

DEPARTMENT OF THE INTERIOR**Fish and Wildlife Service****50 CFR Part 17**

RIN 1018-A178

Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for *Astragalus jaegerianus* (Lane Mountain milk-vetch)**AGENCY:** Fish and Wildlife Service, Interior.**ACTION:** Final rule.

SUMMARY: We, the U.S. Fish and Wildlife Service (Service), are designating no critical habitat pursuant to the Endangered Species Act of 1973, as amended (Act), for *Astragalus jaegerianus* (Lane Mountain milk-vetch). In our April 6, 2004 proposed rule, we identified 29,522 acres (ac) (11,947 hectares (ha)) of habitat essential for the conservation of *A. jaegerianus* located in the Mojave Desert in San Bernardino County, California. However, as a result of our evaluation of the relationship of essential habitat to sections 3(5)(A), 4(a)(3), and 4(b)(2) of the Act, we designate a total of zero acres (0 ac) (zero hectares (0 ha)).

DATES: This rule becomes effective on June 7, 2005.

ADDRESSES: Comments and materials received, as well as supporting documentation used in preparation of this final rule are available for public inspection, by appointment, during normal business hours at the Ventura Fish and Wildlife Office, U.S. Fish and Wildlife Service, 2493 Portola Road, Suite B, Ventura, CA 93003. The final rule, economic analysis, and map of proposed critical habitat are also available via the Internet at <http://ventura.fws.gov>.

FOR FURTHER INFORMATION CONTACT: Field Supervisor, Ventura Fish and Wildlife Office (telephone 805/644-1766; facsimile 805/644-3958).

SUPPLEMENTARY INFORMATION:**Designation of Critical Habitat Provides Little Additional Protection to Species**

In 30 years of implementing the Act, the Service has found that the designation of statutory critical habitat provides little additional protection to most listed species, while consuming significant amounts of available conservation resources. The Service's 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 by biology, limits our ability to fully evaluate the science involved, consumes enormous agency resources, and imposes huge social and economic costs. The Service believes 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 it consumes large amounts of conservation resources. Sidle (1987) stated, "Because the Act 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 470 species, or 38 percent of the 1,253 listed species in the U.S. under the jurisdiction of the Service, have designated critical habitat.

We address the habitat needs of all 1,253 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, Section 6 funding to the States, and the Section 10 incidental take permit process. The Service believes that it is these measures that may make the difference between extinction and survival for many species.

We note, however, that a recent 9th Circuit judicial opinion, *Gifford Pinchot Task Force v. United States Fish and Wildlife Service*, has invalidated the Service's regulation defining destruction or adverse modification of critical habitat. We are currently reviewing the decision to determine what effect it may have on the outcome of consultations pursuant to Section 7 of the Act.

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 the Service 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 the

Service with little ability to prioritize its 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, the Service's 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 the Service 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). None of these costs results 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

For background information on the biology of *Astragalus jaegerianus*, and a description of previous Federal actions, including our determination that designating critical habitat for this species is prudent, please see our April 6, 2004, proposed rule (69 FR 18018). On November 15, 2001, our decision not to designate critical habitat for *A. jaegerianus* and seven other plant and wildlife species was challenged in *Southwest Center for Biological Diversity and California Native Plant Society v. Norton* (Case No. 01-CV-2101-IEG (S.D.Cal.)). On July 1, 2002, the court ordered the Service to reconsider its not prudent

determination and if prudent, to propose critical habitat for the species by September 15, 2003, and, if prudent, to issue a final critical habitat designation no later than September 15, 2004. However, prior to completing the proposed rule, the Service exhausted the funding appropriated by Congress for work on critical habitat designations in 2003. On September 8, 2003, the court issued an order extending the publication date of the proposed critical habitat designation for *A. jaegerianus* to April 1, 2004, and the final designation to April 1, 2005. In light of *Natural Resources Defense Council v. U.S. Department of the Interior*, 113 F.3d 1121 (9th Cir. 1997), and the diminished threat of overcollection, the Service reconsidered its decision and determined that it was prudent to designate critical habitat for the species. On April 6, 2004, we published a proposed critical habitat designation (69 FR 18018) that included 29,522 ac (11,947 ha). On December 8, 2004, we published a notice of availability of the draft economic analysis for the designation of critical habitat and reopened the comment period for the proposed rule and draft economic analysis. This second comment period closed on January 7, 2005.

Summary of Comments and Recommendations

We requested written comments from the public on the proposed designation of critical habitat for *Astragalus jaegerianus* in the proposed rule published on April 6, 2004 (69 FR 18018). We also contacted appropriate Federal, State, and local agencies; scientific organizations; and other interested parties and invited them to comment on the proposed rule. During the comment period that opened on April 6, 2004, and closed on May 21, 2004, we received 11 comment letters directly addressing the proposed critical habitat designation: 2 from peer reviewers, 4 from Federal agencies, 1 from a local agency, and 4 from organizations or individuals. During the comment period that opened on December 8, 2004, and closed on January 7, 2005, we received three comment letters addressing the proposed critical habitat designation and the draft economic analysis. Of these latter comments, two were from Federal agencies, and one was from an organization. Four of the six total comment letters from Federal agencies were from the Department of Defense (DOD). Three commenters supported the designation of critical habitat for *Astragalus jaegerianus*, three were neutral, and four opposed the

designation. Two letters included comments or information, but did not express support or opposition to the proposed critical habitat designation. Comments received were grouped by source (peer review, Federal agency, local agency, and public comments) and are addressed in the following summary and incorporated into the final rule as appropriate. We received one request for a public hearing, but this request was later retracted by the requestor.

Peer Review

In accordance with our policy published on July 1, 1994 (59 FR 34270), we solicited expert opinions from Sustainable Ecosystems Institute and three other knowledgeable individuals with scientific expertise that included familiarity with the species, the geographic region in which the species occurs, or conservation biology principles. We received responses from two of the four peer reviewers. The peer reviewers generally concurred with our methods and conclusions and provided additional information, clarifications, and suggestions to improve the final critical habitat rule. Peer reviewer comments are addressed in the following summary and incorporated into the final rule as appropriate.

Peer Review Comments

Comment 1: One peer reviewer appreciated our efforts to capture realistic functional habitats through the inclusion of appropriate buffers in the critical habitat designation, but was concerned that there may not be sufficient connectivity between the three units to allow for genetic exchange, and suggested that the intervening areas should be evaluated on a regular basis to ensure the populations do not become isolated.

Our response: Three critical habitat units were proposed for the four known populations of *Astragalus jaegerianus* (69 FR 18018). The Goldstone and Montana Mine-Brinkman Wash populations were proposed as one critical habitat unit, preserving existing genetic connectivity between those two populations. We believe we had sufficient reason to propose contiguous critical habitat between the Goldstone and Montana Mine-Brinkman Wash populations because the 0.5-mile (mi) (0.8 kilometers (km)) distance between them could easily be traversed by pollinators and seed dispersers (the two mechanisms for effecting genetic exchange between populations). However, because of the greater distance between the Brinkman Wash-Montana Mine population and the Paradise population (over 1.0 mi (1.6 km.)), and

the Paradise population and Coolgardie population (3.0 mi (5 km)), we have no reasonable cause to believe that genetic exchange occurs between these populations on a regular basis. The intervening habitat between the Brinkman Wash-Montana Mine, Paradise, and Coolgardie populations does not contain the requisite primary constituent elements (PCEs, see Primary Constituent Elements section), nor is it suitable for the survival of *A. jaegerianus*. We believe that these populations of *A. jaegerianus* most likely are reproductively isolated. In addition, the distances between populations are greater than would be reasonably likely to support genetic exchange. All of these factors led us to believe these areas between units or populations are not essential to the conservation of the species and therefore we did not through the critical habitat process attempt to establish connectivity between these other populations.

Comment 2: One peer reviewer commented that stigmatic fouling (a form of contamination that occurs to flowers, and which could decrease the ability to produce viable seed) by dust generated from vehicle traffic has been observed at a Nevada test site. At this site, dust traveled considerable distances to rare plant population sites. The peer reviewer recommended that dust generated from the DOD's training activities could impact the reproduction of *Astragalus jaegerianus*, and that, where necessary, buffers should be expanded on the windward sides of the critical habitat units to reduce this impact.

Our response: We have contracted with the Biological Resources Division of the United States Geologic Survey (USGS) to study the potential effects of dust on the growth (as measured by leaf length) and rate of photosynthesis of *Astragalus jaegerianus*. Preliminary results indicate that applications of dust did not affect leaf growth, and photosynthesis increased; however, shoot length decreased (Wijayratne et al. 2004). Researchers hypothesize that heavily dusted plants compensate by putting more effort into new leaves and reducing the availability of resources for shoot growth. The potential effects of dust on stigmatic fouling have not been studied for this species nor do we have specific information concerning other dust effects on *A. jaegerianus* or its pollinators. Under the ESA, we base our critical habitat determinations on the best available science. The proposed units reflected the best available information on the effects of dust. Due to the lack of information supporting the

need for increased buffers on the windward side, we did not expand the critical habitat units.

Comment 3: The Service has not used the basic tenets of conservation biology in relation to minimizing fragmentation and maximizing connectivity between the proposed critical habitat units. Connectivity among occurrences, minimization or avoidance of fragmentation, and maximization of reserve size are all fundamental principles of basic reserve design that should be applied to delineating critical habitat boundaries. The Goldstone-Brinkman unit and the Coolgardie unit are particularly problematic because of their increased edge-to-area ratios, including the “donut hole” (*i.e.*, the nonessential area encompassed wholly within the Coolgardie unit) in the Coolgardie unit. Maintaining corridors to connect critical habitat units is particularly important to provide opportunities for dispersal of seed and for pollinators.

Our response: We agree that maintaining connectivity between *Astragalus jaegerianus* populations is important when there is some reason to believe that genetic exchange is occurring through seed dispersal and cross-pollination. We intentionally connected the Goldstone and Montana-Brinkman populations because a number of biologically based criteria (including pollinator flight distances, seed disperser travel distances, and the presence of primary constituent elements (PCEs)) were met, indicating that the likelihood of genetic exchange between these two populations was high. Based on available information, however, we do not believe that genetic exchange is occurring between the Montana-Brinkman and Paradise populations, or the Paradise and Coolgardie populations, with any frequency. The distance between the former two populations is 1.4 mi (2.3 km), and the distance between the latter two populations is 3 mi (5 km); this distance is greater than that which can be traversed by the most likely seed-dispersing animals and by pollinators of *A. jaegerianus*. Moreover, unlike the corridor we included between the Goldstone and Montana-Brinkman populations, the intervening habitat between these other two sets of populations contains topographic features, elevations, and vegetation types that do not contain the PCEs for *A. jaegerianus* (See Primary Constituent Elements section). As discussed above in response to comment 1, the Service does not consider this intervening habitat to be essential to the conservation of the species.

We agree that maintaining a low edge-to-area ratio is generally an important criterion in reserve design; however, the designation of critical habitat does not establish a preserve or other conservation area. Ideally, those responsible for planning a reserve (*e.g.*, the land manager) would take into consideration critical habitat as well as other criteria (such as edge-to-area ratio and land uses adjacent to the proposed reserve) in their planning process. In the specific case of the Coolgardie unit, although the “donut hole” technically increases the edge-to-area ratio considerably, the current and future uses of lands in the donut hole most likely would not have substantial edge effects on those lands within adjacent critical habitat. This is because these lands are primarily Bureau of Land Management (Bureau) lands that are managed under the “limited” and “moderate” use categories; among other restrictions, vehicle travel is restricted to approved routes of travel. Mining claims used for recreational purposes occur within the donut hole as well as within the proposed critical habitat boundaries on the Coolgardie unit. Although we do not believe them to be substantial, we recommend that the Bureau undertake an assessment of potential impacts of recreational mining on *Astragalus jaegerianus* regardless of critical habitat designation.

Comment 4: Since the purpose of critical habitat designation is to facilitate recovery of the species, not merely to ensure the survival of individuals or populations (as per recent court cases) designating critical habitat between the proposed critical habitat units would not only reduce fragmentation but also create areas for recovery.

Our response: The Goldstone-Brinkman unit encompasses both the Goldstone and Montana-Brinkman populations and the intervening habitat between these two populations. These two populations and the intervening habitat were proposed to be designated as one unit because the habitat includes PCEs, is suitable for *Astragalus jaegerianus*, and likely supports genetic exchange and serves as a dispersal corridor. This area was considered essential for conservation.

The best information available to us at this time indicates that the rest of the habitat between the proposed critical habitat units is not suitable for *A. jaegerianus* nor is it essential to its conservation. These areas did not contain any PCEs and were not proposed to be designated as critical habitat. For additional discussion, please refer to comment 1 above.

Comment 5: Proposed critical habitat on Fort Irwin should not be excluded on the basis of the DOD completing an Integrated Natural Resources Management Plan (INRMP). The failure to recognize (as the result of an exclusion) that a large portion of the habitat essential to maintaining *Astragalus jaegerianus* occurs on Fort Irwin would likely result in the long-term extinction of the species.

Our response: Because Fort Irwin’s INRMP is still in draft form, the statutory exemption for DOD lands covered by an approved INRMP is not applicable to Fort Irwin lands. Section 4(a)(3)(B) can not be applied at this time. However, in this final rule, all DOD lands at Fort Irwin are being excluded under Section 4(b)(2) for national security. Furthermore, Fort Irwin has undergone a Section 7 consultation in association with its expansion. Among the commitments analyzed in the Biological Opinion are the preservation of two milk-vetch populations in conservation areas set aside for milk-vetch preservation, and limiting military training activities in other areas to preserve milk-vetch plants and habitat. The Service’s Biological Opinion concluded that activities associated with base expansion will not jeopardize the continued existence of *Astragalus jaegerianus* (Service 2004). For more information see comment 6 and the analysis underlying this exclusion in Application of Critical Habitat Under Section 3(5)(A), 4(a)(3)(B), and 4(b)(2) of the Act.

