AUTHENTICATED
U.S. GOVERNMENT
INFORMATION
GPO

FEDERAL REGISTER

Vol. 78 Wednesday,
No. 30 February 13, 2013

Part IV

Department of the Interior

Fish and Wildlife Service

50 CFR Part 17

Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for Astragalus lentiginosus var. coachellae (Coachella Valley Milk-Vetch); Final Rule

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

[Docket No. FWS–R8–ES–2011–0064; 4500030114]

RIN 1018–AX40

Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for *Astragalus lentiginosus* var. *coachellae* (Coachella Valley Milk-Vetch)

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Final rule.

SUMMARY: We, the U.S. Fish and Wildlife Service (Service), designate critical habitat for *Astragalus lentiginosus* var. *coachellae* (Coachella Valley milk-vetch) under the Endangered Species Act of 1973, as amended. In total, approximately 9,603 acres (3,886 hectares) in the Coachella Valley area of Riverside County, California, fall within the boundaries of this critical habitat designation.

DATES: This rule becomes effective on March 15, 2013.

ADDRESSES: This final rule and the associated final economic analysis are available on the Internet at *http://www.regulations.gov*. Comments and materials received, as well as supporting documentation used in preparing this final rule, are available for public inspection, by appointment, during normal business hours, at the U.S. Fish and Wildlife Service, Carlsbad Fish and Wildlife Office, 6010 Hidden Valley Road, Suite 101, Carlsbad, CA 92011; telephone 760–431–9440; facsimile 760–431–5901.

The coordinates or plot points or both from which the maps included in the regulation are generated are included in the administrative record for this critical habitat designation and are available at *http://www.fws.gov/carlsbad/GIS/CFWOGIS.html, http://www.regulations.gov* at Docket No. FWS–R8–ES–2011–0064, and at the Carlsbad Fish and Wildlife Office (see **FOR FURTHER INFORMATION CONTACT**). All additional tools or supporting information developed for this critical habitat designation are also available at the Fish and Wildlife Service Web site and Field Office set out above, and may also be included in the preamble and/or at *http://www.regulations.gov*.

FOR FURTHER INFORMATION CONTACT: Jim Bartel, Field Supervisor, U.S. Fish and Wildlife Service, Carlsbad Fish and Wildlife Office, 6010 Hidden Valley Road, Suite 101, Carlsbad, CA 92011; telephone 760–431–9440; facsimile 760–431–5901. If you use a telecommunications device for the deaf (TDD), call the Federal Information Relay Service (FIRS) at 800–877–8339.

SUPPLEMENTARY INFORMATION:

Executive Summary

Why we need to publish a rule. This is a final rule to designate critical habitat for *Astragalus lentiginosus* var. *coachellae*. Under the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*) (Act), any species that is determined to be an endangered or threatened species requires critical habitat to be designated, to the maximum extent prudent and determinable. Designations and revisions of critical habitat can only be completed by issuing a rule.

We listed *Astragalus lentiginosus* var. *coachellae* as an endangered species on October 6, 1998 (63 FR 53596). On August 25, 2011, we published in the **Federal Register** a proposed critical habitat designation for *A. l.* var. *coachellae* (76 FR 53224). Section 4(b)(2) of the Act states that the Secretary shall designate 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 critical habitat areas we are designating in this rule constitute our current best assessment of the areas that meet the definition of critical habitat for *Astragalus lentiginosus* var. *coachellae*. Here we are designating approximately 9,603 ac (3,886 ha), in 4 units as critical habitat for the taxon.

We have prepared an economic analysis of the designation of critical habitat. In order to consider economic impacts, we have prepared an analysis of the economic impacts of the critical habitat designation. We announced the availability of the draft economic analysis (DEA) in the **Federal Register** on May 16, 2012 (77 FR 28846), allowing the public to provide comments on our analysis. We considered all comments and information received from the public during the comment period, incorporated the comments as appropriate, and completed the final economic analysis (FEA) concurrently with this final determination.

Peer review and public comment. We sought comments from independent specialists to ensure that our designation is based on scientifically sound data and analyses. We invited three knowledgeable individuals with scientific expertise to review our technical assumptions, analysis, and whether or not we had used the best available information. We received responses from two peer reviewers, who generally concurred with our methods and conclusions and provided additional information, clarifications, and suggestions to improve this final rule. Information we received from peer review is incorporated in this final revised designation. We also considered all comments and information received from the public during the comment period.

Previous Federal Actions

The following section summarizes the previous Federal actions since *Astragalus lentiginosus* var. *coachellae* was listed as an endangered species on October 6, 1998 (63 FR 53596); please refer to the final listing rule for a discussion of Federal actions that occurred prior to the taxon's listing.

