

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

[Docket No. FWS-R8-ES-2009-0078; MO 99210-0-0009]

RIN 1018-AW53

Endangered and Threatened Wildlife and Plants; Final Revised 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 revised critical habitat for *Astragalus jaegerianus* (Lane Mountain milk-vetch) under the Endangered Species Act of 1973, as amended (Act). In total, approximately 14,069 acres (ac) (5,693 hectares (ha)) of land in 2 units located in the Mojave Desert in San Bernardino County, California, fall within the boundaries of the revised critical habitat designation.

DATES: This rule becomes effective on June 20, 2011.

ADDRESSES: The final rule and the associated final economic analysis, and map of critical habitat are available on the Internet at <http://www.regulations.gov> at Docket No. FWS-R8-ES-2009-0078, and <http://www.fws.gov/ventura/>. Comments and materials received, as well as supporting documentation used in the preparation of this final rule, are available for public inspection, by appointment, during normal business hours, at the U.S. Fish and Wildlife Service, Ventura Fish and Wildlife Office, 2493 Portola Road, Suite B, Ventura, CA 93003; telephone 805-644-1766; facsimile 805-644-3958.

FOR FURTHER INFORMATION CONTACT: Diane Noda, Field Supervisor, U.S. Fish and Wildlife Service, Ventura Fish and Wildlife Office (see **ADDRESSES**). If you use a telecommunications device for the deaf (TDD), call the Federal Information Relay Service (FIRS) at 800-877-8339.

SUPPLEMENTARY INFORMATION:**Background**

It is our intent to discuss only those topics directly relevant to the development and designation of revised critical habitat for *Astragalus jaegerianus* under the Act (16 U.S.C. 1531 *et seq.*). For more information on the biology and ecology of *A. jaegerianus*, refer to the final listing rule published in the **Federal Register** on

October 6, 1998 (63 FR 53596), the previous proposed critical habitat that published in the **Federal Register** on April 6, 2004 (69 FR 18018), and the proposed revised designation of critical habitat that published in the **Federal Register** on April 1, 2010 (75 FR 16404). Information on the associated draft economic analysis (DEA) for the proposed rule to designate revised critical habitat was published in the **Federal Register** on November 3, 2010 (75 FR 67676).

Species Description, Life History, Distribution, Ecology, and Habitat

We received no new information pertaining to the description, life history, or distribution of *Astragalus jaegerianus* following the proposed revised designation (April 1, 2010; 75 FR 16404). These subjects are summarized in the final listing rule that published in the **Federal Register** on October 6, 1998 (63 FR 53596), and the proposed revised designation of critical habitat that published in the **Federal Register** on April 1, 2010 (75 FR 16404). However, we did receive and analyze new information related to population dynamics, ecology, and habitat of *A. jaegerianus* primarily from two long-term monitoring reports (U.S. Army: Fort Irwin 2009, 2010) and from research recently conducted on the effects of long-term drought on *A. jaegerianus* and its host shrubs (Huggins *et al.* 2010). In addition, we are clarifying information on recent genetic studies that was briefly mentioned in the proposed revised critical habitat designation. This new information is described below.

New Information*Population Dynamics*

Two reports have become available since the proposed revised critical habitat designation was prepared. As part of their Integrated Natural Resources Management Plan (INRMP) responsibilities, the Army established 40 study plots in 2005 to study the demographics of *Astragalus jaegerianus* and submits annual monitoring reports to the Service. Ten study plots were established in each of the four populations of *Astragalus jaegerianus*. This species is an herbaceous perennial that typically dies back at the end of each growing season, and persists through the dry season as a taproot; this taproot may also allow *A. jaegerianus* to survive occasional dry years, while longer periods of drought might be endured by remaining dormant. "Above-ground" refers to those individuals that can be observed each year on the basis

of their herbaceous growth. Information summarized from the 2010 annual monitoring report indicates that, while the total number of *A. jaegerianus* individuals observed above-ground within the plots has decreased compared to 2005 levels, the number of individuals has increased annually since 2007 (Hessing 2010, p. 4). Study plot surveys in 2005 documented 224 individuals; in 2007, the total number of individuals observed in the study plots was 4 plants; in 2010, the total number of individuals was 152. Of these 152 plants, 120 were individuals that were observed the previous year, 26 were new recruits, and 6 were resprouts.

Another ongoing population demography study conducted at permanent survey plots at the Montana Mine and Goldstone sites showed that *Astragalus jaegerianus* populations have declined in number of individuals, and in 2009 are less than 13 percent of their population size in 1999 (Sharifi *et al.* 2010, p. 4). The rate of mortality has generally slowed in the last 2 years, although at one subplot, the rate has increased recently compared with earlier years. Little to no observed recruitment is thought to be the result of low seedling survival and a depleted seed bank (Sharifi *et al.* 2010, pp. 11–12). Recruitment is probably episodic and requires two or more uncommon conditions such as: A large seed bank, precipitation greater than 8 inches (in) (200 millimeter (mm)) per year and frequently spaced (rain events approximately four times a month), and a subsequent wet year or summer precipitation (Sharifi *et al.* 2009, p. 10).

Ecology and Habitat

Huggins *et al.* (2010) reported on changes in host shrub canopy over a time period from 1999 to 2009 in the same areas where populations have been monitored by Sharifi *et al.* (2010) (see above). A drought began in the Mojave Desert (and much of the western States) in 1999, according to various researchers (Cook *et al.* 2004, p. 1016; Breshears *et al.* 2005, p. 15144; Hereford *et al.* 2006, p. 19). Such droughts have been documented to result in population diebacks and drought pruning of perennial desert shrubs (for example, see Hamerlynck and McAuliffe 2008). Host shrubs for *Astragalus jaegerianus* have been documented to have experienced a 10 percent decrease in volume and cover between 1999 and 2009, and shrub mortality has been high (Huggins *et al.* 2010, pp. 123–124). Such deterioration in shrub canopy cover results in increased ground temperature and light intensity within the host shrub, and

likely indirectly affects the establishment and survival of *A. jaegerianus*. This hypothesis was supported by the observation that survival of *A. jaegerianus* was higher in host shrubs with more intact canopies. The authors opine that continuing drought in the Mojave Desert will lead to local extirpations of this species (Huggins *et al.* 2010, p. 127).

Genetics

Recent genetic analysis of *Astragalus jaegerianus* using AFLP (amplification fragment length polymorphism) markers showed that the species exhibits levels of genetic variation that are more consistent with species that are geographically widespread with large populations and numerous individuals, with each population exhibiting a high level of genetic variation and significant population structure across the range of the species (Walker and Metcalf 2008, pp. 158–177). The observation of these results in *A. jaegerianus*, a species with a restricted range and few numbers of individuals, leads the authors to opine that the species has or is currently undergoing population contraction. In addition, the authors found that the level of genetic differentiation between the eastern half and the western half of the Coolgardie population was significant, and they recommended these two areas be recognized as separate populations.

In summary, we have considered new information as described above, and have incorporated it into this rule; none of it has altered our analysis of how to designate critical habitat for this species. With respect to the recommendation that two populations of *Astragalus jaegerianus* be recognized on Coolgardie Mesa, we acknowledge that there may be two genetically distinct populations; however, because they are geographically contiguous, it does not alter our delineation of the critical habitat unit in this area.

Previous Federal Actions

The final rule listing *Astragalus jaegerianus* as an endangered species was published on October 6, 1998 (63 FR 53596). On November 15, 2001, our decision not to designate critical habitat for *A. jaegerianus* and seven other plant and wildlife species at the time of listing 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 propose critical habitat, if prudent, for the species by September 15, 2003, and issue a final

critical habitat designation, if prudent, no later than September 15, 2004. 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 propose critical habitat for the species. However, the Service exhausted the funding appropriated by Congress to work on critical habitat designations in 2003 prior to completing the proposed rule. On September 8, 2003, the court issued an order extending the date for issuance of the proposed critical habitat designation for *A. jaegerianus* to April 1, 2004, and the final designation to April 1, 2005.

On April 6, 2004 (69 FR 18018), we published a proposed critical habitat designation that included 29,522 ac (11,947 ha) in 4 units in San Bernardino County, California. On April 8, 2005 (70 FR 18220), we published our final designation of critical habitat for *Astragalus jaegerianus*. Because we excluded all proposed acreage from the designation, the final designation included zero (0) ac (0 ha).

On December 19, 2007, the 2005 critical habitat determination was challenged by the Center for Biological Diversity (*Center for Biological Diversity v. United States Fish and Wildlife Service et al.*, Case No. CV–07–08221–JFW–JCRx). In a settlement agreement accepted by the court on June 27, 2008, we agreed to reconsider the critical habitat designation for *Astragalus jaegerianus*. The settlement stipulated that we submit a proposed revised critical habitat rule for *A. jaegerianus* to the **Federal Register** for publication on or before April 1, 2010, and submit a final revised determination on the proposed critical habitat rule to the **Federal Register** for publication on or before April 1, 2011; the proposed critical habitat rule was published on April 1, 2010 (75 FR 16404). On November 3, 2010, the document making available the draft economic analysis and reopening the public comment period for the proposed revised critical habitat designation was published in the **Federal Register** (75 FR 67676). On December 28, 2010, the court granted an extension for the submission of the final revised critical habitat determination to the **Federal Register** on or before May 16, 2011. This final revised critical habitat designation complies with the June 27, 2008, and December 28, 2010, court orders.

Summary of Comments and Recommendations

We requested written comments from the public on the proposed revised designation of critical habitat for *Astragalus jaegerianus* during two comment periods. The first comment period associated with the publication of the proposed revised critical habitat designation (75 FR 16404) opened on April 1, 2010, and closed June 1, 2010. We also requested comments on the proposed revised critical habitat designation and associated draft economic analysis during a second comment period that opened November 3, 2010, and closed on December 3, 2010 (75 FR 67676). We did not receive any requests for a public hearing. We also contacted appropriate Federal, State, and local agencies; scientific organizations; and other interested parties and invited them to comment on the proposed revised rule and draft economic analysis during these comment periods.

During the first comment period, we received seven comment letters directly addressing the proposed revised critical habitat designation. During the second public comment period, we received 14 comment letters directly addressing the proposed revision of critical habitat for this species or the draft economic analysis; 1 of these consisted of an informal “petition,” with approximately 870 signatures, to the Bureau of Land Management (Bureau) regarding management of the Coolgardie area, and 1 of the comments was from a party that previously commented in the first comment period. All substantive information provided during comment periods has either been incorporated directly into this final determination or addressed below. Comments received were grouped into five general categories specifically relating to the proposed revised critical habitat designation for *Astragalus jaegerianus*, and are addressed in the following summary and incorporated into the final revised critical habitat designation as appropriate.

Peer Review

In accordance with our peer review policy published on July 1, 1994 (59 FR 34270), we solicited expert opinions from four knowledgeable individuals with scientific expertise that included familiarity with the species, the geographic region in which it occurs, or conservation biology principles pertinent to the species. We received responses from one of the four peer reviewers.

We reviewed all comments received from the peer reviewer for substantive issues and new information regarding critical habitat for *Astragalus jaegerianus*. Peer reviewer comments are addressed in the following summary and incorporated into the final rule as appropriate.

Peer Reviewer Comments

Comment 1: The peer reviewer noted that protection of existing habitat is essential because, as with other *Astragalus* taxa, this species may have very narrow habitat requirements, and translocation may have a low probability of long-term success. The reviewer also noted that the most frequent pollinator of *A. jaegerianus*, *Anthidium dammersi*, is a solitary bee that nests in the ground, likely in close proximity to *A. jaegerianus* plants. Ground-nesting bees are highly sensitive to activities that may compact soil, as the nests may be damaged or destroyed, such as may occur with off-highway vehicles (OHVs), military vehicles, construction or mining equipment, and livestock grazing. The reviewer concludes that the designation is scientifically sound and essential to protect the viability of *A. jaegerianus* populations.

Our Response: We appreciate the peer reviewer's comments. As discussed in the *Methods* section below, we took into consideration all available information concerning habitat requirements, as well as the needs of pollinators and seed dispersers, in delineating critical habitat for this species.

Comment 2: The peer reviewer commented that, because much of the genetic diversity in *Astragalus jaegerianus* is partitioned among populations, it is important to designate each of the [sites for] existing populations as critical habitat. We also received a comment from one of the researchers that conducted the genetic analysis (Walker and Metcalf 2008). He corrected our characterization of the results of the genetics analysis in the proposed revised critical habitat designation as follows: While DNA sequencing techniques detected no variation between individuals of *A. jaegerianus*, the use of AFLP genetic markers, which screen the whole genome, showed that genetic variation was high among the individuals tested. Even though the results are more typical of species that are geographically widespread with large populations and numerous individuals, the observation of these results in *A. jaegerianus*, a species with a restricted range and few individuals, leads the authors to opine that the species has or is currently

undergoing population contraction (Walker and Metcalf 2008 p. 172).

Our Response: We appreciate the clarification on the results of the genetic analyses. We acknowledge the importance of maintaining genetic diversity within the species, and have designated all areas where *Astragalus jaegerianus* occurs as critical habitat, with the exception of those areas on Fort Irwin that have been exempted under 4(a)(3)(b) of the Act. Because all areas where the species occurs were already included in the proposed critical habitat designation, no changes were made based on the information obtained from the genetic studies.