Federal Agency Comments

Comment 6: The DOD has requested that its lands at Fort Irwin be excluded from final critical habitat designation based on an exclusion under section 4(a)(3)(B) of the Endangered Species Act (Act), as amended. Section 4 of the Act was amended through the National Defense Authorization Act for 2004 (Pub. L. 108–136). Section 4(a)(3)(B) of the Act states the Secretary shall not designate as critical habitat any lands controlled by DOD that are subject to an INRMP, if the Secretary determines that such a plan provides a benefit to the species for which critical habitat is proposed. DOD states that Fort Irwin’s INRMP and attendant Endangered Species Management Plan (ESMP) meet the three criteria that the Service uses to evaluate such plans (see Application of Critical Habitat Under Section 3(5)(A), 4(a)(3)(B), and 4(b)(2) of the Act). First, the INRMP provides a conservation benefit to the species because over 8,000 ac (3,237 ha) will be placed under conservation status with training and access restriction. Second, funding is

assured for conservation-related projects in the INRMP because they are given a “must-fund” priority within their program requirements (Hoefert, in litt. 2004). Third, the INRMP provides assurances that the conservation strategies will be effective by providing for periodic monitoring and revisions to management (adaptive management) as necessary. Additionally, the INRMP will be reviewed annually with the Service and other signatory parties to ensure the implementation and effectiveness of the conservation actions taken.

Our response: Section 4(a)(3) of the Act prohibits the Service from designating as critical habitat any lands or other geographical areas owned or controlled by the DOD, or designated for its use, that are subject to an INRMP if the Secretary of the Interior determines in writing that such plan provides a benefit to the species for which critical habitat is being proposed. The current draft INRMP provides conservation measures and monitoring, which allows for an adaptive management strategy to be implemented. Because Fort Irwin’s INRMP is still in draft form, however, Section 4(a)(3)(B) can not be applied at this time. However, in this final rule, all DOD lands at Fort Irwin are being excluded under 4(b)(2) based on potential impacts to national security and military readiness within the training area. For more information, see Application of Critical Habitat Under Section 3(5)(A), 4(a)(3)(B), and 4(b)(2) of the Act.

The Service has been working with the DOD on the development of the INRMP, particularly that portion which addresses *Astragalus jaegerianus*. We reviewed an initial draft in 2002; in late 2004 we reviewed several versions of the draft INRMP. Progress on the INRMP is continuing in early 2005; however, due to the lengthy process to secure review and approval from various entities (in addition to the Service, the INRMP is required to have review and approval from the California Department of Fish and Game (CDFG)), final approvals of the INRMP will likely not be in place by the time of this final rule. Once the entire INRMP is completed, the Service will review it pursuant to our guidelines for Sikes Act documents and consult with the DOD pursuant to section 7(a)(2) of the Act prior to final approval and signature.

The service previously consulted with DOD with respect to its proposal to expand Fort Irwin (Service 2004). In this earlier consultation, we analyzed the effects of the DOD’s proposed additional training activities and proposed conservation measures on *Astragalus jaegerianus*. Of the 11,378 ac (4,605 ha)

of occupied *A. jaegerianus* habitat on Fort Irwin, approximately 4,600 ac (1,862 ha), or 40 percent of this habitat will be subject to high and medium intensity levels of use for military training; approximately 5,000 ac (2023 ha), or 43 percent, will be placed in the two conservation areas and approximately 1,870 ac (757 ha), or 17 percent, will be placed in the “no-dig” zone. DOD has proposed to establish the Goldstone Conservation Area (2,470 ac (1,000 ha)) and the East Paradise Valley Conservation Area (4,302 ac (1741 ha)). No mechanized training or ground-disturbing activities will be permitted within these areas; vehicle use will be restricted to existing roads, and the boundaries of the areas will be marked. In addition, a “no-dig” zone, a portion of which (approximately 2,000 ac (809 ha)) supports *A. jaegerianus*, will be restricted to certain uses. Digging and the establishment of tactical assembly areas and brigade support areas would be prohibited. We anticipate that, with the possible exception of road and communication site development, most of this area will remain undisturbed. Consequently, with few exceptions, we expect the Lane Mountain milk-vetch in the “no-dig” zone to persist with little disturbance. DOD is also proposing to assist the Bureau with the acquisition of private lands within the proposed Coolgardie Area of Critical Environmental Concern (ACEC) that is also being established for the conservation of *A. jaegerianus*, and to implement an education program for military personnel concerning the importance of minimizing disturbance to *A. jaegerianus* and its habitat. These conservation measures, as assessed in our biological opinion, have been carried into Fort Irwin’s INRMP in total.

The military training activities will ultimately result in the loss of up to 4,600 ac; this amount comprises approximately 21.5 percent of the total known habitat for this species. Some areas supporting *A. jaegerianus* within the training areas are inaccessible to vehicles and thus may not be used in a way that impacts the plants. However, due to the large extent of the expansion area and the lack of more detailed information concerning the location of *A. jaegerianus* plants, topographic features such as rock outcrops throughout this area, and the precise intensity and type of use by the Army, we were unable to analyze effects at that level that would allow us to identify and quantify the lands where *A. jaegerianus* may not be affected by training. We note that, to ensure we would not overestimate the contribution

of the *A. jaegerianus* in these areas to the conservation of the species, our analysis was based on the assumption of all of the plants in these areas being lost. With the proposed conservation measures, 78.5 percent of the total known habitat for the species will be placed under some form of conservation management—either in the two conservation areas or the “no-dig” zone on Fort Irwin lands, or in the proposed ACEC on Bureau lands. Based on the information available at this time, although there would be loss of *A. jaegerianus* plants and habitat due to military training activities, the remaining portions of the occurrences support dense aggregations of plants and are of sufficient size for the ecosystems that *A. jaegerianus* depends on to persist (Service 2004).

Comment 7: The DOD requested that its lands at Fort Irwin be excluded from final critical habitat designation based on an exclusion under section 4(b)(2) of the Endangered Species Act (Act), as amended. This section of the Act states that the Secretary may exclude any area from critical habitat if she determines that the benefits of such exclusion outweigh the benefits of specifying such areas as part of the critical habitat, unless she determines, based on the best scientific and commercial data available, that the failure to designate such areas as critical habitat will result in the extinction of the species concerned. DOD cites that “[w]e may exclude an area from designated critical habitat based on economic impacts, the effect on national security, or other relevant impacts.” (Hoefert, in litt. 2004) The DOD stated that the National Training Center (NTC) at Fort Irwin is essential to national security in that it provides the only military installation suited for live maneuver training of heavy brigade and battalion task forces. Should restrictions to maneuver training result from the designation of critical habitat, such as reducing flexibility in use of training lands, closing of areas, or training delays to allow for reinitiation of consultation for critical habitat, it will have a direct impact on the Army’s training cycle, unit readiness, and national security.

Our response: In this final rule, we are excluding all DOD lands at Fort Irwin under section 4(b)(2) due to national security (see Application of Critical Habitat Under Section 3(5)(A), 4(a)(3)(B), and 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 scientific data available after taking into consideration the economic impact, the impact 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 we determine, 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, or other relevant impacts such as preservation of conservation partnerships and national security. In this case, as discussed more fully below, we have determined in the 4(b)(2) analysis that the DOD lands on Fort Irwin may be excluded from the critical habitat designation.

Comment 8: DOD commented that the only potential benefit of designation of critical habitat on Fort Irwin lands would be the prohibition of destruction or adverse modification of critical habitat under section 7 of the Act. However, since all proposed lands are occupied, DOD states that any proposed action that would result in destruction or adverse modification would also result in jeopardy. DOD commented that since they have already consulted on the land expansion and received a nonjeopardy determination, the proposed training activities should not result in the extinction of the species.

Our response: We have evaluated the benefits of designation in our 4(b)(2) analysis within this document.

Comment 9: The creation of artificially large buffer areas around the *Astragalus jaegerianus* populations and their inclusion as critical habitat has no scientific basis. The logic of including every known plant and the associated 100-to-200-meter (m) (328-to-656-feet (ft)) buffer is questionable, especially in light of the fact that the current known amount of *A. jaegerianus* is over 20 times larger than the amount that was believed to exist when it was listed as endangered.

Our response: The numbers of individuals and the range of *Astragalus jaegerianus* are now known to be larger than they were at the time the species was listed (October 6, 1998, 63 FR 53596). However, we also know more now about the life history of the species and about the extent of the threat its habitat faces from proposed military activities. Rundel *et al.* (2004) tracked over 200 *A. jaegerianus* at 5 locations between 1999 and 2004 and found that less than 15 percent of them had survived over the 5-year time period. This research indicates that successful recruitment (addition of individuals to a population by reproduction) is

correlated with, among other factors, annual precipitation of at least 15 centimeters (cm) (5.9 inches (in)). Annual precipitation between 12 cm (4.7 in) and 15 cm (5.9 in) may represent years when established individuals continue to persist; annual precipitation between 7 (2.8 in) and 12 cm (4.7 in) may be years when some individuals die due to water stress; and annual precipitation of less than 7 cm (2.8 in) may be years when many individuals die due to water stress or remain dormant. The level of annual precipitation needed for recruitment (more than 15 cm (5.9 in)) has not occurred since 1998 and it appears that the numbers of individuals of *A. jaegerianus* have been in decline since that time. If the length of time between years favorable for recruitment is longer than the average lifespan of individuals, then the species will be dependent on the seedbank to re-establish above-ground populations. Therefore, it is important to acknowledge that the numbers of individuals of *A. jaegerianus* fluctuate over time, not only from year to year, but from one decade to the next, depending on long-term climatic trends, and that maintaining habitat of suitable quality is important to maximize the reproductive potential of the species during climatically favorable years.

We did not include “artificially large buffer areas” around the *Astragalus jaegerianus* populations in our proposed designation, and in fact we did not include buffer areas. As explained in our proposed rule in the Methods section, any lands additional to those occupied by plants include the granitic soils and plant communities (primary constituent elements) that support *A. jaegerianus* and are well within the distance that can be traversed by pollinators and seed dispersers. We expect these areas have seed banks. Moreover, additional lands were not included if the topography was too steep or the elevation was too high to support additional *A. jaegerianus* individuals. We therefore believe our approach for including these additional lands in the proposed designation was scientifically sound.

Comment 10: The National Aeronautics and Space Administration (NASA) commented that the *Astragalus jaegerianus* individuals on lands they lease from the DOD in what is known as the Venus Research and Development site do not significantly contribute to the overall milk-vetch population, and therefore should not be considered in the critical habitat designation.

Our response: Because this NASA area is a lease holding within DOD's Ft.

Irwin, we are excluding this area under 4(b)(2) for national security. NASA has indicated that this area is vital to their future space exploration efforts and that critical habitat in this area will severely limit their ability to develop cutting edge space communications vital to extended missions to the Moon and planet Mars. Furthermore, about 600 of 996 acres (403 ha) of DOD lands DOD leased to NASA, are covered under DOD's Goldstone Conservation Area. The Goldstone population of the milk-vetch supports approximately 500 plants. As discussed in comment 6, these areas are managed by DOD for the conservation of the plant (where there will be no mechanized training or ground-disturbing activities permitted within these areas), further supporting our exclusion under section 4(b)(2) of the Act.

We have no information suggesting that these individuals contribute any less to the population than other individuals, and we believe we have biological basis for considering them to be essential. However, we have excluded this area for other reasons (see Application of Critical Habitat Under Section 3(5)(A), 4(a)(3)(B), and 4(b)(2) of the Act).

Comment 11: NASA comments that its research and development projects are critical to future space exploration efforts and the additional regulatory constraints imposed by critical habitat in the Venus site will severely limit their ability to develop cutting edge space communications vital to extended missions to the moon and the planet Mars.

Our response: Because the amount of habitat and number of individuals of *A. jaegerianus* that occur on NASA-leased lands is less than one percent of the total extent of the species, we do not believe that critical habitat would result in regulatory constraints to the extent that it would severely limit their ability to carry out their research and development programs. However, we have excluded this area for other reasons (see Application of Critical Habitat Under Section 3(5)(A), 4(a)(3)(B), and Section 4(b)(2) of the Act). See comment 10 for additional information.

Comment 12: The Bureau of Land Management requested that we reconsider whether designation of critical habitat on Bureau-administered lands in the Paradise and Coolgardie areas is necessary or appropriate. The Bureau stated that we are authorized by the Act [sections 4(b)(2) and 3(5)(A)] to exclude areas covered by adequate management plans or agreements (including HCPs), and that provide for

adequate protection of the primary constituent elements of such habitat. The final Environmental Impact Statement (EIS) of the West Mojave Plan (WMP) was published on April 1, 2005 and includes an amendment to the Bureau's California Desert Conservation Area Plan and makes reference to future development of an HCP; the companion HCP for non-Federal lands within the planning area is currently under development. The WMP includes provisions for establishing two new conservation areas for *Astragalus jaegerianus* (Coolgardie Mesa and West Paradise ACECs) and a set of management actions that are applicable to these areas that will contribute to the conservation of *A. jaegerianus*.

