharge, road construction through riparian areas, and trampling and overgrazing by wild and free-roaming horses. Approximately 37 percent of the known spring loving centaury populations were recently purchased by the Service during establishment of the Ash Meadows NWR.

The Ash Meadows blazing star is associated with upland alkaline soils found in arroyos and on knolls only within the more xeric portions of Ash Meadows. This uncommon plant is often found with the Ash Meadows milk-vetch and Ash Meadows sunray (Beatley 1977). Existing populations have been greatly reduced, from those known to

have occurred as little as 15 years ago, by habitat disturbance during road construction, cropland development, and peat mining in Carson Slough. Threats to its existence include the alteration of storm drainage patterns through arroyos by road construction, habitat destruction in locations where road construction activities are proposed, and the trampling by wild and free-roaming horses (Mozingo and Williams 1980). Approximately 37 percent of the habitat occupied by the Ash Meadows blazing star is located on lands the Service recently purchased for the Ash Meadows NWR.

The Ash Meadows ivesia is associated with highly alkaline, clay lowlands or depressions where soil moisture remains high from perched ground water maintained by springs and seeps (Mozingo and Williams 1980). Its presently existing populations are smaller and less numerous than those known historically, because of habitat eliminations during agricultural development, including cropland development, spring alteration, and stream channelization and diversion; and during road construction occurring with municipal development. Ground water depletion, drying ivesia habitat, poses the greatest threat to the existence of this species. Its dependence on perched ground water issuing from seeps and springs or their outflows makes it extremely vulnerable to decreases in spring discharge that result in less water seeping to areas distantly removed from water sources. Proposed road construction could eliminate populations by passing through habitat or interrupting drainage patterns and drying areas that are presently moist. Approximately 45 percent of the known populations occur on land recently purchased to establish the Ash Meadows NWR.

The Amargosa niterwort is confined to specific habitat that is restricted to extremely local areas within the Carson Slough in Nevada and California, where saline and alkaline sinks occur near the terminuses of seepage from springs that lie many miles to the north and east in Ash Meadows (Beatley 1977). Threats to this species in its extremely restricted habitat include off-road vehicle activity, nearby mining activity, and ground water depletion drying its habitat. All of the known populations occur on land managed by BLM; no populations are known to occur within land recently purchased by the Service to establish the Ash Meadows NWR.

The Ash Meadows naucorid is found only in flowing water associated with Point of Rocks Springs in east-central

Ash Meadows. Its remaining habitat is greatly reduced from that known to have existed historically, because of channelization of the springs' outflow for agricultural diversion, and because of large-scale alteration of the Point of Rocks Springs area when PEC impounded approximately 90 percent of the flowing water. This species is now restricted to several stream channels less than 0.3 meters wide and 10 meters long. Threats to its livelihood include ground water depletion decreasing spring discharge, and extremely limited range making it susceptible to decline because of a single event disturbing its habitat or causing mortality. All of the remaining habitat of this species occurs within land purchased to establish the Ash Meadows NWR.

B. Overutilization for commercial, recreational, scientific, or educational purposes. No threats from overutilization are presently known to exist that may adversely affect the plant species. The extremely small population size of the Ash Meadows naucorid makes this species vulnerable to collection for scientific purposes.

C. Disease or predation. The spring-loving centaury, Ash Meadows gumplant, and Ash Meadows ivesia are grazed by cattle and feral horses. The Ash Meadows gumplant has been found to be 90 percent depleted within a fenced area where cattle and horses graze near Ash Meadows Rancho. Introduced fishes and crayfish occur in Ash Meadows and are potential predators of the Ash Meadows naucorid.

D. The inadequacy of existing regulatory mechanisms. The State Forester Fire Warden of the Nevada Division of Forestry maintains a list of critically endangered plants. That list includes the spring-loving centaury, Ash Meadows gumplant, Ash Meadows milk-vetch, and Ash Meadows blazing star. Other than providing recognition of these species' status, inclusion on this list provides no legal protection of the individual plants or their habitats. The Amargosa niterwort is listed as endangered on the State of California list of rare and endangered species. That designation does not protect this species from the major threat to its existence, interruption of the water supply for its habitat.

E. Other natural or manmade factors affecting its continued existence. Trampling by cattle and/or feral horses is a threat to the native plants throughout Ash Meadows.

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 the Ash Meadows sunray, Ash Meadows blazing star, Ash Meadows milk-vetch, Ash Meadows ivesia, Ash Meadows gumplant, spring-loving centaury, and Ash Meadows naucorid as threatened species, and to list the Amargosa niterwort as an endangered species. These listings are appropriate because of past disturbance to habitats has eliminated these species outside of a few relatively pristine areas. These areas may be adversely impacted by future ground water depletion, mining activities, road construction, and/or grazing activities of cattle and wild and free-roaming horses.

These species were proposed for endangered status on October 13, 1983 (48 FR 46590). The recognition of the Ash Meadows sunray, Ash Meadows blazing star, Ash Meadows milk-vetch, Ash Meadows gumplant, spring-loving centaury, Ash Meadows ivesia, and Ash Meadows naucorid as threatened species, rather than endangered species, reflects the recent acquisition of PEC lands to create the Ash Meadows NWR and thereby protect populations of these species. The threatened classification, in spite of this recent acquisition, is appropriate because the Ash Meadows NWR includes only a relatively small portion of the remaining populations of the subject plants, or in the case of the Ash Meadows naucorid, a single, extremely small population. The land recently purchased does not include adequate area to maintain the endemic plants and animals occurring in sharply defined and restricted habitats within the Ash Meadows ecosystem. Even the populations on this land remain vulnerable to a variety of problems.

The Amargosa niterwort is listed as endangered because none of its habitat is located within the area of management concern that will ultimately encompass all of the acreage proposed for the Ash Meadows NWR (Sada 1984). Its extremely localized distribution makes it vulnerable to extinction by single events such as mining, off-road vehicle activity, or ground water depletion.

An explanation of critical habitat designation is presented in the "Critical Habitat" section of this rule.

Critical Habitat

Critical habitat, as defined by Section 3 of the Act means: (i) the specific areas within the geographical area occupied by a species, at the time it is listed in accordance with the Act, on which are

found those physical or biological features (I) essential to the conservation of the species and (II) that may require special management considerations or protection, and (ii) specific areas outside the geographical area occupied by a species at the time it is listed, upon a determination that such areas are essential for the conservation of the species.

Section 4(a)(3) of the Act requires that critical habitat be designated to the maximum extent prudent and determinable concurrently with the determination that a species is endangered or threatened.