Federal Agency Comments

Comment 3: The Bureau provided an update on the status of lands conservation efforts within the Coolgardie and Paradise Areas of Critical Environmental Concern (ACECs), as per the prescriptions in the West Mojave Plan (WMP) (Bureau 2010, *in litt.*). In particular, they noted that:

- No project permits were issued in this area in 2010 (Prescription (P) 26);
- No grazing has been authorized (P27);
- An additional 7 miles (mi) (11 kilometers (km)) of post and cable barrier fence was installed in 2010 and routes were reclaimed in the southwest corner of the Coolgardie ACEC and Rainbow Basin (P28), and route rehabilitation and signing will continue in 2011;
- The Department of Defense (DOD) intends to transfer management of lands they have acquired for conservation within the ACEC boundaries to the Bureau in 2011 (P29);
- Mining claimholders are being contacted to determine if any of these claims could be surrendered (P30); and
- The Bureau has installed post and cable fencing to prevent access to Coolgardie Mesa from Rainbow Basin (P31).

In addition, the Bureau reports that ranger patrols have increased in the Coolgardie Mesa area with additional funding provided by the DOD.

Our Response: We appreciate receiving these comments and note the Bureau's continuing efforts to implement conservation measures for this species.

State Agency Comments

Section 4(i) of the Act states, "the Secretary shall submit to the State agency a written justification for his failure to adopt regulations consistent with the agency's comments or petition." In 2004, we contacted the California Department of Fish and Game

(CDFG) concerning the previous 2004 proposed critical habitat designation; however, the agency 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 *A. jaegerianus* in the draft WMP (CDFG 2003, *in litt.*, pp. 71–72). 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 over private lands issues has been greatly diminished in this area. We contacted the CDFG again in 2010 concerning our most recent proposed revised critical habitat designation; the State provided no comments.

Public Comments

Comment 4: One commenter was concerned that the public did not have adequate notification concerning the proposed revised critical habitat designation and that there should have been a meeting with all concerned parties.

Our Response: The Service conducted outreach by notifying appropriate elected officials, local jurisdictions, interested parties, and members of the public that had been identified during the previous critical habitat designation process in 2004–2005. We also published a legal notice in the *Barstow Dispatch* on April 7, 2010, concerning the proposed revised critical habitat designation and the first open comment period; published a news release; and posted information on the Ventura Fish and Wildlife Office Web site as well as on www.Regulations.gov. The second comment period was similarly noticed by a news release and postings on our office's Web site and www.Regulations.gov. In addition, we received no requests for a public hearing from members of the public when the proposed revised critical habitat designation was published. We believe we have provided sufficient opportunity for public comment with two open comment periods totaling 90 days.

Comment 5: Several commenters expressed concern over the amount of acreage that was being "set aside" and how this would affect the high desert community and their freedom to enjoy the desert. One commenter thought that

these lands could not be enjoyed by future generations because they are locked away from motorized travel.

Our Response: As discussed in the *Background* of the Critical Habitat section of this rule, 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 the government or public to access private lands, or require implementation of restoration, recovery, or enhancement measures by private landowners. Designation of critical habitat only affects activities authorized, funded, or carried out by Federal agencies. Some kinds of activities are unlikely to have any Federal involvement, and so, will not be affected by critical habitat designation (see *Effects of Critical Habitat Designation* section below). We anticipate that the Bureau will continue to allow access to and manage vehicle use and other recreational activities within this area according to the provisions of the WMP amendment to the CDCA (California Desert Conservation Area) Plan. The critical habitat designation does not affect private lands or other non-Federal lands unless a Federal agency proposes to authorize, fund, or carry out an activity on those lands.

Comment 6: One commenter questioned whether private landowners would be “excluded” from the area.

Our Response: Private landowners are not excluded and may still access their lands that fall within a critical habitat designation. As discussed above, the designation of critical habitat does not affect land ownership or establish a refuge, wilderness, reserve, preserve, or other conservation area, and it does not alter, in any manner, landowners’ access to their lands. In addition, it does not require private landowners to implement restoration, recovery, or enhancement measures. See *Effects of Critical Habitat Designation* section below and the 2010 DEA for additional information on the implications of critical habitat designation to private landowners.

Comment 7: One commenter requested that we expand the habitat of *Astragalus jaegerianus* because it is the “primary food of many species and has potential medical benefits for humans.”

Our Response: We have designated all areas where *Astragalus jaegerianus* is known to exist outside of Fort Irwin as critical habitat. Based on numerous surveys, we do not expect to find additional occurrences outside of the designated area; also, given the species’ specific ecological needs, we cannot

reasonably expect to expand the area that it inhabits. The commenter did not provide information documenting the use of *A. jaegerianus* as a source of food or medicine, and at this time, we have no information to indicate that *A. jaegerianus* is the primary food of any species, although it may have some, as yet undetermined, medical value to humans.

Comment 8: Several commenters noted that they enjoy panning for gold in the open desert or working small mining claims in the Coolgardie Mesa area and do not wish to see the area closed.

Our Response: The designation of critical habitat for *Astragalus jaegerianus* will not result in closure of any areas. As we have noted previously, it will not affect non-Federal lands, unless a Federal agency is proposing to authorize, fund, or carry out an action on that land. Although the designation of critical habitat may require the Bureau to reassess its land use plans, recreational activities such as panning for gold are not expected to negatively affect land use within the area. Under the casual use provisions of the CDCA Plan, individuals may continue to pan for gold. In general, we do not expect that such use, which is conducted on a fairly small scale, will compromise the function of critical habitat for *A. jaegerianus*; consequently, at this time, we do not anticipate requesting that the Bureau reassess the provisions of the CDCA Plan with regard to this activity.

Sites where mining claims have been worked previously are unlikely to support the primary constituent elements (PCEs) of critical habitat because they are typically located in pockets of deeper soils where *Astragalus jaegerianus* does not grow. Because *Astragalus jaegerianus* occurs only under specific habitat conditions, we expect that the Bureau is unlikely to alter the use of those claims.

We note, however, that one of the purposes of the designation of critical habitat is to provide for the conservation of listed species. If we, or the Bureau, identified an area within critical habitat that contained the PCEs and was threatened by mining activities, we would work with the Bureau and claimants to attempt to conserve the critical habitat values of that area. After the close of the comment period for this rule, we received information that “prybar mining” had been observed at one site on Coolgardie Mesa adjacent to known *Astragalus jaegerianus* plants (Silverman 2011 in litt.). Unlike the traditional gold panning or drywash methods of mining, this method uses a prybar to break apart rock outcrops;

such outcrops are found adjacent to shallow-soiled areas where *Astragalus jaegerianus* grows. We have notified the Bureau regarding this information and will work with them to evaluate potential impacts to the species.

Comment 9: One commenter notes that “nothing lasts forever” and that we should use our resources to “recultivate” rather than preserving our world as a museum.

Our Response: We recognize that the natural world is one of change. *Astragalus jaegerianus* is, however, threatened by human activities and the designation of critical habitat is one tool we can use to reduce or eliminate those threats. Our goal in conserving *A. jaegerianus* is not to create a static museum display, but to conserve the species and the ecosystem upon which it depends. We acknowledge that this ecosystem may change to the point that it no longer supports this species; however, our goal is to ensure that the changes are effected by the natural world, and not human activities.

Comment 10: One commenter described the level of unauthorized OHV use that they have observed on Coolgardie Mesa, and notes that this use has killed several individuals of *Astragalus jaegerianus*. The commenter notes that this unauthorized use has increased from 2001 to 2010, and that a fence constructed by the Bureau has eliminated one area of extensive unauthorized use, but that the use has shifted to nearby areas.

Our Response: We acknowledge that unauthorized off-highway use of areas occupied by *Astragalus jaegerianus* continues. We will continue to work with the Bureau to attempt to manage off-highway vehicle use within the area of critical habitat so public land users have access to Coolgardie Mesa in a manner that will facilitate the conservation of *A. jaegerianus*.

Comment 11: One commenter notes he has never encountered a Bureau ranger or other law enforcement officer on Coolgardie Mesa and anticipates that the Bureau or Service will install a fence to prevent access to public lands.

Our Response: The Service is aware that the Bureau cannot maintain a constant law enforcement presence in the Coolgardie Mesa area; and we continue to work with the Bureau to attempt to increase the public’s compliance with existing land-use regulations. We understand that the Bureau will continue to install fencing along designated open routes of travel to prevent unauthorized off-road vehicle use. To the best of our knowledge, the Bureau has no intention of installing a fence around the boundaries of critical

habitat, and the Service has no authority to install such a fence.

Comment 12: One commenter urged the Service to think about how the potential development of large-scale solar and wind projects in the desert could affect *Astragalus jaegerianus*, and questioned whether more critical habitat should be set aside given these future losses of desert habitat.

Our Response: Because extensive surveys have been conducted for *Astragalus jaegerianus*, including in areas outside the known geographic range of the species, we have a high level of certainty that *A. jaegerianus* does not occur in other areas of the Mojave Desert. Therefore, we anticipate that large-scale solar and wind energy projects across the Mojave Desert and future losses of desert habitat that may occur will not affect *A. jaegerianus*.

With respect to the geographic area within the Mojave Desert where *Astragalus jaegerianus* occurs, management of this habitat was discussed in the April 1, 2010, proposed revised critical habitat designation (75 FR 16404). Congress passed the Energy Policy Act of 2005; subsequently, the Bureau issued step-down orders that address more specifically how to implement the Energy Policy Act of 2005 (for example, Order No. 3283 (DOI 2009a pp. 1–2) and Order No. 3285 (DOI 2009b pp. 1–3)). In addition, the Bureau has issued its own guidelines for implementing these policies and orders on Bureau lands. For instance, in 2008, the Bureau issued Instruction Memorandum (IM) 2009–043, the Wind Energy Development Policy, which includes guidelines for the development of wind energy projects within designated ACECs (Bureau 2008, p. 2). No alternative energy projects have been permitted or proposed within areas we are designating as critical habitat for *A. jaegerianus*, although the Bureau has received expressions of interest from wind energy companies that are seeking sites for wind energy development.

Comment 13: One commenter reported seeing *Astragalus jaegerianus* outside of the area included in the proposed revised critical habitat designation, and included photos showing plants growing adjacent to OHV trails.

Our Response: We examined the photos and determined the subject plants are not *Astragalus jaegerianus*, but a species of larkspur (*Delphinium*) in the buttercup family (Ranunculaceae).

Comment 14: One commenter stated that the proposed revised critical habitat designation failed to include adequate critical habitat to protect and conserve

all known extant occurrences of *Astragalus jaegerianus*.

Our Response: As per guidance on determining critical habitat, we took into consideration all known extant occurrences of *Astragalus jaegerianus* (see previous April 6, 2004, proposed critical habitat designation (69 FR 18018), and the April 1, 2010, proposed revised critical habitat designation (75 FR 16404). All known occurrences of *A. jaegerianus* are included in our final critical habitat designation, with the exception of lands within Fort Irwin, which are exempted under section 4(a)(3) of the Act due to an approved INRMP that benefits the conservation of the species. See the Exemptions section below.

Comment 15: One commenter asserts that the proposed revised critical habitat designation ignored the recovery goal of critical habitat because we did not include unoccupied habitat for recovery of the species (as per *Gifford Pinchot Task Force v. U.S. Fish and Wildlife Service* 378 F.3d 1059, 1069–70 (9th Circuit 2004) ruling). The commenter also refers to an analysis of listed species with and without critical habitat that indicates species with critical habitat are more likely to be recovering than species that lack the designation (and cites Taylor *et al.* 2005). The commenter suggests we should have used robust models for conservation design (and cites Burgman *et al.* 2001) to estimate additional areas important for recovery of the species.

Our Response: A critical habitat designation does not need to include habitat unoccupied at the time of listing for recovery of the species. We can include such habitat areas if we determine that those lands are essential for the conservation of the species. However, in this case, we did not designate any areas outside the geographical area occupied by the species because: (1) We believe the size of the occupied areas are sufficient for the conservation of the species, and (2) based on extensive surveys for the species, these areas best represent what is needed for the conservation of the species.

With respect to the comment that species with critical habitat are more likely to be recovering than species that lack the designation, we note that in Taylor *et al.* (2005), the authors opine that this may be the case because, in practice, land managers have often given significant protection to critical habitats. In the case of *Astragalus jaegerianus*, we note that the Bureau had already developed recommendations to establish ACECs on Coolgardie Mesa and Paradise, and

provide conservation-oriented management prescriptions in the draft WMP, prior to the publication of our previous 2004 proposed critical habitat designation.

With respect to using robust models for conservation design, we acknowledge it would be useful to have sufficient biological information to construct such a model. In this case, however, because we do not have the level of detail necessary to develop the type of model used in Burgman *et al.* (2001), we are using the best available scientific information to identify critical habitat, as described in the *Methods* section.

Comment 16: One commenter stated that the critical habitat designation should be based on conservation biology principles and include sufficient lands to maintain connectivity and reduce fragmentation between populations (as cited in the literature, *e.g.*, Debinski, and Holt 2000, Noss *et al.* 1997, Honnay and Jacquemyn 2006), especially since intervening habitat is important for pollinators. Furthermore, genetic studies on *Astragalus jaegerianus* indicate an already limited gene flow between populations, and further isolation may decrease genetic variation and ability of the species to adapt to environmental variation (Noss *et al.* 1997).

Our Response: We agree that principles of conservation biology (including maintaining gene flow between populations) are useful to consider in identifying critical habitat. We have acknowledged their importance in our discussion under the *Physical and Biological Features* and *Methods* sections in this final revised critical habitat designation and the April 1, 2010, proposed revised critical habitat designation (75 FR 16404), and have used the best scientific information available in the development of this designation. The critical habitat designation in and of itself will do nothing one way or the other to affect the degree of fragmentation between populations.

Comment 17: One commenter stated that it is important to include currently unoccupied habitat for the species in the critical habitat designation because of the potential effects of climate change on temperature and precipitation, even if these are not well-understood.

