DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

RIN 1018–AJ09

Endangered and Threatened Wildlife and Plants; Proposed Designation of Critical Habitat for Astragalus lentiginosus var. piscinensis (Fish Slough Milk-vetch)

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Proposed rule.

SUMMARY: We, the U.S. Fish and Wildlife Service (Service), propose to designate critical habitat pursuant to the Endangered Species Act of 1973, as amended (Act), for the federally threatened *Astragalus lentiginosus* var. *piscinensis* (Fish Slough milk-vetch). We propose to designate approximately 8,490 acres (ac) (3,435 hectares (ha)) of land in Mono and Inyo Counties, California.

We hereby solicit data and comments from the public on all aspects of this proposal, including data on economic and other effects of the designation. We may revise this proposal prior to final designation to incorporate or address new information received during public comment periods.

DATES: We will accept comments until August 3, 2004. Public hearing requests must be received by July 19, 2004.

ADDRESSES: If you wish to comment, you may submit your comments and materials concerning this proposal by any one of several methods:

1. You may send written comments and information to the Field Supervisor, Ventura Fish and Wildlife Office, U.S. Fish and Wildlife Service, 2493 Portola Road, Suite B, Ventura, CA 93003.

2. You may send your comments by electronic mail (e-mail) to *fw1fsmv_pch@r1.fws.gov*. For directions on how to submit electronic filing of comments, *see* the ''Public Comments Solicited'' section below for file format and other information about electronic filing.

3. You may hand-deliver written comments and information to our Ventura Fish and Wildlife Office, at the above address, or fax your comments to (805) 644–3958.

All comments and materials received, as well as supporting documentation used in the preparation of this proposed rule, will be available for public inspection, by appointment, during normal business hours at the above address.

FOR FURTHER INFORMATION CONTACT: Diane Noda, Field Supervisor, Ventura Fish and Wildlife Office, U.S. Fish and Wildlife Service, 2493 Portola Road, Suite B, Ventura, CA 93003 (telephone 805/644–1766; facsimile 805/644–3958).

SUPPLEMENTARY INFORMATION:

Public Comments Solicited

It is our intent that any final action resulting from this proposal will be as accurate as possible. Therefore, we solicit comments or suggestions from the public, other concerned governmental agencies, the scientific community, industry, or any other interested party concerning this proposed rule. On the basis of public comment, during the development of the final rule we may find that areas proposed are not essential, are appropriate for exclusion under section 4(b)(2), or not appropriate for exclusion, and in all of these cases, this information would be incorporated into the final designation. We particularly seek comments concerning:

(1) The reasons why any areas should or should not be determined to be critical habitat as provided by section 4 of the Act, including whether the benefits of designation will outweigh any threats to the taxon resulting from the designation;

(2) Specific information on the amount and distribution of *Astragalus lentiginosus* var. *piscinensis* and its habitat, and which habitat or habitat components are essential to its conservation and why;

(3) Land use designations and current or planned activities in or adjacent to the area proposed and their relationship to the proposed critical habitat;

(4) Current or planned water withdrawals or diversions in or adjacent to the area proposed and their relationship to the proposed critical habitat;

(5) Any foreseeable economic or other potential impacts resulting from the proposed designation of critical habitat, in particular, any impacts on small entities and to the water user community;

(6) Methodologies that we might use, pursuant to section 4(b)(2) of the Act, to determine if the benefits of excluding an area from critical habitat outweigh the benefits of designating the area as critical habitat;

(7) Whether our approach to critical habitat designation could be improved or modified in any way to provide for greater public participation and understanding, or to assist us in accommodating public concerns and comments;

(8) Additional information that can be used to characterize or more completely understand the regional aquifer that supports aquatic or riparian habitat in Fish Slough, or how local ground water pumping activities affect the hydrology of Fish Slough; and

(9) Information or comment on the merits of the proposed 1,000 meter wide upland area surrounding the alkaline soils, including the need or value of including all or part of this area to ensure an adequate supply of pollinators, manage for control of invasive species, and include sites that could be restored to alkaline soils and reoccupied by *Astragalus lentiginosus* var. *piscinensis*.

If you wish to comment, you may submit your comments and materials concerning this proposal by any one of several methods (*see* **ADDRESSES** section). Please submit electronic comments in ASCII file format and avoid the use of special characters and any form of encryption. Please also include Attn: ''RIN 1018–AJ09'' and your name and return address in the body of your message. If you do not receive a confirmation from the system that we have received your internet message, contact us directly by calling our Ventura Fish and Wildlife Office at phone number (805) 644–1766. Please note that the e-mail address ''*fw1fsmv__pch@r1.fws.gov*'' will be closed out at the termination of the public comment period.

Our practice is to make comments, including names and home addresses of respondents, available for public review during normal business hours. Individual respondents may request that we withhold their home address from the rulemaking record and we will honor such requests to the extent allowable by law. There also may be circumstances in which we would withhold from the rulemaking record a respondent's identity, as allowable by law. If you wish us to withhold your name and/or address, you must state this prominently at the beginning of your comment. We will not, however, consider anonymous comments. We will make all submissions from organizations or businesses, and from individuals identifying themselves as representatives or officials of organizations or businesses, available for public inspection in their entirety. Comments and materials received will be available for public inspection, by appointment, during normal business hours at the above address.

Preamble

Designation of Critical Habitat Provides Little Additional Protection to Species

In 30 years of implementing the Act, we have found that the designation of statutory critical habitat provides little additional protection to most listed species while consuming significant amounts of available conservation resources. Our present system for designating critical habitat has evolved since its original statutory prescription into a process that provides little real conservation benefit, is driven by litigation and the courts rather than biology, limits our ability to fully evaluate the science involved, consumes enormous agency resources, and imposes huge social and economic costs. We believe that additional agency discretion would allow our focus to return to those actions that provide the greatest benefit to the species most in need of protection.

Role of Critical Habitat in Actual Practice of Administering and Implementing the Act

While attention to and protection of habitat is paramount to successful conservation actions, we have consistently found that, in most circumstances, the designation of critical habitat is of little additional value for most listed species yet consumes large amounts of conservation resources. Sidle (1987) stated ''Because the ESA can protect species with and without critical habitat designation, critical habitat designation may be redundant to the other consultation requirements of section 7.'' Currently, only 445 species or 36 percent of the 1,244 listed species in the United States under the jurisdiction of the Service have designated critical habitat. We address the habitat needs of all 1,244 listed species through conservation mechanisms such as listing, section 7 consultations, the Section 4 recovery planning process, the Section 9 protective prohibitions of unauthorized take, the Section 6 funding to the states, and the Section 10 incidental take permit process. We believe that it is these measures that may make the difference between extinction and survival for many species.

Procedural and Resource Difficulties in Designating Critical Habitat

We have been inundated with lawsuits for our failure to designate critical habitat, and we face a growing number of lawsuits challenging critical habitat determinations once they are made. These lawsuits have subjected us to an ever-increasing series of court orders and court-approved settlement agreements, compliance with which now consumes nearly the entire listing program budget. This leaves us with little ability to prioritize our activities to direct scarce listing resources to the listing program actions with the most biologically urgent species conservation needs.

The consequence of the critical habitat litigation activity is that limited listing funds are used to defend active lawsuits, to respond to Notices of Intent (NOIs) to sue relative to critical habitat, and to comply with the growing number of adverse court orders. As a result, listing petition responses, our own proposals to list critically imperiled species, and final listing determinations on existing proposals are all significantly delayed.

The accelerated schedules of court-ordered designations have left us with almost no ability to provide for adequate public participation or to ensure a defect-free rulemaking process before making decisions on listing and critical habitat proposals due to the risks associated with noncompliance with judicially-imposed deadlines. This in turn fosters a second round of litigation in which those who fear adverse impacts from critical habitat designations challenge those designations. The cycle of litigation appears endless, is very expensive, and in the final analysis provides relatively little additional protection to listed species.

The costs resulting from the designation include legal costs, the cost of preparation and publication of the designation, the analysis of the economic effects and the cost of requesting and responding to public comment, and in some cases the costs of compliance with the National Environmental Policy Act (NEPA); all are part of the cost of critical habitat designation. None of these costs result in any benefit to the species that is not already afforded by the protections of the Act enumerated earlier, and they directly reduce the funds available for direct and tangible conservation actions.

Background

Astragalus lentiginosus Douglas ex Hook. var. *piscinensis* Barneby (Fish Slough milk-vetch), was described by Barneby (1977). The type specimen was collected from BLM Spring in the central portion of Fish Slough 8 miles (mi) (13 kilometers (km)) north of the town of Bishop, California. Spellenberg (1993) retained this variety in his treatment of *Astragalus*, which was published in the most recent edition of *The Jepson Manual of Higher Plants of California*. The genus *Astragalus* is in the pea family (Fabaceae).

Astragalus lentiginosus var. *piscinensis* is a prostrate perennial, with few-branching stems that are up to 39 inches (in) (1 meter (m)) in length and covered with stiff, appressed hairs. Leaflets, flowers, and fruits are described in the final listing rule (63 FR 53596).

The Service listed *Astragalus lentiginosus* var. *piscinensis* as threatened under the Act on October 6, 1998 (63 FR 53596). Please refer to our final listing rule for a more detailed discussion of the species' taxonomic history and description. *A. l. var. piscinensis* is not listed by the State of California as a rare, threatened, or endangered taxon, and is not a state candidate for listing as threatened or endangered.

Status and Distribution

The entire known range of *Astragalus lentiginosus* var. *piscinensis* is restricted to a 6 mi (9.7 km) long area of alkaline habitat that parallels Fish Slough, a wetland oasis in Inyo and Mono Counties, California. Fish Slough is located in the northern end of the Owens Valley area, along the eastern edge of the Sierra Nevada Mountains in central California. The Fish Slough area is approximately 4,200 feet (ft) (1,280 m) in elevation. Alkaline habitat at Fish Slough is characterized by soil that has a sandy or silty texture and a white appearance. This alkaline habitat forms a ring around the seasonally and permanently flooded wetland habitat in the slough itself. The alkali flat and alkali scrub habitats in the Fish Slough ecosystem were mapped in 1991 (Ferren 1991a). Approximately 540 ac (219 ha) of alkaline habitat were present in Fish Slough when this mapping effort was completed. For reasons that are not precisely known, *A. l.* var. *piscinensis* does not inhabit the entire alkaline habitat present in Fish Slough (Ferren 1991a; Odion *et al.* 1991).

A comparison of the distribution of alkaline habitat that exists in Fish Slough today with aerial photographs taken in 1950 suggests the geographic extent of alkaline habitat in Fish Slough has decreased over time (Anne Halford, Bureau of Land Management, pers. comm. 2004). There has not been an effort to precisely map the boundary of the alkaline areas in the photographs, but some of the areas that previously possessed alkaline soil would now be mapped as xeric uplands that would not be likely to support *Astragalus lentiginosus* var. *piscinensis*.

In 1992, staff from the Los Angeles Department of Water and Power

(LADWP) and Bureau of Land Management (BLM) performed the first comprehensive survey to locate all of the *Astragalus lentiginosus* var. *piscinensis* in Fish Slough (Novak 1992). The survey documented approximately 3,200 widely-scattered individuals within a 530–ac (214–ha) area. This survey also demonstrated that multiple sites that had been occupied by *A. l.* var. *piscinensis* in the 1980s and 1991 were larger in geographic extent than previously suspected. One site where six plants were documented in the 1980s and 1991 had no plants in 1992. Another site experienced a decline in the number of observed plants from 44 in 1983 to 8 in 1992. The areas where *A. l.* var. *piscinensis* occurred in 1992 were resurveyed in 2000, and it was determined that the overall number of mature plants declined from the 3,200 individuals in 1992 to 1,543 plants in 2000 (A. Halford, pers. comm. 2004). The 2000 survey did not result in the discovery of any new, additional patches of *A. l.* var. *piscinensis*, and the overall distribution of the taxon in 2000 was similar to what was observed in 1992.

Fish Slough can be divided into northern, central, and southern areas. Sixty percent of the known *Astragalus lentiginosus* var. *piscinensis* plants occur in the northern portion of the slough on land owned by the LADWP. In 1991, LADWP staff constructed an 80–ac (32–ha) cattle exclosure in the northern portion of Fish Slough; in 1992, over 95 percent of the *A. l.* var. *piscinensis* plants documented in the northern portion of Fish Slough were within this exclosure. Approximately 35 percent of the known *A. l.* var. *piscinensis* plants occur in the central portion of the slough on lands owned and managed by the BLM or the LADWP. The remaining 5 percent of the known plants occur as scattered patches in the southern portion of the slough located north of the McNally Canal. This land is owned by the BLM or the LADWP. The area south of McNally Canal contains little habitat suitable for *A. l.* var. *piscinensis* (Novak 1992).