Critical habitat being designated for the Ash Meadows sunray consists of about 1,760 acres in Ash Meadows, Nye County, Nevada. These areas include dry washes or whitish, saline soil associated with outcrops of a pale whitish limestone.

Critical habitat being designated for the Ash Meadows milk-vetch consists of 1,200 acres in Ash Meadows, Nye County, Nevada. These areas include dry, hard, white, barren, saline, clay flats, knolls and slopes.

Critical habitat being designated for the Ash Meadows gumplant consists of 1,968 acres in Ash Meadows, Inyo County, California, and Nye County, Nevada. These areas include saltgrass meadows along streams and pools or drier areas with alkali clay soils. An additional 40 acres (NW ¼ NW ¼ sec. 30, T26N, R6E) in Inyo County may be added in the near future (see the announcement in the Proposed Rules section of today's Federal Register).

Critical habitat being designated for the Ash Meadows blazing star consists of 1,240 acres in Ash Meadows, Nye County, Nevada. These areas include sandy or saline clay soils along canyon washes and near springs and seeps.

Critical habitat being designated for the Ash Meadows ivesia consists of 880 acres in Ash Meadows, Nye County, Nevada. These areas include saline seep areas of light colored clay uplands.

Critical habitat being designated for the spring-loving centaury consists of 1,840 acres in Ash Meadows, Nye County, Nevada. These areas include moist to wet clay soils along banks of streams or in seepage areas.

Critical habitat being designated for the Amargosa niterwort consists of 1,200 acres in Ash Meadows, Inyo County, California. These areas include salt encrusted alkaline flats. An additional 1,200 acres (W ½ sec. 6, W ½ NW ¼ and S ½ sec. 7, sec. 18 T25N, R6E) in Inyo County and 160 acres (SW ¼ sec. 9, T18S, R50E) in Nye County, Nevada, may be added in the near future (see the

announcement in the Proposed Rules section of today's Federal Register).

Critical habitat being designated for the Ash Meadows naucorid consists of about 10 acres in Ash Meadows, Nye County, Nevada, including Point of Rocks Springs and their immediate outflows. These areas include flowing warm water over rock and gravel substrate.

Taking into account the overlaps in these critical habitat areas, an area of 6,933 acres includes all of the critical habitat being designated for these 8 species at this time.

Section 4(b)(8) requires, for any proposed or final regulation that designates critical habitat, a brief description and evaluation of those actions (public and private) which may adversely modify such habitat or be affected by such designation. Except for the Ash Meadows gumplant and the Amargosa niterwort, the critical habitats designated in this rule include the entire known present ranges of the subject species.

Activities that may adversely modify critical habitats are mining, overgrazing, land development for agriculture, road construction, ground water depletion, and/or off-road vehicle use. All of these activities could modify habitats so that they would no longer be occupied by the subject species. The Service notes that activities on public lands (Fish and Wildlife Service and BLM) in the designated areas are generally consistent with protection of critical habitats. Activities occurring on public lands will be subject to review pursuant to section 7 of the Act; and, therefore, may proceed in a manner whereby the continued existence of these species is not jeopardized. The designation of critical habitat on private lands does not preclude all development. The listing of animals that occurs on private land may affect development only if such development takes, harms, or harasses these animals as discussed in section 9 of the Act.

Section 4(b)(2) of the Act requires the Service to consider economic and other impacts of designating a particular area as critical habitat. The Service has considered these critical habitat designations in light of additional information obtained during the public comment period. H.D. Carper, Director, California Department of Fish and Game, requested that 80 acres for the Ash Meadows gumplant and 1,320 acres for the Amargosa niterwort be added to the proposed critical habitat in California. One hundred-sixty acres is being considered for addition to the niterwort critical habitat in Nevada in response to the recent discovery of a

new population of this species. These areas are not being included at this time, but their addition will be considered following the closing of the 60 day comment period. The current designations of critical habitat for the seven plants and one insect consist of about 10,158 acres (not counting overlaps; see third paragraph above) of Federal and private lands. Primary activities in the area include issuing of mining claims, road construction, grazing, recreation, and agriculture. There is no known involvement of Federal funds or permits for the private lands. Analyses of local mining activities and other land use practices on Federal land indicate that no significant economic impacts are expected to result from the designation of critical habitat.

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 prohibitions against taking and harm for listed animals, and removal and reduction to possession for listed plants 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. Regulations implementing this interagency cooperation provision of the Act are codified at 50 CFR Part 402 and are now under revision (see proposal at 48 FR 29990; June 29, 1983). 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 Bureau of Land Management has jurisdiction over much of the critical habitat area designated

herein. Many activities presently being conducted on BLM lands are consistent with the conservation of these species. Small-scale mining activities and consideration for easements on BLM land are activities that may require Section 7 consultation. Pursuant to Section 404 of the Clean Water Act, the United States Army Corps of Engineers (COE) has jurisdiction over activities that may place dredge or fill in the waters or adjacent wetlands within Ash Meadows. Road construction activities in Ash Meadows would require Section 7 consultation with COE prior to its issuance of permits allowing dredging or filling to occur. The Service manages approximately 11,000 acres of the area as the Ash Meadows NWR; activities anticipated on this refuge are compatible with the conservation of these species. There is no known involvement of Federal funds or permits for the private lands within the critical habitat designations.

The Act and its implementing regulations found at 50 CFR 17.81, 17.82, and 17.83 for endangered, and 17.71 and 17.72 for threatened species set forth a series of general trade prohibitions and exceptions that apply to plants. With respect to the Ash Meadows sunray, Ash Meadows blazing star, Ash Meadows gumplant, Ash Meadows milk-vetch, spring-loving centaury, Ash Meadows ivesia, and Amargosa niterwort, all trade prohibitions of section 9(a)(2) of the Act, implemented by 50 CFR 17.81 or 17.71, apply. These prohibitions, in part, make it illegal for any person subject to the jurisdiction of the United States to import or export, transport in interstate or foreign commerce in the course of a commercial activity, or sell or offer for sale these species in interstate or foreign commerce. Seeds from cultivated specimens of threatened plant species are exempt from these prohibitions provided that a statement of "cultivated origin" appears on their containers. Certain exceptions can apply to agents of the Service and State conservation agencies. The Act and 50 CFR 17.82 and 17.83 or 17.72 also provide for the issuance of permits to carry out otherwise prohibited activities involving endangered or threatened species under certain circumstances. It is anticipated that few trade permits would ever be sought or issued since these species are not common in cultivation or the wild.