Our response: The Service has been working with the Bureau and other participating agencies in the development of the WMP over the last decade. Although the final EIS for the WMP has been published, the WMP is not final because the Record of Decision (ROD) has not yet been signed; we expect the ROD to be signed in the near future. We have provided comments to the Bureau on its proposed measures to conserve *Astragalus jaegerianus* on early versions of the draft plan and believe that these measures will provide a conservation benefit to the species. We have applied the three criteria by which we evaluate the effectiveness of conservation measures included in management plans (see Application of Critical Habitat Under Section 3(5)(A), 4(a)(3)(B), and Section 4(b)(2) of the Act) and have made a finding that conservation measures contained in the WMP for *A. jaegerianus* will provide for adequate protection of the species and its habitat; therefore, special management and protections would not be required. However, to the extent that these specific areas meet the definition of critical habitat pursuant to section 3(5)(A)(i)(II) of the Act, we are excluding under section 4(b)(2) the entire Coolgardie unit and the portion of the Paradise unit that is on Bureau lands from final critical habitat designation. For our justification, please see, Relationship of Critical Habitat to Lands Managed by the Bureau of Land Management.

Local Agency Comments

Comment 13: The County of San Bernardino questions whether additional populations of *Astragalus jaegerianus* might be located in the future since the DOD-sponsored surveys focused on Fort Irwin lands. If additional populations are found in the future, the County is concerned as to

whether these lands would also be included in critical habitat.

Our response: The DOD-sponsored surveys included a reconnaissance phase in which additional sites up to 30 miles away from known *Astragalus jaegerianus* populations that had suitable substrate, elevation, and plant communities were also checked (Charis Corporation 2001). Although it is possible that other populations may be located in the future, the reconnaissance surveys lead us to believe that this is unlikely. We are required to use the best information available at the time a critical habitat designation is proposed; if other populations are located in the future on nondesignated lands, those lands could be designated as critical habitat only through another regulatory process. However, if other lands are found that support *A. jaegerianus* populations but critical habitat is not designated on these lands, this lack of designation does not signify that these lands are any less important to the conservation and recovery of the species.

Comment 14: Critical habitat should not be used to cancel or impede the determination the Service has already made in its biological opinion that the expansion of training at Fort Irwin will not cause jeopardy to the species.

Our response: We have excluded all DOD lands at Fort Irwin on the basis of 4(b)(2) of the Act. If we had designated critical habitat for *Astragalus jaegerianus* on Fort Irwin lands, any re-initiation of formal consultation on its critical habitat would be conducted under section 7(a)(2) of the Act.

Comment 15: What kind of assessment has there been of the effects that the potentially impacting activities discussed under the Effects of Critical Habitat Designation in the proposed rule (such as grazing, fire management, vehicle disturbance, and mining activities) have actually had on the population size and distribution of the species? What effects have historic mining activities had on the species beyond the boundary of actual operations?

Our response: Quantitative monitoring to correlate the nature and extent of impacts with population parameters has not yet been initiated; DOD has proposed to initiate such monitoring as a part of its INRMP and ESMP. Nevertheless, there is an abundance of literature that discusses impacts of various activities (such as grazing, fire management, vehicle disturbance, and mining) on desert habitats which, in general, are less resilient to such impacts and take longer to recover than more mesic habitats (see

Webb and Wishire 1983; Latting and Rowlands 1995; U.S. Geologic Survey, 2004 and DOD Integrated Training Area Management (ITAM) workshop proceedings (<http://srp.army.mil/public/workshop>)). Impacts that affect the plant community within which *Astragalus jaegerianus* occurs will also impact *A. jaegerianus*.

The commenter notes that "much of the area has undergone historic mining exploration and activity" and questions whether this really had an effect on the species. Although mining historically occurred over much of the area included in the proposed Coolgardie critical habitat unit, the activity typically consisted of digging small test pits. While the number of pits dug may be numerous, they typically were so small that collectively they affected a very small percentage of the land within the proposed critical habitat unit. A proliferation of dirt roads associated with this mining activity resulted in a loss of habitat and an increase in habitat fragmentation in the Coolgardie area. While an assessment of historical impacts due to mining activity may be difficult to do, we have suggested to the Bureau that they undertake an assessment of impacts due to current mining activity on their lands.

Comment 16: The description of the proposed critical habitat designation by Universal Transverse Mercator (UTM) coordinates is not acceptable, as the effects of the designation cannot correctly be tied to properties on the ground, especially for private landowners.

Our response: Our regulations (50 CFR 17.94(b) and 50 CFR 424.12(c)) set forth the requirements for describing areas included in a critical habitat designation. We are required to provide legal definitions of the boundaries. For this purpose, the boundaries for critical habitat provided as UTM North American Datum coordinates are used to describe the critical habitat boundaries. Since no critical habitat is being designated, there are no maps or descriptions in this rule.

Public comments

Comment 17: One commenter said that procedures as per 16 U.S.C. 1533(a)(3)(A) for the designation of critical habitat were not followed; specifically, best scientific data are unavailable to interested parties and therefore they presume that the available data are both insufficient and inaccurate. The commenter requested the "best scientific data available" that the proposed designation was based on as well as any comments made by the

State of California or the County of San Bernardino.

Our response: We sent the commenter the list of references cited in the rule and offered to send any particular references in which he was interested. We also forwarded comments we received from the County of San Bernardino.

Comment 18: An economic analysis is required to be provided "not less than 90 days before the effective date of the regulation" designating critical habitat.

Our response: A notice (69 FR 70971) announcing the availability of the draft economic analysis and reopening the comment period on the proposed critical habitat designation was published in the **Federal Register** on December 8, 2004. The public had an opportunity to comment on the economic analysis, and that opportunity was provided not less than 90 days before the effective date of the regulation. The comment period closed on January 7, 2005.

Comment 19: Exclusion of DOD and Bureau lands from critical habitat based on section 3(5)(A) of the Act would be unlawful because public funds and public lands (e.g., Bureau lands) cannot be used to mitigate the taking of threatened and endangered species by private applicants and for private purposes, such as is being proposed in the West Mojave Plan (WMP) and the Fort Irwin Expansion Plan. The commenter cites U.S.C. 1539(a)(2)(A)(ii) [identical to section 10(a)(2)(A)] and 43 U.S.C. 869.

Our response: The conservation measures proposed by the DOD as part of its proposal to use additional training lands at Fort Irwin include the acquisition of private lands and the restoration of disturbed areas on public lands to offset the loss of habitat that will result from training activities. The DOD is a Federal agency and is undertaking these activities as part of its federally mandated mission. Therefore, the DOD's activities do not mitigate any effects of a project of any private party.

The cited section, 16 U.S.C. 1539(a)(2)(A)(ii) requires that an applicant (not a Federal agency) for an incidental take permit specify the funding that will be available to minimize and mitigate impacts to the species. If the Service issues an incidental take permit to local governments as part of the West Mojave Plan, funds may be generated by development proposed by both private parties and State and local agencies as a means of mitigating the impacts of the loss of habitat on species covered by the plan. These funds may be used to acquire private lands and to restore

disturbed areas on public lands to promote the conservation of the covered species. Section 10(a)(1)(B) of the Act, its implementing regulations, and our policies do not prohibit the use of monies generated as a result of the permitting process in the funding of restoration activities on public lands; public lands, in and of themselves, cannot be used to mitigate for the impacts of private activities (Service 1996).

Finally, one component of the West Mojave Plan is a formal amendment, by the Bureau of Land Management, of the California Desert Conservation Area Plan. This amendment will apply only to the Bureau's (i.e., public) lands. Consequently, no component of this amendment would involve the use of public funds or lands to mitigate the impacts of private activities.

Comment 20: The Service is proposing to close public lands to recreational activities that were previously dedicated to this purpose. Cities and counties that use these public lands for recreation would then be in violation of the Quimby Act (California State Code 66477). Furthermore, the economic impact of making these lands unavailable for dedication to recreational purposes under the Quimby Act would exceed 100 million dollars.

Our response: The Service is not closing any lands as a result of designating critical habitat. The designation of critical habitat does not affect land ownership or establish a refuge, wilderness, reserve, preserve, or other conservation area. Federal lands managed by the Bureau are managed to provide for balanced stewardship of the lands and resources for all people. The Federal Lands Policy and Management Act of 1976 (FLPMA) provided for the establishment of the California Desert Conservation Area (CDCA) and required development of a management plan for this area. Different parts of the CDCA are managed for different purposes, depending on the sensitivity of the resources, public uses, and other factors such as health and safety. The Bureau lands in the area of Coolgardie Mesa that were proposed as critical habitat were previously designated through the CDCA plan as class L (limited) and M (moderate) use lands, indicating that certain uses were appropriate and others were not. With respect to recreation, because these lands are already classed as limited or moderate use, vehicle use is already restricted to approved routes of travel.

The Quimby Act does not apply to any of the lands within the proposed Coolgardie Unit. The purpose of the Quimby Act was to provide for parkland

and open space for recreational purposes to help mitigate the impacts of property development. The lands on Coolgardie Mesa are remote from any cities or urban areas; therefore, Coolgardie Mesa would not be an appropriate location for any city or urban area that may need to set aside lands within its boundaries for recreation. However, for unrelated reasons, we have excluded this area from the critical habitat designation (see Application of Critical Habitat Under Section 3(5)(A), 4(a)(3)(B), and 4(b)(2) of the Act).

Comment 21: There are numerous small businesses that will be affected by the proposed critical designation because they will have to pay a fee for recreation facilities in accordance with the Quimby Act. The Service needs to comply with the Regulatory Flexibility Act by taking into consideration these costs.

Our response: We disagree that numerous small businesses will be affected, based on the economic analysis that was made available on December 8, 2004, which addresses the economic impacts to several sectors, including recreational miners and OHV users. The economic analysis concluded that few, if any, impacts will affect these two user groups.

Comment 22: This proposal requires that an environmental impact statement be prepared because the proposal would devastate the urban outdoor recreation facilities that were previously designated under the Outdoor Recreation Act of 1963. The commenter also cites a number of State regulations, such as the Off-Highway Motor Vehicle Recreation Act of 1988, the California Outdoor Recreation Resources Plan Act of 1967, the California Recreation Trails Act of 1974, and the Federal Outdoor Recreation Act of 1963, to make the point that critical habitat designation in the Coolgardie unit would severely impact the supply of outdoor recreation resources and facilities in the State.

Our response: We disagree that a critical habitat designation in the Coolgardie Unit would severely impact outdoor recreation. The Bureau has been responsible for the management of the lands in this area since 1946 when the agency was formed. The Bureau has not designated any recreation areas or facilities within the proposed Coolgardie unit. This area is almost entirely within lands classed for limited and moderate use, which restricts vehicle use to approved routes of travel.

Furthermore, the Service is not required to conduct an environmental impact statement or environmental assessment per the National

Environmental Policy Act (NEPA) for the proposed critical habitat designation. We published a notice in the **Federal Register** on October 25, 1983 (48 FR 49244), outlining the reasons for our determination that an environmental analysis as defined by the NEPA is not required when designating critical habitat under the Endangered Species Act of 1973, as amended. This position has been approved by the Ninth Circuit Court of Appeals (*Douglas County v. Babbitt*, 48 F.3d 1495 (9th Cir. Ore. 1995), cert. denied 116 S. Ct. 698 (1996)).

Comment 23: One commenter asked why the Service would consider providing critical habitat for this “loco weed,” if, as we have stated, [“the Service has 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 response: Section 4(b)(2) of the Act directs us to consider the designation of critical habitat at the time the species is listed. On November 15, 2001, our failure to follow these regulations in designating critical habitat for *Astragalus jaegerianus* and seven other plant and wildlife species was challenged in *Southwest Center for Biological Diversity and California Native Plant Society v. Norton* (Case No. 01–CV–2101–IEG (S.D.Cal.)). Our court settlement obligated us to pursue the designation of critical habitat within certain timeframes.

“Locoweed” is a term given to certain species of *Astragalus*, that accumulate selenium in alkaline soils, which when eaten by livestock is toxic. This term does not apply to *Astragalus jaegerianus* because it is not a selenium accumulator.

Comment 24: One commenter was not convinced that this species needs protection; the commenter thinks that species are being counted as subspecies and populations, and believes that the data do not always show a direct correlation between human activities and species decline.

Our response: *Astragalus jaegerianus* is not being counted as a subspecies or populations (however, please note that the Endangered Species Act directs us to treat subspecies and varieties of plants as full species for purposes of the Act). In his monograph on the genus *Astragalus*, Barneby (1964) placed this species in its own monotypic section of the genus, indicating its distinctness from other species of milk-vetch. Current taxonomic treatments of the genus uphold the distinctness of this taxon (Spellenberg 1993).

We frequently use data gathered on other species or their habitats and how they respond to various types of disturbance to infer that similar processes are occurring for the species of interest. We have performed this type of analysis for *Astragalus jaegerianus*. Human impacts on desert ecosystems have been studied, and therefore we have a body of literature to reference. For instance, we know the soils and plant communities of desert ecosystems are less resilient than other ecosystems in recovering from the effects of vehicular traffic (e.g., see Latting and Rowlands 1995; Webb and Wilshire 1983; Prose and Metzger 1985). Because we know the structure and composition of desert plant communities is altered by vehicular traffic, and because we know that *A. jaegerianus* depends on particular shrub communities, we infer that if those shrub communities are destroyed or eliminated by vehicular traffic, then *A. jaegerianus* will also be destroyed or eliminated.

Comment 25: Critical habitat cannot close the Coolgardie area to mineral prospecting; this can only be done through a process of withdrawal of areas from mineral entry as specified in FLPMA.

Our response: We concur that the designation of critical habitat would not close the Coolgardie area to mineral entry. We note that the Bureau has proposed to withdraw the Coolgardie area from mineral entry in the WMP; however, a withdrawal request has not been prepared at this time. We also note that, even if a withdrawal from mineral entry were enacted, it would only preclude the possibility of new claims being filed; valid existing claims would not be affected, and claims found to be invalid would be vacated.