Staff from the LADWP and the BLM collect population trend data for *Astragalus lentiginosus* var. *piscinensis* in five monitoring plots on land owned by the LADWP. Two monitoring plots are located in the 80-ac (32-ha) cattle exclosure, where grazing has not occurred since 1991. The other three monitoring plots are subject to grazing. One grazed plot is north of the cattle exclosure, and the other two are in the central portion of Fish Slough near BLM Spring. Monitoring of the five plots occurred annually between 1991 and 2002 (Paula Hubbard, LADWP, pers. comm. 2003; A. Halford, pers. comm. 2003), except for one plot near BLM Spring in 1995, and for the plot north of the cattle exclosure in 1996. When trend data were collected, there was an effort to quantify the number of seedlings, immature plants, and mature plants in each plot.

Data collected from LADWP plots provide insight into how the abundance of *Astragalus lentiginosus* var. *piscinensis* has varied over time at specific sites. An average of 33 plants was present in ungrazed plot 1 between 1991 and 1996, but this declined by 61 percent to an average of 13 plants between 1997 and 2002. Similarly, in ungrazed plot 2, an average of 104 plants was present between 1991 and 1996; this declined by 52 percent to an average of 50 plants between 1997 and 2002. In the grazed plot north of the cattle exclosure (plot 3), an average of 41 plants was present between 1991 and 1996, while the average present between 1997 and 2002 was 48 (an increase of 17 percent). In grazed plot 4, north of BLM Spring, an average of 15 plants was present between 1991 and 1996; this number declined by 53 percent to an average of 7 plants between 1997 and 2002. In grazed plot 5, north of BLM Spring, an average of 7 plants were present in the plot between 1991 and 1996; this number declined by 86 percent to an average of 1 plant between 1997 and 2002. If data from all plots (*i.e.*, grazed and ungrazed) are considered together, the average number of plants in the plots declined by approximately 41 percent between the two periods. The number of immature plants observed within a plot has exceeded the number of mature plants in that plot for only one plot (grazed plot 3) during the monitoring period, and this only occurred twice. The number of seedlings present in different plots has varied over time, with the greatest number of seedlings occurring in the northern portion of the slough in ungrazed plot 2 and grazed plot 3. The plant census data collected within and outside the cattle exclosure suggest that the decline in *A. l.* var. *piscinensis* within the monitoring plots may be caused by one or more factors that may not relate directly to grazing activities, and suggest that low numbers of cattle in an area may not necessarily have an adverse effect on *A. l.* var. *piscinensis*.

Staff from the BLM also monitor changes in the abundance of *Astragalus lentiginosus* var. *piscinensis* at five plots established in 1997 or 1998 on lands under their jurisdiction. Three of the plots are near the middle of Fish Slough. The number of *A. l.* var. *piscinensis* in two of these plots declined from 14 plants in 1997 to 3 plants in 2003, and from 47 plants in 1998 to 5 plants in 2003. At the third plot near the middle of Fish Slough, the number of plants has varied between 19 and 22 individuals during a 7-year period. At the two plots near BLM Spring, the number of *A. l.* var. *piscinensis* has remained relatively constant between 1997 and 2003, with one plot having between 39 and 46 individuals, and the other plot having between 6 and 8 plants. The only plot where a substantial number of young individuals were seen between 1997 and 2003 was located near BLM spring.

Threats

Previously identified threats to *Astragalus lentiginosus* var. *piscinensis* include the presence of roads, effects related to the use of motorized off-road vehicles, effects related to cattle grazing, and herbivory by native vertebrates and insects (USFWS 1998). A potential threat to *A. l.* var. *piscinensis* not previously identified in other documents includes competition with, or displacement by, non-native plant species (P. Hubbard, pers. comm. 2003). The modification of wetland habitats which results from ground water pumping or water diversion activities that alter the surface and underground hydrology of Fish Slough are also a threat to the taxon (USFWS 1998).

The use of motorized off-road vehicles and the presence of roads have affected habitat occupied by *Astragalus lentiginosus* var. *piscinensis*. Approximately 19 mi (30.6 km) of roads exist within 3,280 ft (1,000 m) of the alkaline habitats within Fish Slough. South of BLM Spring, on the east side of the slough, a road bisects one cluster of the listed plants, and off-road vehicle use in the central portion of the slough has been documented (Novak 1992). Soil compaction and topographic changes resulting from road presence and off-road vehicle activity can affect soil moisture regimes in Fish Slough, and potentially result in changes in seasonal inundation patterns that may adversely affect *A. l.* var. *piscinensis*.

Roads through upland areas in Fish Slough also create increased levels of human visitation that would otherwise be unlikely if roads were absent. Roads have been associated with negative impacts that alter the biotic integrity of both terrestrial and aquatic habitats (Trombulak and Frissell 2000). A growing body of published literature indicates that vehicular traffic along road networks in terrestrial habitats increases the likelihood that non-native plant seeds will be introduced into areas

where they were previously absent (Wace 1977; Schmidt 1989; Lonsdale and Lane 1994). Some of the non-native plant species in Fish Slough (*e.g.*, five hook bassia (*Bassia hyssopifolia*)) are identified as pest plants of ecological concern (CalEPPC 1999) and have the potential to invade and degrade the quality of alkaline habitats and compete with *Astragalus lentiginosus* var. *piscinensis*.

The BLM does not permit grazing on lands they administer in Fish Slough. With the exception of the 80-ac (32-ha) cattle exclosure in the northern portion of Fish Slough, lands under LADWP management that support Fish Slough milk-vetch are grazed (P. Hubbard, pers. comm. 2003). The LADWP has not completed a management plan that provides specific prescriptions to guide grazing activities in Fish Slough. Currently, there are approximately 40 head of cattle and up to 8 horses in Fish Slough between late summer and March annually (P. Hubbard, pers. comm. 2003). The LADWP schedules grazing activities so cows are absent from the slough during the milk-vetch growing season.

We believe that moderate to intense levels of cattle grazing in Fish Slough could result in a number of adverse effects. For example, the composition of the local plant community could be altered by reducing or eliminating species that cannot tolerate trampling and increasing the abundance of plant species that are tolerant to trampling. Other taxa that were not previously part of the native plant community may be introduced as a result of grazing activities (*e.g.*, introduction of seeds of non-native species from supplemental feed that is not weed seed free). The regular presence of cattle in an area could result in the creation of cattle trails that are devoid of vegetation, and therefore reduce the amount of habitat that could be occupied by *Astragalus lentiginosus* var. *piscinensis*. Trampling by livestock can also reduce the number of burrows or other nesting sites available for bee pollinators (Sugden 1985), and actions that concentrate the presence of cattle in a particular location (*e.g.*, placement of salt licks) may lead to an increased likelihood that individual *A. l.* var. *piscinensis* plants could be trampled.

Native herbivores may exert a substantial effect on the reproductive output of individual *Astragalus lentiginosus* var. *piscinensis* plants. Infestations of root systems by phloem-sucking insects and high rates of rabbit herbivory have been reported for *A. l.* var. *piscinensis* individuals that were present in the central portion of Fish Slough (Mazer and Travers 1992). Ferren (1991a) observed rabbit feces adjacent to individuals that had been stripped of leaves, flowers, and seeds, and assumed these plants had been browsed or otherwise adversely affected by rabbits. Mazer and Travers (1992) found that plants in the central portion of Fish Slough experienced high herbivory levels when compared to plants in the northern portion of the slough. Some plants in the center of the slough had 80 percent of their branches grazed by rabbits or rodents, while in the northern portion of the slough fewer than 20 percent of the branches of some plants had been grazed. Herbivory of *A. l.* var. *piscinensis* by rodents and insects has also been noted during the aforementioned surveys of long-term monitoring plots (P. Hubbard, pers. comm. 2003). A large percentage of *A. l.* var. *piscinensis* seeds in Fish Slough may be perforated by holes that are created by weevils or wasps. In addition, gopher activity and ant colonies under previously live plants have been noted during monitoring activities. It is not known if herbivory of *A. l.* var. *piscinensis* plants is responsible for low recruitment levels of the listed plant taxon.

Investigations into the condition and viability of *Astragalus lentiginosus* var. *piscinensis* seeds suggest that a large fraction of its viable seeds will germinate under laboratory conditions, but that a large proportion of seeds may be parasitized. Of the 2,901 seeds collected from 35 plants in Fish Slough on September 10, 2000, 1,039 seeds (36 percent) were found to have been parasitized by one or more insect species (Wall 2001). The identity of the insects has not been determined, but may include a weevil (Joy Fatooh, BLM, in litt. 2003), or a wasp (Wall 2001). Parasitism of a seed is believed to always result in damage to the seed embryo (Joy Fatooh, BLM, in litt. 2002).

The proliferation of non-native plant species in Fish Slough has the potential to adversely affect *Astragalus lentiginosus* var. *piscinensis*. Non-native salt cedar (*Tamarix ramosissima*), five hook bassia, Russian thistle (*Salsola iberica*), and pepperweed (*Lepidium latifolium*) would compete with *A. l.* var. *piscinensis* for available space, nutrients, and water if the different species had overlapping distributions. The presence of pepperweed in Fish Slough is especially problematic since that species is able to colonize and rapidly spread into a variety of habitat types, including alkaline areas where *A. l.* var. *piscinensis* is present (P. Hubbard, pers. comm. 2003). Currently, dense concentrations of non-native plant species are not found with *A. l.* var. *piscinensis*. Recognizing that non-native competition could be a problem, LADWP, BLM, and California Department of Fish and Game (CDFG) staff systematically work to control the spread of non-native plant species in Fish Slough.

Natural changes in, or human-induced modifications of, aquatic habitat in Fish Slough may reduce the number of *Astragalus lentiginosus* var. *piscinensis*. A long-term threat to the milk-vetch may include the expansion of Fish Slough Lake. The increased size of the lake may be due to natural geologic processes (*e.g.*, earthquakes), or human-caused actions (*e.g.*, the construction of Red Willow Dam, a small earthen berm). Expansion of Fish Slough Lake from natural processes or human-caused actions has resulted in increased soil inundation, expansion in the distribution of emergent wetland vegetation, and loss of suitable alkaline habitat for Fish Slough milk-vetch (Ferren 1991c). Beavers (*Castor canadensis*) have been observed in Fish Slough Lake and the Northwest Springs area, and their presence sometimes results in changes in local soil moisture conditions as they construct ponds. The construction of a beaver dam near one of the aforementioned long-term monitoring plots on land owned by the LADWP (ungrazed plot 1) appears to coincide with decreases in the number of *A. l.* var. *piscinensis* plants that were counted (P. Hubbard, pers. comm. 2004).

The creation of earthen dams, fish barriers, and weirs that facilitate water flow measurements has also likely affected *Astragalus lentiginosus* var. *piscinensis*. The dams and fish barriers have been built for a variety of purposes, including habitat enhancement for waterfowl, creation of sport fish habitat, and management activities that were designed to benefit native fish. These activities have also altered the slough hydrology by increasing the size of permanently flooded habitats, modifying surface water drainage patterns, and increasing the length of time that *A. l.* var. *piscinensis* habitat is inundated or subject to elevated soil moisture conditions. Each of these effects creates conditions that are less suitable or unsuitable for *A. l.* var. *piscinensis*. No new dams have been built in Fish Slough since 1980. Staff from the BLM and CDFG have removed two dams and are analyzing the potential to remove Red Willow Dam, now the single largest water control structure remaining in Fish Slough.

Water diversion activities associated with mining operations may also affect the hydrology near the southern end of Fish Slough. The Desert Aggregate Mine is situated near the southernmost portion of Fish Slough on lands owned by the LADWP and is 0.75 mi (1.2 km) south of the southernmost known occurrence of *Astragalus lentiginosus* var. *piscinensis*. The mine was specifically developed at a site with coarse, permeable gravels and the transmissivity (a measure of the ease at which ground water can move through the aquifer) of the area around the mine is relatively high (Danskin 1998). Ground water pumping activities at pits at the mine in 1986 or 1987 adversely affected riparian vegetation to the extent that large areas of vegetation south and down-gradient of the mine and Fish Slough died as water tables declined (P. Hubbard, pers. comm. 2003; Sally Manning, County of Inyo, pers. comm. 2003). The effect of ground water pumping on alkaline habitats around the mine was not documented and so it is unknown if alkaline habitats near the mine were also adversely affected. Mining activities nearest to Fish Slough have been completed.