Section 9(a)(2)(B) of the Act, as amended in 1982, prohibits the removal and reduction to possession of endangered plant species from areas under Federal jurisdiction. The new prohibition now applies to the

Amargosa niterwort. Section 4(d) allows for the provision of such protection to threatened species through regulations. This new protection will apply to the Ash Meadows sunray, Ash Meadows blazing star, Ash Meadows gumplant, Ash Meadows ivesia, Ash Meadows milk-vetch, and spring-loving centaury once regulations are promulgated. Permits for exceptions to this prohibition are available through section 10(a) and 4(d) of the Act, until revised regulations are promulgated to incorporate the 1982 amendments. Proposed regulations implementing this prohibition were published on July 8, 1983 (48 FR 31417), and it is anticipated that these will be made final following public comment. The Ash Meadows sunray, Ash Meadows blazing star, Ash Meadows gumplant, Ash Meadows milk-vetch, Ash Meadows ivesia, and spring-loving centaury are found on both private and Federal lands in the Ash Meadows area. The Amargosa niterwort is known only on Federal lands. 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, D.C. 20240 (703/235-1903).

The Act and implementing regulations found at 50 CFR 17.21 and 17.31 set forth a series of general prohibitions and exceptions that apply to all threatened wildlife and will apply to the Ash Meadows naucorid beginning on the effective date of this rule. These prohibitions, in part, make it illegal for any person subject to the jurisdiction of the United States to take, import or export, ship in interstate commerce in the course of a commercial activity, or sell or offer for sale in interstate or foreign commerce any listed species. It also is illegal to possess, sell, deliver, carry, transport, or ship any such wildlife that has been taken illegally. Certain exceptions apply to agents of the Service and State conservation agencies.

Permits may be issued to carry out otherwise prohibited activities involving threatened wildlife species under certain circumstances. Regulations governing permits are at 50 CFR 17.22, 17.23, and 17.32. Such permits are available for scientific purposes, to enhance the propagation or survival of the species, and/or for incidental take in connection with otherwise lawful activities. For threatened species, there are also permits for zoological exhibition, educational purposes, or special purposes consistent with the purpose of the Act. In some instances, permits may be issued during a specific

period of time to relieve undue economic hardship that would be suffered if such relief were not available.

Public Comments Solicited

In an accompanying announcement in the "Proposed Rules" section of today's Federal Register, the Service solicits comments and suggestions from the public, other concerned governmental agencies, the scientific community, industry, or other interested parties concerning the possible addition of areas to the critical habitats designated in the present rule for the Ash Meadows gumplant and the Amargosa niterwort. These possible additional areas are described in the critical habitat section of this rule. The comment period opens on the date of publication of this rule and the accompanying notice of request for further comments and will remain open for 60 days. A final decision on the inclusion of these additional areas will be made and published in the Federal Register following the conclusion of the comment period.

National Environmental Policy Act

The Fish and Wildlife Service has determined that an Environmental Assessment, as defined by 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).

Regulatory Flexibility Act and Executive Order 12291

The Department of the Interior has determined that designation of critical habitat for these species will not constitute a major action under Executive Order 12291 and certifies that this designation will not have a significant economic effect on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*). No significant economic or other impacts are expected to result from the designations of critical habitat for the seven plants and one insect of Ash Meadows. The critical habitat areas are located on Federal and private lands. Federal management of the critical habitat areas by the BLM and the Service is expected to be compatible with the critical habitat designations. There is no known involvement of Federal funds or permits for the private lands within the critical habitat designations. No direct costs, enforcement costs, or information collection or recordkeeping

requirements are imposed on small entities by the designations. These determinations are based on a Determination of Effects that is available at the Service's Portland Regional Office at the address given at the beginning of this document.

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Author

The primary author of this final rule is Donald W. Sada, Great Basin Complex Office, U.S. Fish and Wildlife Service, Reno, Nevada 89502 (702/784-5227 or FTS 470-5227).

List of Subjects in 50 CFR Part 17

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

Regulations 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. 1531 *et seq.*).

2. Amend § 17.11(h) by adding the following, in alphabetical order under Insects, to the List of Endangered and Threatened Wildlife:

§ 17.11 Endangered and threatened wildlife.

(h) * * *

Species		Historic range	Vertebrate population where endangered or threatened	Status	When listed	Critical habitat	Special rules
Common name	Scientific name						
Insects.							
Nauconid, Ash Meadows.....	<i>Ambrysus amargosus</i>	U.S.A. (NV).....	NA.....	T.....	178	17.95(i)	NA

3. Amend § 17.12(h) by adding the following, in alphabetical order under family names indicated, 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					
Asteraceae—Aster family:						
<i>Encolopia nudicaulis</i> var. <i>corrugata</i>	Ash Meadows sunray	U.S.A. (NV)	T	178	17.96(a)	NA
<i>Grindelia traxnoprarensis</i>	Ash Meadows gumplant	U.S.A. (CA, NV)	T	178	17.96(a)	NA
Chenopodiaceae—Goosefoot family:						
<i>Nitrophila mohaveensis</i>	Amargosa nitewort	U.S.A. (CA)	E	178	17.96(a)	NA
Fabaceae—Pea family:						
<i>Astragalus phoenix</i>	Ash Meadows milk-vetch	U.S.A. (NV)	T	178	17.96(a)	NA
Gentianaceae—Gentian family:						
<i>Centaureum namophilum</i>	Spring-loving centaury	U.S.A. (CA, NV)	T	178	17.96(a)	NA
Loasaceae—Loasa family:						
<i>Mentzelia leucophylla</i>	Ash Meadows blazing star	U.S.A. (NV)	T	178	17.96(a)	NA
Rosaceae—Rose family:						
<i>Ivesia eremica</i>	Ash Meadows ivesia	U.S.A. (NV)	T	178	17.96(a)	NA

4. Amend Section 17.95(i) by adding critical habitat of the Ash Meadows naucorid as follows: The position of this entry under 17.95(i) will follow the same sequence as the species occurs in 17.11(h).

§ 17.95 Critical habitat—fish and wildlife.