Comment 26: One commenter had concerns about the potential exclusion of critical habitat from military lands based on an updated INRMP. With over half of the proposed critical habitat occurring on Fort Irwin, the commenter claims that the ultimate result of such exclusion could be extinction of the species. The DOD’s current proposal would eliminate 21.5 percent of *Astragalus jaegerianus* habitat, including 66 percent of the Montana-Brinkman population and 20 percent of the Paradise Valley population. If the INRMP is to be used as an exclusion, it would have to recognize that critical habitat is the minimum standard for conservation and should not be subjected to training.

Our response: Since Fort Irwin’s INRMP is still in draft form, Section 4(a)(3)(B) can not be applied at this time. Because the DOD has stated that

Fort Irwin is essential to national security, we have excluded this area from critical habitat under section 4(b)(2) of the Act.

In 2004, we completed a biological opinion on the Army’s proposed expansion of military training at Fort Irwin in which we determined that, even though individuals and habitat of *Astragalus jaegerianus* would be lost due to training, the DOD’s proposed activity would not cause jeopardy to the species. In connection with that consultation, DOD proposed conservation measures, such as imposing restrictions on certain portions of the habitat and implementing an education program for the species (see comment 6), that the Service believes will provide conservation benefits to the species. The draft INRMP contains these same measures. We believe that the measures that the Army has proposed to conserve *A. jaegerianus* in the draft INRMP, which are identical to those that we consulted with DOD on, would be sufficient to provide for the survival of the species.

Comment 27: The Service should not use the proposed designation to undermine the utility of the important and legally mandated conservation tool. In cases such as *Forest Guardians v. Babbitt* (1998) and *Arizona Cattlegrowers v. FWS* (2001), courts have agreed that there are benefits to designation, such as providing information that would assist in prioritizing conservation planning and management efforts, and avoiding the piecemeal conservation approach when species management is fragmented into smaller planning entities. Furthermore, critical habitat was intended to require a recovery standard, which incorporates consideration of cumulative impacts beyond the piecemeal jeopardy standard.

Our response: The process of proposing critical habitat has provided informational benefits for planning the conservation and management of *Astragalus jaegerianus*. Unlike other species that may range over a larger number of jurisdictions and land management agencies, as of 2004 when the proposed critical habitat designation was prepared, 85 percent of the range of *A. jaegerianus* occurred primarily under the jurisdiction of two Federal agencies—the Department of the Army and the Bureau of Land Management; this has facilitated conservation planning for this species (as of February 2005, 92 percent of the range of the species occurs on Federal lands). Even prior to the listing of the species in 1998, we coordinated with these two

agencies to ensure that they were including measures to conserve and manage habitat for *A. jaegerianus* appropriately during the course of their proposed activities. Aside from the lands that are proposed for active military training by DOD on Fort Irwin, all other federal lands on Fort Irwin, including most of the NASA-leased lands, and all lands managed by the Bureau that are habitat for *A. jaegerianus* are being managed primarily for the conservation of the species. Although some private lands are interspersed with Bureau lands within the proposed critical habitat boundaries, critical habitat for plant species carries no additional requirements for private landowners unless there is a Federal nexus. In the case of the private lands where *A. jaegerianus* occurs, most of these will be purchased by the Army and managed by the Bureau as parts of the Paradise Valley ACEC and Coolgardie ACEC; as of February 2005, over 50 percent of the private lands have already been purchased. The designation of critical habitat for plant species on private lands confers no regulatory authority unless there is a Federal nexus. The County of San Bernardino, the agency that has jurisdiction over private lands in this area, has been alerted through the critical habitat designation process of the value of these lands to the conservation of *A. jaegerianus*, and should take this into consideration during its permitting processes.

Section 7 requires that federal agencies ensure that activities they undertake not jeopardize the continued existence of a listed species or adversely modify or destroy its designated critical habitat. The processes for determining whether jeopardy and adverse modification are likely to occur involve analyzing the same types of information from the same time frames (*i.e.*, the current rangewide condition of the species and its critical habitat, the current condition of the species and its critical habitat in the action area, the effects of the action under review on the species and its critical habitat, and the effects of any future non-Federal action that is reasonably certain to occur within the action area). The courts have invalidated the Service's definition of adverse modification of critical habitat. The Service is currently reviewing the decision to determine what effect it may have on the outcome of section 7 consultations. We believe that the actions to be undertaken by the Bureau through the WMP, and by DOD through the INRMP, provide conservation benefits which exceed those that would

arise from the designation of critical habitat, because the WMP and INRMP provide positive conservation measures, such as monitoring and fencing of certain portions of the habitat, rather than just avoiding adverse modification.

Economic Issues

Comment 28: The Service should devote as much time, energy, and language to the estimation of economic benefits and costs in relation to the proposed critical habitat. The commenter provided us with a list of potential economic impacts that should be included in the analysis.

Our Response: Section 4(b)(2) of the Act requires the Secretary to designate critical habitat based on the best scientific data available after taking into consideration the economic impact, and any other relevant impact, of specifying any particular area as critical habitat. Our approach for estimating economic impacts includes both economic efficiency and distributional effects. The measurement of economic efficiency is based on the concept of opportunity costs, which reflect the value of goods and services foregone in order to comply with the effects of the designation (*e.g.*, lost economic opportunity associated with restrictions on land use). Where data are available, our analyses do attempt to measure the net economic impact. For example, if the fencing of *Astragalus jaegerianus* habitat to restrict motor vehicles results in an increase in the number of individuals visiting the site for wildlife viewing, then our analysis would attempt to net out the positive, offsetting economic impacts associated with their visits (*e.g.*, impacts that would be associated with an increase in tourism spending). However, while this scenario remains a possibility, we found no data that would allow us to measure such an impact, nor was such information submitted to us during the public comment period.

Most of the other benefit categories submitted by the commenter reflect broader social values, which are not the same as economic impacts. While the Secretary must consider economic and other relevant impacts as part of the final decision-making process under section 4(b)(2) of the Act, the Act explicitly states that it is the government's policy to conserve all threatened and endangered species and the ecosystems upon which they depend. Thus we believe that explicit consideration of broader social values for the species and its habitat, beyond the more traditionally defined economic impacts, is not necessary, because Congress has already clarified the social

importance of the species and its habitat. As a practical matter, we note the difficulty in being able to develop credible estimates of such values as they are not readily observed through typical market transactions. In sum, we believe that society places the utmost value on conserving any and all threatened and endangered species and the habitats upon which they depend and thus we need only to consider whether the economic impacts (both positive and negative) are significant enough to merit exclusion of any particular area without causing the species to go extinct.

Comment 29: One commenter suggested revising the statement made in the draft economic analysis (DEA) that in its earlier biological opinion (BO), the Service concluded that the addition of training lands at Fort Irwin is not likely to jeopardize the continued existence of *Astragalus jaegerianus*. The comment notes that this BO did not consider adverse modification with regard to species recovery and advises that the statement in the DEA should be revised to reflect current case law invalidating the Service's definition of adverse modification.

Our Response: The DEA states that the past formal consultation regarding the proposed addition of training lands at Fort Irwin resulted in a Service BO concluding that the proposed action was not likely to jeopardize the continued existence of *Astragalus jaegerianus*. This statement correctly characterizes this past consultation which occurred prior to designation of critical habitat and thus did not consider whether the proposed activity would adversely modify or destroy critical habitat, and the associated costs of this consultation are appropriately included as pre-designation impacts of species conservation. The DEA acknowledges (in footnote 16), however, that a recent Ninth Circuit judicial opinion (*Gifford Pinchot Task Force v. United States Fish and Wildlife Service*) has invalidated the Service's regulation defining destruction or adverse modification of critical habitat, and notes that the Service is currently reviewing the decision to determine what effect it may have on the outcome of section 7 consultations.

Comment 30: One commenter stated that the DEA should clearly state that critical habitat designation for plants would not have any legal impact on private lands unless there were a Federal nexus, and therefore the economic impact to private landowners from this designation should be zero.

Our response: As detailed in the DEA, no impacts are anticipated to private landowners associated with *Astragalus*

jaegerianus conservation efforts. The DEA discusses the potential for changes to private property values associated with public attitudes about the limits and costs of critical habitat. However, this effect should be minimized since we anticipate most of the private property will be transferred to Federal ownership within the next few years.

Comment 31: A commenter stated that the range of administrative consultation costs applied in the DEA is too broad and offers that Federal agencies likely keep better track of consultation costs and may provide a more realistic range of costs.

Our response: The economic analysis employs a consultation cost model to represent the likely range of administrative costs of informal and formal section 7 consultations. The broad range takes into consideration that consultations involve varied levels of effort. The cost model is based on anticipated administrative effort from a survey of a number of Federal agencies and Service Field Offices across the country. The administrative effort is typically defined in number of hours spent, and then translated into a dollar value by applying the appropriate average government salary rates. In interviewing the agencies relevant to this DEA, the representatives were asked if the estimated administrative costs seemed reasonable. In the case that the agency anticipated a different range of costs for its particular activities within the proposed designation, that cost range was applied to the relevant consultations in place of the generic cost model estimates. That is, where specific information was available regarding the level of effort for a particular consultation, the unique cost estimates were applied.

Comment 32: One commenter said that, because many of the conservation efforts benefit multiple species, including informal and formal consultations, it is not appropriate to allocate all costs to *Astragalus jaegerianus* conservation. This comment suggested that costs be prorated by species that benefit from the critical habitat designation and other conservation actions. As an example, the comment states that consultation costs are overestimated, as most consultations involve multiple species.

Our response: To the extent possible, the DEA distinguished costs related specifically to *Astragalus jaegerianus* conservation where multiple species are subject to a single conservation effort or section 7 consultation. In the case that another species clearly drives a project modification or conservation effort, the associated costs are appropriately not

attributed to *A. jaegerianus*. For each consultation and conservation effort, the DEA attempts to identify costs specifically related to *A. jaegerianus*. In the case of administrative consultation costs, the DEA applies a standard cost model used to estimate a range of administrative costs of consultation. These costs are considered representative of the potential range of costs typically experienced for a consultation regarding a single species. The cost model assumes that consultations involving more than one species typically involve higher administrative costs. Accordingly, although consultations described in the DEA may involve multiple species, the administrative costs as estimated by applying this cost model are considered to be predictive of those costs due specifically to the inclusion of *A. jaegerianus* in the consultation.

Comment 33: According to one comment provided, conservation efforts associated with the Fort Irwin expansion predesignation consultations are overstated because many of these consultations involved multiple species. The comment stated that DOD monitoring and maintenance costs do not appear to be prorated to include the other sensitive species that occur on DOD lands.

Our response: As mentioned previously, the DEA attempts to identify costs specifically related to *Astragalus jaegerianus* conservation. Administrative costs as estimated in the DEA (e.g., associated with development of the Key Elements Report, preliminary review of expansion lands proposal and INRMP, etc.) are those specifically attributable to consideration of *A. jaegerianus* and habitat. The costs of surveys, monitoring, and fencing in the DEA represent only *A. jaegerianus*-specific efforts, and not similar efforts for other species.

Comment 34: A comment letter regarding the DEA stated that the WMP costs should be divided among species considered in the plan. This comment offered that costs of *Astragalus jaegerianus* conservation may be determined by applying the ratio of proposed critical habitat acreage to the entire WMP acreage or as a percentage of the total number of species covered in the WMP.

Our response: It is not appropriate to simply divide the acreage of the proposed critical habitat designation that overlaps the proposed WMP area by the total acres covered in the WMP to establish the percentage of total WMP costs relevant to *Astragalus jaegerianus*. It is likely that particular regions require more active management than others.

The lands within the WMP that contain proposed critical habitat designation for *A. jaegerianus*, for example, may require particular attention and management, as they are known to contain sensitive species. The DEA also acknowledges that the WMP considers multiple sensitive species and does not include all costs of WMP conservation efforts for all species, but isolates those related specifically to *A. jaegerianus*. That is, the full costs of development and implementation of the WMP are not attributed to *A. jaegerianus* conservation efforts in the DEA. The DEA isolates conservation efforts specifically included in the proposed WMP for *A. jaegerianus*, including increasing law enforcement (of OHV restrictions) in the proposed *A. jaegerianus* conservation areas, route maintenance and rehabilitation, and maintenance of signage and route maps.

Comment 35: One commenter noted that, as the WMP is in developmental stages and no final environmental impact statement has been completed, the analysis of the WMP and its conservation efforts for *Astragalus jaegerianus* are speculative and should be represented as such or deleted from the DEA. Following that, the commenter states specifically that the costs of an annual report on the progress of the WMP should be deleted because the WMP is still only a draft, and further, under the WMP, annual monitoring is not required.

Our response: The DEA acknowledges that the WMP is not yet complete. Significant time and effort, however, have been already devoted to its development (the BLM estimates more than \$5 million has been spent on the Plan) and the Notice of Availability for the final EIS is expected to be published in the **Federal Register** soon (letter from BLM to USFWS, January 6, 2005). As such, the DEA considers the implementation of the WMP to be a reasonable forecast of future land management in the region. Regarding the costs of annual monitoring of conservation measures implemented, the West Mojave Management Team (developers of the WMP) anticipates preparing a report summarizing progress specifically on *Astragalus jaegerianus* conservation measures and the status of *A. jaegerianus* on WMP lands.

Comment 36: According to one comment letter, the costs of developing the WMP included in the DEA seem underestimated.