Three major spring areas are present in Fish Slough. Northeast Spring and Northwest Springs are located in the northern portion of the slough, and BLM Spring is present in the east-central portion of the slough. Staff from the LADWP has quantified the amount of water passing through Fish Slough for several decades. The volume of water moving through Fish Slough at one monitoring site declined from 148–152 cubic feet per second (cfs) (4,191–4,304 liters per second (lps)) in the early 1920s to 84–96 cfs (2,379–2,718 lps) in the early 1960s. This reduction in water flow is larger than the annual variability in water volume that can be accounted for by seasonal variation in evaporative losses and transpiration by local phreatophytes (Pinter and Keller 1991). The cause for the decrease in water flow through the slough between the 1920s and the 1960s has not been conclusively identified, but may be related to increased ground water pumping in the Chalfant Valley 2 mi (3.2 km) northeast of Fish Slough (Pinter and Keller 1991; MHA 2001).

Analysis of water table levels in a number of wells in Chalfant and Hammil valleys east or northeast of Fish Slough confirms that there is an incremental decrease in the potentiometric surface (*i.e.*, height of the water table) between these valleys and Fish Slough. This decrease suggests that ground water is moving down gradient from Chalfant and Hammil valleys to the Fish Slough area (MHA 2001).

The Tri-Valley Groundwater Management District (District) in Mono County was established in 1989, in part, to review and approve proposals to export water from the District. The District includes Chalfant, Hammil, and Benton valleys. California landowners may extract as much ground water as they can put to beneficial use, and no permit is required to pump ground water (DWR 1996). Between 1999 and 2001, the District considered a proposal by United States Filter Water Resources, Inc. to pump and export 13,700 acre-feet (16.9 billion liters) of ground water per year (MHA 2001). If the project had been approved as initially proposed, captured water would have been conveyed in a closed pipe and diverted to a location south and down-gradient of Fish Slough. The project was ultimately abandoned, in part, because of environmental concerns for Fish Slough. The District will continue to consider applications to export water, however, as projects to do so are proposed.

Lack of recruitment is a potential threat to *Astragalus lentiginosus* var. *piscinensis.* Staff from the BLM and the LADWP has monitored this taxon from 1992 to 2002, observing that only a few young plants matured and persisted during that time (A. Halford, pers. comm. 2003; P. Hubbard, pers. comm. 2003). Two possible explanations for the lack of recruitment are high rabbit/rodent herbivory of seedlings and changes in soil hydrology or chemistry that make the habitat less suitable for seed germination and plant growth.

Previous Federal Action

On October 6, 1998, the Service published a final rule in the **Federal Register** (63 FR 53596), which determined endangered status for three plant taxa and threatened status for two plant taxa, including *Astragalus lentiginosus* var. *piscinensis.* Please refer to the final rule listing the taxon for information on previous Federal actions prior to October 6, 1998. In the final rule listing *A. l.* var. *piscinensis,* the Service determined that endangered status for this taxon was not warranted because a significant portion of the listed plant occurrences in northern Fish Slough were protected by a cattle exclosure, thereby reducing threats from grazing and trampling. In addition, the land where the taxon occurred was receiving specific management consideration at the time the final rule was published due to its inclusion in a special management unit administered by the BLM. The Service determined that, while this taxon may not have been in immediate danger of extinction, it was likely to become endangered in the foreseeable future throughout all or a significant portion of its range, and listing as threatened was warranted.

At the time *Astragalus lentiginosus* var. *pinscinensis* was listed, we determined that designation of critical habitat was not prudent because the potential benefits were outweighed by the potential negative effects of designating critical habitat. We believed that designation of critical habitat could result in increased threats of illegal collection and vandalism and the designation would not compel or require a private or other non-Federal landowner to undertake active management for the taxon or to modify proposed project activities in the absence of a Federal nexus.

On November 15, 2001, the Center for Biological Diversity and the California Native Plant Society filed a lawsuit in the U.S. District Court for the Southern District of California challenging our determination not to designate critical habitat for eight desert plants, including *Astragalus lentiginosus* var. *pinscinensis* (*Center for Biological Diversity* et al. v. *Norton,* No. 01 CV 2101). On July 1, 2002, the Court ordered the Service to reconsider its not prudent determination and propose critical habitat, if prudent, for *A. l.* var. *pinscinensis* on or before November 15, 2003. On September 9, 2003, the court issued a subsequent order that required the Service to publish a proposed critical habitat designation for *A. l.* var. *pinscinensis* by June 1, 2004.

We have reconsidered our evaluation of the threats posed by vandalism in the not prudent determination, and now determine that the threats to *Astragalus lentiginosus* var. *pinscinensis* from specific instances of vandalism are limited, if not speculative. Accordingly, we withdraw our previous determination that the designation of critical habitat is not prudent for *A. l.* var. *pinscinensis* and determine that the designation of critical habitat is prudent. At this time, we have sufficient information necessary to identify specific areas as essential to the conservation of this plant taxon and are therefore proposing critical habitat (*see* ''Methods'' section below for a discussion of information used in our reevaluation).

Critical Habitat

Section 3(5)(A) of the Act defines critical habitat as—(i) the specific areas within the geographic 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 geographic 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. ''Conservation'' means the use of all methods and procedures that are necessary to bring an endangered or a threatened species to the point at which listing under the Act is no longer necessary.

The designation of critical habitat does not affect land ownership or establish a refuge, wilderness, reserve, preserve, or other conservation area. It does not allow government or public access to private lands. Under section 7 of the Act, Federal agencies must consult with us on activities they undertake, fund, or permit that may affect critical habitat and lead to its destruction or adverse modification. However, the Act prohibits unauthorized take of listed species and requires consultation for activities that may affect them, including habitat alterations, regardless of whether critical habitat has been designated. We have found that the designation of critical habitat provides little additional protection to most listed species.

To be included in a critical habitat designation, habitat must be either a specific area within the geographic area occupied by the species on which are found those physical or biological features essential to the conservation of the species (primary constituent elements, as defined at 50 CFR 424.12(b)) and which may require special management considerations or protection, or be specific areas outside of the geographic area occupied by the species which are determined to be essential to the conservation of the species. Section 3(5)(C) of the Act states that not all areas that can be occupied by a species should be designated as critical habitat unless the Secretary determines that all such areas are essential to the conservation of the species. Our regulations (50 CFR 424.12(e)) also state that, ''The Secretary shall designate as critical habitat areas outside the geographic area presently occupied by the species only when a designation limited to its present range would be inadequate to ensure the conservation of the species.''

Regulations at 50 CFR 424.02(j) defines special management considerations or protection to mean any methods or procedures useful in protecting the physical and biological features of the environment for the conservation of listed species. When we designate critical habitat, we may not have the information necessary to identify all areas which are essential for the conservation of the species. Nevertheless, we are required to designate those areas we consider to be essential, using the best information available to us. Accordingly, we do not designate critical habitat in areas outside the geographic area occupied by the species unless the best available scientific and commercial data demonstrate that unoccupied areas are essential for the conservation needs of the species.

Section 4(b)(2) of the Act requires that we take into consideration the economic impacts, the effect on national security, and any other relevant impact, of specifying any particular area as critical habitat. We may exclude areas from critical habitat designation when the benefits of exclusion outweigh the benefits of including the areas within critical habitat, provided the exclusion will not result in extinction of the species.

Our Policy on Information Standards Under the Endangered Species Act, published in the **Federal Register** on July 1, 1994 (59 FR 34271), provides criteria, establishes procedures, and provides guidance to ensure that our decisions represent the best scientific and commercial data available. It requires our biologists, to the extent consistent with the Act and with the use of the best scientific and commercial data available, to use primary and original sources of information as the basis for recommendations to designate critical habitat. When determining which areas are critical habitat, a primary source of information should be the listing package for the species. Additional information may be obtained from a recovery plan, articles in peer-reviewed journals, conservation plans developed by States and counties, scientific status surveys and studies, biological assessments, or other unpublished materials and expert opinion or personal knowledge.

Section 4 of the Act requires that we designate critical habitat on the basis of what we know at the time of designation. Habitat is often dynamic, and species may move from one area to another over time. Furthermore, we recognize that designation of critical habitat may not include all of the habitat areas that may eventually be determined to be necessary for the recovery of the species. For these reasons, critical habitat designations do not signal that habitat outside the designation is unimportant or may not be required for recovery.

Areas that support populations, but are outside the critical habitat designation, will continue to be subject to conservation actions implemented under section 7(a)(1) of the Act and to the regulatory protections afforded by the section 7(a)(2) jeopardy standard, as determined on the basis of the best available information at the time of the action. Federally funded or permitted projects affecting listed species outside their designated critical habitat areas may still result in jeopardy findings in some cases. Similarly, critical habitat designations made on the basis of the best available information at the time of designation will not control the direction and substance of future recovery plans, habitat conservation plans, or other species conservation planning efforts if new information available to these planning efforts calls for a different outcome.

Methods

As required by the section 4(b)(2) of Act and regulations at 50 CFR 424.12, we used the best scientific information available to determine areas that contain the physical and biological features that are essential for the conservation of *Astragalus lentiginosus* var. *piscinensis,* and that may require special management considerations or protection. This includes information from our own documents, including the data from the final rule listing the taxon as threatened (66 FR 27901), recent biological surveys, reports and aerial photos, documentation provided by staff from the BLM and the LADWP, and discussions with botanical and hydrologic experts. We also conducted two site visits to Fish Slough, and met with staff from the BLM, the LADWP, and CDFG to solicit their views on various management aspects involving *A. l.* var. *piscinensis.*

Primary Constituent Elements

In accordance with section 3(5)(A)(i) of the Act and regulations at 50 CFR 424.12, in determining which areas to propose as critical habitat, we consider those physical and biological features (primary constituent elements) that are essential to the conservation of the species and that may require special management considerations or protection. These include, but are not limited to: Space for individual and population growth, and for normal behavior; food, water, air, light, minerals or other nutritional or physiological requirements; cover or shelter; sites for reproduction, germination, or seed dispersal; and habitats that are protected from disturbance or are representative of the

known historic, geographic, and ecological distributions of a species.

The proposed critical habitat unit has been delineated to provide sufficient habitat to maintain a self-sustaining population of *Astragalus lentiginosus* var. *piscinensis* in Fish Slough and includes those habitat components essential for the conservation of the taxon. These habitat components provide for: (1) Individual and population growth, including sites for germination, pollination, reproduction, pollen and seed dispersal, and seed dormancy; (2) areas that allow gene flow and provide connectivity or linkage between different locations within Fish Slough; and (3) areas that provide basic requirements for growth, such as water, light, and minerals.

The presence of water is essential to the development and maintenance of alkaline soils and habitat upon which *Astragalus lentiginosus* var. *piscinensis* depends. The alkaline soils in Fish Slough where alkali flat, alkali scrub, and meadow habitats occur are generally classified as aquic torriorthents-aquent complex with 0–2 percent slope. These alkaline soils develop as mineral-rich, shallow ground water rises under capillary action to the surface by the high evaporation rates which prevail in the Fish Slough area. As this water evaporates at the soil surface, its solute load precipitates, creating a veneer of white salts and minerals. The alkaline habitat that *A. l.* var. *piscinensis* occupies is likely to have a water table that fluctuates between 19–60 in (0.5–1.5 m) below the land surface (Odion *et al.* 1991). In areas where water tables are more 2 m (6.6 ft) deep, capillary action is insufficient to promote and maintain the development of alkaline soils (Odion *et al.* 1991).

Between May 1999 and October 2001, a variety of *in situ* and experimental studies were conducted to evaluate the relationship between photosynthetic rates, growth rates, fecundity, and survivorship of *Astragalus lentiginosus* var. *piscinensis* as depth to a water table varied (Murray and Sala, 2003). Data from these studies suggest that elevated water tables are likely to adversely affect these variables if local water tables are less than 35–40 cm (13.8–15.7 in) below the land surface. Therefore, water tables that rise too close to the land surface and the root zone of *A. l.* var. *piscinensis* may be detrimental to individual plants that are subjected to saturated soils for a prolonged period of time.

Fish Slough is a wetland in an otherwise arid landscape. The average annual rainfall in the town of Bishop is 5.0 in (12.7 centimeters (cm)). The average annual evapo-transpiration rates in alkaline meadows or alkaline scrub habitats in the greater Owens Valley area which are most similar to the habitat type occupied by *Astragalus lentiginosus* var. *piscinensis* range between 18.5–40.5 in (47.0–102.9 cm) and 15.2–23.6 in (38.6–59.9 cm), respectively (Danskin 1998). Because the low annual rainfall and high annual evapo-transpiration rates in the Bishop area create an arid environment, it is essential that a substantial and sustained amount of surface and ground water exists to maintain the wetland and riparian habitats that are present in Fish Slough.