(i) * * *

* * * * *

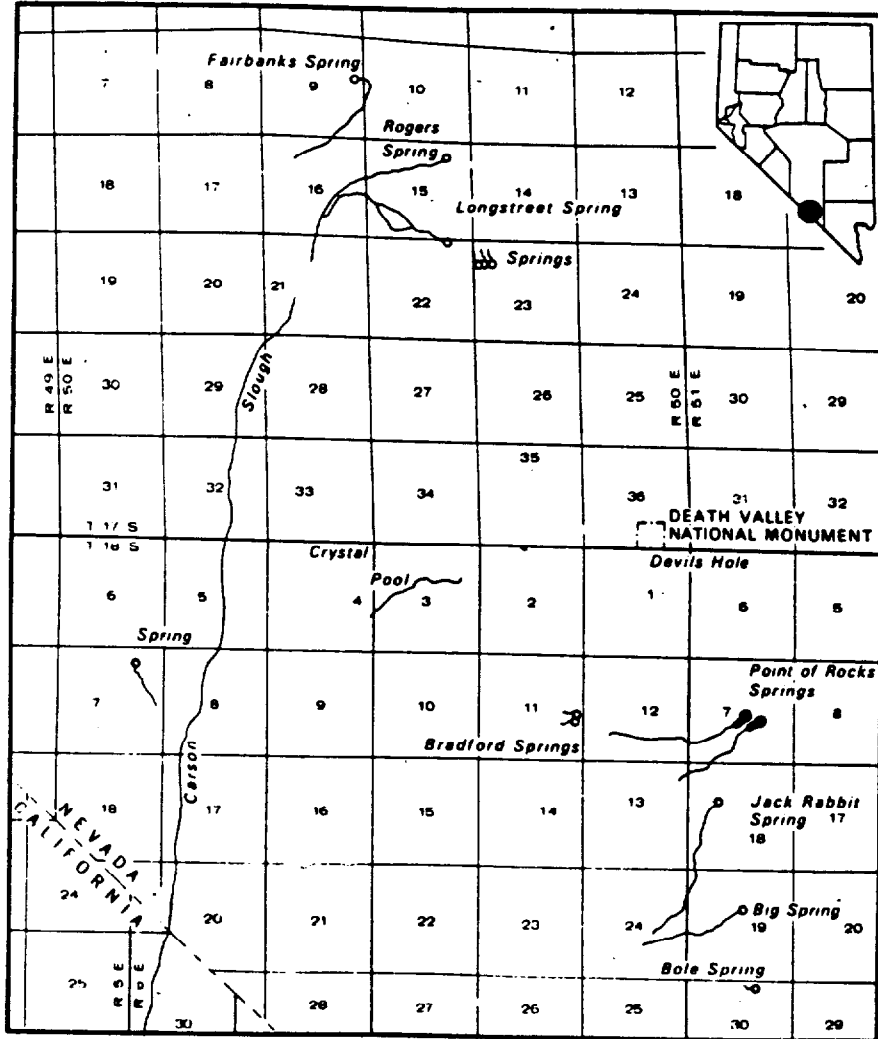
Ash Meadows Naucorid (*Ambrysus amargosus*)

Nevada, Nye County, Point of Rocks Springs and their immediate outflows in SE¼ sec. 7, T18S, R51E.

Known primary constituent elements include flowing warm water over rock and gravel substrate.

ASH MEADOWS NAUCORID

Nye County, NEVADA



5. Amend Section 17.96(a) by adding critical habitat of the Ash Meadows sunray as follows: The position of this entry under § 17.96(a) will follow the same sequence as the species occurs in § 17.12(h).

§ 17.96 Critical habitat—plants.

(a) * * *

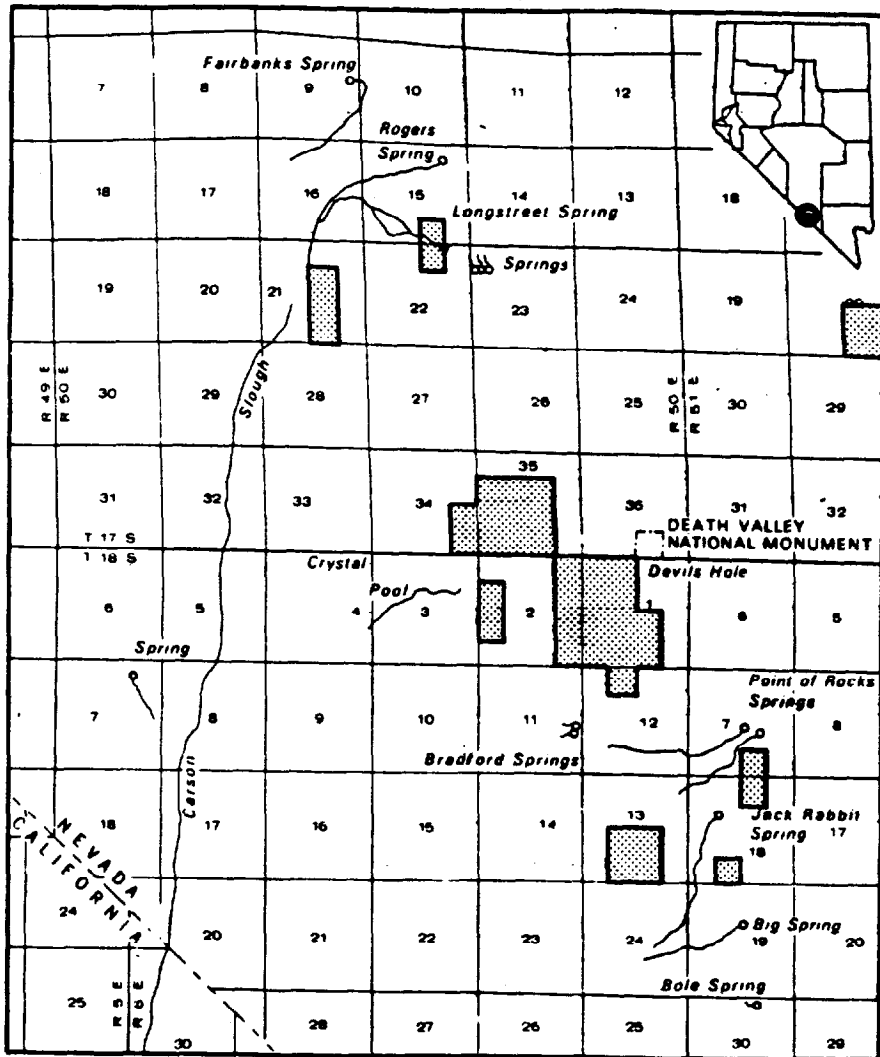
Family Asteraceae—*Enceliopsis nudicaulis* var. *corrugata* (Ash Meadows sunray).