Our Response: While climate change modeling has been undertaken for the Great Basin and Sonoran Desert regions (for example, see Redmond 2010), very little modeling has been conducted for the Mojave Desert region to date. Recent studies, however, have discussed the effects of drought on desert shrubs

including localized diebacks and drought-pruning (for example, see Breshears *et al.* 2005, pp. 15144–15148; Hereford *et al.* 2006, pp. 13–34; Haymerlynck and Huxman 2009, pp. 582–585; and McAuliffe and Haymerlynck 2010, pp. 885–896). Huggins *et al.* (2010, pp. 120–128) studied the effects of recent drought on host shrubs that support *Astragalus jaegerianus* and found higher survival rates of *A. jaegerianus* in host shrubs with more intact canopies, providing the first evidence that recent drought conditions in the Mojave Desert could be indirectly affecting the survivorship of *A. jaegerianus*. However, based on the best available scientific information, we are unable to predict at this time additional areas that could support *A. jaegerianus* in the future.

Comment 18: One commenter stated that the Service should not exclude areas that are covered by the Bureau's WMP from the critical habitat designation by using the logic that they do not need "special management" or through an exclusion through section 4(b)(2) of the Act; by definition, these areas qualify as critical habitat.

Our Response: Our revised final critical habitat designation includes all Bureau lands that are included in the WMP.

Comment 19: One commenter notes that Fort Irwin does not seem to be affected by the designation of critical habitat.

Our Response: In 2004, Congress amended the Act to exempt DOD-managed lands from critical habitat designations if the military installation has an INRMP that is determined to provide a benefit to the species. Fort Irwin has such a plan that the Service has reviewed and approved. We acknowledge that military training at Fort Irwin will result in the loss of habitat for *Astragalus jaegerianus*; however, the Army has also established two areas, totaling 6,772 ac (2,741 ha), where all training will be prohibited to protect this species. In another area, comprising 3,700 ac (1,497 ha), all vehicular traffic will be restricted to a limited number of roads to protect *A. jaegerianus*.

Comments Related to the Draft Economic Analysis

Comment 20: One commenter stated that the economic analysis needs to include all habitat currently occupied by *Astragalus jaegerianus*, including lands on Fort Irwin, and not rely on the "flawed" proposed revised critical habitat designation as the basis for the analysis.

Our Response: The DEA includes a discussion of all geographic areas occupied by the species; the areas occupied by the species on Fort Irwin are not included in the designation because they are exempted through section 4(a)(3)(b) of the Act.

Comment 21: One commenter stated that the DEA incorrectly asserts that, "[a]ll Federal land is managed for purposes of *Astragalus jaegerianus* conservation according to the WMP." The comment notes that, while some of the areas proposed for critical habitat are within ACECs designated by the WMP, these areas still allow some level of OHV use, causing habitat fragmentation and opportunities for illegal OHV use in the areas designated as critical habitat.

Our Response: The final EA has been amended to state that all Bureau lands are managed according to the WMP for the purposes of *Astragalus jaegerianus* conservation. The objective of the WMP is to provide a conservation strategy for sensitive plant and animal species, including *A. jaegerianus*. The DEA does not assert that the management of the proposed critical habitat area according to the WMP precludes all OHV use within the boundaries of the proposed critical habitat area. Specifically, Section 3.2.2 of the DEA describes that vehicle routes within the proposed critical habitat area are classified under the WMP as open, closed, or limited, and all OHV-users must comply with the road designations. Section 3.2.2 further describes that because of damage related to unauthorized use, the Bureau has fenced portions of the West Paradise ACEC and the Coolgardie Mesa ACEC. As noted in the final EA, however, "Vehicle use will not be altogether precluded, due to the need to provide access to the private lands and mining claims." The DOD is not permitting any activities on DOD lands within the boundaries of the ACECs, since the intent of their acquisition is to transfer them to the Bureau.

Comment 22: A comment provided on the DEA states that there is some development pressure, particularly with regard to wind energy development, on private parcels within the ACEC areas until these parcels are acquired to consolidate public land ownership.

Our Response: As described in Section 3.1 of the DEA, the private parcels within the proposed designation are primarily homesteads interspersed within the ACECs. No development activities, such as wind energy projects, have been subject to section 7 consultation under the Act regarding the *Astragalus jaegerianus* on these private lands. While it is possible that such

projects may be proposed in the future, only those projects subject to a Federal nexus (*i.e.*, projects permitted, funded, or carried out by a Federal agency) may result in section 7 consultation with the Service. No such consultations have occurred for any projects on private lands in *A. jaegerianus* habitat to date. The probability of future wind energy projects being proposed on private lands within the proposed critical habitat area is uncertain; however, we do not anticipate any development of wind energy in the area. See also response to *Comment 12* above and the *Energy Supply, Distribution, or Use* section below.

Comment 23: Multiple comments state that any restrictions placed upon the proposed critical habitat area will result in losses to miners and OHV users. One of these comments further states that recreationists contribute millions of dollars to the regional economy. Another comment asserts the DEA does not correctly assess the effect of restrictions on certain land-use activities on local, regional, and national economies.

Our Response: Section 3.2 of the DEA describes that land use activities, such as mining and OHV recreation, are currently restricted within the proposed critical habitat area, even absent critical habitat designation. The Federal lands in the proposed critical habitat area (79 percent of the proposed critical habitat) are managed for *Astragalus jaegerianus* conservation according to the WMP, which has limited access to the habitat area through closing some vehicle routes and fencing ACECs containing *A. jaegerianus* habitat. Section 3.3.1 of the DEA describes that, due to the existing management of habitat threats through the WMP, critical habitat for *A. jaegerianus* is not expected to result in additional conservation measures for the species on Federal lands. Section 3.3.2 of the DEA further describes that the private land uses within proposed critical habitat (small scattered parcels containing homesteads) are not likely to trigger section 7 consultation or the California Environmental Quality Act (CEQA) requirements and, therefore, critical habitat designation of these lands is not anticipated to restrict land-use activities. Thus, the DEA does not expect critical habitat to generate any additional restrictions on land-use activities that will result in impacts to the local, regional, or national economies.

Comment 24: A comment provided on the DEA suggests that, if there are no economic costs associated with the critical habitat designation due to the existing conservation measures for the

species, it is likely that there is no need for the designation. The comment further states that the designation must result in some economic impacts due to project delays and costs of consultation with the Service.

Our Response: Even though there were no economic costs identified in the final EA associated with the critical habitat designation due to existing conservation measures for the species, the areas proposed for designation meet the definition of critical habitat, and therefore are included in the designation.

Section 3.3.1 of the DEA describes that critical habitat designation is not expected to result in additional section 7 consultations. The section also notes that any future consultations considering *Astragalus jaegerianus* will experience some incremental administrative costs to consider potential adverse modification of critical habitat. Due to the continued management of the critical habitat area by the Bureau according to the WMP, however, the DEA anticipates only a single, informal consultation with the Bureau regarding the pending land transfer between the DOD and the Bureau. The Bureau does not anticipate consulting with the Service on other land management activities, and no consultations are forecast to occur for activities on private lands. Thus, the DEA concludes that the incremental administrative costs of consultation associated with the critical habitat designation are most likely to be negligible; the DEA did not predict any project delays.

Comment 25: One comment asserts that the DEA fails to calculate the benefits of the critical habitat designation, stating that all types of benefits should be assessed and quantified or, where quantification is inappropriate or too speculative, should be described qualitatively to allow for a comparison of costs to benefits.

Our Response: As described in Section 3.4 of the DEA, critical habitat designation is not expected to generate: (1) Additional conservation efforts for *Astragalus jaegerianus*; (2) changes in economic activity; or (3) changes to land management. Absent any changes in the above, no incremental economic benefits are forecast to result from the designation of critical habitat.

We believe the commenter is referring to benefits with respect to 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 decisionmaking 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 26: A comment provided on the DEA states that the document should explain the differences between the October 2004 DEA of the previous proposed critical habitat designation for *Astragalus jaegerianus* and the 2010 DEA of the proposed revised critical habitat designation. The 2004 analysis quantified both pre-designation (occurring from the time of listing to final critical habitat designation) and post-designation impacts, estimating \$5.84 million to \$13.01 million in post-designation impacts. The 2010 DEA, however, does not quantify any impacts. The comment further asserts that there must be some economic impact associated with fencing areas, effects on military activities, relocating OHV use, and precluding mining and energy projects.

Our Response: Section 1.3 of the DEA describes the differences between the 2005 Economic Analysis (which is the final version of the October 2004 DEA referenced in this comment) and the 2010 DEA of the revised proposed critical habitat.

First, the 2005 Economic Analysis and the 2010 DEA apply different analytic frameworks. The 2005 Economic Analysis quantified impacts of all *Astragalus jaegerianus* conservation in the areas being proposed as critical habitat, regardless of whether the conservation efforts were occurring due to critical habitat designation or other baseline regulations or conservation plans. As a result, the impacts quantified in the 2005 Economic Analysis include impacts due to such baseline protections as Federal listing of *A. jaegerianus*, implementation of the West Mojave

Plan, and DOD conservation efforts for *A. jaegerianus* at the National Training Center at Fort Irwin (NTC). The 2010 DEA, however, focuses on those impacts resulting incrementally from critical habitat designation, as described in Chapter 2. That is, we do not include impacts of *A. jaegerianus* conservation occurring due to the implementation of baseline protections, plans, or regulations. Thus, impacts of activities such as fencing, limiting OHV activity, mining, and energy projects are not quantified in the 2010 DEA, as they are expected to occur regardless of the critical habitat designation.

Second, the proposed critical habitat area considered in the 2005 Economic Analysis was more than double the proposed critical habitat area being considered in the 2010 DEA. The primary reason for the difference in scope is that the Service's 2010 proposed revised critical habitat designation exempted 16,462 ac (6,662 ha) located within DOD's National Training Center at Fort Irwin from critical habitat designation. Because this area is exempt from critical habitat designation, no impacts of critical habitat are expected to occur on these lands.

Summary of Changes From the Proposed Revised Rule and Previous Critical Habitat Designation

In our final revised critical habitat rules, we typically provide a Summary of Changes that compares the final revised critical habitat designation with the previously proposed revised critical habitat designation as well as with previously designated critical habitat. However, we designated zero (0) ac (0 ha) in our previous designation. Therefore, we are also providing comparison between the previously proposed critical habitat designation from April 6, 2004 (69 FR 18018), the proposed revised critical habitat designation from April 1, 2010 (75 FR 16404), and this final revised critical habitat designation. There are no changes from the April 1, 2010, proposed revised critical habitat designation and this final revised critical habitat designation. This final revised critical habitat designation compares with the previous April 6, 2004, proposed designation (69 FR 18018) as follows:

(1) In 2004, we proposed 9,627 ac (3,896 ha) of Bureau lands and 4,427 ac (1,792 ha) of private lands. Currently we are designating 9,888 ac (4,002 ha) of Bureau lands and 2,899 ac (1,169 ha) of private lands.

(2) In 2004, we proposed 211 ac (85 ha) of lands inaccurately identified as

State lands. In this revised designation we are not including, through exemption under section 4(a)(3) of the Act, 211 ac (85 ha) of the NTC lands covered under the Army's INRMP. The land was inaccurately identified as State Lands in our 2004 proposed critical habitat rule.

(3) In this revised designation we are including 1,282 ac (519 ha) of lands that

were formerly in private ownership but have been acquired by the DOD for the purposes of conservation of *Astragalus jaegerianus*. These lands are not contiguous with the NTC and are not covered under the Army's INRMP.

(4) We are not designating through exemption under section 4(a)(3) of the Act, 16,462 ac (6,662 ha) of the NTC lands covered under the Army's INRMP.

Below, table 1 compares the acreage by land ownership included in the previous 2004 proposed critical habitat designation and the previous 2005 final critical habitat designation, with what we proposed in the 2010 revision and are including in this final revised critical habitat designation.

TABLE 1—COMPARISON OF ACREAGES INCLUDED IN PREVIOUS AND CURRENT RULEMAKING ACTIONS FOR *Astragalus jaegerianus*

Name of critical habitat unit	2004 proposed designation of critical habitat (69 FR 18018)	2005 final revision to the critical habitat designation (70 FR 18220)	2010 proposed revised critical habitat designation (75 FR 16404)	2011 final revised critical habitat designation
Goldstone-Brinkman	9,906 ac (4,008 ha)	Excluded (all) 0 ac (0 ha)	10,394 ac (4,206 ha) exempted due to INRMP on NTC lands.	10,394 ac (4,206 ha) exempted due to INRMP on NTC lands.
Paradise	6,828 ac (2,763 ha)	Excluded (all) 0 ac (0 ha)	A portion exempted due to INRMP on NTC lands, 6,068 ac (2,456 ha); a portion included 964 ac (390 ha).	A portion exempted due to INRMP on NTC lands, 6,068 ac (2,456 ha); a portion included 964 ac (390 ha).
Coolgardie	12,788 ac (5,175 ha)	Excluded (all) 0 ac (0 ha)	13,105 ac (5,303 ha) included.	13,105 ac (5,303 ha) included.
Totals	29,522 ac (11,947 ha)	0 ac (0 ha)	14,069 ac (5,693 ha)	14,069 ac (5,693 ha).

Note: Land areas may not sum due to rounding.

Critical Habitat

Background

Critical habitat is defined in section 3 of the Act as:

(1) The specific areas within the geographical area occupied by a species, at the time it is listed in accordance with the Act, on which are found those physical or biological features

(a) Essential to the conservation of the species, and

(b) Which may require special management considerations or protection; and

(2) Specific areas outside the geographical area occupied by the species at the time it is listed, upon a determination that such areas are essential for the conservation of the species.