The sources of the water that discharge from springs in Fish Slough have not yet been conclusively identified. Available data indicate that Fish Slough water is derived from the Casa Diablo Mountain area (BLM 1984; MHA 2001), the Tri-Valley area, or a combination of the two areas (MHA 2001). The Casa Diablo Mountain area reaches a maximum elevation of 7,913 ft (2,412 m) and is located 9.5 mi (15.3 km) northwest of Fish Slough. The area between Fish Slough and Casa Diablo Mountain is locally referred to as the Volcanic Tableland. The geology of the Volcanic Tableland predominantly consists of the Bishop Tuff, which has a welded ash and tuff surface veneer. Underneath the surface veneer, a thicker, more permeable layer is present in the Volcanic Tableland. The lower unit of the tuff is extensively fractured and faulted, and some areas are more permeable than wind-blown sand (DWR 1964). These fractures act as conduits that convey ground water from higher elevation areas with greater levels of precipitation to the lower elevation Fish Slough area where low amounts of precipitation predominate. The Tri-Valley area is bounded on the east by the White Mountains, which reach an elevation of up to 14,245 ft (4,342 m), and to the west by a ridge that separates it from Fish Slough. This ridge is less than 280 ft (85 m) higher than the valley floor. The high elevation of the White Mountains promotes the deposition of precipitation. This water then percolates into alluvial fans at the base of the mountains, and ultimately enters the coarse alluvium that is present on the floors of Benton, Hammil, and Chalfant valleys. Because the surface elevation decreases from Benton Valley in the north to Chalfant Valley in the south, and because Fish Slough is lower in elevation than all three of these valleys, ground water tends to move in a southerly or southwesterly direction toward Fish Slough or toward Chalfant Valley east of Fish Slough. A number of fault lines are present in the Fish Slough and Volcanic Tableland area (MHA 2001) and these features likely affect the presence, distribution, and volume of ground water present in the local area (Andy Zdon, MHA Environmental Consulting, Inc., pers. comm. 2004).

The alkaline flats where *Astragalus lentiginosus* var. *piscinensis* occurs are typically dominated by a *Spartina—Sporobolis* (cordgrass—dropseed) plant association. *A. l.* var. *piscinensis* may also occur where a sparse amount of *Chrysothamnus albidus* (rabbit-brush) exists in the transition zone between *Spartina—Sporobolis* and *Chrysothamnus albidus—Distichlis* (rabbit-brush—saltgrass) plant associations. Sawyer and Keeler-Wolf (1995) classify the alkaline habitats where *A. l.* var. *piscinensis* occurs as a cordgrass series or saltgrass series. *Astragalus lentiginosus* var. *piscinensis* is frequently sympatric with *Ivesia kingii* (alkali ivesia). The higher elevation areas where *A. l.* var. *piscinensis* is absent consist of dry shadscale scrub communities that are dominated by various species of *Atriplex* spp. (saltbush).

Distribution of many alkaline-tolerant plant species is largely determined by a combination of environmental factors, predominantly soil moisture and salinity. These two factors in combination may affect the physiology of adult and immature plants, seed germination, and seedling survival. Mazer and Travers (1992) suggest that seed germination and successful establishment of *Astragalus lentiginosus* var. *piscinensis* seedlings are infrequent events, and that sufficient rainfall is necessary to promote seed germination and survivorship of young plants. The suite of environmental factors that determine where *Astragalus lentiginosus* var. *piscinensis* occurs is also likely to determine the composition of the broader plant community of which *A. l.* var. *piscinensis* is a part. Changes in soil moisture and salinity are likely to influence not only the abundance and presence of *A. l.* var. *piscinensis* but also to affect the persistence and character of the *Spartina—Sporobolis* plant association in which *A. l.* var. *piscinensis* occurs.

Upland areas adjacent to the alkaline habitat where *Astragalus lentiginosus* var. *piscinensis* currently exists are also important because some of these areas historically possessed alkaline habitat that no longer exists. The long-term success of the conservation of *Astragalus lentiginosus* var. *piscinensis* may depend upon efforts to restore the extent and character of the alkaline

habitat that historically existed. Inclusion of currently unoccupied upland habitat within the proposed critical habitat unit will therefore include the areas that are necessary to promote the conservation of the listed plant taxon. This need is identified in the recovery plan for the taxon (Owens Basin Wetland and Aquatic Species Recovery Plan Inyo and Mono Counties, California (USFWS 1998)).

Mazer and Travers (1992) examined various aspects that relate to the pollination ecology of *Astragalus lentiginosus* var. *piscinensis*. They found that *A. l.* var. *piscinensis* is dependant on insects for flower pollination and fertilization and the taxon is not capable of producing fruits in the absence of pollinators. Bumblebees (*Bombus* spp.) in the family Apidae were observed to pollinate *A. l.* var. *piscinensis* flowers on three occasions. Bees in the family Megachilidae are believed to be important pollinator insects for *Astragalus brauntonii* (Fotheringham and Keeley 1998), and various bee taxa in this family may occur in and adjacent to Fish Slough. With other milk-vetch species such as *A. cibarius* and *A. utahensis,* large bees in the families Anthophoridae and Apidae carry large pollen loads from plant to plant, while a variety of smaller beetle and fly species carry smaller pollen loads. These smaller insects are, therefore, likely to have a smaller potential for pollinating *Astragalus* plants (Green and Bohart 1975). Unless a specific endemic bee species is responsible for flower pollination, it is possible that multiple bee species pollinate the flowers of *A. l.* var. *piscinensis* (Terry Griswold, Utah State University, pers. comm. 2003).

Studies to quantify the distance that bees will fly to pollinate their host plants are limited in number, but the few that exist show that some bees will routinely fly 100 to 500 m (328 to 984 ft) to pollinate plants. Studies by Steffan-Dewenter and Tscharntke (2000) have demonstrated that it is possible for bees to fly at least 1,000 m (3,280 ft) to pollinate flowers, and at least one study suggests that bumblebees may forage many kilometers from a colony (Sudgen 1985). Studies by Steffan-Dewenter and Tscharntke (2000) also indicate that if pollinator habitat within 1,000 m of some host plants is eliminated, seed set of some plant species may be decreased by as much as 50 percent. Additional studies suggest that the degradation of pollinator habitat is likely to adversely affect the abundance of pollinator species (Jennersten 1988; Rathcke and Jules 1993).

Bumblebees usually nest in abandoned rodent burrows or bird nests (Thorpe *et al.* 1980), and bees in the family Megachilidae also nest in underground rodent burrows or in dry woody material. The alkaline nature of the habitat occupied by *Astragalus lentiginosus* var. *piscinensis* makes it unlikely that burrowing rodents are present in such areas. We believe insect pollinators are more likely to nest in upland habitats adjacent to alkaline areas because nesting and cover sites for various species of mice, kangaroo rats, and pocket mice are more likely to be common there (T. Griswold, pers. comm. 2003).

The upland areas adjacent to occurrences of *Astragalus lentiginosus* var. *piscinensis* are likely to include cover and nest sites for a variety of insects necessary for the pollination of this taxon. Surveys have not been conducted to specifically identify which species are responsible for the fertilization of *A. l.* var. *piscinensis* flowers but, at a minimum, they likely include a variety of ground-nesting bee taxa. Studies have demonstrated that it is possible for bees to fly 1,000 m (3,280 ft) or more to pollinate flowers. The bees that have been observed on *A. l.* var. *piscinensis* include taxa that routinely nest in underground burrows. We believe that rodent burrows are less likely to be common in alkaline habitats and so we have concluded that the bee pollinators that visit *A. l.* var. *piscinensis* are more likely to use rodent burrows in upland shrub scrub plant communities within 100–1,000 m (328–3,280 ft) of the alkaline habitat occupied by the listed plant taxon.

The maintenance of natural conditions in upland areas adjacent to the alkaline habitat where *Astragalus lentiginosus* var. *piscinensis* occurs is important because the presence of roads and use of motorized vehicles have a substantial potential to introduce non-native plant species. These upland areas may act as reservoirs for invasive plant species and facilitate their invasion into the more mesic habitat occupied by Fish Slough milk-vetch. Some species such as *Lepidium latifolium* and *Salsola iberica* can survive in soils that vary in texture and moisture. Proactive management of upland habitats at Fish Slough is necessary to preclude the establishment of invasive non-native plant species that could displace *A. l.* var. *piscinensis* and that such control should not be limited to the areas immediately adjacent to alkaline habitats.

The area we are proposing to designate as critical habitat provides some or all of the habitat components and the physical and hydrologic attributes that are essential for the conservation of *Astragalus lentiginosus* var. *piscinensis*. Based on the best available information at this time, the primary constituent elements of critical habitat for *A. l.* var. *piscinensis* include, but are not limited to:

(1) Alkaline soils that occur in areas with little or no slope, and which overlay a ground water table that is 19–60 in (0.5–1.5 m) below the land surface;

(2) Plant associations dominated by *Spartina—Sporobolis,* or where a sparse amount of *Chrysothamnus albidus* occurs in the transition zone between *Spartina—Sporobolis* and *Chrysothamnus albidus—Distichlis* plant associations;

(3) Upland areas within 1,000 m (3,280 ft) of the alkaline soils described in (1), that support sites where the listed plant's pollinator populations are likely to nest or obtain cover, that require minimal disturbance and active management to limit the establishment of non-native plant taxa, and portions of which may be suitable for restoration and recolonization by *Astragalus lentiginosus* var. *piscinensis*; and

(4) Hydrologic conditions that provide suitable periods of soil moisture and chemistry for *Astragalus lentiginosus* var. *piscinensis* germination, growth, reproduction, and dispersal.

All of the primary constituent elements outlined above do not have to occur simultaneously within the unit to constitute critical habitat for *Astragalus lentiginosus* var. *piscinensis*. We determined the primary constituent elements of critical habitat for *A. l.* var. *piscinensis* based on the best available scientific and commercial information, including professional studies and reports that pertain to its habitat and ecology and the hydrological conditions that are relevant to the quality of habitat in Fish Slough. These documents include, but are not limited to, BLM (1984); Odion *et al.* (1991); Ferren (1991a); Mazer and Travers (1992); Danskin (1998); and MHA (2001).

Criteria Used To Identify Critical Habitat

The criteria that have been used to identify the proposed critical habitat unit for *Astragalus lentiginosus* var. *piscinensis* include the known range of the taxon, the alkaline habitat where the taxon and its associated flora occurs, the upland areas within 1,000 m (3,280 ft) of the alkaline soils that are occupied by the taxon, and the hydrologic features that are essential to promote the survival and persistence of the taxon.

A number of botanical surveys have been completed in most of the alkaline habitats in the greater Owens Valley area and *Astragalus lentiginosus* var. *piscinensis* has not been found outside of Fish Slough (P. Hubbard, pers. comm. 2003). Mary DeDecker, the botanist who collected the type specimen of *A. l.* var. *piscinensis*, traveled extensively throughout the greater Owens Valley area and Inyo and Mono Counties collecting botanical specimens for her herbarium collection. Because her collection does not contain specimens of *A. l.* var. *piscinensis* collected outside of Fish Slough (Michael Denslow, Rancho Santa Ana Botanic Garden, pers. comm. 2004), it is unlikely that Fish Slough milk-vetch occurs outside of that area surrounding the Fish Slough oasis. Considering this, we conclude that the geographic range of *A. l.* var. *piscinensis* is limited to those disjunct occurrences within a 6 mi (9.7 km) stretch of alkaline habitat that borders aquatic habitat in Fish Slough in Inyo and Mono Counties, California. Because the taxon occurs within a relatively limited area and the alkaline habitat within the taxon's range forms a relatively continuous feature in the landscape, we are proposing a single critical habitat unit which is not separated into smaller, separate units. The critical habitat unit being proposed for *A. l.* var. *piscinensis* includes virtually all of the known locations of the taxon.

According to a recovery plan that includes *Astragalus lentiginosus* var. *piscinensis* (USFWS 1998), all remaining habitat of the taxon needs to be conserved. Virtually the entire geographic area which currently is and potentially can be occupied by the taxon is being proposed as critical habitat. This is being done because these areas are all considered essential to the conservation of the species, in accordance with Section 3(5)(C) of the Act. We have determined, however, that one privately-owned, 49-acre (20-ha) parcel within the historic range of *A. l.* var. *piscinensis* is not essential for its conservation. That parcel is in Township 6 South, Range 33 East, section 18 of U.S. Geological Survey quadrangle map titled Fish Slough. It is highly unlikely that this area is currently occupied by the taxon and it has little alkaline soil habitat. In addition, there is no chance that the taxon will be re-introduced on this property. Therefore, the parcel is not essential to conservation of the taxon, and is not included in the proposed critical habitat.

The critical habitat units are designed to encompass a large enough area to support existing ecological processes that may be essential to the conservation of *Astragalus lentiginosus* var. *piscinensis*. Some upland areas adjacent to the alkaline habitat where *A. l.* var. *piscinensis* occurs could potentially be restored to allow the taxon to re-occupy historically-occupied areas. Upland areas within 1,000 meters of the alkaline habitat also provide nest sites and cover for pollinators, and are important to help minimize the potential to introduce new non-native plant species that may adversely affect *A. l.* var. *piscinensis* and to control non-native plant species already present. Because these areas are essential for conservation of the taxon, we have included them in the proposed critical habitat unit in accordance with section 3(5)(A)(ii) of the Act.