Our response: According to BLM (William Haigh, personal comm. May 18, 2004), the primary agency involved in the multijurisdictional WMP, the costs of developing of the WMP were

approximately \$5 million. Importantly, this estimate is provided for context and is not a cost component of the DEA. The WMP covers a large area and considers many species; the DEA evaluates only the portion of those costs relevant to *Astragalus jaegerianus*.

Comment 37: With respect to the WMP, one comment stated that costs of route designation appear highly inflated. The comment reasons that if \$700,000 was spent surveying routes in the WMP's 9.4 million acres, \$20,000 to \$30,000 seems high for the 25 miles of routes in *Astragalus jaegerianus* proposed critical habitat. Further, the estimate of 5 to 25 percent of the route maintenance seems high, as proposed critical habitat makes up less than 0.2% of the WMP area.

Our response: First, according to the BLM (William Haigh, personal comm. May 18, 2004), the \$700,000 was spent surveying 1.5 million acres within the WMP area, not 9.4 million acres. Second, it is not necessarily appropriate to assume that there is a linear relationship between miles surveyed and survey cost. Rather than develop a "rule of thumb," the DEA employs specific information provided by the BLM regarding estimated BLM total expenditures on the surveys (\$700,000) and the portion of that cost relevant to surveys within *Astragalus jaegerianus* conservation areas as outlined by the proposed WMP (\$20,000 to \$30,000). As the BLM conducted these efforts, this is considered to be the best information available regarding these costs. Further, communications with the BLM (May 18, 2004, and September 13, 2004) have supported the DEA estimate that up to 25 percent of route maintenance costs of the WMP are related to *A. jaegerianus* conservation. The BLM notes and the DEA reflects, however, that this is a high-end estimate and that the actual range of potential costs related to *A. jaegerianus* conservation is between 5 and 25 percent of the total costs. Although the proposed critical habitat designation is relatively small compared to the entire WMP area, this range of costs is reasonable considering that sensitive species (*i.e.*, *A. jaegerianus*) are known within the proposed critical habitat designation area: therefore, more effort may be spent in maintenance of *A. jaegerianus*-occupied acres as compared to other, less sensitive lands.

Comment 38: One comment stated that while a minerals withdrawal from the WMP lands proposed for critical habitat is preferable, there is no guarantee this would happen and so associated costs are not certain.

Our response: The DEA does not anticipate impacts to casual use mining

participants or private individuals holding mining claims in the region. This is because most of the digging and panning occurs in pockets of deeper, gold-bearing soil rather than the shallow soiled areas where *Astragalus jaegerianus* occurs. The costs associated with mining in the DEA are for BLM to: (a) Conduct validity exams at existing mining claims to determine whether a valuable mineral deposit exists; and (b) assess whether claimant's mining activity may result in significant ground disturbance. The Bureau has yet to determine whether current mining activity has any impact on *A. jaegerianus*.

Comment 39: A comment provided from the DOD states that the economic analysis is adequate but that it did not estimate costs of acquiring better information on the distribution of the species and conducting research on the impacts of training (*e.g.*, the effects of dust or obscurants) on endangered species. Although these efforts are recommended by the Service, conducting such research and experiments can be cost prohibitive.

Our response: While the DEA does include past costs of species survey and research efforts, future costs of similar efforts are not included. Future costs of species conservation efforts on Fort Irwin in the DEA include maintenance of *Astragalus jaegerianus* conservation areas, acquisition of private lands for *A. jaegerianus* conservation outside of Fort Irwin, and implementation of the ongoing education program regarding *A. jaegerianus*. The DOD expects to spend approximately \$100,000 per year for the next 5 years to conduct research on seed germination and banking and management of experimental populations. DOD further anticipates spending approximately \$50,000 per year for 5 years to study the cumulative effects of dust obscurants on *A. jaegerianus*. This new information is included in the revised economic analysis of the proposed critical habitat designation.

Comment 40: A comment provided on the DEA noted that Fort Irwin must acquire all lands within the boundaries of the expansion and that including purchase of these lands as a cost of *Astragalus jaegerianus* conservation overestimates the costs attributable to *A. jaegerianus*. The comment further stated that Fort Irwin must purchase additional acres outside the boundaries of the expansion area to mitigate land impact regardless of critical habitat designation and that it is likewise not appropriate to attribute these costs to the *A. jaegerianus* critical habitat designation.

Our response: The DEA does not include costs of purchase of private lands within the boundaries of the Fort Irwin expansion area as a cost related to *Astragalus jaegerianus* conservation, and only includes purchase of those private lands outside of Fort Irwin that overlap with the proposed critical habitat designation for *A. jaegerianus*. The purpose of DOD purchase of *A. jaegerianus* habitat lands to be managed by the Bureau as conservation areas is to mitigate potential impact to *A. jaegerianus* from training on habitat within Fort Irwin lands. Purchase of these lands outside of Fort Irwin and within the proposed critical habitat designation is therefore appropriately considered related to *A. jaegerianus* conservation in the DEA.

Comment 41: One commenter stated that as the Key Elements Report primarily considered the desert tortoise, costs of the review of this plan (\$20,000–\$85,000) related to the *Astragalus jaegerianus* seem very high.

Our response: The Service estimates that the Key Elements report involved roughly double the effort of a typical consultation due to its coverage of complex issues regarding military training and species conservation. It is unclear whether this estimate considers only the administrative effort of *A. jaegerianus*-related issues, or all species considered within the Key Elements report. In the case that this cost includes efforts considering, for example, the desert tortoise, administrative costs of consultation related to *A. jaegerianus* are overestimated.

Comment 42: According to one comment, the 2001–2003 DOD surveys for *Astragalus jaegerianus* included lands outside of the proposed critical habitat designation and these costs should therefore not be included in the DEA.

Our response: The DOD conducted *Astragalus jaegerianus* surveys to obtain better information regarding the distribution of the species. The cost of these *A. jaegerianus* surveys are therefore considered conservation efforts related to *A. jaegerianus* and are included in the pre-designation costs within the DEA.

Comment 43: While the DOD has committed \$75 million for conservation, one commenter highlighted that these monies will be used for a variety of mitigation efforts, not just for *Astragalus jaegerianus*.

Our response: The DEA acknowledges that the \$75 million will be applied to myriad efforts considering multiple species. This estimate is provided for context in the DEA and is not included

in full as a component of the costs of conservation for *Astragalus jaegerianus*.

Comment 44: One comment stated that an Integrated Natural Resources Management Plan (INRMP), such as that for Fort Irwin, would need to be updated whenever a new federally listed species is discovered on the base or when a species is listed. The cost of updating the INRMP should therefore not be considered a result of the critical habitat designation.

Our response: The INRMP did not previously include a discussion of *Astragalus jaegerianus* management and is therefore being updated to address issues and management related to *A. jaegerianus*. The costs of updating the INRMP are therefore appropriately included in the DEA as a conservation effort related to *A. jaegerianus*.

Comment 45: One comment asserted that the annual monitoring and reporting costs on NASA lands are inflated. This comment further questioned why NASA species survey costs are included, as the DOD already surveyed NASA-leased lands and further surveying would be redundant.

Our response: Written communication from NASA (March 4, 2004, and July 14, 2004) provided the costs of annual monitoring and reporting on *Astragalus jaegerianus*. The DEA estimates costs of approximately \$500,000 in the first year (reflecting NASA's stated intention to resurvey all of the areas previously surveyed by DOD to independently verify the species' distribution on NASA lands leased from DOD) and \$30,000 per year in subsequent years to monitor and report on the status of the species. Communication with NASA following the publication of the DEA clarifies that these cost estimates include costs for surveys and monitoring of not only *A. jaegerianus*, but also the desert cymopterus (*Cymopterus deserticola*) and the Mojave ground squirrel. NASA estimates that three-fifths of the costs of these conservation efforts are specifically due to consideration of *A. jaegerianus*. The revised economic analysis therefore revises impacts to NASA of *A. jaegerianus* conservation efforts to \$300,000 in the first year and \$18,000 per year in subsequent years for monitoring and reporting on the status of *A. jaegerianus* on its lands leased from DOD.

Comment 46: According to one comment on the DEA, off-highway vehicle (OHV) enthusiasts rarely purchase motorcycles/equipment for a single event. The costs to participate in a dual sport event are therefore overstated.

Our response: The DEA does not forecast any impacts to OHV users as a

result of species conservation efforts. Information on the prevalence of OHV use and dual sport events in the area is provided in the DEA as context for the analysis. First, the Bureau does not issue formal permits for OHV use within the proposed lands. All OHV users must remain on open routes within the proposed critical habitat and are therefore not anticipated to adversely impact *Astragalus jaegerianus* or its habitat. Second, dual sport events may require a Bureau-issued Special Recreation Permit and may pass through routes within the proposed critical habitat. These events, however, are also required to adhere to the open routes. While dust resulting from these events may be a concern for *A. jaegerianus*, multiple route options are available for these events, and participants are typically flexible regarding rerouting around particular areas.

Comments From the State

Section 4(i) of the Act states, "the Secretary shall submit to the State agency a written justification for [her] failure to adopt regulations consistent with the agency's comments or petition." We contacted the CDFG concerning the proposed critical habitat designation; however, it chose not to submit comments on the proposed critical habitat designation for *Astragalus jaegerianus*. The State notified us that submitting comments on the proposed critical habitat designation was a low priority for them because they are participants in the WMP planning process, and have previously commented on the conservation measures that were proposed for *Astragalus jaegerianus* in the draft WMP (CDFG, in litt. 2003). Furthermore, many of the private parcels that would be subject to State environmental regulations have been or are being purchased by DOD and transferred to the Bureau for inclusion in the Coolgardie and Paradise ACECs. Because of this action, the State's concern with private lands issues has been greatly diminished.

Summary of Changes From the Proposed Rule

In the development of our final designation of critical habitat for *Astragalus jaegerianus*, we reviewed comments received on the proposed designation of critical habitat and the draft economic analysis. In addition to incorporating these comments in this final rule and revised economic analysis, where appropriate, we made the following changes to the proposed designation:

(1) We excluded from critical habitat portions of the Montana-Brinkman and Paradise units that occur on DOD lands at Fort Irwin, including those proposed for military training and those proposed for conservation of *Astragalus jaegerianus* under section 4(b)(2) of the Act.

(2) We excluded from critical habitat under sections 4(b)(2) and 3(5)(A) of the Act the portion of the Paradise unit and all of the Coolgardie unit that occur on Bureau lands where an Area of Critical Environmental Concern in the WMP has been proposed to be established.

(3) We no longer consider the *Astragalus jaegerianus* habitat on lands leased to NASA from the DOD at what is known as the Venus Research and Development site to be essential to the conservation of the species and have therefore removed this area from the final critical habitat designation. See response to Comment 10.

Critical Habitat

Critical habitat is defined in section 3 of the Act 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.

Critical habitat receives protection under section 7 of the Act through the prohibition against destruction or adverse modification of critical habitat with regard to actions carried out, funded, or authorized by a Federal agency. Section 7 requires consultation on Federal actions that are likely to result in the destruction or adverse modification of critical habitat. The designation of critical habitat does not affect land ownership or establish a refuge, wilderness, reserve, preserve, or other conservation area. Such designation does not allow government or public access to private lands.

To be included in a critical habitat designation, the habitat within the area occupied by the species must first have features that are "essential to the conservation of the species." Critical habitat designations identify, to the extent known and using the best

scientific and commercial data available, habitat areas that provide essential life cycle needs of the species (*i.e.*, areas on which are found the primary constituent elements, as defined at 50 CFR 424.12(b)).

Occupied habitat may be included in critical habitat only if the essential features thereon may require special management or protection. Thus, we do not include areas where existing management is sufficient to conserve the species. (As discussed below, such areas may also be excluded from critical habitat pursuant to section 4(b)(2).)

Our regulations state that, "The Secretary shall designate as critical habitat areas outside the geographical area presently occupied by a species only when a designation limited to its present range would be inadequate to ensure the conservation of the species" (50 CFR 424.12(e)). Accordingly, when the best available scientific and commercial data do not demonstrate that the conservation needs of the species require designation, we will not designate critical habitat in areas outside the geographic area occupied by the species.

The Service's Policy on Information Standards Under the Endangered Species Act, published in the **Federal Register** on July 1, 1994 (59 FR 34271), and Section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001 (Pub. L. 106-554; H.R. 5658) and the associated Information Quality Guidelines issued by the Service, provide criteria, establish procedures, and provide guidance to ensure that decisions made by the Service represent the best scientific and commercial data available. They require Service 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 is generally the listing package for the species. Additional information sources include the recovery plan for the species, 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. All information is used in accordance with the provisions of Section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001 (Pub. L. 106-554; H.R. 5658) and the

associated Information Quality Guidelines issued by the Service.

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 conservation 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 conservation.

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 section 4(b)(1)(A) of the Act, we use the best scientific and commercial data available in determining areas that are essential to the conservation of *Astragalus jaegerianus*. We have also reviewed available information that pertains to the habitat requirements of this species. This information included data from our files that we used for listing the species; geologic maps (California Geologic Survey 1953), recent biological survey, and reports, particularly from the Army surveys of 2001 (Charis 2002); additional information provided by the Army, the Bureau of Land Management, those engaged in research on *A. jaegerianus*, and other interested parties; and discussions with botanical experts. We also conducted multiple site visits to all three of the units that were proposed for critical habitat designation.

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 designate as critical habitat, we are required to base critical habitat determinations on the best scientific and commercial data available and to 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 germination or seed dispersal; and habitats that are protected from disturbance or are representative of the historic geographical and ecological distributions of a species.