Conservation, as defined under section 3 of the Act, means to use and the use of all methods and procedures that are necessary to bring an endangered species or threatened species to the point at which the measures provided pursuant to the Act are no longer necessary. Such methods and procedures include, but are not limited to, all activities associated with scientific resources management such as research, census, law enforcement, habitat acquisition and maintenance, propagation, live trapping, and transplantation, and, in the extraordinary case where population pressures within a given ecosystem

cannot otherwise be relieved, may include regulated taking.

Critical habitat receives protection under section 7 of the Act through the requirement that Federal agencies insure, in consultation with the Service, that any action they authorize, fund, or carry out is not 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 the government or public to access private lands. Such designation does not require implementation of restoration, recovery, or enhancement measures by non-Federal landowners. Where a landowner seeks or requests Federal agency funding or authorization of an action that may affect a listed species or critical habitat, the consultation requirements of section 7(a)(2) of the Act would apply, but even in the event of a destruction or adverse modification finding, the obligation of the Federal action agency and the landowner is not to restore or recover the species, but to implement reasonable and prudent alternatives to avoid destruction or adverse modification of critical habitat.

For inclusion in a critical habitat designation, the habitat within the geographical area occupied by the species at the time it was listed must contain physical and biological features

(PBFs) which are essential to the conservation of the species and which may require special management considerations or protection. Critical habitat designations identify, to the extent known using the best scientific and commercial data available, those PBFs that are essential to the conservation of the species (such as space, food, cover, and protected habitat), focusing on the principal biological or physical constituent elements (primary constituent elements) within an area that are essential to the conservation of the species (such as roost sites, nesting grounds, seasonal wetlands, water quality, tide, soil type). Primary constituent elements are the elements of PBFs that, when laid out in the appropriate quantity and spatial arrangement to provide for a species' life-history processes, are essential to the conservation of the species.

Under the Act, we can designate critical habitat in areas outside the geographical area occupied by the species at the time it is listed, upon a determination that such areas are essential for the conservation of the species. According to regulations at 50 CFR 424.12, we designate critical habitat in 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. When the best available scientific data do not demonstrate that the

conservation needs of the species require such additional areas, we will not designate critical habitat in areas outside the geographical area occupied by the species. An area currently occupied by the species but that was not occupied at the time of listing may, however, be essential to the conservation of the species and may be included in the critical habitat designation.

Section 4 of the Act requires that we designate critical habitat on the basis of the best scientific and commercial data available. Further, our Policy on Information Standards Under the Endangered Species Act (published in the **Federal Register** on July 1, 1994 (59 FR 34271)), the Information Quality Act (section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001 (Pub. L. 106-554; H.R. 5658)), and our associated Information Quality Guidelines, provide criteria, establish procedures, and provide guidance to ensure that our decisions are based on the best scientific data available. They require our biologists, to the extent consistent with the Act and with the use of the best scientific data available, to use primary and original sources of information as the basis for recommendations to designate critical habitat.

When we are determining which areas should be designated as critical habitat, our primary source of information is generally the information developed during the listing process for the species and any previous designation of critical habitat. Additional information sources may include the recovery plan, 5-year reviews 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.

Habitat is dynamic, and species may move from one area to another over time. Climate change will be a particular challenge for biodiversity because the interaction of additional stressors associated with climate change and current stressors may push species beyond their ability to survive (Lovejoy 2005, pp. 325-326). The synergistic implications of climate change and habitat fragmentation are the most threatening facet of climate change for biodiversity (Hannah *et al.* 2005, p. 4). Current climate change predictions for terrestrial areas in the Northern Hemisphere indicate warmer air temperatures, more intense precipitation events, and increased summer continental drying (Field *et al.* 1999, pp. 1-3; Hayhoe *et al.* 2004,

p. 12422; Cayan *et al.* 2005, p. 6; Intergovernmental Panel on Climate Change 2007, p. 1181). Climate change may lead to increased frequency and duration of severe storms and droughts (Golladay *et al.* 2004, p. 504; McLaughlin *et al.* 2002, p. 6074; Cook *et al.* 2004, p. 1015).

Some efforts have been made to predict the effects of climate change in the Western States region (see Redmond 2010). However, predictions of climatic conditions for smaller subregions, such as the Mojave Desert in California, remain uncertain. It is unknown at this time if climate change in the Mojave Desert in California will result in a warmer trend with localized drying, higher precipitation events, or other effects. Thus, the information currently available on the effects of global climate change and increasing temperatures does not make sufficiently precise estimates of the location and magnitude of the effects. Nor are we currently aware of any climate change information specific to the habitat of *Astragalus jaegerianus* that would indicate what areas may become important to the species in the future. Therefore, we are unable to determine what additional areas, if any, may be appropriate to include in the final revised critical habitat for this species to respond to potential effects of climate change.

We specifically requested information from the public on the currently predicted effects of climate change on *Astragalus jaegerianus* and its habitat, and we have included a discussion of potential effects of the current drought on host shrubs and indirect effects on *A. jaegerianus* (Huggins *et al.* 2010, pp. 120-128). Should drought conditions continue in the Mojave Desert, regardless of whether it is caused by climate change or other short-term weather variation, it may affect the long-term persistence of *A. jaegerianus*. We recognize that critical habitat designated at a particular point in time may not include all of the habitat areas that we may later determine are necessary for the recovery of the species. For these reasons, a critical habitat designation does not signal that habitat outside the designated critical habitat area is unimportant or may not be required for recovery of the species.

Areas that are important to the conservation of the species, both inside and outside the critical habitat designation, will continue to be subject to: (1) Conservation actions implemented under section 7(a)(1) of the Act, (2) regulatory protections afforded by the requirement in section 7(a)(2) of the Act for Federal agencies to

insure their actions are not likely to jeopardize the continued existence of any endangered or threatened species, and (3) the prohibitions of section 9 of the Act if actions occurring in these areas may affect the species. Federally funded or permitted projects affecting listed species outside their designated critical habitat areas may still result in jeopardy findings in some cases. These protections and conservation tools will continue to contribute to recovery of this species. 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 (HCPs), or other species conservation planning efforts if new information available at the time of these planning efforts calls for a different outcome.

Physical and Biological Features

In accordance with section 3(5)(A)(i) and 4(b)(1)(A) of the Act and regulations at 50 CFR 424.12, in determining which areas within the geographical area occupied at the time of listing to propose as critical habitat, we consider the physical and biological features 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:

- (1) Space for individual and population growth and for normal behavior;
- (2) Food, water, air, light, minerals, or other nutritional or physiological requirements;
- (3) Cover or shelter;
- (4) Sites for breeding, reproduction, or rearing (or development) of offspring; and
- (5) Habitats that are protected from disturbance or are representative of the historic, geographical, and ecological distributions of a species.

We derive the specific PBFs required for *Astragalus jaegerianus* from studies of this species' habitat, ecology, and life history as described in the Critical Habitat section of the proposed revised rule to designate critical habitat published in the **Federal Register** on April 1, 2010 (75 FR 16404), and in the information presented below. Additional information can be found in the final listing rule published in the **Federal Register** on October 6, 1998 (63 FR 53596), and the previous proposed critical habitat designation (69 FR 18018; April 6, 2004).

The revised critical habitat is designed to provide sufficient habitat to maintain self-sustaining populations of

Astragalus jaegerianus throughout its range and to provide those habitat components essential for the conservation of the species. We have determined for the revised critical habitat that *A. jaegerianus* requires the following PBFs: (1) Habitat for individual and population growth, including sites for germination, pollination, reproduction, pollen and seed dispersal, and seed banks; (2) sites for the host plants that provide structural support for *A. jaegerianus*; (3) intervening areas that allow gene flow and provide connectivity or linkage within segments of the larger population; and (4) areas that provide basic requirements for growth, such as water, light, and minerals.

Primary Constituent Elements for *Astragalus jaegerianus*

Under the Act and its implementing regulations, we are required to identify the PBFs essential to the conservation of *Astragalus jaegerianus* in areas occupied at the time of listing, focusing on the features' PCEs. We consider PCEs to be the elements of the PBFs that are essential to the conservation of the species.

Based on our current knowledge of the physical or biological features and habitat characteristics required to sustain the species' life-history processes, we determine that the PCEs specific to *Astragalus jaegerianus* are:

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

(2) Host shrubs at elevations between 3,100 and 4,200 ft (945 to 1,280 m). The primary host shrubs include but are not limited to: *Thamnosma montana* (turpentine bush), *Ambrosia dumosa* (burro bush), *Eriogonum fasciculatum* ssp. *Polifolium* (California buckwheat), *Ericameria cooperi* var. *cooperi* (golden bush), *Ephedra nevadensis* (Mormon tea), and *Salazaria mexicana* (paperbag bush) that are usually found in mixed-desert-shrub communities.

With this designation of critical habitat, we intend to identify the PBFs essential to the conservation of the species, through the identification of the appropriate quantity and spatial arrangement of the PCEs sufficient to support the life-history processes of the species. All units and subunits designated as critical habitat are currently occupied by *Astragalus jaegerianus* and contain the PCEs in the

appropriate quantity and spatial arrangement sufficient to support the life-history needs of the species.

Special Management Considerations or Protections

When designating critical habitat, we assess whether the specific areas within the geographical area occupied by the species at the time of listing contain the features that are essential to the conservation of the species and may require special management considerations or protection.

A detailed discussion of threats affecting the PBFs essential to the conservation of *Astragalus jaegerianus*, and that may require special management considerations or protection, can be found in the previous proposed critical habitat designation of April 6, 2004 (69 FR 18018), and the 5-year review (Service 2008, pp. 1–21). In summary, these threats include surface mining, unauthorized OHV recreation, military training activities, competition with nonnative species, and habitat fragmentation. In addition, the Bureau has received interest from wind energy companies that are seeking sites for wind energy development, although no specific plans for the areas occupied by *Astragalus jaegerianus* are currently being considered for any energy development projects.

The areas included in this revised critical habitat designation will require some level of management to address the current and future threats to *Astragalus jaegerianus* and to maintain the PBFs essential to the conservation of the species. In units that were occupied at the time of listing and are currently occupied, special management will be needed to ensure that designated habitat is able to provide areas for germination, pollination, reproduction, and sites for the host plants that provide structural support for *A. jaegerianus*; intervening areas that allow gene flow and provide connectivity or linkage within segments of the larger population; and areas that provide basic requirements for growth, such as water, light, and minerals.

There will be impacts from military activities on *Astragalus jaegerianus* and its habitat at NTC. We will not discuss these impacts any further, because areas where *A. jaegerianus* occurs on NTC are being exempted (see Exemptions section below). Army-owned lands in the Paradise and Coolgardie units that are not part of the NTC were purchased for *A. jaegerianus* conservation and will not be impacted by military activities.

The designation of critical habitat does not imply that lands outside of critical habitat do not play an important role in the conservation of *Astragalus*

jaegerianus. Activities with a Federal nexus that may affect those areas outside of critical habitat, such as surface mining, off-highway vehicle recreation, land transfer programs, and military training activities, are still subject to review under section 7 of the Act, if they may affect *A. jaegerianus*. The prohibitions of section 9 of the Act applicable to plants also continue to apply both inside and outside of designated critical habitat. With respect to plants, section 9 of the Act includes among its prohibitions the import or export of listed species, the removal to possession or malicious damage or destruction of species on areas under Federal jurisdiction, or the removal, damage, or destruction of species in violation of State law (16 U.S.C. 1538(a)(2)).

Criteria Used To Identify Critical Habitat

As required by section 4(b)(1)(A) of the Act, we used the best scientific and commercial data available to designate critical habitat. We reviewed available information pertaining to the habitat requirements of this species. In accordance with the Act and its implementing regulation at 50 CFR 424.12(e), we considered whether designating additional areas—outside those currently occupied as well as those occupied at the time of listing—is necessary to ensure the conservation of the species. We are not designating any areas outside the geographical area occupied by the species because occupied areas are sufficient for the conservation of the species.

The material we used to determine critical habitat for *Astragalus jaegerianus* included the 1998 final listing rule (63 FR 53596; October 6, 1998), the 2004 proposed critical habitat designation (69 FR 18018; April 6, 2004), data in reports submitted during section 7 consultations and by biologists holding section 10(a)(1)(A) recovery permits, research published in peer-reviewed articles and presented in academic theses and agency reports, the 5-year review for *A. jaegerianus* (Service 2008, pp. 1–21), Army surveys of 2001 (Charis 2002, pp. 1–85), and regional geographic information system (GIS) coverages. We analyzed this information to develop criteria for identifying areas that contain the PCEs in the appropriate quantity and spatial arrangement essential to the conservation of the *A. jaegerianus* that may require special management considerations or protection, or that are essential for the conservation of *A. jaegerianus*. Extensive surveys funded by the Army were conducted in 2001 (Charis 2002).

The 2001 surveys were conducted under optimal growing conditions for the species and contributed greatly to our knowledge of the overall distribution and abundance of *A. jaegerianus*.

We are designating all habitat occupied by *Astragalus jaegerianus* during the extensive Army surveys conducted in 2001, other than those lands exempted under section 4(a)(3) of the Act (see discussion in Exemptions section below). Because the species is long-lived and the 2001 surveys were conducted under optimal conditions, we believe the survey results capture the fullest expression of *A. jaegerianus* and provide an accurate representation of habitat occupied by the species.

Methods

As required by section 4(b) of the Act and 50 CFR 424.12, we used the best scientific information available in determining which areas within the geographic area occupied by the species at the time of listing contain the features essential to the conservation of *Astragalus jaegerianus*, and which areas outside the geographic area occupied at the time of listing are essential for the conservation of the species. We reviewed information used to prepare the 2004 proposed critical habitat rule (69 FR 18018; April 6, 2004); the 5-year review (Service 2008, pp. 1–21); published peer-reviewed articles; data from our files that we used for listing the species; geologic maps (California Geologic Survey 1953); recent biological surveys and reports, particularly from the Army surveys of 2001 (Charis 2002, pp. 1–85); additional information provided by the Army, the Bureau, and other interested parties; and discussions with botanical experts. We also conducted site visits to all three known general geographic areas that are occupied and are considered essential to the conservation of the species.