Determining the geographic boundary of the critical habitat unit for *Astragalus lentiginosus* var. *piscinensis* would be relatively straightforward if the unit boundary was based only on the presence of alkaline soils, the *Spartina—Sporobolis* plant association where Fish Slough milk-vetch is found, and an upland zone inhabited by the plant's pollinators. We believe, however, that the long-term maintenance and recovery of *A. l.* var. *piscinensis* is ultimately dependent on the maintenance of the hydrologic system that promotes the development and persistence of the alkaline soils and plant communities that *A. l.* var. *piscinensis* is associated with. We believe that adverse changes in the hydrology of Fish Slough would reduce or eliminate those physical features essential for the conservation of the taxon.

Delineating a critical habitat unit for *Astragalus lentiginosus* var. *piscinensis* that includes the hydrologic system that supports this taxon poses significant challenges because the source(s) of the water that issues from the springs in Fish Slough is not precisely known and the location of the ground water flow paths between these sources and the spring orifices in Fish Slough have not yet been determined. Our current understanding of how pumping activities in Chalfant and Hammil valleys affects spring discharge rates or the local aquifer in Fish Slough is not sufficient to clearly illustrate these cause and effect relationships.

Because we believe the protection of the hydrologic conditions that supports the formation and maintenance of alkaline soils is essential to conserve occupied and suitable unoccupied habitat for *Astragalus lentiginosus* var. *piscinensis*, we have identified these hydrologic conditions as a primary constituent element in the ''Primary Constituent Element'' section of this proposed rule even though they may depend upon sources outside the proposed critical habitat unit boundary.

Delineating Critical Habitat

To delineate the critical habitat unit for Fish Slough milk-vetch, we used a computerized Geographic Information System to overlay various themes that included the known occurrences of *Astragalus lentiginosus* var. *piscinensis* and the primary constituent elements (see Primary Constituent Element section above). To map the distribution of *A. l.* var. *piscinensis*, we used information in the California Department of Fish and Game's Natural Diversity Database (CNDDB 2004) and plant distribution data from Novak (1992). These two information sources provide a comparable assessment of the locations of *A. l.* var. *piscinensis*.

The upland boundaries of alkaline soils in Fish Slough as depicted in Ferren (1991a) were then digitized. We digitized the boundaries of aquatic habitats and meadows mapped in this Ferren (1991a) and included these within the boundary of the proposed critical habitat unit. These two habitats do not provide suitable habitat for *Astragalus lentiginosus* var. *piscinensis*; however, they are included within the proposed unit because the precise boundaries of alkaline habitat in Fish Slough vary on an annual basis, and small-scale conversions of wetland habitat to alkaline flat habitat are likely to occur from time to time. In addition, as this ecosystem is dynamic, we believe that areas of alkaline soils may convert to wetland habitat. The mapped boundary based on alkaline soils also corresponds closely with the distribution of the *Spartina—Sporobolis* and *Chrysothamnus albidus—Distichlis* plant associations which are associated with *A. l.* var. *piscinensis*. The alkaline habitat occupied by *A. l.* var. *piscinensis* is a visually obvious feature of Fish Slough. It is present at elevations above the low-lying flooded aquatic habitat in Fish Slough and below the elevated and drier areas dominated by coarse alluvial soils lacking a white alkaline appearance. The alkaline habitat occupied by the taxon is dominated by a *Spartina—Sporobolis* plant association (Odion *et al.* 1991); the taxon may also occur where a sparse amount of *Chrysothamnus albidus* occurs in the transition zone between *Spartina—Sporobolis* and *Chrysothamnus albidus—Distichlis* plant associations. Collectively, these plant associations form the plant community of which *A. l.* var. *piscinensis* is a part, and are therefore

included in the proposed critical habitat unit in this rule. The higher elevation areas where *A. l.* var. *piscinensis* is absent consist of dry shadscale scrub communities that are dominated by various species of *Atriplex* spp. (saltbush).

Because we have concluded that upland area within 1,000 m (3,280 ft) of the alkaline habitats occupied by *Astragalus lentiginosus* var. *piscinensis* is essential for the taxon's conservation, we delineated a boundary that includes this distance as measured from the outer edge of the area that includes occurrences of *A. l.* var. *piscinensis*, alkaline soils, and the *Spartina—Sporobolis* plant association or transition zone between *Spartina—Sporobolis* and *Chrysothamnus albidus—Distichlis* plant associations. This boundary delineates the perimeter of the proposed critical habitat unit.

To provide a legal description of the critical habitat boundary, a final modification to the boundary described in the proceeding paragraphs was made. The proposed critical habitat unit boundary conforms to a Universal Transverse Mercator (UTM) North American Datum 1927 (NAD 27) coordinate system grid with a cell size of 100 m by 100 m. For the modification, those points which define the boundaries of our initial polygon were moved to an adjacent point lying on the UTM grid of 100-meter cells. Defining critical habitat boundaries to be coincident with points on a UTM grid is consistent with current practice and is intended to simplify interpretation of the coordinates while diminishing the number of coordinates necessary to define a boundary.

This proposed unit thus includes the following: Locations where pollinators are most likely to nest or obtain cover; some, but not all, of the surface and subsurface hydrologic features that are necessary to maintain the soils that are necessary for *Astragalus lentiginosus* var. *piscinensis* germination, growth, reproduction, and dispersal; an area where the successful exclusion of non-native plant species must take place in order to safeguard the status of the taxon; the plant communities that are associated with *A. l.* var. *piscinensis*; locations where the current normal year-to-year variations in surface water are likely to create new alkaline habitat; and the locations where the taxon occurred historically and could possibly be restored with active management. The critical habitat unit proposed constitutes our best assessment of that area essential to the conservation of *A. l.* var. *piscinensis*.

Manmade features within the boundaries of the mapped unit, such as buildings, roads, parking lots, and other paved areas, do not contain any of the primary constituent elements for *Astragalus lentiginosus* var. *piscinensis*. Federal actions limited to these areas, therefore, would not trigger a section 7 consultation, unless they affect the taxon and/or its primary constituent elements in adjacent critical habitat. In proposing to designate critical habitat, we made an effort to avoid the inclusion of such features in proposed critical habitat; however, critical habitat is not mapped in sufficient detail to exclude all developed areas, or other lands unlikely to contain the primary constituent elements.

Special Management Considerations or Protection

In 1982, the BLM established the Fish Slough Area of Critical Environmental Concern (ACEC) in an effort to provide protection for the federally endangered Owens pupfish (*Cyprinodon radiosus*), several rare plant taxa including *Astragalus lentiginosus* var. *piscinensis*, and the wetland and riparian habitats upon which these species depend. The listing of the Owens pupfish under the Act provides additional recognition of the need to protect the Fish Slough ecosystem and has indirectly provided some benefit to *A. l.* var. *piscinensis* by raising the level of management attention that is devoted to Fish Slough. Conversely, the creation of impoundments and other manipulations of spring systems in the slough which have been done to manage pupfish have likely affected the suitability of alkaline meadow habitat that could be occupied by *A. l.* var. *piscinensis* by increasing the length of inundation in certain areas. A management plan for the ACEC was finalized in 1984, and the plan has not been revised since it was completed. *Astragalus lentiginosus* var. *piscinensis* was not a listed taxon when the ACEC management plan was completed.

The Fish Slough ACEC has three zones (BLM 1984). Zone 1 is approximately 7,961 ac (3,221 ha) in size and is located within the southeastern portion of the ACEC. Zone 1 encompasses all but the southern-most occurrences of *Astragalus lentiginosus* var. *piscinensis*. The proposed critical habitat unit is predominantly located within Zone 1 of the ACEC, but also extends slightly beyond the boundary of this zone to the south and west. The land in this zone is owned by the BLM, CDFG, LADWP, and one private land owner. Zones 2 and 3 of the ACEC are located in the Volcanic Tableland area west or northwest of Zone 1, and collectively measure 27,964 ac (11,317 ha) in size. Zone 2 was included within the ACEC because this area includes the surface water drainage up-gradient of Fish Slough, and the area was deemed necessary to protect the quality and quantify of surface and ground water that enters Fish Slough. Zone 3 was included within the ACEC because this area is thought to include an aquifer that affects the hydrology of Fish Slough.

A joint management committee composed of representatives of the LADWP, BLM, the Service, and CDFG provides guidance on ACEC management issues. The committee meets at least once a year to discuss land management activities or new developments that have the potential to adversely affect *Astragalus lentiginosus* var. *piscinensis* or other regionally endemic species or their habitats. The annual meeting provides a forum that fosters communication, cooperation, and the coordination of activities among the different committee members.

The suite of factors that affect *Astragalus lentiginosus* var. *piscinensis* is complex. The establishment of the Fish Slough ACEC has helped provide some benefit for *A. l.* var. *piscinensis* by coordinating the activities of staff from the BLM, LADWP, and CDFG on various land management challenges which exist in the local area. Because the long, narrow configuration of the slough is bounded by upland habitat, the amount of alkaline habitat that can be occupied by *A. l.* var. *piscinensis* is limited. Ferren (1991b) summarizes threats to botanical resources at Fish Slough, noting that those related to the enhancement of fisheries (construction of ponds, impoundments, roads, and ditches) may have had the greatest effect on the Fish Slough ecosystem. In the central portion of the slough, Fish Slough Lake appears to have expanded in size between 1944 and 1981. This increase may be due to natural geologic subsidence, the construction of Red Willow Dam, or the construction of water impoundments by beavers. The increase in aquatic habitat has likely resulted in the loss of alkaline habitat for *A. l.* var. *piscinensis* as soils near the lake are now saturated for greater portions of the year (Ferren 1991c). Some earthquake events in Chalfant Valley appear to have resulted in decreases in spring discharge or changes in local water table levels (Brian Tillemans, LADWP, pers. comm. 2000), thereby making it more difficult to clearly understand the nature of the local aquifer. Conflicts that arise in the management of Fish Slough are not easily resolved, and modifications to the slough environment from changes in the

local hydrology are not well understood or easily reversed. These factors, in combination with essential data gaps that include, but are not limited to, a more thorough understanding of the ecology and habitat requirements of the listed plant taxon have made it difficult for local land managers to understand and reverse the decline in the number of *A. l.* var. *piscinensis* within the ACEC over the past decade. The trend in the taxon's abundance during the past decade suggests that, despite the ongoing efforts of the relevant land management agencies, additional factors need to be addressed to reverse the decline in the status of *A. l.* var. *piscinensis*.

In 1998, the Service completed the Owens Basin Wetland and Aquatic Species Recovery Plan Inyo and Mono Counties, California (USFWS 1998). The document describes the natural history and threats that pertain to *Astragalus lentiginosus* var. *piscinensis* and describes only those general recovery actions necessary for its delisting. If implementation of the recovery tasks described in the recovery plan proceeds as scheduled, the recovery and delisting of *A. l.* var. *piscinensis* is expected to take at least 15 years.

Because *Astragalus lentiginosus* var. *piscinensis* is not listed by the state of California as a rare, threatened, or endangered taxon, and is not a candidate for state listing as threatened or endangered, the CDFG does not have an agency management plan that provides prescriptions designed to conserve or actively manage this taxon. The agency is, however, signatory to the 1984 Fish Slough ACEC management plan.

Under section 404 of the Clean Water Act (CWA), the U.S. Army Corps of Engineers (Corps) regulates the discharge of fill into waters of the United States, including navigable waters, wetlands, and other waters (33 CFR parts 320–330). The CWA requires project proponents to obtain a permit from the Corps prior to undertaking activities that would result in the filling of wetlands subject to the Corps' jurisdiction. These activities include grading, discharge of soil or other fill material, etc. Habitat for *Astragalus lentiginosus* var. *piscinensis* consists of alkaline flats adjacent to jurisdictional wetlands under the purview of section 404 of the CWA. Some protection from wetland fill activity, such as the construction of new impoundments or diversion structures, may be afforded by the Corps' regulatory process; however, unless a population of *A. l.* var. *piscinensis* is present within the footprint of the fill area or zone of construction activities, the impacts of the project on the taxon (*e.g.*, changes in surface or ground water hydrology that affect the character and persistence of alkaline habitat) may not be considered.

Special management considerations or protection may be needed to maintain the physical and biological features as well as the primary constituent elements essential to the conservation of *Astragalus lentiginosus* var. *piscinensis* within the unit being proposed as critical habitat. As noted in the ''Critical Habitat'' section, ''special management considerations or protection'' is a term that originates in section 3(5)(A) of the Act under the definition of critical habitat. We believe that the proposed critical habitat unit may require special management considerations or protections due to the threats outlined below.