All areas proposed for critical habitat for *Astragalus jaegerianus* are within the species' historical range and contain one or more of the biological and physical features (primary constituent elements) identified as essential for the conservation of the species. The Act defines critical habitat as areas containing physical and biological characteristics essential to the conservation of the species. Conservation is in turn defined as the point at which the Act's protections are no longer necessary. Accordingly, to identify critical habitat for *Astragalus jaegerianus*, we must first determine at what point the species may be considered "conserved". Although the Service has not completed preparation of a recovery plan for this species, recovery criteria most likely will include/be based on the persistence of stable populations over time in the four areas where the species is currently known to occur. To achieve this will likely require (1) monitoring of key life history attributes, including reproduction and recruitment rates; (2) maintaining habitat that is required for the species to carry out these essential functions; and (3) avoiding and minimizing threats that alter the primary constituent elements within the habitat or the ability of the species to complete its life cycle. The primary constituent elements essential to the conservation of *A. jaegerianus* habitat are based on specific components that are described below.

Space for Individual and Population Growth, Including Sites for Germination, Pollination, Reproduction, Seed Dispersal, and Seed Bank

The distribution of *Astragalus jaegerianus* is restricted to four geographically distinct areas that occur north of the city of Barstow in the west

Mojave Desert, San Bernardino County. The four populations of *A. jaegerianus* are arrayed more or less linearly along a 20-mile-long (32 km) axis that trends in a northeasterly-to-southwesterly direction. The region is characterized by block-faulted mountain ranges separated by alluvium-filled basins. The basins consist of broad valley plains, gently sloping bajadas, and rolling hills with low relief (Charis 2003). At the landscape level, the plant community within which *A. jaegerianus* occurs can be described as Mojave mixed woody scrub (Holland 1998), Mojave creosote bush scrub (Holland 1988; Cheatham and Haller 1975; Thorne 1976), or creosote bush series (Sawyer and Keeler-Wolf 1995). More specifically, the sites where *A. jaegerianus* occurs have a high diversity of low shrub species, including: Turpentine bush (*Thamnosma montana*), white bursage (*Ambrosia dumosa*), Mormon tea (*Ephedra nevadensis*), Cooper goldenbush (*Ericameria cooperi* var. *cooperi*), California buckwheat (*Eriogonum fasciculatum* var. *polifolium*), brittlebush (*Encelia farinosa* or *Encelia actoni*), desert aster (*Xylorrhiza tortifolia*), goldenheads (*Acamptopappus spheroccephalus*), spiny hop-sage (*Grayia spinosa*), cheesebush (*Hymenoclea salsola*), winter fat (*Kraschenninikovia lanata*), and paper bag bush (*Salazaria mexicana*). *Astragalus jaegerianus* grows within what are referred to as "host shrubs," which it uses for structural support. The first five of the shrubs listed above, along with dead shrubs, are host to approximately 75 percent of the *A. jaegerianus* individuals that have been observed. Host shrubs may also be important in providing appropriate microhabitat conditions (such as shelter from herbivores, and modified soil and water conditions) for *A. jaegerianus* seed germination and seedling establishment (Charis 2002).

These plant communities also support insects that pollinate *Astragalus jaegerianus*. Based on limited observation, *Anthidium dammersi*, a solitary bee in the megachilid family (Megachilidae), was found to be the most frequent pollinator observed on *A. jaegerianus* in 2003 (Kearns 2003). This species will fly up to 0.6 mi (1 km) away from its nest; however, if floral resources are abundant, it will decrease its flight distances accordingly (Doug Yanega, University of California Riverside, pers. comm. 2003). Three other occasional visitors to *A. jaegerianus* were a hover fly (*Eupeodes volucris*), a large anthophrid bee

(*Anthophora* sp.), and the white-lined sphinx moth (*Hyles lineata*) (Kearns 2003). Additional pollinator observations are scheduled for the 2005 flowering season (Hopkins 2005).

These plant communities also support animal species that are likely to disperse the seeds of *Astragalus jaegerianus*. Compared with the seed sizes of many desert annual species, the *A. jaegerianus* seed's relatively large size of would make them an attractive food source to ants and other large insects, small mammals, and birds (Brown et al. 1979). These animal species would also be the most likely vectors to disperse *A. jaegerianus* seeds within and between populations. Rasoul Sharifi (pers. comm. 2004) confirmed the presence of *A. jaegerianus* seeds within native ant coppices (mounds). Seed may also be moved across the soil surface by wind or running water (Sharifi et al. 2004); however, long-distance dispersal by these means is more likely a rare than common event.

Although the aboveground portion of *Astragalus jaegerianus* individuals die back each year, they persist as a perennial rootstock through the dry season. The perennial rootstock may also allow *A. jaegerianus* to survive occasional dry years, while longer periods of drought might be endured by remaining dormant (Beatley in Bagley 1999). Individuals begin regrowth in the late fall or winter, once sufficient soil moisture is available. Seed set typically follows flowering in April and May. However, if climatic conditions are unfavorable, the plants may desiccate prior to flowering or completing seed set. Therefore, substantial contributions to the seedbank may occur primarily in climatically favorable years. The seedbank then persists in the soil around the base of host shrubs and allows for germination and growth of new individuals in those years when suitable climatic conditions (rainfall, temperatures) occur.

Areas That Provide the Basic Requirements for Growth (Such as Water, Light, and Minerals)

Astragalus jaegerianus is most frequently found on shallow soils derived from Jurassic or Cretaceous granitic bedrock. A small portion of the individuals located to date occur on soils derived from diorite or gabbroid bedrock (Charis 2002). In one location on the west side of the Coolgardie site, plants were found on granitic soils overlain by scattered rhyolitic cobble, gravel, and sand. Soils tend to be shallower immediately adjacent to milk-vetch plants than in the surrounding landscape; at the Montana Mine site,

rotten, highly weathered granite bedrock was reached within 2 in (5 cm) of the soil surface near *A. jaegerianus* plants (Fahnestock 1999). The topography where *A. jaegerianus* most frequently occurs is on low ridges and rocky low hills where bedrock is exposed at or near the surface and the soils are coarse or sandy (Prigge 2000b; Charis 2002). Most of the individuals found to date occur between 3,100 and 4,200 ft (945 to 1,280 m) in elevation (Charis 2002). At lower lying elevations, the alluvial soils appear to be too fine to support *A. jaegerianus*, and at higher elevations the soils may not be developed enough to support *A. jaegerianus* (Prigge 2000b; Charis 2002).

Sharifi et al (2004) have noted annual rainfall amounts at two weather stations representative of the northern portion of the range of *Astragalus jaegerianus* and compared them to germination and survival rates of over 200 *A. jaegerianus* individuals. They believe that successful recruitment (addition of individuals to a population by reproduction) is correlated with, among other factors, annual precipitation of at least 15 cm (5.9 in). Annual precipitation between 7 and 15 cm (2.8–6 in) may represent years when established individuals continue to persist, though with some death due to water stress at the lower levels; annual precipitation of less than 7 cm may be years when many individuals die due to water stress or remain dormant. Although many years may not provide optimal climatic conditions to result in germination and seed set of *Astragalus jaegerianus*, the region north of Barstow provides the appropriate soils, vegetation communities, and rainfall patterns to support the growth of *A. jaegerianus*.

Based on the best available information at this time, the primary constituent elements of critical habitat for *Astragalus jaegerianus* consist of:

(1) Shallow soils (between 3,100 and 4,200 ft (945 to 1,280 m) in elevation) derived primarily from Jurassic or Cretaceous granitic bedrock, and less frequently on soils derived from diorite or gabbroid bedrock and at one location on granitic soils overlain by scattered rhyolitic cobble, gravel, and sand.

(2) The host shrubs (between 3,100 and 4,200 ft (945 to 1,280 m) in elevation) within which *Astragalus jaegerianus* grows, most notably *Thamnosma montana*, *Ambrosia dumosa*, *Eriogonum fasciculatum* ssp. *polifolium*, *Ericameria cooperi* var. *cooperi*, *Ephedra nevadensis*, and *Salazaria mexicana* that are usually found in mixed desert shrub communities.

Criteria Used To Identify Essential Habitat

In our proposed critical habitat designation (69 FR 18018), we delineated critical habitat units to provide for the conservation of *Astragalus jaegerianus* at the four sites where it is known to occur. All four sites are essential habitat because *A. jaegerianus* exhibits life history attributes, including variable seed production, low germination rates, and habitat specificity in the form of a dependence on a co-occurring organism (host shrubs), all of which make it particularly vulnerable to extinction (Keith 1998; Gilpin and Soule 1986). Please refer to the proposed rule (69 FR 18018) for details on how we determined the boundaries of the proposed critical habitat units.

Special Management Considerations or Protections

Within the geographical area occupied by the species special management considerations or protections may be needed to maintain the physical or biological features that are essential to the conservation of *Astragalus jaegerianus*. Habitat for *A. jaegerianus* within the proposed Goldstone-Brinkman, Paradise, and Coolgardie units may require special management considerations or protection due to the threats to the species and its habitat posed by invasions of non-native plants such as Sahara mustard (*Brassica tournefortii*) that may take over habitat for the species; habitat fragmentation that detrimentally affects plant-host plant (composition and structure of the desert scrub community) and plant-pollinator interactions, leading to a decline in species reproduction and increasing susceptibility to non-native plant invasion; and vehicles (military vehicles or unauthorized OHV users) that cause direct and indirect impacts, such as excessive dust, to the plant. Habitat for *A. jaegerianus* in the Goldstone-Brinkman, Paradise, and Coolgardie units has been fragmented to a minor extent. We anticipate that in the future, habitat fragmentation will increase, that changes in composition and structure of the plant community may be altered by the spread of non-native plants, and that the direct and indirect effects of dust may increase. All of these threats would render the habitat less suitable for *A. jaegerianus*, and special management may be needed to address them.

Application of Critical Habitat Under Section 3(5)(A), 4(a)(3), and 4(b)(2) of the Act

Section 3(5)(A) of the Act defines critical habitat as the specific areas within the geographic area occupied by the species on which are found those physical and biological features (i) essential to the conservation of the species and (ii) which may require special management considerations or protection. Therefore, areas within the geographic area occupied by the species that do not contain the features essential for the conservation of the species are not, by definition, critical habitat. Similarly, areas within the geographic area occupied by the species that do not require special management or protection also are not, by definition, critical habitat. To determine whether an area requires special management, we first determine if the essential features located there generally require special management to address applicable threats. If those features do not require special management, or if they do in general but not for the particular area in question because of the existence of an adequate management plan or for some other reason, then the area does not require special management.

We consider a current plan to provide adequate management or protection if it meets three criteria: (1) The plan is complete and provides a conservation benefit to the species (*i.e.*, the plan must maintain or provide for an increase in the species' population, or the enhancement or restoration of its habitat within the area covered by the plan); (2) the plan provides assurances that the conservation management strategies and actions will be implemented (*i.e.*, those responsible for implementing the plan are capable of accomplishing the objectives, and have an implementation schedule or adequate funding for implementing the management plan); and (3) the plan provides assurances that the conservation strategies and measures will be effective (*i.e.*, it identifies biological goals, has provisions for reporting progress, and is of a duration sufficient to implement the plan and achieve the plan's goals and objectives).

Section 318 of fiscal year 2004 the National Defense Authorization Act (Pub. L. 108–136) amended the Endangered Species Act to address the relationship of Integrated Natural Resources Management Plans (INRMPs) to critical habitat by adding a new section 4(a)(3)(B). This provision prohibits the Service from designating as critical habitat any lands or other

geographical areas owned or controlled by the Department of Defense, or designated for its use, that are subject to an INRMP prepared under section 101 of the Sikes Act (16 U.S.C. 670a), if the Secretary of the Interior determines in writing that such plan provides a benefit to the species for which critical habitat is proposed for designation. Fort Irwin has prepared a draft INRMP which includes *Astragalus jaegerianus*. We are currently consulting with Fort Irwin on the draft INRMP. It is not likely that the INRMP will be finalized prior to publication of this rule and therefore, section 4(a)(3)(B) cannot be applied.

Further, 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 after taking into consideration the economic impact, national security impact, 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 that the benefits of 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.

In our critical habitat designations we have used the provisions outlined in sections 3(5)(A), 4(a)(3)(B), and 4(b)(2) of the Act to evaluate those specific areas proposed for designation as critical habitat and those areas which are subsequently finalized (*i.e.*, designated). We have applied the provisions of these sections of the Act to lands essential to the conservation of *Astragalus jaegerianus* to evaluate and exclude them from final critical habitat.

Relationship of Critical Habitat to Lands Managed by the Bureau of Land Management (Bureau)

Under section 3(5)(A) and (4)(b)(2) of the Act, the Service is excluding from critical habitat the Coolgardie Unit and a portion of the Paradise Unit that were proposed for designation. We provide greater explanation below.

As discussed in the proposed rule (69 FR 18018), the Bureau has led the development of the West Mojave Plan (WMP) (see additional information at <http://www.ca.blm.gov/cdd/wemo.html>). The final WMP was published in February 2005 and the Notice of Availability for the final WMP Final Environmental Impact Statement was published on April 1, though the Record of Decision is due to be signed by July 2005. The WMP includes the Federal action of amending the Bureau's California Desert Conservation Area Plan and the framework for the

development of an HCP for non-Federal lands within the planning area.

Conservation of *A. jaegerianus* is a key factor that was considered in the development of the WMP. We have been providing technical assistance to the Bureau to ensure that the WMP provides for protection and management of habitat essential for the conservation of this species. In addition, the Bureau is currently consulting with the Service on its proposed amendments to the California Desert Conservation Area Plan under section 7 of the Act. As part of the WMP, the Bureau has proposed to establish the Coolgardie Mesa and West Paradise Conservation Areas, to implement management actions that will contribute toward the conservation of the species, and to modify current activities within these areas so that such activities will not impair the conservation of the species. The WMP does not contain specific measures to conserve *A. jaegerianus* on private lands; however, the WMP targets these lands for acquisition and subsequent management by the Bureau for the conservation of the species. The DOD is providing the funding to acquire these private lands in the Coolgardie Mesa and West Paradise Conservation areas. As of February 2005, the DOD had already acquired over 50 percent of the 4,300 ac of private lands outside of Fort Irwin and included in the proposed critical habitat designation.