Nevada, Nye County, Ash Meadows:
 SW ¼ SE ¼ sec. 15, SW ¼ NE ¼ and W ¼ SE ¼ sec. 21, NW ¼ NE ¼ sec. 22, E ½ SE ¼ sec. 34, SW ¼ NE ¼, S ½ NW ¼, SW ¼, and W ¼ SE ¼ sec. 35, T17S R50E, SE ¼ sec. 20, T17S, R51E, NW ¼, SW ¼, and W ½ SE ¼ sec. 1, E ½ NE ¼, SW ¼ NW ¼, NW ¼ SW ¼, and E ½ SE ¼ sec. 2, Ne ¼ NW ¼ S. 12, E ½ SW ¼ and W ¼ SE ¼ sec. 13, T18S, R50E, SW ¼ SE ¼ sec. 7, NW ¼ NE ¼ and SE ¼ SW ¼ sec. 18, T18S, R51E.

Known primary constituent elements include dry washes or whitish saline soil associated with outcrops of pale whitish limestone.

ASH MEADOWS SUNRAY

Nye County, NEVADA



6. Amend § 17.96(a) by adding critical habitat of the Ash Meadows gumplant as follows: The position of this entry under § 17.96(a) will follow the same sequence as the species occurs in § 17.12(h).

§ 17.96 Critical habitat—plants.

(a) * * *

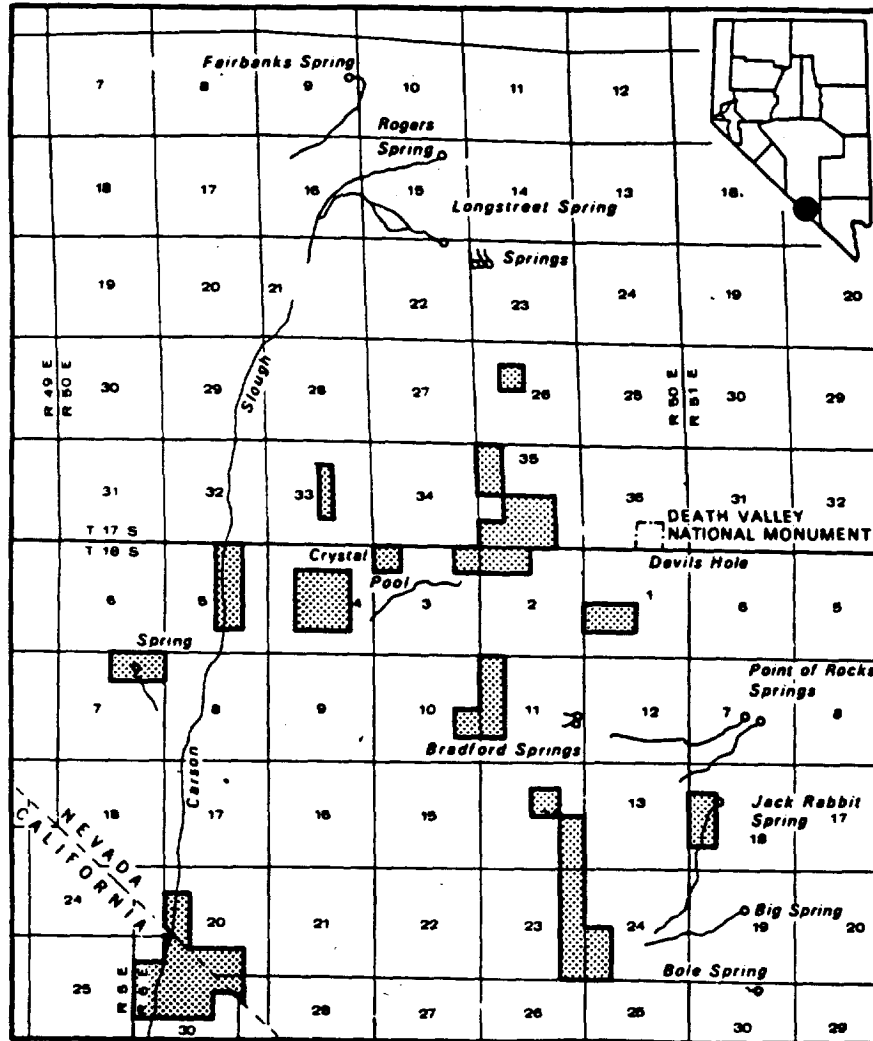
Family Asteraceae—*Grindelia fraxinoprattensis* (Ash Meadows gumplant).
California, Inyo County, Ash Meadows: NE¼, E½NW¼, SW¼NW¼, N½SW¼, and NW¼SE¼ sec. 30, T28N, R6E.

Nevada, Nye County, Ash Meadows: SE¼NW¼ sec. 26, W½SW¼NE¼ and W½NW¼SE¼ sec. 33, W½NW¼, SW¼SW¼, E½SE¼, and W½SE¼ sec. 35, T17S, R50E. N½SW¼ sec. 1, N½NW¼ sec. 2, NE¼NE¼ and NW¼NW¼ sec. 3, SW¼NE¼, SE¼NW¼, NE¼SW¼, and NW¼SE¼ sec. 4; W½NE¼ and NW¼SE¼ sec. 5, N½NE¼ sec. 7, NE¼SE¼ sec. 10, W½NW¼ and NW¼SW¼ sec. 11, SW¼NE¼ and E½SE¼ sec. 14; SW¼NW¼, SW¼SE¼, W½SW¼, and SE¼SW¼ sec. 20 northeast of the Nevada-California boundary, E½NE¼ and E½SE¼ sec. 23, W½SW¼ sec. 24, NW¼NE¼ sec. 29 northeast of the Nevada-California boundary, T18S, R50E. SW¼NW¼ and NW¼SW¼ sec. 18, T18S, R51E.

Known primary constituent elements include saltgrass meadows along streams and pools or drier areas with alkali clay soils.

ASH MEADOWS GUMPLANT

Inyo County, CALIFORNIA and Nye County, NEVADA



7. Amend § 17.96(a) by adding critical habitat of the Amargosa niterwort as follows: The position of this entry under § 17.96(a) will follow the same sequence as the species occurs in § 17.12(h).

§ 17.96 Critical habitat—plants.