(1) Activities that have the potential to change the hydrology of Fish Slough and adversely affect the survivorship, seed germination, growth, or photosynthesis of *Astragalus lentiginosus* var. *piscinensis*, unless such activities are designed and have the effect of recreating the historic environmental conditions that existed in Fish Slough.

(2) Activities that have the potential to adversely affect the suitability of alkaline areas that could provide habitat for *Astragalus lentiginosus* var. *piscinensis* including, but not limited to, off-road vehicle use, levels of cattle grazing which could result in increased soil compaction, and road construction and maintenance activities.

(3) Activities that have the potential to modify the species composition, character, or persistence of the native plant associations that are associated with *Astragalus lentiginosus* var. *piscinensis*.

(4) Activities that could adversely affect the insect pollinators that inhabit the native upland desert scrub community that is adjacent to alkaline habitats in Fish Slough including, but not limited to, livestock grazing at levels which would increase soil compaction, use of heavy-wheeled vehicles or off-road vehicles (including motorcycles and all terrain vehicles), pesticide use, and incompatible recreational activities.

(5) Management activities, particularly those that involve cattle grazing and road maintenance, that have the potential to introduce new non-native plant species that may compete with or displace *Astragalus lentiginosus* var. *piscinensis*.

Relationship to Section 4(b)(2) of the Act

Section 4(b)(2) of the Act states that critical habitat shall be designated, and revised, on the basis of the best available scientific data available after taking into consideration the economic impact, the effect on national security, and any other relevant impact, of specifying any particular area as critical habitat. An area may be excluded from critical habitat if it is determined, following an analysis, that the benefits of such exclusion outweigh the benefits of specifying a particular area as critical habitat, unless the failure to designate such area as critical habitat will result in the extinction of the species. Consequently, we may exclude an area from designated critical habitat based on economic impacts, effects on national security, or other relevant impacts such as preservation of conservation partnerships, if we determine the benefits of excluding an area from critical habitat outweigh the benefits of including the area in critical habitat, provided the action of excluding the area will not result in the extinction of the species. In this proposed rule we have not excluded any lands on the basis of economic impacts.

Further, we conducted an evaluation of other potential impacts that may result from this designation, including those to national security, partnerships with local jurisdiction in the development of habitat conservation plans, conservation agreements, and management plans, as well as Tribal nations. We determined that the lands within the designation of critical habitat for *Astragalus lentiginosus* var. *piscinensis* are not owned or managed by the Department of Defense, there are currently no habitat conservation plans or other management plans for *A. l.* var. *piscinensis*, and the designation does not include any Tribal lands or trust resources. As such, we have not excluded any lands from this proposed critical habitat designation based on potential impacts to these factors.

Proposed Critical Habitat Designation

We propose to designate a single critical habitat unit for *Astragalus lentiginosus* var. *piscinensis* that encompasses approximately 8,490 ac (3,435 ha). Within the proposed unit, the city of Los Angeles owns four separate parcels that total 2,923 ac (1,183 ha) in area. The CDFG owns a single 166 ac (67 ha) parcel in the proposed critical habitat unit. The remaining land within the proposed unit is owned by the BLM and comprises 5,401 ac (2,185 ha). The

approximate size of the different land ownership areas within the proposed critical habitat unit is shown in Table 1. Lands managed by the BLM and LADWP comprise 64 and 34 percent of the total proposed unit, respectively, with State lands comprising approximately 2 percent.

TABLE 1.—APPROXIMATE AREAS IN ACRES (AC) AND HECTARES (HA) OF PROPOSED CRITICAL HABITAT FOR *Astragalus lentiginosus* VAR. *piscinensis* BY LAND OWNERSHIP [1]

Critical habitat unit name	City of Los Angeles	State of California	Federal (BLM)	Total
Fish Slough unit	2,923 ac (1,183 ha)	166 ac (67 ha)	5,401 ac (2,185 ha)	8,490 ac (3,435 ha)

[1] Approximate acres have been converted to hectares (1 ha = 2.47 ac).

The proposed Fish Slough critical habitat unit described below constitutes our best assessment at this time of the area that is essential for the conservation of *Astragalus lentiginosus* var. *piscinensis* and includes Federal, State, and City lands. The land within the proposed critical habitat unit contains all of the known occurrences of *A. l.* var. *piscinensis*, alkaline habitat occupied by this taxon, and the upland areas that provide cover sites for insect pollinators and require special management to control non-native plant species. The land within the proposed unit also includes the *Spartina—Sporobolis* plant association and *Chrysothamnus albidus* which is present in the transition zone between the *Spartina—Sporobolis* and *Chrysothamnus albidus—Distichlis* plant associations. The unit also includes some of the hydrologic features that we believe are necessary to promote the persistence and successful recruitment of the listed plant taxon.

This unit boundary overlaps the boundary of Inyo and Mono counties in the state of California. The northern-most boundary of the proposed Fish Slough critical habitat unit is located approximately 3,444 ft (1,050 m) north of Northeast Spring in the northern portion of Fish Slough. The southern boundary of the proposed unit is approximately 510 ft (155 m) north of the Owens River near an area that is labeled ''Five Bridges'' on the Fish Slough U.S. Geological Survey 1:24,000 scale topographic quadrangle. The eastern and western boundaries of the proposed unit are parallel to, overlap, or are adjacent to the eastern and western boundaries of Zone 1 of the BLM's Fish Slough ACEC, respectively.

Effects of Critical Habitat Designation

Section 7 Consultation

Section 7 of the Act requires Federal agencies, including the Service, to ensure that actions they fund, authorize, or carry out are not likely to destroy or adversely modify critical habitat.

Section 7(a) of the Act requires Federal agencies, including the Service, 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 proposed or designated. Regulations implementing this interagency cooperation provision of the Act are codified at 50 CFR part 402. Section 7(a)(4) of the Act requires Federal agencies to confer with us on any action that is likely to jeopardize the continued existence of a proposed species or result in destruction or adverse modification of proposed critical habitat. Conference reports provide conservation recommendations to assist the agency in eliminating conflicts that may be caused by the proposed action. The conservation recommendations in a conference report are advisory. If a species is listed or critical habitat is designated, 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 such a 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 (action agency) must enter into consultation with us. Through this consultation, the action agency ensures that the permitted actions do not destroy or adversely modify critical habitat.

When we issue a biological opinion concluding that a project is likely to result in the destruction or adverse modification of critical habitat, we also provide reasonable and prudent alternatives to the project, if any are identifiable. ''Reasonable and prudent alternatives'' are defined at 50 CFR 402.02 as alternative actions identified during consultation that can be implemented in a manner consistent with the intended purpose of the action, that are consistent with the scope of the Federal agency's legal authority and jurisdiction, that are economically and technologically feasible, and that the Director believes would avoid destruction or adverse modification of critical habitat. Reasonable and prudent alternatives can vary from slight project modifications to extensive redesign or relocation of the project. Costs associated with implementing a reasonable and prudent alternative are similarly variable.

Regulations at 50 CFR 402.16 require Federal agencies to reinitiate consultation on previously reviewed actions in instances where critical habitat is subsequently designated and the Federal agency has retained discretionary involvement or control over the action or such discretionary involvement or control is authorized by law. Consequently, some Federal agencies may request reinitiation of consultation or conference with us on actions for which formal consultation has been completed, if those actions may affect designated critical habitat or adversely modify or destroy proposed critical habitat.

We may issue a formal conference report if requested by a Federal agency. Formal conference reports on proposed critical habitat contain an opinion that is prepared according to 50 CFR 402.14, as if critical habitat were designated. We may adopt the formal conference report as the biological opinion when the critical habitat is designated, if no substantial new information or changes in the action alter the content of the opinion (*see* 50 CFR 402.10(d)).

Activities on Federal lands that may affect *Astragalus lentiginosus* var. *piscinensis* or its critical habitat will require section 7 consultation. Activities on private or State lands requiring a permit from a Federal agency, such as a permit from the Army Corps under section 404 of the Clean Water Act, a section 10(a)(1)(B) permit from the Service, or some other Federal action, including funding (*e.g.*, Federal Highway Administration or Federal Emergency Management Agency funding), will also continue to be subject to the section 7 consultation process. Federal actions not affecting listed species or critical habitat and

actions on non-Federal and private lands that are not federally funded, authorized, or permitted do not require section 7 consultation.

Section 4(b)(8) of the Act requires us to briefly evaluate and describe in any proposed or final regulation that designates critical habitat those activities involving a Federal action that may destroy or adversely modify such habitat, or that may be affected by such designation. Activities that may destroy or adversely modify critical habitat include those that appreciably reduce the value of critical habitat to *Astragalus lentiginosus* var. *piscinensis.* We note that such activities may also jeopardize the continued existence of the species.

To properly portray the effects of critical habitat designation, we must first compare the section 7 requirements for actions that may affect critical habitat with the requirements for actions that may affect a listed species. Section 7 prohibits actions funded, authorized, or carried out by Federal agencies from jeopardizing the continued existence of a listed species or destroying or adversely modifying the listed species' critical habitat. Actions likely to ''jeopardize the continued existence'' of a species are those that would appreciably reduce the likelihood of the species' survival and recovery. Actions likely to ''destroy or adversely modify'' critical habitat are those that would appreciably reduce the value of critical habitat to the listed species.

Common to both definitions is an appreciable detrimental effect on both survival and recovery of a listed species. Given the similarity of these definitions, actions likely to destroy or adversely modify critical habitat would often result in jeopardy to the species concerned when the area of the proposed action is occupied by the species concerned.

Federal agencies already consult with us on activities in areas currently occupied by the species to ensure that their actions do not jeopardize the continued existence of the species. These actions include, but are not limited to:

(1) Activities that disturb or degrade the character of alkaline soils or hydrology necessary to support wetlands in Fish Slough.

(2) Activities that have the potential to introduce new non-native plant species to Fish Slough or promote the spread of non-native plant species that are already present in the local area.

(3) Activities that alter the character of the native plant associations that co-occur with *Astragalus lentiginosus* var. *piscinensis.*

(4) Activities that adversely affect insect pollinators that facilitate viable seed production in *Astragalus lentiginosus* var. *piscinensis.*

(5) Activities on Federal lands (*e.g.*, BLM) or private lands that require permits from Federal agencies (*e.g.*, the U.S. Army Corps of Engineers) or use Federal funding (*e.g.*, dollars provided by the Natural Resource Conservation Service).

(6) Sale or exchange of lands by a Federal agency to a non-Federal entity; and

(7) Promulgation and implementation of a land use plan by a Federal agency such as the BLM that may alter management practices for critical habitat.

Activities that may destroy or adversely modify critical habitat include those that alter the primary constituent elements to an extent that the value of critical habitat for the conservation of *Astragalus lentiginosus* var. *piscinensis* is appreciably reduced. We note that such activities may also jeopardize the continued existence of the taxon.

If you have questions regarding whether specific activities will constitute destruction or adverse modification of critical habitat, contact the Field Supervisor, Ventura Fish and Wildlife Office (see **ADDRESSES** section). Requests for copies of the regulations on listed wildlife and plants and inquiries about prohibitions and permits may be addressed to the U.S. Fish and Wildlife Service, Branch of Endangered Species, 911 N.E. 11th Ave, Portland, OR 97232 (telephone 503/231–2063; facsimile 503/231–6243).

Economic Analysis

Section 4(b)(2) of the Act requires us to designate critical habitat on the basis of the best scientific and commercial data available and to consider the economic and other relevant impacts of designating a particular area as critical habitat. We may exclude areas from critical habitat upon a determination that the benefits of such exclusions outweigh the benefits of specifying such areas as critical habitat. We cannot exclude such areas from critical habitat when such exclusion will result in the extinction of the species.

An analysis of the economic impacts of proposing critical habitat for the *Astragalus lentiginosus* var. *piscinensis* is being prepared. We will announce the availability of the draft economic analysis as soon as it is completed, at which time we will seek public review and comment. At that time, copies of the draft economic analysis will be available for downloading from the Internet at *http://ventura.fws.gov*, or by contacting the Ventura Fish and Wildlife Office directly (*see* **ADDRESSES** section).

Peer Review

In accordance with our policy published on July 1, 1994 (59 FR 34270), we will solicit the expert opinions of at least three appropriate and independent specialists regarding this proposed rule. The purpose of such review is to ensure that our critical habitat designation is based on scientifically sound data, assumptions, and analyses. We will send these peer reviewers a copy of the proposed rule immediately following publication in the **Federal Register**. We will invite these peer reviewers to comment, during the public comment period, on the specific assumptions and conclusions regarding the proposed designation of critical habitat.

All comments and information received during the 60-day comment period on this proposed rule will be considered as we prepare our final rulemaking. Accordingly, the final designation may differ from this proposal.