We have reviewed the Bureau's WMP, and we find that it meets the three criteria we use for evaluating such plans as discussed above. The WMP provides an adequate conservation management plan that covers the species and provides for adaptive management sufficient to conserve the species. The first criterion is whether the plan is complete and provides a conservation benefit to the species. The WMP includes prescriptions for establishing two ACECs that include all the known habitat for *Astragalus jaegerianus* outside of DOD lands at Fort Irwin. The areas will be managed to maintain the integrity of the habitat, and include both protective measures, such as restricting certain uses that would alter or destroy the habitat (including: botanical surveys will be required prior to issuing use permits, certain routes will be closed through a route designation process, certain areas may be fenced if needed to protect the species, lands will be withdrawn from mineral entry to limit future exploration, and restrictions on casual use mining will be developed as necessary), and measures to restore habitat that has already been impacted (closed routes will be signed as such,

and roadbeds will be vertically mulched).

The second criterion is whether the plan provides assurances that the conservation management strategies and actions will be implemented. As the primary Federal land manager for the lands that support *A. jaegerianus* populations in the proposed Coolgardie unit and a portion of the proposed Paradise unit, the Bureau is directed by section 7(a)(1) of the Act to "utilize their authorities in furtherance of the purposes of the Act by carrying out programs for the conservation of endangered species." In addition, the Bureau's own national and State policies (Bureau 1996, 2001) include the objective to conserve listed species and the ecosystems on which they depend. The plan also includes an implementation schedule for conservation measures to be taken; monitoring includes an annual review of implementation of the measures undertaken, and tracking the progress of land acquisition within the ACEC boundaries.

The third criterion is whether the plan provides assurances that the conservation strategies and measures will be effective. We believe the measures that will be implemented by the Bureau will be effective because the primary strategy to conserve *A. jaegerianus* is to ensure that the quality of its habitat is maintained by avoiding future impacts. Based on this analysis of the three criteria, we have found that the Bureau's WMP provides for the management that is needed to conserve *A. jaegerianus* in these two areas and under 3(5)(A) of the Act, we are not designating as critical habitat these BLM areas. To the extent that these areas meet the definition of critical habitat pursuant to section 3(5)(A)(i)(II), we are excluding the Coolgardie unit and a portion of the Paradise unit that were proposed for critical habitat, totaling 9,627 ac (3,896 ha), from final critical habitat designation under section 4(b)(2) as discussed below.

In the proposed critical habitat designation, approximately 4,427 ac (1,792 ha) of private lands were included. The amount of private lands within the three proposed critical habitat units was as follows: Goldstone-Brinkman unit 193 ac (78 ha); Paradise unit 607 ac (246 ha); Coolgardie unit 3,714 ac (1,503 ha). These private lands are also being excluded from critical habitat because most of these lands will fall under the management of DOD or the Bureau over time. As part of the proposal to expand training lands on Fort Irwin included in the 2004 consultation with the Service, DOD has

planned to purchase parcels from Catellus Corporation, a real estate company that is assisting with the transfer of parcels previously owned by Santa Fe Railroad. Catellus parcels were located within the expansion area as well as on Bureau lands. As of February 2005, the following acquisitions of Catellus land have already been completed by DOD: 100 percent of those in the Goldstone-Brinkman unit; 33 percent of those in the Paradise unit, and 67 percent of those in the Coolgardie unit. In 2005, DOD will continue with the acquisition of non-Catellus private lands from willing sellers within the boundaries of the two ACECs on Bureau lands.

Federal and other lands may also be excluded from critical habitat designation based on section 4(b)(2) of the Act. An area may be excluded from critical habitat if it is determined, following an analysis of relevant impacts, 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. We are excluding Bureau lands in the proposed Paradise and Coolgardie units, and private lands within the proposed units, under section 4(b)(2) of the Act. The analysis, which led us to the conclusion that the benefits of excluding these areas exceed the benefits of designating them as critical habitat, and will not result in the extinction of the species, follows.

(1) Benefits of Inclusion

The benefits of inclusion are low. If these areas were designated as critical habitat, any actions the Bureau proposed to approve, fund, or undertake which might destroy or adversely modify the critical habitat would require a consultation with us. If the action affects an area occupied by the plants, consultation is required even without the critical habitat designation. As indicated above, these units are each occupied by the listed plant, so consultation on BLM's activities on the excluded lands will be required even without the critical habitat designation. Further, if a consultation on adverse modification were to occur after designating critical habitat, since Bureau's plan adequately provides for the conservation of habitat for this species, the benefit from additional consultation is likely also to be minimal. We are consulting on the WMP and anticipate that the Bureau's plan will provide for the conservation for the species. This is because the conservation measures included in the final West Mohave Plan to conserve *A.*

jaegerianus, detailed above, were a key factor that was considered in the development of the WMP. Under the Ninth Circuit judicial opinion (*Gifford Pinchot Task Force v. United States Fish and Wildlife Service*), critical habitat designations may provide greater benefits to recovery of a species than previously believed, but it is not possible to quantify these benefits at this time.

Another possible benefit of a critical habitat designation is education of landowners and the public regarding the potential conservation value of these areas through the proposed rule and request for public comments. This may focus and contribute to conservation efforts by other parties by clearly delineating areas of high conservation value for certain species. However, we believe that this educational benefit has largely been achieved because the DOD-sponsored surveys for *Astragalus jaegerianus* in 2001 provided the basis for the Bureau's proposal to establish the Coolgardie and Paradise ACECs (included in the West Mojave Plan) for the purposes of conserving the species. Furthermore, private landowners and users of the Bureau lands in these areas have had the opportunity to participate in the planning process for the West Mojave Plan for over a decade, and thus have been made aware of the presence of *A. jaegerianus* and the importance of this habitat to its conservation. Therefore, we believe the education benefits, which might arise from a critical habitat designation here, have already been generated.

In summary, we believe that a critical habitat designation for this plant species would provide virtually no additional Federal regulatory benefits. Because almost all of the proposed critical habitat is Federal land occupied by the species, the Bureau must consult with the Service over any action it undertakes, approves, or funds which might impact the *Astragalus jaegerianus*. The additional educational benefits, which might arise from critical habitat designation, are largely accomplished through the proposed rule and request for public comment that accompanied the development of this regulation, and the proposed critical habitat is known to the Bureau. Furthermore, under the *Gifford Pinchot* decision, critical habitat designations may provide greater benefits to recovery of a species than was previously believed, but it is not possible to quantify this at present.

(2) Benefits of Exclusion

The Bureau commented that critical habitat designation may not be

necessary or appropriate given the extensive conservation actions it has included in the WMP, including establishment of the Paradise and Coolgardie ACECs and the conservation measures that will be implemented to protect the habitat of *Astragalus jaegerianus*. Based on our review of the WMP conservation measures, detailed above, we agree with the Bureau that the measures it is undertaking are sufficient to provide for the long-term conservation of the species in these two areas, and that little additional benefit would be provided by designating critical habitat on Bureau lands.

It will benefit the Bureau, and private parties seeking permits and approvals from the Bureau to exclude these areas from designation. Existing conservation measures are already being undertaken for the species, and thus without a designation, because these measures will provide long-term conservation benefits for the species, designating critical habitat in these areas would require an additional administrative burden, through requiring consultation on the critical habitat that is unlikely to provide additional protection to that already provided in the WMP.

(3) Benefits of Exclusion Outweigh the Benefits of Inclusion

Because the *Astragalus jaegerianus* habitat identified on Bureau lands in the proposed Paradise and Coolgardie units does provide the primary constituent elements and requires special management considerations or protection, it was proposed for designation as critical habitat. However, because all of the actions that the Bureau has proposed for these lands in the WMP are focused on providing for the long-term conservation of *Astragalus jaegerianus* and provide benefits that exceed those that would arise from the designation of critical habitat (because the WMP provides positive conservation measures), we have determined that the benefits of exclusion of these Bureau lands from the critical habitat designation outweigh the benefits of the designation and therefore we are excluding these lands under section 4(b)(2) of the Act.

(4) Exclusion Will Not Result in Extinction of the Species

Exclusion of the Bureau lands in the proposed Paradise and Coolgardie critical habitat units will not result in extinction of the species. We are currently consulting with the Bureau on the WMP, which includes the establishment of the Paradise and Coolgardie ACECs. Although the consultation is not complete, we believe

that all of the actions that the Bureau will be undertaking in these two areas will contribute to the conservation of the species, and would not cause jeopardy to the species. Any additional actions by the Bureau which might adversely affect the species must undergo a consultation with the Service under the requirements of section 7 of the Act.

Relationship of Critical Habitat to Lands Managed by the Department of Defense (DOD)

We have excluded all DOD lands (including proposed critical habitat currently leased to NASA) at Fort Irwin under section 4(b)(2) of the Act for military readiness and national security. DOD requested that all Fort Irwin lands be excluded for national security. Of lands currently leased to NASA from DOD, a 996-acre inholding was proposed as critical habitat that lies completely within the boundaries of Fort Irwin. These lands include approximately 600 acres within the Goldstone Conservation Area that is managed by DOD for the benefit of *Astragalus jaegerianus*, further supporting our exclusion under section 4(b)(2) of the Act. Because the INRMP has not yet been completed, we did not consider DOD lands for non-inclusion under Section 4(a)(3)(B). We provide greater explanation below.

The Sikes Act Improvement Act of 1997 (Sikes Act) requires each military installation that includes land and water suitable for the conservation and management of natural resources to complete, by November 17, 2001, an INRMP. Section 318 of the fiscal year 2004 National Defense Authorization Act (Pub. L. 108-136) amended the Act, under Section 4(a)(3)(B), to address the relationship of INRMPs to critical habitat. An INRMP integrates implementation of the military mission of the installation with stewardship of the natural resources found there. Each INRMP includes an assessment of the ecological needs on the installation, including the need to provide for the conservation of listed species; a statement of goals and priorities; a detailed description of management actions to be implemented to provide for these ecological needs; and a monitoring and adaptive management plan. We consult with the military on the development and implementation of INRMPs for installations with listed species. Section 4(a)(3)(B) of the Act states that the Secretary shall not designate as critical habitat any lands controlled by the Department of Defense, or designated for its use, that are subject to an INRMP if the Secretary

determines that the plan provides a benefit to the species for which critical habitat is being proposed for designation. The DOD specifically requested that we exclude Fort Irwin from critical habitat based on this exclusion, and we worked closely with DOD to revise its draft INRMP over the last year. However, because DOD has not completed its INRMP for Fort Irwin, these DOD lands do not meet the requirements for non-inclusion under Section 4(a)(3)(B).

Military lands may be excluded from critical habitat designation based on section 4(b)(2) of the Act. An area may be excluded from critical habitat if we determine, following an analysis of relevant impacts including the impact to national security, 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. DOD further requested the exclusion of all lands in Fort Irwin under section 4(b)(2) based on national security concerns. After conducting the requisite 4(b)(2) analysis under section, we have excluded all DOD lands at Fort Irwin (the Goldstone-Brinkman and Paradise units) under section 4(b)(2) of the Act for military readiness and national security. The analysis, which led us to the conclusion that the benefits of excluding these areas exceed the benefits of designating them as critical habitat, and will not result in the extinction of the species, follows.

(1) Benefits of Inclusion

The benefits of inclusion are low. Since the Fort Irwin units are all occupied by *Astragalus jaegerianus*, DOD must already consult with the Service regarding any activities on these lands that may affect the species. In other words, consultation would be required even without critical habitat designation. Under the *Gifford Pinchot* decision, critical habitat may provide greater recovery benefits to species than was previously believed, but it is not possible to quantify this at present. However, we have already consulted with and provided technical assistance to the Army relative to this expansion area. The largest aggregations of plants on these lands will be protected (see discussion above), and not subject to activities which would likely adversely affect the ability of the conservation areas to contribute to the recovery of the species.

Another possible benefit of a critical habitat designation in general is education of landowners and the public regarding the potential conservation

value of these areas. This may focus and contribute to conservation efforts by other parties by clearly delineating areas of high conservation value for certain species. In this case the primary land owner is DOD, and we believe that this educational benefit has largely been achieved because we have been coordinating for many years with DOD on its land management programs and its proposal to expand training activities. Based on these coordinating efforts, we believe that DOD is very aware of the conservation needs of *Astragalus jaegerianus*. For example, DOD sponsored the surveys for *Astragalus jaegerianus* in 2001 that provided the basis for the proposed critical habitat designation. Therefore, we believe the education benefits, which might arise from a critical habitat designation here, have already been generated.

(2) Benefits of Exclusion

The Army has commented that critical habitat on Fort Irwin would result in substantial economic and military readiness impact. The Army believes that critical habitat would impact their ability to use the expansion lands for military training because such designation could separate entirely the western expansion areas from the installation and in the Army's opinion critical habitat "does not allow any means of using the land for training without violating the critical habitat that would be designated." If critical habitat were to have such an effect, it might require the Army to relocate its training facilities. The Army commented that startup costs to establish a brigade-sized force-on-force Combat Training Center in another location would cost \$830 million, and as much as \$10 billion to improve an existing installation so that it could support the training mission.