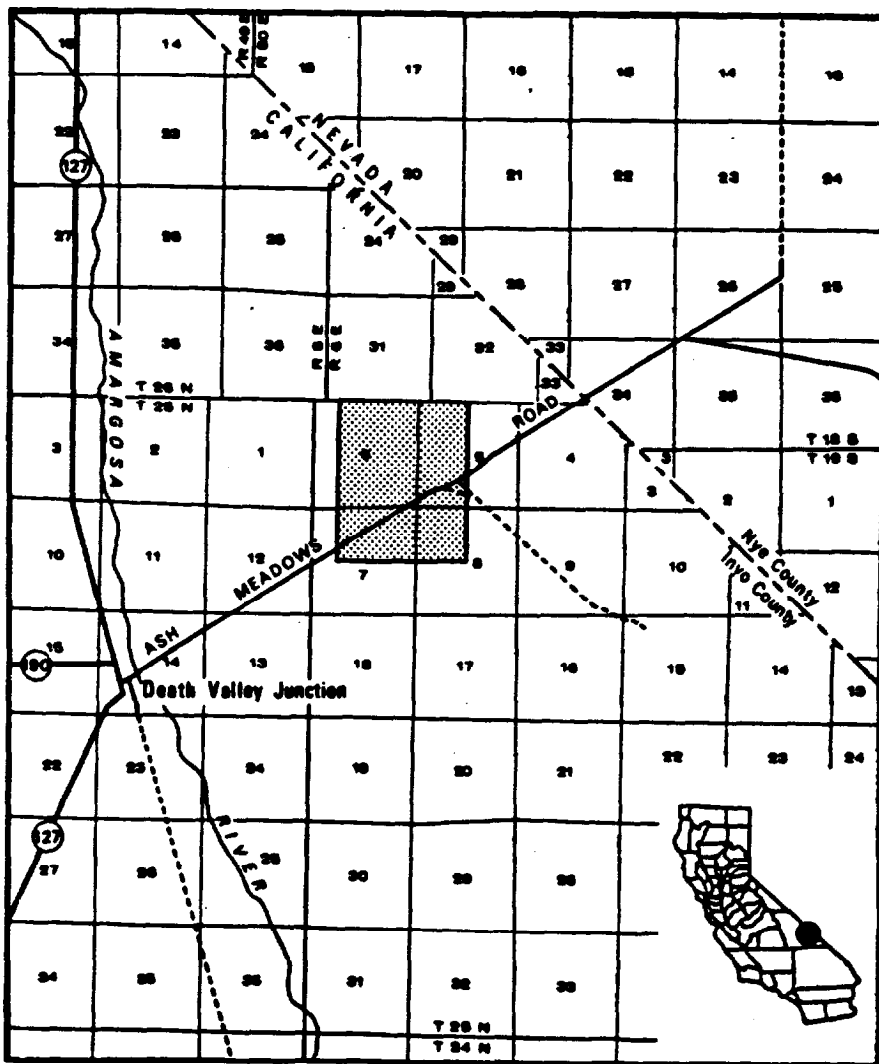
(a) * * *

Family Chenopodiaceae—*Nitrophila mohavensis* (Amargosa niterwort). California, Inyo County, Ash Meadows: W½ sec. 5, E½ sec. 6, NE¼ and E½NW¼ sec. 7, NW¼ sec. 8, T25N, R6E.

Known primary constituent elements include salt-encrusted alkaline flats.

AMARGOSA NITERWORT

Inyo County, CALIFORNIA



8. Amend § 17.96(a) by adding critical habitat of the Ash Meadows milk-vetch as follows: The position of this entry under § 17.96(a) will follow the same sequence as the species occurs in § 17.12(h).

§ 17.96 Critical habitat—plants.

(a) * * *

Family Fabaceae—*Astragalus phoenix* (Ash Meadows milk-vetch). Nevada, Nye

County, Ash Meadows: W½NW¼ and SW¼SW¼ sec. 14, SW¼NE¼ and W½SE¼ sec. 21, NE¼SE¼ sec. 22, NW¼ sec. 26.

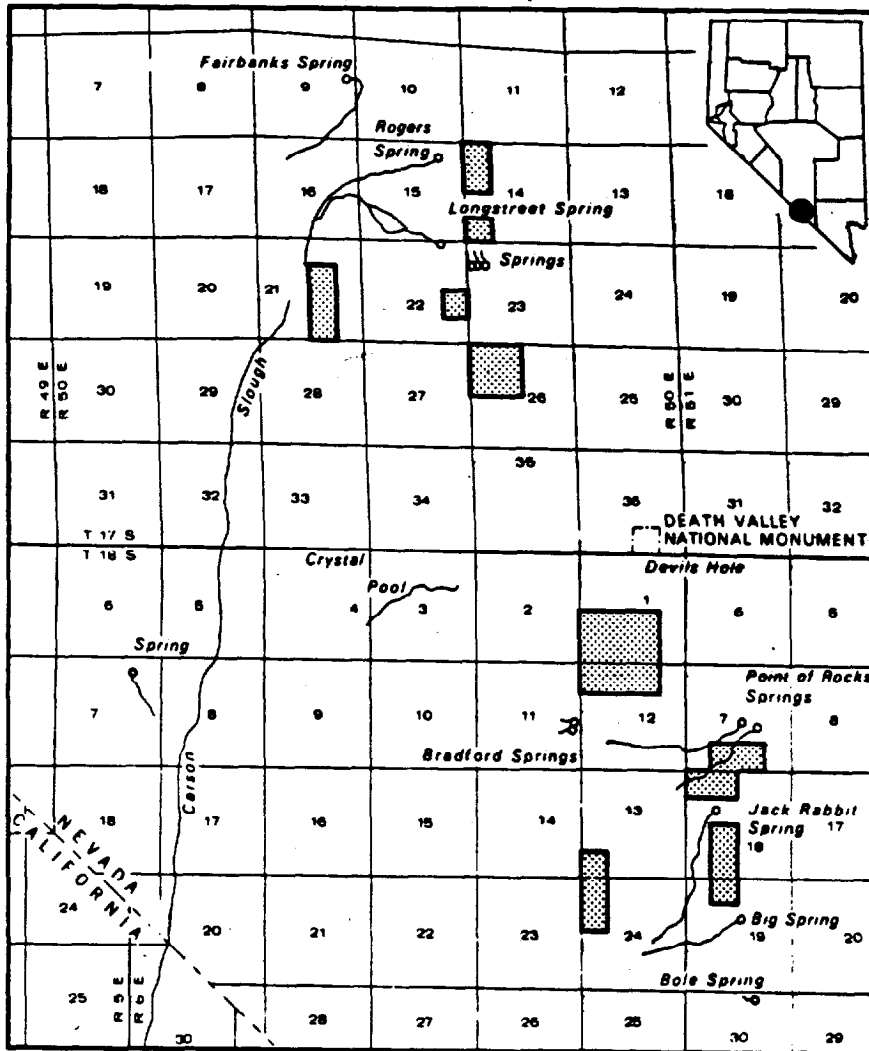
T17S, R50E. SW¼ and W½SE¼ sec. 1, NW¼NE¼ and N½NW¼ sec. 12, SW¼SW¼ sec. 13, W½NW¼ sec. 24, T18S.