The long-term probability of the survival and recovery of *Astragalus jaegerianus* is dependent upon: The protection of existing population sites; the maintenance of ecologic functions within these sites, including connectivity within and between populations in close geographic proximity to one another (to facilitate pollinator activity and seed dispersal mechanisms); and keeping these areas free of major ground-disturbing activities. The areas we are proposing to designate as critical habitat provide all of the features essential for the conservation of *A. jaegerianus*.

In our delineation of the proposed critical habitat units in 2004, we initially selected three areas to provide for the conservation of *Astragalus*

jaegerianus that comprise the four specific population sites where it is known to occur. As discussed under the “Current Distribution” section of the April 1, 2010 proposed revised critical habitat rule (75 FR 16404), at the time of listing, *A. jaegerianus* was known to occur from Brinkman Wash and Montana Mine (the populations at these two sites were subsequently determined to be contiguous and thus are considered one population), Paradise Wash, and Coolgardie; due to our understanding of the lifespan of the species, we also conclude that the Goldstone site was occupied at the time of listing even though this was not confirmed until 3 years subsequent to listing. All four populations are important 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), that make it vulnerable to extinction (see previous rules (69 FR 18018 and 70 FR 18220) and Gilpin and Soule 1986, p. 33; Keith 1998, p. 1080). We believe the 2004 proposed critical habitat designation (69 FR 18018) is of sufficient size to maintain landscape-scale processes and to minimize the secondary impacts resulting from human occupancy and human activities occurring in adjacent areas. We mapped the units with a degree of precision commensurate with the best available information and the size of the unit.

Of principle importance in the process of delineating the proposed critical habitat units are data in a GIS format provided by the Army, depicting the results of Army field surveys for *Astragalus jaegerianus* conducted in 2001 (Charis 2002, pp. 1–85). These data consisted of three files depicting the locations of transects that were surveyed for *A. jaegerianus*, the locations of *A. jaegerianus* individuals found during the surveys, and minimum convex polygons (MCP) calculated to represent the outer bounds of *A. jaegerianus* populations (Charis 2002, pp. 1–85).

For mapping proposed critical habitat units, we proceeded through a multi-step process. First, we started with the MCPs that had been calculated by the Army (Charis 2002, pp. 1–85) based on the presence of documented individuals. We then expanded these boundaries outward from the edge of each of the four populations by a distance of 0.25 mi (0.4 km). We did this to include *Astragalus jaegerianus* individuals that are part of these populations, but were not noted during surveys. The basis for determining that

these additional land areas are occupied is as follows:

(1) This habitat has the appropriate elevational range, and includes the granitic soils and plant communities that support host plants required by *A. jaegerianus*;

(2) botanists involved in the Army surveys stated that “the estimate of [*A. jaegerianus*] distribution is a minimum” (SAIC 2003, pp. 1–2), and that additional individuals of *A. jaegerianus* most likely occurred on the fringes of the MCPs (SAIC 2003, pp. 1–2);

(3) this 0.25-mi (0.4-km) distance is commensurate in scale with the distance between transects where individuals were found and the distance between individuals along one transect, and it is well within the distance that can be traversed by pollinators and seed dispersers;

(4) mapping errors during the 2001 surveys indicated that the location of individuals did not match up precisely with the location of the transect boundaries (Charis 2002 pp. 36–37); and

(5) limited surveys were conducted in 2003, and despite the unfavorable climatic conditions for *A. jaegerianus*, 13 additional individuals were located outside the MCPs (SAIC 2003 pp. 1–2). Three of the four areas where new plants were found were within the 0.25-mi (0.4-km) distance around the MCPs.

We next removed areas on the margins of the resultant polygons where we determined, by referring to digital raster graphic maps, the topography is either too steep or the elevation too high to support additional *Astragalus jaegerianus* individuals. This boundary modification involved editing the eastern and southeastern edge of the Coolgardie MCP and a cirque-shaped sliver from the central portion of the southern boundary of the Brinkman-Montana MCP.

For the Goldstone and Brinkman-Montana populations, expansion of the MCP boundaries by 0.25 mi (0.4 km) left a narrow corridor (about 0.125 mi- (0.2 km-) wide) between the revised polygons. We chose to bridge the gap between the two polygons by incorporating the intervening habitat that is within the geographic area occupied by the species between the Goldstone and Brinkman-Montana polygons into a single critical habitat unit, called the Goldstone-Brinkman unit. We did this for several reasons: The intervening habitat between the two MCPs contains the PCEs with the appropriate elevational range, granitic soils, and plant communities (based on topographic maps, geologic maps, and aerial photos) that *Astragalus jaegerianus* requires; there were no

obvious physical barriers between the two MCPs; the distance between the two closest *A. jaegerianus* individuals across the gap of the two MCPs was smaller than the distance between individuals within the MCPs; and the distance between the two MCPs was small enough that it could be easily traversed by a pollinator with a potential flight distance of 0.6 mi (1 km), or a seed disperser such as certain small mammals and birds. Granitic soil and the plant community in the intervening area between the two polygons also provide habitat for the pollinators that visit *A. jaegerianus* flowers, as well as habitat for seed dispersers (birds, small mammals, and large insects) that carry seed between the coppices of suitable host shrubs, and the area functions as long-term storage for the soil seedbank of *A. jaegerianus*.

Finally, the boundaries of the critical habitat units were modified slightly in the process of creating the legal descriptions of the critical habitat units. This process consisted of overlaying the critical habitat units with grid lines spaced at 100-m intervals; the grid lines following the Universal Transverse Mercator (UTM) coordinate system ties to the North American Datum of 1927. Vertices defining the critical habitat boundary polygon were then moved to the closest vertex on the 100-m UTM grid lying inside of the critical habitat boundary. Vertices not necessary to define the shape of the boundary polygon were deleted. Changing the boundaries in this fashion serves two purposes: (1) It creates a list of coordinates that is easier for the public to use when looking at USGS 7.5-minute topographic maps, and (2) it minimizes the number of coordinates necessary to define the shapes of the critical habitat units.

When determining critical habitat boundaries within this final rule, we made every effort to avoid including developed areas such as lands covered by buildings, pavement, and other structures because such lands lack PBFs for *Astragalus jaegerianus*. The scale of the maps we prepared under the parameters for publication within the Code of Federal Regulations may not reflect the exclusion of such developed lands. In addition, old mining sites, where the soil profile and topography have been altered such that no native vegetation can grow, also do not and likely will not contain any of the PBFs for *A. jaegerianus* in the future. Any such lands inadvertently left inside critical habitat boundaries shown on the maps of this final rule have been excluded by text in the rule and are not designated as critical habitat. Therefore, a Federal action involving these lands will not trigger section 7 consultation with respect to critical habitat and the requirement of no adverse modification unless the specific action would affect the PBFs in the adjacent critical habitat.

For the proposed revised critical habitat designation of April 1, 2010 (75 FR 16404), we made no changes to the boundaries of the critical habitat units that were proposed in 2004 (69 FR 18018), other than to exempt DOD lands on Fort Irwin that are included in the INRMP (see Exemptions section below). Other changes between the previous 2004 proposed critical habitat designation and the 2010 proposed revised critical habitat designation address changes and corrections in the acreage attributed to various landowners; these changes are detailed in the Summary of Changes From the Proposed Revised Rule and Previous Critical Habitat Designation section above.

We are designating as critical habitat lands that we have determined are occupied at the time of listing and contain sufficient PBFs to support life-history processes essential for the conservation of *Astragalus jaegerianus* and for which special management may be required.

Two units are being designated based on sufficient elements of PBFs being present to support *Astragalus jaegerianus* life processes. Both units contain all of the identified elements of PBFs and support multiple life processes; the Paradise Unit supports a portion of the Paradise population, and the Coolgardie Unit supports all of the Coolgardie population.

Final Revised Critical Habitat Designation

We are designating two units as critical habitat for *Astragalus jaegerianus*. The critical habitat areas described below constitute our best assessment at this time of areas that meet the definition of critical habitat. Those two units are: (1) Paradise, and (2) Coolgardie. Table 2 shows the land ownership and approximate area of each critical habitat unit. Both units are within an area that is north of the town of Barstow in the Mojave Desert in San Bernardino County, California, were occupied at the time of listing, are currently occupied, and contain the PCEs that sustain *A. jaegerianus*. We are exempting the previously proposed Goldstone-Brinkman unit and a large portion of the previously proposed Paradise unit (from the 2004 proposed critical habitat rule (69 FR 18018)) because NTC now has a Service-approved INRMP that benefits the species. Please see discussion in Exemptions section below for a description of the importance of these exempted areas to *A. jaegerianus*.

TABLE 2—DESIGNATED CRITICAL HABITAT UNITS FOR ASTRAGALUS JAEGERIANUS
[Areas estimates reflect all land within critical habitat unit boundaries.]

Unit name	Army lands (Federal)	Bureau of Land Management (Federal)	State lands	Private lands	Totals
Paradise	318 ac (129 ha)	409 ac (166 ha)	0 ac (0 ha)	237 ac (96 ha)	964 ac (390 ha).
Coolgardie	964 ac (390 ha)	9,479 ac (3,836 ha) ..	0 ac (0 ha)	2,662 ac (1,077 ha) ..	13,105 ac (5,303 ha).
Totals	1,282 ac (519 ha)	9,888 ac (4,002 ha) ..	0 ac (0 ha)	2,899 ac (1,173 ha) ..	14,069 ac (5,693 ha).

Note: Approximate acres have been converted to hectares (1 ac = 0.4047 ha). Fractions of acres and hectares have been rounded to the nearest whole number. Totals are sums of units. Area sizes may not sum due to rounding.

We present brief descriptions of both units, and reasons why they meet the definition of critical habitat for *Astragalus jaegerianus* below.

Paradise Unit

The Paradise unit consists of approximately 7,032 ac (2,846 ha). We are designating critical habitat for *Astragalus jaegerianus* on 964 ac (390

ha). Of this, 318 ac (129 ha) is Army-owned land adjacent to the NTC (off Fort Irwin), 237 ac (96 ha) is privately owned land located adjacent to the NTC, and approximately 409 ac (166 ha) is on adjacent Federal lands managed by

the Bureau. The remaining 6,068 acres (2,456 ha) within this unit are on Army lands at NTC subject to the INRMP and have been exempted under section 4(a)(3) of the Act (see Exemptions section below).

As part of the plan amendments to the CDCA, the Bureau in 2005 designated an area of approximately 1,000 ac (405 ha) as part of the West Paradise Valley Conservation Area. It generally overlaps with the 964 ac (390 ha) in this designation of critical habitat. The boundary of the West Paradise Valley Conservation Area encompasses some Army lands not on NTC and some private inholdings. This unit contains the PBFs essential to the conservation of the species. The unit supports a portion of the Paradise population which is one of the four populations of *Astragalus jaegerianus*. In 2001, approximately 1,667 individuals were observed in this population. The land within this unit supports the granitic soils (PCE 1) and host shrubs (PCE 2) that are necessary for the growth, reproduction, and establishment of *A. jaegerianus* individuals. These granitic soils and host shrubs also provide habitat for (1) the pollinators that visit *A. jaegerianus* flowers that result in the production of seed; (2) seed dispersers (birds, small mammals, and large insects) that carry seed between the coppices of suitable host shrubs; and (3) sites for long-term storage for seedbank of *A. jaegerianus*.

The Paradise unit may require special management considerations or protection due to the threats to the species and its habitat posed by: Invasions of nonnative plants such as Sahara mustard (*Brassica tournefortii*) and other plant species that may take over habitat for the species; habitat fragmentation that detrimentally affects plant-host plant and plant-pollinator interactions (*i.e.*, composition and structure of the desert scrub community), leading to a decline in species reproduction and increasing susceptibility to nonnative plant invasion; and vehicles that cause direct and indirect impacts, such as excessive dust, to the plant. Habitat for *Astragalus jaegerianus* in the Paradise unit has been fragmented to a minor extent. We anticipate that, in the future, habitat fragmentation may increase, composition and structure of the plant community may be altered by the spread of nonnative plants, and 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.

Coolgardie Unit

The Coolgardie unit consists of approximately 13,105 ac (5,303 ha), primarily on Federal lands managed by the Bureau. The designated Coolgardie critical habitat unit overlaps to a great extent with the Bureau's Coolgardie Mesa Conservation Area (CMCA). Of this acreage, approximately 9,479 ac (3,836 ha) are managed by the Bureau, and approximately 964 ac (390 ha) were formerly in private ownership, but have been acquired by the Army since 2005 for the purposes of conservation of *Astragalus jaegerianus*. These lands are not contiguous with the NTC and are not covered under the Army's INRMP. Parcels of private land are scattered throughout this unit and total approximately 2,662 ac (1,077 ha). Some of these parcels may be acquired by the Bureau and added to the CMCA. This unit supports one of only four populations of *A. jaegerianus*. In 2001, surveyors observed 2,014 plants in this population.

The land within this unit contains the PBFs essential to the conservation of the species and supports the granitic soils (PCE 1) and host shrubs (PCE 2) that are necessary for the growth, reproduction, and establishment of *Astragalus jaegerianus* individuals. It should be noted that the proposed critical habitat does not include the "donut hole" in the center of the unit, where granitic soils are absent. Within the proposed unit, the granitic soils and host shrubs: (1) Provide habitat for the pollinators that visit *A. jaegerianus* flowers and result in the production of seed; (2) provide habitat for seed dispersers (birds, small mammals, and large insects) that carry seed between the coppices of suitable host shrubs; and (3) provide for long-term seedbank storage for *A. jaegerianus*.