If these impacts were to occur, the benefits of excluding the installation from critical habitat would be high. The Service defers to the Army's identification of specific credible military readiness or national security impacts. Further, critical habitat would require additional administrative expenditures for consultation activities required by the designation for Fort Irwin (and the DOD lands leased to NASA). Since Fort Irwin is already working to conserve the species and habitat on its property and proposing measures that will conserve species and habitats, it is unlikely that the designation of critical habitat would provide additional benefits to the habitat through these additional consultations.

(3) Benefits of Exclusion Outweigh the Benefits of Inclusion

Because the *Astragalus jaegerianus* habitat identified on Fort Irwin lands proposed for military training does provide the primary constituent elements and requires special management considerations or protection, it was proposed for designation as critical habitat. However, because the military has commented that critical habitat for *A. jaegerianus* had the potential to disrupt their critical national defense mission, we have determined that the benefits of exclusion of critical habitat at Fort Irwin outweigh the benefits of the designation and therefore we are excluding these lands under section 4(b)(2) of the Act. In addition to national security concerns, NASA expressed concern that creation of critical habitat on their lands leased from Fort Irwin would severely limit NASA's ability to develop cutting edge space communications technology. Furthermore, management is being provided in these areas to provide for species conservation.

(4) Exclusion Will Not Result in Extinction of the Species

The exclusion of the DOD lands on Fort Irwin will not result in extinction of the species. We have already consulted with DOD on its proposal to expand military training in the expansion area and made the determination that this action would not cause jeopardy to the species (see Comment 6). Any additional actions by DOD which might adversely affect the species must undergo a consultation with the Service under the requirements of section 7 of the Act. The exclusions leave these protections unchanged from those that would exist if the excluded areas were designated as critical habitat.

Critical Habitat Designation

Because all three critical habitat units that were proposed were excluded from final designation, we are designating zero acres (0 ac) (zero hectares (0 ha) of critical habitat in this final rule for *Astragalus jaegerianus* in San Bernardino County, California. Congress envisioned that there would be circumstances where no critical habitat would be designated (Congressional Research Service 1982).

Effects of Critical Habitat Designation

Section 7 Consultation

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

Individuals, organizations, States, local governments, and other non-Federal entities are affected by the designation of critical habitat only if their actions occur on Federal lands, require a Federal permit, license, or other authorization, or involve Federal funding.

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 designated or proposed. Regulations implementing this interagency cooperation provision of the Act are codified at 50 CFR part 402.

Section 7(a)(4) 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 action agency in eliminating conflicts that may be caused by the proposed action. 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)). 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 must enter into consultation with us. Through this consultation, the action agency ensures that their 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 the 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.

Activities on Federal lands that may affect *Astragalus jaegerianus* will require section 7 consultation. Activities on private or State lands requiring a permit from a Federal agency, such as a permit from the U.S. Army Corps of Engineers under section 404 of the Clean Water Act or any other activity requiring Federal action (*i.e.*, funding, authorization), will also continue to be subject to the section 7 consultation process. Federal actions not affecting listed species, 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 describe and evaluate 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. Though we have not designated any areas as critical habitat in this final rule, we note Federal actions may jeopardize the continued existence of the species.

We recognize that those areas included in the proposed designation of critical habitat may not include all of the habitat areas that may eventually be determined to be necessary for the conservation of the species. For this reason, we want to ensure that the public is aware that the critical habitat designation process does not signal that habitat outside the proposed designation is unimportant or may not be required for the species' conservation. Any areas where *Astragalus jaegerianus* occurs will continue to be subject to conservation actions that may be implemented under section 7(a)(1) of the Act and to the regulatory protections afforded by the

section 7(a)(2) jeopardy standard and the prohibitions of section 9 of the Act. 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.

As discussed previously in this rule, we are consulting with both the Army and the Bureau on activities that are being proposed on their lands. We have completed consultation with the Army and continue to coordinate with them on its proposed addition of training lands on NTC (Charis 2003). We are also consulting with the Bureau as the lead Federal agency on the WMP (Bureau 2003).

Where federally listed wildlife species occur on private lands proposed for development, any habitat conservation plans submitted by the applicant to secure an incidental take permit, pursuant to section 10(a)(1)(B) of the Act, would be subject to the section 7 consultation process. The Superior-Cronese Critical Habitat Unit for the desert tortoise (*Gopherus agassizii*), a species that is listed as threatened under the Act, overlaps in range with *Astragalus jaegerianus* in a portion of the Brinkman-Montana, Paradise, and Coolgardie populations of the species. Although we anticipate that most of the activities occurring on private lands within the range of *A. jaegerianus* will eventually be included under the umbrella of the HCP to be prepared by the County of San Bernardino, there may be activities proposed for private lands that either need to be completed prior to the approval of the WMP's HCP, or there may be a proposed activity that is not covered by the HCP, and therefore may require a separate habitat conservation plan.

If you have questions regarding whether specific activities would require consultation under section 7 of the Act, contact the Field Supervisor, Ventura Fish and Wildlife Office (*see ADDRESSES* section). Requests for copies of the regulations on listed wildlife and inquiries about prohibitions and permits may be addressed to the U.S. Fish and Wildlife Service, Portland Regional Office, 911 NE 11th Avenue, Portland, OR 97232 (telephone 503/231-6131; 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 potential economic impacts of designating critical habitat for *Astragalus jaegerianus* was prepared and was made available for public review on December 8, 2004 (69 FR 70971). This analysis considered the potential economic effects of designating critical habitat as well as the protective measures taken as a result of the listing of *A. jaegerianus* as an endangered species, and other Federal, State, and local laws that aid habitat conservation in areas designated as critical habitat. However, because the Service has not designated any lands as critical habitat for *A. jaegerianus* the economic impact within the final designation is zero.

A copy of the final economic analysis and supporting documents are included in our administrative record and may be obtained by contacting U.S. Fish and Wildlife Service, Branch of Endangered Species (see **ADDRESSES** section) or by download from the Internet at <http://ventura.fws.gov>.

Required Determinations

Regulatory Planning and Review

In accordance with Executive Order (EO) 12866, this document is not a significant rule in that it will not raise novel legal and policy issues, and 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. This action was submitted to the Office of Management and Budget (OMB); however, OMB declined to review the proposed rule. We prepared an economic analysis of this action and used 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 *Astragalus jaegerianus*. However, because we are not designating any critical habitat, we will not be submitting the final rule to OMB for review.

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

Under the Regulatory Flexibility Act (RFA) (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 that the rule will not have a significant economic impact on a substantial number of small entities. SBREFA amended the RFA to require Federal agencies to provide a statement of the factual basis for certifying that a rule will not have a significant economic impact on a substantial number of small entities. SBREFA also amended the RFA to require a certification statement. Based on the information that is available to us at this time, we are certifying that this designation of critical habitat will not have a significant economic impact on a substantial number of small entities. The following discussion explains our rationale.

According to the Small Business Administration (SBA), small entities include small organizations, including any independent nonprofit organization that is not dominant in its field, and small governmental jurisdictions, including school boards and city and town governments that serve fewer than 50,000 residents, as well as small businesses. The SBA defines small businesses categorically and has provided standards for determining what constitutes a small business at 13 CFR 121.201 (also found at <http://www.sba.gov/size/>), which the RFA requires all federal agencies to follow. To determine if potential economic impacts to these small entities would be significant, the draft economic analysis considered the types of activities that might trigger regulatory impacts if critical habitat were to be designated as proposed. However, because zero acres (0 ac (zero ha)) of critical habitat for *Astragalus jaegerianus* are being designated with this final rule, we are certifying that this rule will not have a significant economic impact on a substantial number of small entities, and thus a regulatory flexibility analysis is not required.

Small Business Regulatory Enforcement Fairness Act (5 U.S.C. 804(2)).

Under the SBREFA (5 U.S.C. 804(2)), this rule is not a major rule. Based on the effects identified in the economic analysis, we believe that this critical habitat designation of zero acres (0 ac (zero ha)) will not have an effect on the economy of \$100 million or more, will not cause a major increase in costs or prices for consumers, individual industries, federal, state, or local government agencies, or geographical regions, and will not have 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. None of these criteria are relevant to this analysis because we are designating zero acres (0 ac (zero ha)) of critical habitat. Nevertheless, based on the economic analysis, the likelihood of any energy-related activity occurring within the zero acres (0 ac (zero ha)) of designated critical habitat is minimal for the following reasons: (1) There are no transmission power lines identified on the what we originally proposed as critical habitat, and (2) there are no energy extraction activities (Bureau of Land Management 1980). Therefore, this action is not a significant energy action and no Statement of Energy Effects is required.

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

In accordance with the Unfunded Mandates Reform Act (2 U.S.C. 1501 et seq.), we make 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, or 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 to State governments.

(b) We do not believe that this rule will significantly or uniquely affect small governments because it will not produce a Federal mandate of \$100 million or greater in any year, that is, it is not a “significant regulatory action” under the Unfunded Mandates Reform Act. The designation of critical habitat imposes no obligations on State or local governments. As such, Small Government Agency Plan is not required.

Federalism

In accordance with Executive Order 13132, the rule does not have significant Federalism effects. A Federalism assessment is not required. As discussed above, the designation of zero acres (0 ac (zero ha)) of critical habitat in areas currently occupied by *Astragalus jaegerianus* would have little incremental impact on State and local governments and their activities. This is because the zero acres (0 ac (zero ha)) of critical habitat occurs to a great extent on Federal lands managed by the Department of Defense and the Bureau of Land Management. Less than 15 percent occurs on private lands that would involve State and local agencies, and the amount of private lands continues to diminish as parcels are purchased by DOD.

Even though zero acres (0 ac (zero ha)) of critical habitat are designated, the process of identifying proposed critical habitat may have some benefit to State and local governments in that the areas essential to the conservation of these species are more clearly defined, and the primary constituent elements of the habitat necessary to the survival of the species are identified. While this definition and identification does not alter where and what federally sponsored activities may occur, it may assist these local governments in long-range planning (rather than making them wait for case-by-case section 7 consultation to occur).

Civil Justice Reform

In accordance with Executive Order 12988, the 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 designating zero acres (0 ac (0 ha)) critical habitat in accordance with the provisions of the Endangered Species Act. The proposed rule used standard property descriptions and identified the primary constituent elements within the proposed designated areas to assist the public in understanding the habitat needs of *Astragalus jaegerianus*.

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

This 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 (Fish & Wildlife Service Forms 3–200–55 and 3–200–56) are covered by existing OMB Control No. 1018–0094, which expires on 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

It is our position that, outside the Tenth Circuit, we do not need to prepare environmental analyses as defined by the National Environmental Policy Act of 1969 in connection with designating critical habitat under the Endangered Species Act of 1973, as amended. We published a notice outlining our reasons for this determination in the **Federal Register** on October 25, 1983 (48 FR 49244). This position was upheld in the courts of the Ninth Circuit (*Douglas County v. Babbitt*, 48 F.3d 1495 (9th Cir. Ore. 1995), cert. denied 116 S Ct. 698 (1996)). This final 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 coordinate with federally recognized Tribes on a Government-to-Government basis. We have determined that there are no Tribal lands essential for the conservation of *Astragalus jaegerianus*. Therefore, no tribal lands were proposed as critical habitat for *A. jaegerianus*.

References Cited

A complete list of all references cited herein, as well as others, is available upon request from the Field Supervisor, Ventura Fish and Wildlife Office (see **ADDRESSES** section).

Author

The primary author of this proposed rule is Constance Rutherford, Ventura Fish and Wildlife Office, U.S. Fish and Wildlife Service, 2493 Portola Road, Suite B, Ventura, California 93003 (805/644–1766).

List of Subjects in 50 CFR Part 17

Endangered and threatened species, Exports, Imports, Reporting and

recordkeeping requirements,
Transportation.

Proposed Regulation Promulgation

■ Accordingly, the Service hereby amends 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 jaegerianus*” under “FLOWERING PLANTS,” to read as follows:

17.12 Endangered and threatened plants.

* * * * *

(h) * * *

Species		Historic range	Family	Status	When listed	Critical habi- tat	Special rules
Scientific name	Common name						
FLOWERING PLANTS.							
*	*	*	*	*		*	*
<i>Astragalus jaegerianus.</i>	Lane Mountain milk- vetch.	U.S.A. (CA)	Fabaceae—Pea	E	647	17.96(a)	NA
*	*	*	*	*	*		*

■ 3. In § 17.96(a), add critical habitat for *Astragalus jaegerianus*, in alphabetical order under Family Fabaceae to read as follows:

§ 17.96 Critical habitat—plants.

(a) Flowering plants.

* * * * *

Family Fabaceae: *Astragalus jaegerianus* (Lane Mountain milk-vetch)

(1) Lands proposed for critical habitat, but excluded under 4(b)(2) and exempted under 3(5)(A) of the Act, consists of the mixed desert scrub community within the range of

Astragalus jaegerianus that is characterized by the following primary constituent elements:

(i) Shallow soils derived primarily from Jurassic or Cretaceous granitic bedrock, and less frequently soils derived from diorite or gabbroid bedrock and, at one location, granitic soils overlain by scattered rhyolitic cobble, gravel, and sand.

(ii) The highly diverse mixed desert scrub community that includes the host shrubs within which *Astragalus jaegerianus* grows, most notably: *Thamnosma montana*, *Ambrosia*

dumosa, *Eriogonum fasciculatum* ssp. *polifolium*, *Ericameria cooperi* var. *cooperi*, *Ephedra nevadensis*, and *Salazaria mexicana*.

(2) Critical Habitat Map Units.

Because zero acres (0 ac) of critical habitat are being designated, no critical habitat maps are provided here.

Dated: April 1, 2005.

Craig Manson,

Assistant Secretary for Fish and Wildlife and Parks.

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