Public Hearings

The Act provides for one or more public hearings on this proposal, if requested. Requests must be received within 45 days of the date of publication of the proposal in the **Federal Register**. Such requests must be made in writing and be addressed to the Field Supervisor, Ventura Fish and Wildlife Office (*see* **ADDRESSES** section). We will schedule public hearings on this proposal, if any are requested, and announce the dates, times, and places of those hearings in the **Federal Register** and local newspapers at least 15 days prior to the first hearing.

Clarity of the Rule

Executive Order 12866 requires each agency to write regulations and notices that are easy to understand. We invite your comments on how to make this proposed rule easier to understand, including answers to questions such as the following:

(1) Are the requirements in the proposed rule clearly stated?

(2) Does the proposed rule contain technical jargon that interferes with the clarity?

(3) Does the format of the proposed rule (grouping and order of the sections, use of headings, paragraphing, etc.) aid or reduce its clarity?

(4) Is the description of the notice in the **SUPPLEMENTARY INFORMATION** section of the preamble helpful in understanding the proposed rule?

(5) What else could we do to make this proposed rule easier to understand?

Send a copy of any comments on how we could make this proposed rule easier to understand to: Office of Regulatory Affairs, Department of the Interior, Room 7229, 1849 C Street, NW., Washington, DC 20240. You may e-mail your comments to this address: *Exsec@ios.doi.gov.*

Required Determinations

Regulatory Planning and Review

In accordance with Executive Order 12866, this document is a significant rule in that it may raise novel legal and policy issues, but it is not anticipated to have an annual effect on the economy of $100 million or more or affect the economy in a material way. The Office of Management and Budget (OMB) has not reviewed this proposed rule, but intends to review the final rule.

We are preparing a draft economic analysis of this proposed action. We will use this analysis to meet the requirement of section 4(b)(2) of the Act to determine the economic consequences of designating the specific areas as critical habitat and excluding any area from critical habitat if it is determined that the benefits of such exclusion outweigh the benefits of specifying such areas as part of the critical habitat, unless failure to designate such area as critical habitat will lead to the extinction of the *Astragalus lentiginosus* var. *piscinensis*. This draft economic analysis will be made available for public review and comment before we finalize this designation. At that time, copies of the analysis will be available for downloading from the Ventura Fish and Wildlife Office's Internet Web site at *http://ventura.fws.gov* or by contacting the Ventura Fish and Wildlife Office directly (*see* **ADDRESSES** section).

Regulatory Flexibility Act (5 U.S.C. 601 et seq.)

Under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*, as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996), whenever an agency is required to publish a notice of rulemaking for any proposed or final rule, it must prepare and make available for public comment a regulatory flexibility analysis that describes the effects of the rule on small entities (*i.e.*, small businesses, small organizations, and small government jurisdictions). However, no regulatory flexibility analysis is required if the head of the agency certifies the rule will not have a significant economic impact on a substantial number of small entities. The SBREFA amended the Regulatory Flexibility Act (RFA) to require Federal agencies to provide a statement of the factual basis for certifying that the rule will not have a significant economic impact on a substantial number of small entities.

At this time, the Service lacks the available economic information necessary to provide an adequate factual basis for the required RFA finding. Therefore, the RFA finding is deferred until completion of the draft economic analysis prepared pursuant to section 4(b)(2) of the ESA and E.O. 12866. This draft economic analysis will provide the required factual basis for the RFA finding. Upon completion of the draft economic analysis, the Service will publish a notice of availability of the draft economic analysis of the proposed designation and reopen the public comment period for the proposed designation for an additional 60 days. The Service will include with the notice of availability, as appropriate, an initial regulatory flexibility analysis or a certification that the rule will not have a significant economic impact on a substantial number of small entities accompanied by the factual basis for that determination. The Service has concluded that deferring the RFA finding until completion of the draft economic analysis is necessary to meet the purposes and requirements of the RFA. Deferring the RFA finding in this manner will ensure that the Service makes a sufficiently informed determination based on adequate economic information and provides the necessary opportunity for public comment.

Small Business Regulatory Enforcement Fairness Act (5 U.S.C. 802(2))

In the draft economic analysis, we will determine whether designation of critical habitat will cause (a) any effect on the economy of $100 million or more; (b) any increases in costs or prices for consumers, individual industries, Federal, State, or local government agencies, or geographic regions; or (c) any significant adverse effects on competition, employment, investment, productivity, innovation, or the ability of U.S.-based enterprises to compete with foreign-based enterprises.

Executive Order 13211

On May 18, 2001, the President issued an Executive Order (E.O. 13211) on regulations that significantly affect energy supply, distribution, and use. Executive Order 13211 requires agencies to prepare Statements of Energy Effects when undertaking certain actions. This proposed rule to designate critical habitat for *Astragalus lentiginosus* var. *piscinensis* is considered a significant regulatory action under Executive Order 12866 in that it may raise novel legal and policy issues. However we do not anticipate that the proposed designation of critical habitat for this taxon will significantly affect energy supplies, distribution, or use because there are no pipelines, distribution facilities, power grid stations, etc. within the boundaries of proposed critical habitat. Therefore, we do not believe that this action is a significant energy action and no Statement of Energy Effects is required. We will further examine any potential effect in our economic analysis of this proposal.

Unfunded Mandates Reform Act (2 U.S.C. 1501 et seq.)

In accordance with the Unfunded Mandates Reform Act (2 U.S.C. 1501), the Service makes the following findings:

(a) This rule will not produce a Federal mandate. In general, a Federal mandate is a provision in legislation, statute or regulation that would impose an enforceable duty upon State, local, tribal governments, or the private sector and includes both ''Federal intergovernmental mandates'' and ''Federal private sector mandates.'' These terms are defined in 2 U.S.C. 658(5)–(7). ''Federal intergovernmental mandate'' includes a regulation that ''would impose an enforceable duty upon State, local, or tribal governments'' with two exceptions. It excludes ''a condition of federal assistance.'' It also excludes ''a duty arising from participation in a voluntary Federal program,'' unless the regulation ''relates to a then-existing Federal program under which $500,000,000 or more is provided annually to State, local, and tribal governments under entitlement authority,'' if the provision would ''increase the stringency of conditions of assistance'' or ''place caps upon, or otherwise decrease, the Federal Government's responsibility to provide funding'' and the State, local, or tribal governments ''lack authority'' to adjust accordingly. (At the time of enactment, these entitlement programs were: Medicaid; AFDC work programs; Child Nutrition; Food Stamps; Social Services Block Grants; Vocational Rehabilitation State Grants; Foster Care, Adoption Assistance, and Independent Living; Family Support Welfare Services; and Child Support Enforcement.) ''Federal private sector mandate'' includes a regulation that ''would impose an enforceable duty upon the private sector, except (i) a condition of Federal assistance; or (ii) a duty arising from

participation in a voluntary Federal program.''

The designation of critical habitat does not impose a legally binding duty on non-Federal government entities or private parties. Under the Act, the only regulatory effect is that Federal agencies must ensure that their actions do not destroy or adversely modify critical habitat under section 7. While non-Federal entities who receive Federal funding, assistance, permits or otherwise require approval or authorization from a Federal agency for an action may be indirectly impacted by the designation of critical habitat, the legally binding duty to avoid destruction or adverse modification of critical habitat rests squarely on the Federal agency. Furthermore, to the extent that non-Federal entities are indirectly impacted because they receive Federal assistance or participate in a voluntary Federal aid program, the Unfunded Mandates Reform Act would not apply; nor would critical habitat shift the costs of the large entitlement programs listed above on to State governments.

(b) We do not believe that this rule will significantly or uniquely affect small governments. The term ''small governmental jurisdiction'' means governments of cities, counties, towns, townships, villages, school districts, or special districts, with a population of less than fifty thousand (U.S.C. title 5, part I, chapter 6, section 601[5]). The lands being proposed for critical habitat designation are owned by the City of Los Angeles, the State of California, and the Federal Bureau of Land Management. None of these government entities fit the definition of ''small governmental jurisdiction''. As such, a Small Government Agency Plan is not required. We will, however, further evaluate this issue as we conduct our economic analysis and as appropriate, review and revise this assessment as warranted.

Takings

In accordance with Executive Order 12630 (''Government Actions and Interference with Constitutionally Protected Private Property Rights''), we have analyzed the potential takings implications of designating critical habitat for *Astragalus lentiginosus* var. *piscinensis.* This preliminary assessment concludes that this proposed rule does not pose significant takings implications; however, we have not yet completed the economic analysis for this proposed rule. Once the economic analysis is available, we will review and revise this preliminary assessment as warranted.

Federalism

In accordance with Executive Order 13132, this rule does not have significant federalism effects. A federalism assessment is not required. In keeping with Department of the Interior policies, we requested information from and coordinated development of this proposed critical habitat designation with appropriate State resource agencies in California. The proposed designation of critical habitat in areas currently occupied by *Astragalus lentiginosus* var. *piscinensis* imposes no additional significant restrictions beyond those currently in place and, therefore, has little incremental impact on State and local governments and their activities.

The proposed designation of critical habitat may have some benefit to the State and local resource agencies in that the areas essential to the conservation of this species are more clearly defined, and the primary constituent elements of the habitat necessary to the conservation of this species are specifically identified. While this definition and identification does not alter where and what federally sponsored activities may occur, it may assist local governments in long-range planning (rather than waiting for case-by-case section 7 consultations to occur).

Civil Justice Reform

In accordance with Executive Order 12988, the Department of the Interior's Office of the Solicitor has determined that this rule does not unduly burden the judicial system and does meet the requirements of sections 3(a) and 3(b)(2) of the Order. We are proposing to designate critical habitat in accordance with the provisions of the Endangered Species Act. The rule uses standard property descriptions and identifies the primary constituent elements within the designated areas to assist the public in understanding the habitat needs of the *Astragalus lentiginosus* var. *piscinensis.*

Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.)

This proposed rule does not contain new or revised information collection for which OMB approval is required under the Paperwork Reduction Act. Information collections associated with certain Act permits are covered by an existing OMB approval and are assigned clearance No. 1018–0094, Forms 3–200–55 and 3–200–56, with an expiration date of July 31, 2004. Detailed information for Act documentation appears at 50 CFR 17. This rule will not impose recordkeeping or reporting requirements on State or local governments, individuals, businesses, or organizations. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

National Environmental Policy Act

We have determined that an Environmental Assessment and/or an Environmental Impact Statement 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, as amended. A notice outlining our reason for this determination was published in the **Federal Register** on October 25, 1983 (48 FR 49244). This proposed rule does not constitute a major Federal action significantly affecting the quality of the human environment.

Government-to-Government Relationship With Tribes

In accordance with the President's memorandum of April 29, 1994, ''Government-to-Government Relations with Native American Tribal Governments'' (59 FR 22951), Executive Order 13175, and the Department of the Interior's manual at 512 DM 2, we readily acknowledge our responsibility to communicate meaningfully with recognized Federal Tribes on a government-to-government basis. We have determined that there are no Tribal lands essential for the conservation of *Astragalus lentiginosus* var. *piscinensis.* Therefore, designation of critical habitat for *A. l.* var. *piscinensis* has not been proposed on Tribal lands.

References Cited

A complete list of all references cited in this proposed rule is available upon request from the Ventura Fish and Wildlife Office (*see* **ADDRESSES** section).

Author

The primary author of this notice is Douglas Threloff in the Ventura Fish and Wildlife Office staff (*see* **ADDRESSES** section).

List of Subjects in 50 CFR Part 17

Endangered and threatened species, Exports, Imports, Reporting and record keeping requirements, Transportation.

Proposed Regulation Promulgation

Accordingly, we propose to amend part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations as set forth below:

PART 17—[AMENDED]

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

Authority: 16 U.S.C. 1361–1407; 16 U.S.C. 1531–1544; 16 U.S.C. 4201–4245; Pub. L. 99–625, 100 Stat. 3500; unless otherwise noted.

2. In § 17.12(h), revise the entry for ''*Astragalus lentiginosus* var. *piscinensis,*'' under ''FLOWERING PLANTS,'' to read as follows:

§ 17.12 Endangered and threatened plants.

* * * * *

(h) * * *

Species		Historic range	Family	Status	When listed	Critical habitat	Special rules
Scientific name	Common name						
FLOWERING PLANTS							
*	*	*	* *		*		*
Astragalus lentiginosus var. *piscinensis*.	Fish Slough milk-vetch.	U.S.A. (CA)	Fabaceae-Pea	T	647	17.96(a)	NA
*	*	*	* *		*		*

3. In § 17.96, amend paragraph (a) by adding an entry for *Astragalus lentiginosus* var. *piscinensis* in alphabetical order under Family Fabaceae to read as follows:

§ 17.96 Critical habitat—plants.

(a) *Flowering plants.*

* * * * *

Family Fabaceae: *Astragalus lentiginosus* var. *piscinensis* (Fish Slough milk-vetch)

(1) The critical habitat unit is depicted for Inyo and Mono Counties, California, on the map below.