The Coolgardie unit may require special management considerations or protection due to the threats to the species and its habitat posed by: Invasions of nonnative plants such as Sahara mustard (*Brassica tournefortii*) and other plant species that may take over habitat for the species; habitat fragmentation that detrimentally affects plant-host plant and plant-pollinator interactions (composition and structure of the desert scrub community), leading to a decline in species reproduction and increasing susceptibility to nonnative plant invasion; vehicles that cause direct and indirect impacts, such as excessive dust, to the plant; and limited mining activities that can lead to changes in habitat conditions (*e.g.*, decreases in plant cover, and increases in nonnative species). Habitat for

Astragalus jaegerianus in the Coolgardie unit has been fragmented to a moderate extent from current and historical mining and from off-road vehicle use, and non-native species have been introduced into the area. We anticipate that in the future, habitat fragmentation may increase, and composition and structure of the plant community may be altered by the continued spread of nonnative plants. Due to increased recreational pressure, off-road vehicle use has increased in the past 4 years. All of these threats would render the habitat less suitable for *A. jaegerianus*, and special management may be needed to address them.

Effects of Critical Habitat Designation

Section 7 Consultation

Section 7(a)(2) of the Act requires Federal agencies, including the Service, to ensure that actions they fund, authorize, or carry out is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of designated critical habitat of such species. In addition, section 7(a)(4) of the Act requires Federal agencies to confer with the Service on any agency action that is likely to jeopardize the continued existence of any species proposed to be listed under the Act or result in the destruction or adverse modification of proposed critical habitat.

Decisions by the 5th and 9th Circuit Court of Appeals have invalidated our regulatory definition of "destruction or adverse modification" (50 CFR 402.02) (see *Gifford Pinchot Task Force v. U.S. Fish and Wildlife Service*, 378 F.3d 1059 (9th Cir. 2004) and *Sierra Club v. U.S. Fish and Wildlife Service et al.*, 245 F.3d 434, 442F (5th Cir. 2001)), and we do not rely on this regulatory definition when analyzing whether an action is likely to destroy or adversely modify critical habitat. Under the statutory provisions of the Act, we determine destruction or adverse modification on the basis of whether, with implementation of the proposed Federal action, the affected critical habitat would continue to serve its intended conservation role for the species.

If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency (action agency) must enter into consultation with us. Examples of actions that are subject to the section 7 consultation process are actions on State, Tribal, local, or private lands that require a Federal permit (such as a permit from the U.S. Army Corps of Engineers under section 404 of the Clean Water Act (33

U.S.C. 1251 *et seq.*) or a permit from the Service under section 10 of the Act) or that involve some other Federal action (such as funding from the Federal Highway Administration, Federal Aviation Administration, or the Federal Emergency Management Agency). Federal actions not affecting listed species or critical habitat, and actions on State, Tribal, local, or private lands that are not federally funded or authorized, do not require section 7 consultation.

As a result of section 7 consultation, we document compliance with the requirements of section 7(a)(2) of the Act through our issuance of:

(1) A concurrence letter for Federal actions that may affect, but are not likely to adversely affect, listed species or critical habitat; or

(2) A biological opinion for Federal actions that may affect, and are likely to adversely affect, listed species or critical habitat.

When we issue a biological opinion concluding that a project is likely to jeopardize the continued existence of a listed species and/or destroy or adversely modify critical habitat, we provide reasonable and prudent alternatives to the project, if any are identifiable, that would avoid the likelihood of jeopardy and/or destruction or adverse modification of critical habitat. We define “reasonable and prudent alternatives” (at 50 CFR 402.02) as alternative actions identified during consultation that:

(1) Can be implemented in a manner consistent with the intended purpose of the action,

(2) Can be implemented consistent with the scope of the Federal agency’s legal authority and jurisdiction,

(3) Are economically and technologically feasible, and

(4) Would, in the Director’s opinion, avoid the likelihood of jeopardizing the continued existence of the listed species and/or avoid the likelihood of destroying or adversely modifying 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 we have listed a new species or subsequently designated critical habitat that may be affected and the Federal agency has retained discretionary involvement or control over the action (or the agency’s

discretionary involvement or control is authorized by law). Consequently, Federal agencies may sometimes need to request reinitiation of consultation with us on actions for which formal consultation has been completed, if those actions with discretionary involvement or control may affect subsequently listed species or designated critical habitat.

Application of the “Adverse Modification” Standard

The key factor related to the adverse modification determination is whether, with implementation of the proposed Federal action, the affected critical habitat would continue to serve its intended conservation role for the species. Activities that may destroy or adversely modify critical habitat are those that alter the PBFs to an extent that appreciably reduces the conservation value of critical habitat for *Astragalus jaegerianus*. As discussed above, the role of critical habitat is to support life-history needs of the species and provide for the conservation of the species.

Section 4(b)(8) of the Act requires us to briefly evaluate and describe, in any proposed or final regulation that designates critical habitat, activities involving a Federal action that may destroy or adversely modify such habitat, or that may be affected by such designation.

Examples of activities that, when authorized, funded, or carried out by a Federal agency, may affect critical habitat and therefore should result in consultation for *Astragalus jaegerianus* include, but are not limited to:

(1) Activities that would disturb the upper layers of soil, including disturbance of the soil crust, soil compaction, soil displacement, and soil destabilization. These activities include, but are not limited to, military-related and construction activities of the Army on its lands or lands under its jurisdiction not covered by an INRMP; activities of the Bureau on its lands or lands under its jurisdiction, including livestock grazing, fire management, and recreational use; and habitat restoration projects on private lands receiving funding from Federal agencies, such as from the Natural Resources Conservation Service (NRCS), that would include mechanical disturbance such as would occur with tracked vehicles, heavy-wheeled vehicles, vehicles used in restoration projects (e.g., rippers or discers), off-highway vehicles (including motorcycles), and mining activities, such as “club mining” with drywashers and sluices. These activities could alter soil conditions in

ways that would affect the germination of seed, the growth of individual plants, and successful reproduction, and result in direct or cumulative adverse effects to these individuals and their life cycles.

(2) Activities that appreciably degrade or destroy the native desert scrub communities that support host shrubs, including but not limited to military-related and construction activities of the Army on its lands or lands under its jurisdiction not covered by an INRMP; activities of the Bureau on its lands or lands under its jurisdiction, including livestock grazing, fire management, and recreational use; and habitat restoration projects on private lands receiving funding from Federal agencies, such as from the NRCS that would include mechanical disturbance such as would occur with tracked vehicles, heavy-wheeled vehicles, vehicles used in restoration projects (e.g., rippers or discers), off-highway vehicles (including motorcycles), and mining activities such as “club mining” with drywashers and sluices. These activities could alter the plant communities, particularly the host shrubs and habitat for pollinators, in ways that would affect the germination of seed, the growth of individual plants, and successful reproduction, and result in direct or cumulative adverse effects to these individuals and their life cycles.

(3) Activities that would appreciably degrade the normal metabolic processes in individual plants through aerial application of chemical compounds, such as the application or runoff of chemical or biological agents into the air, onto the soil, or onto native vegetation, including substances such as pesticides, herbicides, fertilizers, tackifiers, obscurants, and chemical fire retardants used by the Bureau, the Army, NRCS, and the Animal and Plant Health Inspection Service, in the control of nonnative plant and animal species, firefighting, military training activities, and restoration activities. These activities could interfere with normal plant metabolic processes such as gas exchange in leaf tissues, and water and mineral uptake in root tissues. In addition, aerial spraying can affect reproduction through a reduction in successful pollen transfer; pollinator availability may also be affected, which, could in turn affect seed set.

As discussed previously in the revised proposed rule (75 FR 16404), we completed consultation with both the Army and the Bureau on activities that were being proposed on their lands. We consulted with the Army on its proposed addition of training lands on the NTC (Charis 2003; Service 2005); see

discussion below under “Approved INRMPs”. We also consulted with the Bureau as the lead Federal agency on the plan amendments to the CDCA plan (Bureau 2005; Service 2005); for a complete discussion of actions and conservation measures undertaken through this consultation, please refer to the revised proposed critical habitat designation (75 FR 16404).

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, under 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 with the distribution of *Astragalus jaegerianus* in a portion of the Paradise population of the species. 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. However, there may be activities proposed for private lands that either need to be completed prior to the approval of the HCP, or there may be a proposed activity that is not covered by the HCP and, therefore, may require a separate habitat conservation plan.

Exemptions

Application of Section 4(a)(3) of the Act

The Sikes Act Improvement Amendment of 1997 (Sikes Act) (16 U.S.C. 670a) required each military installation that includes land and water suitable for the conservation and management of natural resources to complete an INRMP by November 17, 2001. An INRMP integrates implementation of the military mission of the installation with stewardship of the natural resources found on the base. Each INRMP includes:

- (1) An assessment of the ecological needs on the installation, including the need to provide for the conservation of listed species;
- (2) A statement of goals and priorities;
- (3) A detailed description of management actions to be implemented to provide for these ecological needs; and
- (4) A monitoring and adaptive management plan.

Among other things, each INRMP must, to the extent appropriate and applicable, provide for fish and wildlife management; fish and wildlife habitat enhancement or modification; wetland protection, enhancement, and

restoration where necessary to support fish and wildlife; and enforcement of applicable natural resource laws.

The National Defense Authorization Act for Fiscal Year 2004 (Pub. L. 108–136) amended the Act to limit areas eligible for designation as critical habitat. Specifically, section 4(a)(3)(B)(i) of the Act (16 U.S.C. 1533(a)(3)(B)(i)) now provides: “The Secretary shall not designate 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 integrated natural resources management plan prepared under section 101 of the Sikes Act (16 U.S.C. 670a), if the Secretary determines in writing that such plan provides a benefit to the species for which critical habitat is proposed for designation.”

We consult with the military on the development and implementation of INRMPs for installations with listed species. We analyzed INRMPs developed by military installations located within the range of the critical habitat designation for *Astragalus jaegerianus* to determine if they are exempt under section 4(a)(3) of the Act. The following areas are DOD lands with completed, Service-approved INRMPs within the revised critical habitat designation.

Approved INRMPs

Army lands within the boundaries of the NTC at Fort Irwin are subject to an INRMP for 2006–2011 (NTC 2005), which includes management guidelines in place that provide a benefit for *Astragalus jaegerianus*. As part of the Army’s consultation on the proposed expansion of training lands at NTC (Service 2005), the Army established the 4,300-ac (1,740-ha) East Paradise Conservation Area on NTC. This area contains approximately 80 percent of the East Paradise population of *A. jaegerianus*. The Army established the 3,700-ac (1497-ha) Brinkman Wash Restricted Access Area (no-dig zone) on NTC. This area contains 1,872 ac (758 ha) of *A. jaegerianus* habitat and approximately 51 percent of the Montana Mine population of *A. jaegerianus*. The Army also maintains the 2,471-ac (1,000-ha) Goldstone Conservation Area. The Army’s INRMP management guidelines provide a benefit to *A. jaegerianus* through the following measures: the Army will prohibit off-road activity; they will reduce threats to *A. jaegerianus* caused by dust through the application of soil binders. They will also collect and store site-specific seed from host plants to restore closed routes and other disturbed areas within *A. jaegerianus*

habitat. Contingent on funds, the Army will perform intensive nonnative species control and eradication efforts at conservation areas, if such species are found there. We will continue to monitor the status of the INRMP to ensure that it adequately addresses management guidelines for *A. jaegerianus*.

In the April 6, 2004, proposed critical habitat designation (69 FR 18018), the Army had not yet completed its INRMP and, therefore, was not exempted under section 4(a)(3)(B) of the Act. However, the Army was excluded under section 4(b)(2) of the Act for reasons of national security and because existing management plans provided a benefit to *Astragalus jaegerianus*. The Army’s INRMP was approved in 2006, and includes management actions that the Secretary has determined benefit *A. jaegerianus*. With our current exemption of all areas within the Army’s NTC (see “Relationships to Sections 4(a)(3) of the Act” section), the entire 10,394-ac (4,206-ha) Goldstone-Brinkman unit has been exempted from revised critical habitat designation. Similarly, almost all (6,068 ac (2,456 ha) of 7,032 ac (2,846 ha)) of the Paradise Unit on NTC has been exempted from designation as revised critical habitat. Army lands outside the NTC are not subject to the INRMP and, therefore, not exempted. The 2006 INRMP is due to be revised in 2011; the Army is currently reviewing the draft INRMP for 2011–2016. It contains all the same measures for *A. jaegerianus* as the existing INRMP (Everly 2011 *in litt.*).

Based on the above considerations, and in accordance with section 4(a)(3)(B)(i) of the Act, we have determined that the identified lands are subject to the NTC at Fort Irwin INRMP, and that conservation efforts identified in the INRMP will provide a benefit to *Astragalus jaegerianus* occurring in habitats within, or adjacent to, the NTC at Fort Irwin INRMP. Therefore, lands within this installation are exempt from critical habitat designation under section 4(a)(3) of the Act. Approximately 16,462 ac (6,662 ha) of *A. jaegerianus* habitat are not included in this revised critical habitat designation because of this exemption.

Exclusions

Application of Section 4(b)(2) of the Act

Section 4(b)(2) of the Act states that the Secretary shall designate and make revisions to critical habitat 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. The Secretary may exclude an area from critical habitat if he determines that the benefits of such exclusion outweigh the benefits of specifying such area as part of the critical habitat, unless he determines, based on the best scientific data available, that the failure to designate such area as critical habitat will result in the extinction of the species. In making that determination, the statute on its face, as well as the legislative history, are clear that the Secretary has broad discretion regarding which factor(s) to use and how much weight to give to any factor.