R50E. SE¼SW¼ and SW¼SE¼ sec. 7, N½NW¼ and E½SW¼ sec. 18, NE¼NW¼ sec. 19, T18S, R51E.

Known primary constituent elements include dry, hard, white, barren, saline, clay flats, knolls, and slopes.

ASH MEADOWS MILK-VETCH

Nye County, NEVADA



9. Amend § 17.96(a) by adding critical habitat of the spring-loving centaury as follows: The position of this entry under § 17.96(a) will follow the same sequence as the species occurs in § 17.12(h).

§ 17.96 Critical habitat—plants.

(a) * * *

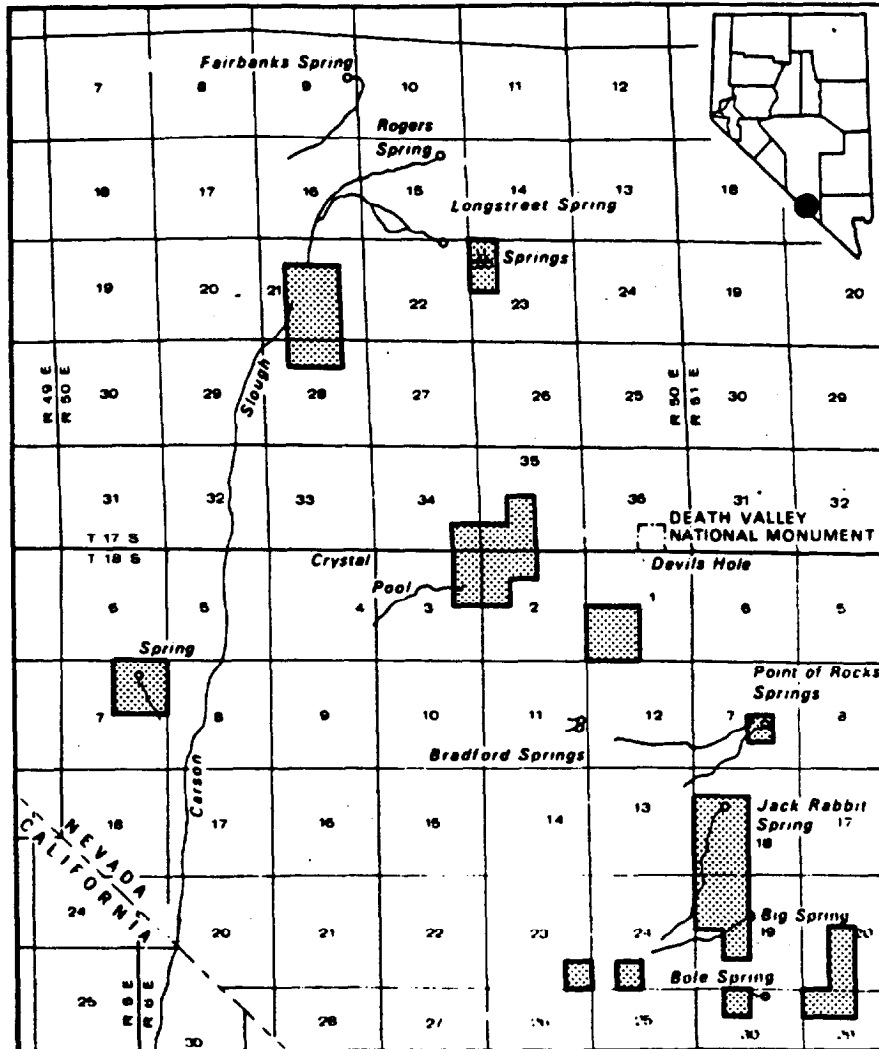
Family Gentianaceae—*Centaurium namophilum* (spring-loving centaury). Nevada, Nye County, Ash Meadows:

SW¼NE¼, SE¼NW¼, E¼SW¼, and W¼SE¼ sec. 21; W¼NW¼ sec. 23, NW¼NE¼ and NE¼NW¼ sec. 28, SE¼SE¼ sec. 34, SW¼SW¼ and E¼SW¼ sec. 35, T17S, R50E. SW¼ sec. 1, NE¼NW¼ and W¼NW¼ sec. 2, E¼NE¼ sec. 3, NE¼ sec. 7; SE¼SE¼ sec. 23, SE¼SW¼ sec. 24, T18S, R50E. NW¼SE¼ sec. 7, S¼NW¼ and SW¼ sec. 18, NW¼ and NE¼SE¼ sec. 19, E¼SW¼ sec. 20, N¼NW¼ sec. 29, NE¼NW¼ sec. 30, T18S, R51E.

Known primary constituent elements include moist to wet clay soils along banks of streams or in seepage areas.

SPRING-LOVING CENTAURY

Nye County, NEVADA



10. Amend § 17.96(a) by adding critical habitat of the Ash Meadows blazing star as follows: The position of this entry under § 17.96(a) will follow the same sequence as the species occurs in § 17.12(h).

§ 17.96 Critical habitat—plants.

(a) * * *

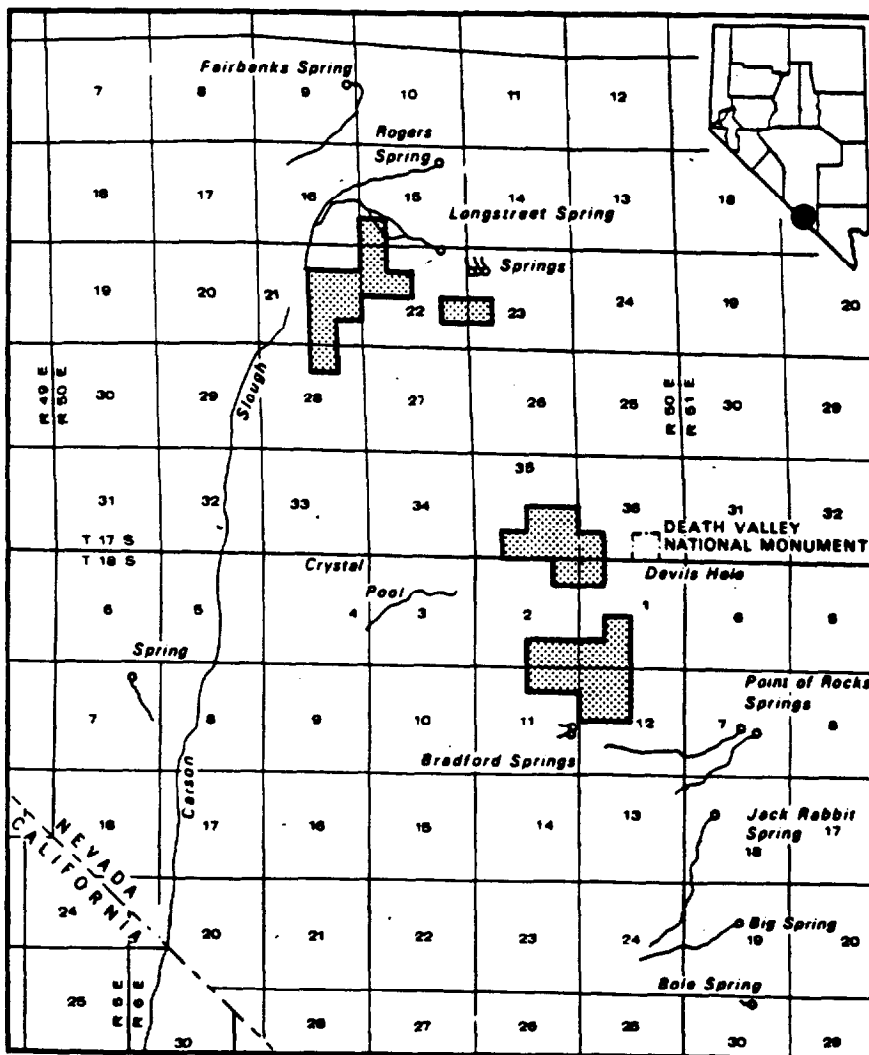
Family Loasaceae—*Mentzelia leucophylla*