(2) The primary constituent elements of critical habitat for *Astragalus lentiginosus* var. *piscinensis* consist of:

(i) Alkaline soils that occur in areas with little or no slope, and which overlay a ground water table that is 19–60 in (0.5–1.5 m) below the land surface;

(ii) Plant associations dominated by *Spartina—Sporobolis*, or where a sparse amount of *Chrysothamnus albidus* occurs in the transition zone between *Spartina—Sporobolis* and *Chrysothamnus albidus—Distichlis* plant associations;

(iii) Upland areas within 1,000 m (3,280 ft) of the alkaline soils described in (1), that support sites where the listed plant's pollinator populations are likely to nest or obtain cover, that require minimal disturbance and active management to limit the establishment of non-native plant taxa, and portions of which may be suitable for restoration and recolonization by *Astragalus lentiginosus* var. *piscinensis*; and

(iv) Hydrologic conditions that provide suitable periods of soil moisture and chemistry for *Astragalus lentiginosus* var. *piscinensis* germination, growth, reproduction, and dispersal.

(3) Critical habitat does not include existing features and structures, such as buildings, roads, parking lots, and other paved surfaces or areas not containing one or more of the primary constituent elements.

(4) Critical Habitat Map Unit.

(i) *Map Unit 1:* Fish Slough critical habitat unit, Inyo and Mono Counties, California. From USGS 1:24,000 quadrangle maps Chidago Canyon and Fish Slough, California. Lands bounded by UTM Zone 11, NAD 1927 coordinates (E, N): 375800, 4154200, 376100, 4154300; 376500, 4154200; 376700, 4154100; 377000, 4153900; 377200, 4153600; 377300, 4153400; 377400, 4153100; 377400, 4152400; 377300, 4151900; 377200, 4151600; 377300, 4150200; 377200, 4149900; 377100, 4149700; 377000, 4149500; 377300, 4149100; 377400, 4148900; 377500, 4148200; 377500, 4147700; 377400, 4147100; 377300, 4146400; 377200, 4145800; 377100, 4145600; 377000, 4145300; 377000, 4145200; 376900, 4144600; 376900, 4144300; 376900, 4144200; 376800, 4144000; 376800, 4143800; 376900, 4143700; 377100, 4143600; 377500, 4143000; 377500, 4142600; 377400, 4142200; 377100, 4141800; 376500, 4141600; 376100, 4141700; 376000, 4141700; 375600, 4141800; 375200, 4142000; 375000, 4142200; 374800, 4142500; 374700, 4142900; 374600, 4143500; 374500, 4144000; 374600, 4144400; 374700, 4144600; 374700, 4145600; 374800, 4145900; 374900, 4146300; 374900, 4146900; 374800, 4147300; 374700, 4147500; 374400, 4147800; 374000, 4148600; 373800, 4149200; 373700, 4149500; 373800, 4149800; 373800, 4150300, 373900, 4150700; 373900, 4151400; 374000, 4151800; 374100, 4152400; 374200, 4152700; 374400, 4153000; 374500, 4153100; 374800, 4153200; 375000, 4153300; 375100, 4153500; 375200, 4153700; 375400, 4154000; 375700, 4154200; 375800, 4154200; and returning to 375800, 4154200.

(ii) *Excluding*: 375700, 4143400; 375700, 4142900; 376300, 4142900; 376300, 4143400; returning to 375700, 4143400.

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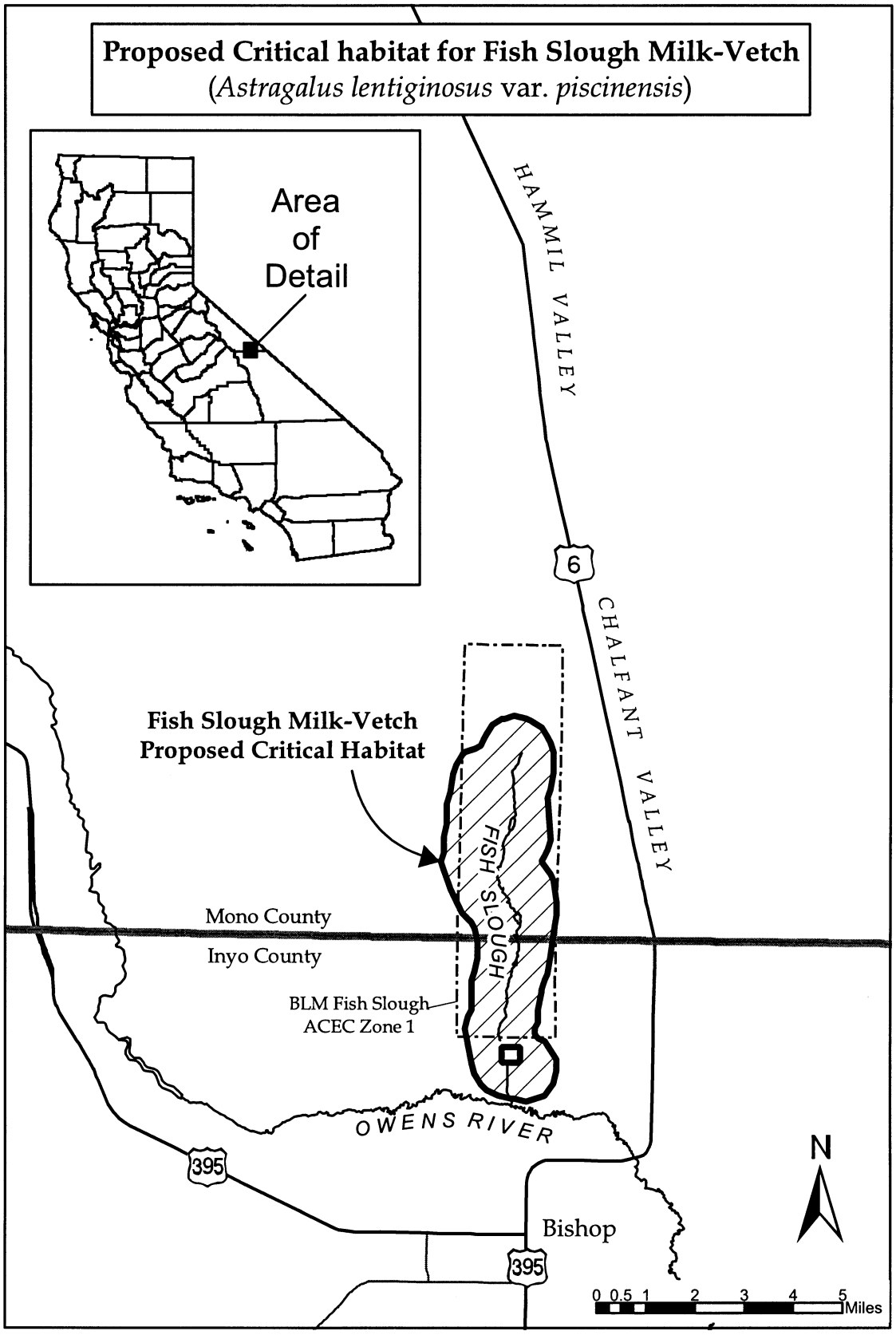
Proposed Critical habitat for Fish Slough Milk-Vetch
(*Astragalus lentiginosus* var. *piscinensis*)
Area of Detail
HAMMIL VALLEY
6
CHALFANT VALLEY
Fish Slough Milk-Vetch Proposed Critical Habitat
FISH SLOUGH
Mono County
Inyo County
BLM Fish Slough ACEC Zone 1
OWENS RIVER
395
Bishop
395
N
0 0.5 1 2 3 4 5 Miles

Dated: May 27, 2004.

Craig Manson,

Assistant Secretary for Fish and Wildlife and Parks.

[FR Doc. 04–12658 Filed 6–3–04; 8:45 am]

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DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

RIN 1018–AJ10

Endangered and Threatened Wildlife and Plants; Proposed Designation of Critical Habitat for Allium munzii (Munz's onion)

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Proposed rule.

SUMMARY: We, the U.S. Fish and Wildlife Service (Service), propose to designate critical habitat for the federally endangered *Allium munzii* (Munz's onion) pursuant to the Endangered Species Act of 1973, as amended (Act). We propose to designate 227 acres (ac) (92 hectares (ha)) of critical habitat of Federal land in western Riverside County, California. We excluded 1,068 ac (433 ha) from proposed critical habitat within approved habitat conservation plans (HCPs) and the draft Western Riverside Multiple Species HCP (MSHCP), Riverside County, California.

We hereby solicit data and comments from the public on all aspects of this proposal, including data on economic and other impacts of the designation. We may revise this proposal prior to final designation to incorporate or address new information received during public comment periods.

DATES: We will accept comments until August 3, 2004. Public hearing requests must be received by July 19, 2004.

ADDRESSES: If you wish to comment, you may submit your comments and materials concerning this proposal by any one of several methods:

1. You may submit written comments and information to the Field Supervisor, Carlsbad Fish and Wildlife Office, U.S. Fish and Wildlife Service, 6010 Hidden Valley Road, Carlsbad, CA 92009.

2. You may hand-deliver written comments and information to our Carlsbad Fish and Wildlife Office, at the above address, or fax your comments to 760/731–9618.

3. You may send your comments by electronic mail (e-mail) to *fw1cfwoalmu@r1.fws.gov.* For directions on how to submit electronic filing of comments, see the ''Public Comments Solicited'' section.

All comments and materials received, as well as supporting documentation used in preparation of this proposed rule, will be available for public inspection, by appointment, during normal business hours at the above address.

FOR FURTHER INFORMATION CONTACT: Field Supervisor, Carlsbad Fish and Wildlife Office (telephone 760/431–9440; facsimile 760/431–9618).

SUPPLEMENTARY INFORMATION:

Public Comments Solicited

It is our intent that any final action resulting from this proposal will be as accurate as possible. Therefore, we solicit comments or suggestions from the public, other concerned governmental agencies, the scientific community, industry, or any other interested party concerning this proposed rule. Maps of essential habitat not included in the proposed critical habitat are available for viewing by appointment during regular business hours at the Carlsbad Fish and Wildlife Office (see **ADDRESSES** section) or on the Internet at *http://carlsbad.fws.gov.* On the basis of public comment, during the development of the final rule we may find that areas proposed are not essential, are appropriate for exclusion under section 4(b)(2), or not appropriate for exclusion, and in all of these cases, this information would be incorporated into the final designation. We particularly seek comments concerning:

(1) The reasons why any areas should or should not be determined to be critical habitat as provided by section 4 of the Act, including whether the benefits of designation will outweigh any threats to the species resulting from the designation;

(2) Specific information on the amount and distribution of *Allium munzii* and its habitat, and which habitat or habitat components are essential to the conservation of this species and why;

(3) Land use designations and current or planned activities in or adjacent to the areas proposed and their possible impacts on proposed critical habitat;

(4) Any foreseeable economic or other potential impacts resulting from the proposed designation, in particular, any impacts on small entities;

(5) Most of the lands we have identified as essential for the conservation of *Allium munzii* are proposed for exclusion as critical habitat. Eighteen of 19 known occurrences of this species have been proposed for exclusion from this proposed designation of critical habitat because they are within approved HCPs or the draft Western Riverside MSHCP. These areas are proposed for exclusion from critical habitat because we believe the value of excluding these areas outweighs the value of including them. We specifically solicit comment on the inclusion or exclusion of such areas and: (a) Whether these areas are essential; (b) whether these areas warrant exclusion; and (c) the basis for excluding these areas as critical habitat (section 4(b)(2) of the Act); and

(6) Whether our approach to designate critical habitat could be improved or modified in any way to provide for greater public participation and understanding, or to assist us in accommodating public concerns and comments.

If you wish to comment, you may submit your comments and materials concerning this proposal by any one of several methods. Please submit electronic comments in ASCII file format and avoid the use of special characters or any form of encryption. Please also include ''Attn: RIN 1018–AJ10'' in your e-mail subject header and your name and return address in the body of your message. If you do not receive a confirmation from the system that we have received your internet message, contact us directly by calling our Carlsbad Fish and Wildlife Office at phone number 760–431–9440. Please note that the e-mail address, *fw1cfwoalmu@r1.fws.gov,* will be closed out at the termination of the public comment period.

Our practice is to make comments, including names and home addresses of respondents, available for public review during regular business hours. Individual respondents may request that we withhold their home addresses from the rulemaking record, which we will honor to the extent allowable by law. There also may be circumstances in which we would withhold from the rulemaking record a respondent's identity, as allowable by law. If you wish us to withhold your name and/or address, you must state this prominently at the beginning of your comment. However, we will not consider anonymous comments. We will make all submissions from organizations or businesses, and from individuals identifying themselves as representatives or officials of organizations or businesses, available for public inspection in their entirety. Comments and materials received will be available for public inspection, by appointment, during normal business hours at the above address.