Under section 4(b)(2) of the Act, the Secretary may exclude an area from designated critical habitat based on economic impacts, impacts on national security, or any other relevant impacts. In considering whether to exclude a particular area from the designation, we must identify the benefits of including the area in the designation, identify the benefits of excluding the area from the designation, and determine whether the benefits of exclusion outweigh the benefits of inclusion. If the analysis indicates that the benefits of exclusion outweigh the benefits of inclusion, the Secretary may exercise his discretion to exclude the area only if such exclusion would not result in the extinction of the species.

Exclusions Based on Economic Impacts

Under section 4(b)(2) of the Act, we consider the economic impacts of specifying any particular area as critical habitat. In order to consider economic impacts, we prepared a draft economic analysis of the proposed critical habitat designation and related factors (Industrial Economics Incorporated (IEC) 2010, pp. 1–44). The draft analysis, dated September 30, 2010, was made available for public review on November 3, 2010, and the comment period for the draft analysis and proposed revised designation of critical habitat was opened for an additional 30 days, extending through December 3, 2010 (75 FR 67676). Following the close of the comment period, a final analysis (dated March 1, 2011) of the potential economic effects of the designation was developed taking into consideration the public comments and any new information (IEC 2011).

The intent of the final economic analysis (FEA) is to quantify the economic impacts of all potential conservation efforts for *Astragalus jaegerianus*; some of these costs will likely be incurred regardless of whether we designate critical habitat (baseline). The economic impact of the final critical habitat designation is analyzed

by comparing scenarios both “with critical habitat” and “without critical habitat.” The “without critical habitat” scenario represents the baseline for the analysis, considering protections already in place for the species (e.g., under the Federal listing and other Federal, State, and local regulations). The baseline, therefore, represents the costs incurred regardless of whether critical habitat is designated. The “with critical habitat” scenario describes the incremental impacts associated specifically with the designation of critical habitat for the species. The incremental conservation efforts and associated impacts are those not expected to occur absent the designation of critical habitat for the species. In other words, the incremental costs are those attributable solely to the designation of critical habitat above and beyond the baseline costs; these are the costs we consider in the final designation of critical habitat. Conservation measures implemented under the baseline (without critical habitat) scenario are described qualitatively within the FEA, but economic impacts associated with these measures are not quantified. Economic impacts are only quantified for conservation measures implemented specifically due to the designation of critical habitat (i.e., incremental impacts).

The FEA also addresses how potential economic impacts are likely to be distributed, including an assessment of any local or regional impacts of habitat conservation and the potential effects of conservation activities on government agencies, private businesses, and individuals. The FEA measures lost economic efficiency associated with residential and commercial development and public projects and activities, such as economic impacts on water management and transportation projects, Federal lands, small entities, and the energy industry. Decision-makers can use this information to assess whether the effects of the designation might unduly burden a particular group or economic sector. Finally, the FEA looks qualitatively at costs that have been incurred since 1998 (year of the species’ listing) (63 FR 53596), and considers those costs that may occur in the 20 years following the designation of critical habitat, which was determined to be the appropriate period for analysis because limited planning information was available for most activities to forecast activity levels for projects beyond a 20-year timeframe. The FEA quantifies incremental economic impacts of *Astragalus*

jaegerianus conservation efforts associated with the following categories of activity: recreational OHV use, recreational surface mining, and wind energy development. It also assessed possible indirect impacts to economic activities as the result of possible applications of the CEQA, and regulatory uncertainty or delay associated with consultations with the Service.

The FEA estimates that no economic impacts from additional conservation measures are likely to result from the designation of critical habitat. The main reason for this conclusion is that approximately 79 percent of the designated critical habitat is Federal land that is either being managed for *Astragalus jaegerianus* conservation by the Bureau under the guidance of the California Desert Conservation Area Plan, as modified by the West Mojave Plan, or is being held by the DOD. Because the DOD acquired these lands as mitigation for the expansion of Fort Irwin, it will not permit any ground-disturbing activities on them. Ultimately, the DOD will transfer the lands to the Bureau, and the Bureau will manage them as part of the Coolgardie Mesa and West Paradise Areas of Critical Environmental Concern. The Service, DOD, and the Bureau do anticipate section 7 consultation on the land transfer, but expect that the consultation will be informal and not require a formal biological opinion under section 7 of the Act. An additional reason that no economic impacts are likely to result from the designation of critical habitat is that the private lands (remaining 21 percent of designation interspersed in a checkerboard fashion among the Bureau ACECs lands) occur in a remote region where access, development, and construction are limited. Also land-use activities specifically within ACECs are limited. These private lands are being targeted through the WMP for acquisition by Federal agencies from willing sellers to eventually become part of one of the two ACECs. No section 7 consultations have occurred regarding activities on private lands within the area since the listing of the desert tortoise in 1990. The federally threatened desert tortoise occurs throughout the area that we have proposed as critical habitat; critical habitat for the desert tortoise also completely overlaps the areas designated as revised critical habitat for *A. jaegerianus*. Consequently, based on discussions with land managers and the lack of consultations on private lands in this area since the listing of the desert

tortoise, we do not anticipate any land use changes that will result in future consultations.

Our economic analysis identified that there could be “insignificant additional administrative costs to conduct the adverse modification analysis for those projects with a Federal nexus”; no attempt was made to quantify the administrative costs associated with this designation. As a result, there are no disproportionate costs that are likely to result from the designation.

Consequently, the Secretary has determined not to exert his discretion to exclude any areas from this designation of critical habitat for *Astragalus jaegerianus* based on economic impacts.

A copy of the FEA with supporting documents may be obtained by contacting the Ventura Fish and Wildlife Office (see **ADDRESSES**) or by downloading from the Internet at <http://www.regulations.gov>.

Exclusions Based on National Security Impacts

Under section 4(b)(2) of the Act, we consider whether there are lands owned or managed by the DOD where a national security impact might exist. In preparing this final rule, we have

determined that there are lands within the designation of critical habitat for *Astragalus jaegerianus* that are owned by the DOD. These lands were acquired as mitigation for the expansion of Fort Irwin, and the DOD will not permit any ground-disturbing activities on them. Ultimately, the DOD will transfer the lands to the Bureau, and the Bureau will manage them as part of the Coolgardie Mesa and West Paradise ACEC. The Service, DOD, and the Bureau anticipate consultation on the land transfer, but expect that the consultation would be informal and not require a formal biological opinion under section 7 of the Act. No military operations or training for national security occurs on these lands. Consequently, the Secretary has determined not to exert his discretion to exclude any areas from this final designation based on impacts on national security.

Exclusions Based on Other Relevant Impacts

Under section 4(b)(2) of the Act, we consider any other relevant impacts, in addition to economic impacts and impacts on national security. We consider a number of factors, including

whether the landowners have developed any HCPs or other management plans for the area, or whether there are conservation partnerships that would be encouraged by designation of, or exclusion from, critical habitat. In addition, we look at any Tribal issues, and consider the government-to-government relationship of the United States with Tribal entities. We also consider any social impacts that might occur because of the designation.

In preparing this final rule, we have determined that there are currently no HCPs or other management plans for *Astragalus jaegerianus*, and the final designation does not include any Tribal lands or trust resources. We anticipate no impact on Tribal lands, partnerships, or HCPs from this critical habitat designation. Accordingly, the Secretary has determined not to exert his discretion to exclude any areas from this final designation based on other relevant impacts.

Table 3 below provides approximate areas (ac, ha) of lands that meet the definition of critical habitat but are exempt from designation under section 4(a)(3) of the Act. Table 3 also provides our reasons for the exemption.

TABLE 3—EXEMPTIONS FROM THE CRITICAL HABITAT DESIGNATION FOR *Astragalus jaegerianus* BY CRITICAL HABITAT UNIT

Unit	Specific area	Basis for exclusion/exemption	Areas meeting the definition of critical habitat in acres (hectares)	Areas exempted in acres (hectares)
Goldstone-Brinkman.	National Training Center, Fort Irwin Integrated Natural Resources Management Plan.	Exemption under section 4(a)(3) of the Act.	10,394 ac (4,206 ha)	10,394 ac (4,206 ha) exempted due to INRMP* on NTC** lands.
Paradise	National Training Center, Fort Irwin Integrated Natural Resources Management Plan.	Exemption under section 4(a)(3) of the Act.	6,068 ac (2,456 ha)	6,068 ac (2,456 ha) exempted due to INRMP on NTC lands.
Total	16,462 ac (2,456 ha)	16,462 ac (2,456 ha).

*INRMP = Integrated Natural Resources Management Plan.

**NTC = National Training Center.

Required Determinations

Regulatory Planning and Review—Executive Order 12866

The Office of Management and Budget (OMB) has determined that this rule is not significant and has not reviewed this rule under Executive Order 12866 (Regulatory Planning and Review). OMB bases its determination upon the following criteria:

(1) Whether the rule will have an annual effect of \$100 million or more on the economy or adversely affect an economic sector, productivity, jobs, the environment, or other units of the government.

(2) Whether the rule will create inconsistencies with other Federal agencies’ actions.

(3) Whether the rule will materially affect entitlements, grants, user fees, loan programs, or the rights and obligations of their recipients.

(4) Whether the rule raises novel legal or policy issues.

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

Under the Regulatory Flexibility Act (RFA; 5 U.S.C. 601 et seq.), as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996 (5 U.S.C 801 et seq.), whenever an

agency must 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 (small businesses, small organizations, and small government jurisdictions). However, no regulatory flexibility analysis is required if the head of the agency certifies the rule will not have a significant economic impact on a substantial number of small entities. The SBREFA amended the RFA to require Federal agencies to provide a certification statement of the factual basis for certifying that a rule will not

have a significant economic impact on a substantial number of small entities. In this final rule, we are certifying that the critical habitat designation for *Astragalus jaegerianus* 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, small entities include small organizations, such as independent nonprofit organizations, small governmental jurisdictions, including school boards and city and town governments that serve fewer than 50,000 residents, as well as small businesses (13 CFR 121.201). Small businesses include manufacturing and mining concerns with fewer than 500 employees, wholesale trade entities with fewer than 100 employees, retail and service businesses with less than \$5 million in annual sales, general and heavy construction businesses with less than \$27.5 million in annual business, special trade contractors doing less than \$11.5 million in annual business, and agricultural businesses with annual sales less than \$750,000. To determine if potential economic impacts on these small entities are significant, we consider the types of activities that might trigger regulatory impacts under this rule, as well as the types of project modifications that may result. In general, the term “significant economic impact” is meant to apply to a typical small business firm’s business operations.

To determine if the rule could significantly affect a substantial number of small entities, we consider the number of small entities affected within particular types of economic activities (e.g., recreational OHV use and recreational mining). We apply the “substantial number” test individually to each industry to determine if certification is appropriate. However, the SBREFA does not explicitly define “substantial number” or “significant economic impact.” Consequently, to assess whether a “substantial number” of small entities is affected by this designation, this analysis considers the relative number of small entities likely to be impacted in an area. In some circumstances, especially with critical habitat designations of limited extent, we may aggregate across all industries and consider whether the total number of small entities affected is substantial. In estimating the number of small entities potentially affected, we also consider whether their activities have any Federal involvement.

Designation of critical habitat only affects activities authorized, funded, or

carried out by Federal agencies. Some kinds of activities are unlikely to have any Federal involvement and so will not be affected by critical habitat designation. In areas where the species is present, Federal agencies already are required to consult with us under section 7 of the Act on activities they authorize, fund, or carry out that may affect *Astragalus jaegerianus*. Federal agencies also must consult with us if their activities may affect critical habitat. Designation of critical habitat, therefore, could result in an additional economic impact on small entities due to the requirement to reinstate consultation for ongoing Federal activities (see *Application of the “Adverse Modification Standard”* section).

In our final economic analysis of the critical habitat designation, we evaluated the potential economic effects on small business entities resulting from conservation actions related to the listing of *Astragalus jaegerianus* and the designation of critical habitat. The analysis is based on the estimated impacts associated with the rulemaking as described in Section 3.5 of the analysis and evaluates the potential for economic impacts related to: (1) Recreational OHV use; (2) recreational surface mining; and (3) wind energy development. In this case, the analysis discusses that, because there are no incremental impacts resulting from the critical habitat designation, there are no impacts on small entities.

In summary, we considered whether this designation would result in a significant economic effect on a substantial number of small entities. Based on the above reasoning and currently available information, we concluded that this rule would not result in a significant economic impact on a substantial number of small entities. Therefore, we are certifying that the designation of critical habitat for *A. jaegerianus* will not have a significant economic impact on a substantial number of small entities, and a regulatory flexibility analysis is not required.

Energy Supply, Distribution, or Use—Executive Order 13211

Executive Order 13211 (Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use) requires agencies to prepare Statements of Energy Effects when undertaking certain actions. OMB has provided guidance for implementing this Executive Order that outlines nine outcomes that may constitute “a significant adverse effect”

when compared to not taking the regulatory action under consideration.

This final revised critical habitat designation for *Astragalus jaegerianus*, as described above, is not expected to significantly affect energy supplies, distribution, or use. There are no transmission power lines identified on the designated critical habitat, or energy extraction activities (Bureau of Land Management 1980). In addition, according to the FEA, no future wind energy developments will be permitted within the Paradise Unit due to the DOD concerns regarding use of the air space (IEC 2011). Further, reserve-level management of the ACECs for *Astragalus jaegerianus* conservation in both proposed units indicate it is unlikely that wind energy developments will be permitted by the Bureau within the critical habitat designation (IEC 2011, Section 3.2.4).

Thus, based on information in the economic analysis, energy-related impacts associated with *Astragalus jaegerianus* conservation activities within critical habitat are not expected. As such, the designation of critical habitat is not expected to significantly affect energy supplies, distribution, or use. 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), we make the following findings:

(1) 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, or 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. First, it excludes “a condition of Federal assistance.” Second, 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 that receive Federal funding, assistance, or permits, or that 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 onto State governments.