(Ash Meadows blazing star), Nevada, Nye County, Ash Meadows: SW¼SW¼ sec. 15, S½NE¼, N½SE¼, and SW¼SE¼ sec. 21, NW¼NW¼, S½NW¼, and NE¼SE¼ sec. 22, NW¼SW¼ sec. 23, NW¼NE¼ sec. 28, SE¼SW¼ and SE¼ sec. 35, SW¼SW¼ sec. 36, T17S, R50E, NW¼NW¼, SW¼SW¼, and E½SW¼ sec. 1, NE¼NE¼ and S½SE¼ sec. 2, N½NE¼ sec. 11, NW¼ sec. 12, T18S, R50E.

Known primary constituent elements include sandy or saline clay soils along canyon washes and near springs and seeps.

ASH MEADOWS BLAZING STAR

Nye County, NEVADA



11. Amend § 17.96(a) by adding critical habitat of the Ash Meadows *ivesia* as follows: The position of this entry under § 17.96(a) will follow the same sequence as the species occurs in § 17.12(h).

§ 17.96 Critical habitat—plants.

(a) . . .

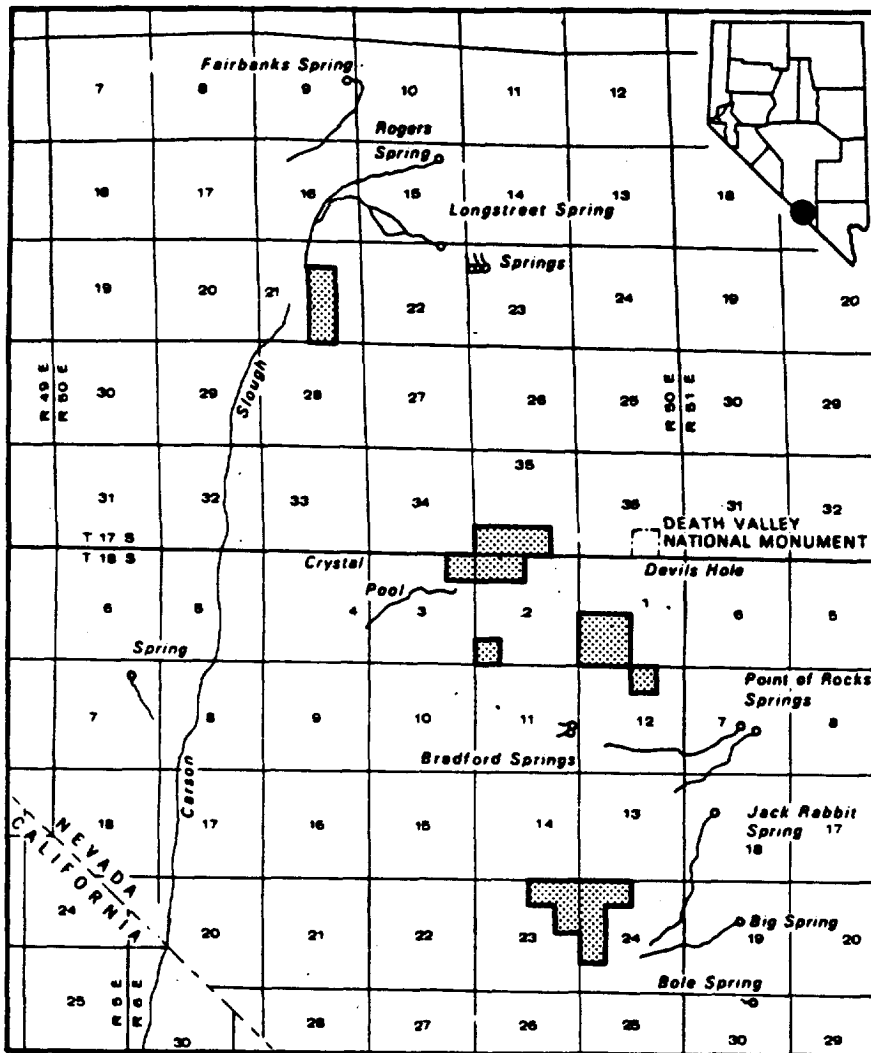
Family Rosaceae—*Invesia eremica* (Ash

Meadows *ivesia*). Nevada, Nye County, Ash Meadows: SW¼NE¼ and W¼SE¼ sec. 21, S¼SW¼ and SW¼SE¼ sec. 35, T17S, R50E. SW¼ sec. 1, N¼NW¼ and SW¼SW¼ sec. 2, NE¼NE¼ sec. 3, NW¼NE¼ sec. 12, N¼NE¼ and SE¼NE¼ sec. 23, N¼NW¼, SW¼NW¼, and NW¼SW¼ sec. 24, T18S, R50E.

Known primary constituent elements include saline seep areas of light colored clay uplands.

ASH MEADOWS IVESIA

Nye County, NEVADA



Dated: March 21, 1985.

J. Craig Potter,
Assistant Secretary for Fish and Wildlife and
Parks.

[FR Doc. 85-12034 Filed 5-17-85; 8:45 am]

BILLING CODE 4310-65-M