(2) We do not believe that this rule will significantly or uniquely affect small governments and a small Government Agency Plan is not required. State lands were not included in this revised critical habitat designation. Given the distribution of this species, small governments will not be uniquely affected by this rule. Small governments will not be affected at all unless they propose an action requiring Federal funds, permits, or other authorization. Any such activity will require that the involved Federal agency ensure that the action is not likely to adversely modify or destroy designated critical habitat. However, as discussed above, Federal agencies are currently required to ensure that any such activity is not likely to jeopardize the species, and no further regulatory impacts from this revised designation of critical habitat are anticipated. Consequently, we do not believe that the critical

habitat designation would significantly or uniquely affect small government entities. As such, a Small Government Agency Plan is not required.

Takings—Executive Order 12630

In accordance with Executive Order 12630 (Government Actions and Interference with Constitutionally Protected Private Property Rights), we have analyzed the potential takings implications of designating critical habitat for *Astragalus jaegerianus* in a takings implications assessment. Critical habitat designation does not affect landowner actions that do not require Federal funding or permits, nor does it preclude development of habitat conservation programs or issuance of incidental take permits to permit actions that do require Federal funding or permits to go forward. The takings implications assessment concludes that this designation of critical habitat for *A. jaegerianus* does not pose significant takings implications for lands within or affected by the designation.

Federalism—Executive Order 13132

In accordance with Executive Order 13132 (Federalism), the rule does not have significant Federalism effects. A Federalism assessment is not required. In keeping with Department of the Interior policy, we requested information from, and coordinated development of, this critical habitat designation with appropriate State resource agencies in California. We solicited, but did not receive, comments from the CDFG and have noted this in the Summary of Comments and Recommendations section of the rule. As discussed above, the designation 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 proposed revised critical habitat occurs to a great extent on Federal lands managed by the DOD and the Bureau, and less than 2 percent occurs on private lands that would involve State and local agencies. The designation may have some benefit to these governments, in that the areas that contain the PBFs essential to the conservation of these species are more clearly defined, and the elements of the features of the habitat necessary to the conservation of the species are specifically identified. This information does not alter where and what Federally sponsored activities may occur. However, it may assist these local governments in long-range planning (rather than having them wait for case-by-case section 7 consultation to occur).

Where State and local governments require approval or authorization from a Federal agency for actions that may affect critical habitat, consultation under section 7(a)(2) would be required. While non-Federal entities that receive Federal funding, assistance, or permits, or that 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.

Civil Justice Reform—Executive Order 12988

In accordance with Executive Order 12988 (Civil Justice Reform), the regulation meets the applicable standards set forth in sections 3(a) and 3(b)(2) of the Order. We are designating critical habitat in accordance with the provisions of the Act. This final rule uses standard property descriptions and identifies the elements of PBFs essential to the conservation of *Astragalus jaegerianus* within the designated areas to assist the public in understanding the habitat needs of the species.

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

This rule does not contain any new collections of information that require approval by OMB under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.). 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 (42 U.S.C. 4321, et seq.)

It is our position that, outside the jurisdiction of the U.S. Court of Appeals for the Tenth Circuit, we do not need to prepare environmental analyses pursuant to the National Environmental Policy Act (NEPA; 42 U.S.C. 4321 et seq.) in connection with designating critical habitat under the Act. 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 by the U.S. Court of Appeals for the 9th Circuit (*Douglas County v. Babbitt*, 48 F.3d 1495 (9th Cir. 1995), cert. denied 516 U.S. 1042 (1996)).

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 (Consultation and Coordination With Indian Tribal Governments), and the Department of the Interior's manual at 512 DM 2, we readily acknowledge our responsibility to communicate meaningfully with recognized Federal Tribes on a government-to-government basis. In accordance with Secretarial Order 3206 of June 5, 1997 (American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act), we readily acknowledge our responsibilities to work directly with Tribes in developing programs for healthy ecosystems, to acknowledge that Tribal lands are not subject to the same controls as Federal public lands, to remain sensitive to Indian culture, and to make information available to Tribes. We determined that there are no Tribal lands occupied by *Astragalus jaegerianus* at the time of listing that contain the features essential for conservation of the species, and no Tribal lands unoccupied by *A. jaegerianus* that are essential for the conservation of the species. Therefore, the designation of critical habitat for *A. jaegerianus* will not affect Tribes or Tribal lands.

Data Quality Act

In developing this rule we did not conduct or use a study, experiment, or survey requiring peer review under the Data Quality Act (Pub. L. 106-554).

References Cited

A complete list of all references cited herein is available on the Internet at <http://www.regulations.gov> at Docket No. FWS-R8-ES-2009-0078 and upon request from the Field Supervisor, Ventura Fish and Wildlife Office (see **FOR FURTHER INFORMATION CONTACT**).

Author

The primary authors of this rulemaking are the staff of the Ventura Fish and Wildlife Office (see **FOR FURTHER INFORMATION CONTACT**).

List of Subjects in 50 CFR Part 17

Endangered and threatened species, Exports, Imports, Reporting and recordkeeping requirements, Transportation.

Regulation Promulgation

Accordingly, we amend part 17, subchapter B of chapter I, title 50 of the

Code of Federal Regulations, as set forth below:

PART 17—[AMENDED]

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

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

■ 2. In § 17.96, amend paragraph (a) by revising the critical habitat designation for "*Astragalus jaegerianus* (Lane Mountain milk-vetch)," under the family Fabaceae, to read as follows:

§ 17.96 Critical habitat—plants.

(a) Flowering plants.

* * * * *

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

(1) Critical habitat units are depicted for San Bernardino County, California, on the map below.

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

(ii) Host shrubs at elevations between 3,100 and 4,200 ft (945 to 1,280 m). The primary host shrubs include, but are not limited to: *Thamnosma montana* (turpentine bush), *Ambrosia dumosa* (burro bush), *Eriogonum fasciculatum* ssp. *Polifolium* (California buckwheat), *Ericameria cooperi* var. *cooperi* (golden bush), *Ephedra nevadensis* (Mormon tea), and *Salazaria mexicana* (paperbag bush) that are usually found in mixed desert shrub communities.

(3) Critical habitat does not include manmade structures (including, but not limited to, buildings, aqueducts, runways, roads, and other paved areas) and the land on which they are located existing within the legal boundaries on the effective date of this rule and not containing one or more of the PCEs.

(4) *Critical habitat map units.* These critical habitat units were mapped using Universal Transverse Mercator (UTM), Zone 10, North American Datum (NAD) 1983 (UTM NAD 83) coordinates. These coordinates establish the vertices and endpoints of the boundaries of the units.

(5) Coolgardie Unit: San Bernardino County, California. From USGS 1:24,000 quadrangle maps Lane Mountain and Mud Hills, San Bernardino County, California.

(i) Land bounded by the following UTM Zone 10, NAD83 coordinates (E, N): 495500, 3884300; 495700, 3884600; 496400, 3885100; 497100, 3885400; 497300, 3885500; 497700, 3885700; 498000, 3885800; 498200, 3885800; 498900, 3885900; 500400, 3886100; 501100, 3886200; 501800, 3886300; 502500, 3886400; 503300, 3886500; 503600, 3886500; 503900, 3886400; 504100, 3886300; 504600, 3886100; 504900, 3886000; 505100, 3885900; 505200, 3885700; 505300, 3885500; 505400, 3885400; 505300, 3885200; 505100, 3884600; 505100, 3881000; 505000, 3880900; 504700, 3880200; 504600, 3879900; 503900, 3879600; 503800, 3879500; 503600, 3879500; 503000, 3879400; 502400, 3879300; 502000, 3879200; 501900, 3878900; 501900, 3878800; 501200, 3878700; 500400, 3878600; 499700, 3878500; 499600, 3878400; 499400, 3878500; 499100, 3878600; 498700, 3878700; 498400, 3878800; 498300, 3879000; 498200, 3879400; 497800, 3880900; 497700, 3881200; 496400, 3881700; 496200, 3881800; 496100, 3881800; 496000, 3882000; 495600, 3883700; 495500, 3884100; returning to 495500, 3884300; excluding land bounded by: 498800, 3883900; 499200, 3883200; 499300, 3882900; 499500, 3882100; 499800, 3881900; 501200, 3881100; 501700, 3881100; 501900, 3881200; 501900, 3881300; 501800, 3882000; 501700, 3882600; 501600, 3883100; 501200, 3883600; 500900, 3883900; 500200, 3884000; 499000, 3884000; returning to 498800, 3883900.

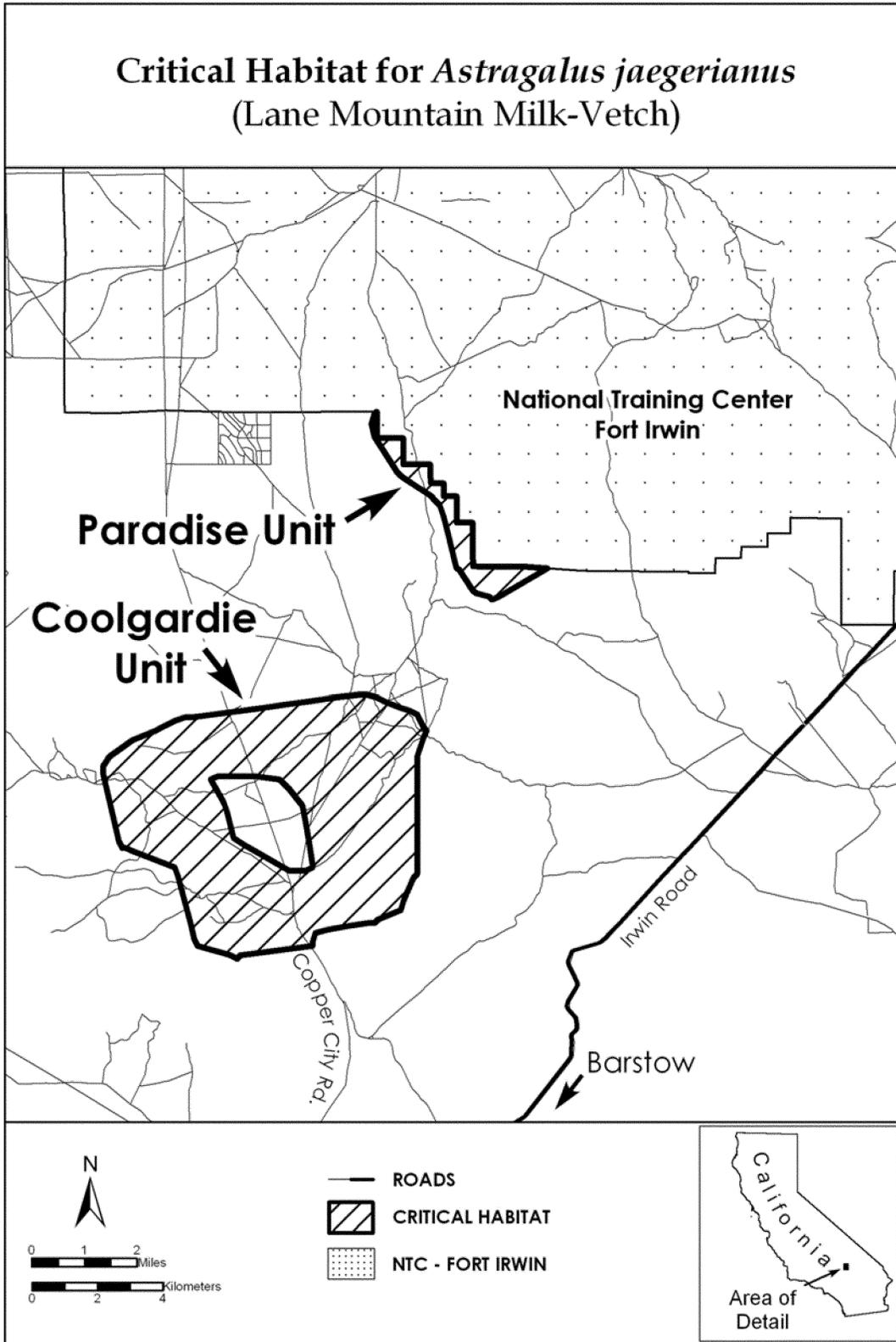
(ii) **Note:** Map of Coolgardie Unit is provided at paragraph (6)(ii) of this entry.

(6) Paradise Unit: San Bernardino County, California. From USGS 1:24,000 quadrangle map Williams Well, San Bernardino County, California.

(i) Land bounded by the following UTM Zone 10, NAD83 coordinates (E, N): 509089 3890369; 507600, 3889500; 507400, 3889400; 507300, 3889500; 506900, 3889600; 506800, 3889700; 506400, 3890300; 506300, 3890400; 506000, 3891600; 505900, 3892000; 505800, 3892300; 505500, 3892600; 504900, 3893000; 504600, 3893200; 504500, 3893300; 504000, 3894100; 503800, 3894400; 503700, 3894800; 503800, 3895100; 503857, 3895157; 503873, 3895157; 503874, 3894353; 504678, 3894353; 504679, 3893549; 505510, 3893550; 505512, 3892977; 505912, 3892974; 505909, 3892573; 506314, 3892571; 506314, 3891767; 506804, 3891767; 506804, 3891244; 506820, 3890426; 508454, 3890415; returning to 509089, 3890369.

(ii) Note: Map of Coolgardie and Paradise Units follows:

BILLING CODE 4310-55-P



* * * * *

Dated: April 28, 2011.

Will Shafroth,

*Acting Assistant Secretary for Fish and
Wildlife and Parks.*

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