At the time of listing, we determined that designation of critical habitat was ''not prudent'' (63 FR 53596). On November 15, 2001, the Center for Biological Diversity and the California Native Plant Society filed a lawsuit against the Secretary of the Interior and the Service challenging our not prudent determinations for eight plant taxa, including *Astragalus lentiginosus* var. *coachellae* (*Center for Biological Diversity, et al.* v. *Norton,* case number 01–cv–2101 (S.D. Cal.)). A second lawsuit asserting the same challenge was filed on November 21, 2001, by the Building Industry Legal Defense Foundation (*Building Industry Legal Defense Foundation* v. *Norton,* case number 01–cv–2145 (S.D. Cal.)). On May 9, 2002, all parties agreed to consolidate the suits and remand the critical habitat determinations for the eight plant taxa at issue to the Service for reconsideration. On July 1, 2002, the Court directed us to reconsider our not prudent determination and if we determined that designation was prudent, submit to the **Federal Register** for publication a proposed critical habitat designation for *A. l.* var. *coachellae* by November 30, 2004, and to submit to the **Federal Register** for publication a final rule designating critical habitat by November 30, 2005. The proposed rule to designate critical habitat for *A. l.* var. *coachellae* published in the **Federal Register** on December 14, 2004 (69 FR 74468). The final rule designating critical habitat for *A. l.* var. *coachellae* published in the **Federal Register** on December 14, 2005 (70 FR 74112).

The Center for Biological Diversity filed a lawsuit on January 14, 2009,

claiming the Service failed to designate adequate critical habitat for *Astragalus lentiginosus* var. *coachellae* (*Center for Biological Diversity* v. *Kempthorne,* case number ED–cv–09–0091 VAP (AGRx) (C.D. Cal.)). In a settlement agreement dated November 14, 2009, we agreed to reconsider the critical habitat designation for *A. l.* var. *coachellae*. The settlement required the Service to submit a proposed revised critical habitat designation for *A. l.* var. *coachellae* to the **Federal Register** by August 18, 2011, and submit a final revised critical habitat designation to the **Federal Register** by February 14, 2013. The proposed revised critical habitat designation was delivered to the **Federal Register** on August 17, 2011, and published on August 25, 2011 (76 FR 53224). A notice announcing the availability of the draft economic analysis for the proposed revised critical habitat designation was published in the **Federal Register** on May 16, 2012 (77 FR 28846). This final rule complies with the terms of the settlement agreement.

Background

It is our intent to discuss in this final rule only those topics directly relevant to the revision of critical habitat for *Astragalus lentiginosus* var. *coachellae* under the Act (16 U.S.C. 1531 *et seq.*). For more information on the taxonomy, biology, and ecology of *A. l.* var. *coachellae,* please refer to: the final listing rule published in the **Federal Register** on October 6, 1998 (63 FR 53596); the first rule proposing designation of critical habitat published in the **Federal Register** on December 14, 2004 (69 FR 74468); the subsequent critical habitat final rule published in the **Federal Register** on December 14, 2005 (70 FR 74112); and the recent proposed rule to designate critical habitat published in the **Federal Register** on August 25, 2011 (76 FR 53224). Additionally, more information on the taxon can be found in the *A. l.* var. *coachellae* 5-year review (Service 2009).

Except when referencing statutory language, we refer to *Astragalus lentiginosus* var. *coachellae* as a taxon in this document because it is not a species itself, but rather a variety of the species *Astragalus lentiginosus.* Information on the associated draft economic analysis for the proposed rule to designate revised critical habitat was published in the **Federal Register** on May 16, 2012 (77 FR 28846).

To ensure clarity of habitat discussions in the remainder of this rule, in the following paragraphs we have included a description of the sand transport system that sustains the sand formations that form the basis of *A. l.* var. *coachellae* habitat in the Coachella Valley.

Sand Transport System

Most of the sand in the northern Coachella Valley is derived from drainages within the Indio Hills, the San Bernardino Mountains, the Little San Bernardino Mountains, and the San Jacinto Mountains. This sand is moved into and through the valley by the sand transport system. The sand transport system consists of two main parts: (1) The fluvial (water) portion (headwaters, tributaries, and the stream channels within the various drainages surrounding Coachella Valley) and (2) the aeolian (wind) portion (predominantly westerly and northwesterly winds moving through the valley) (Griffiths *et al.* 2002, pp. 5–7). The fluvial and aeolian portions of the systems are capable of moving sand until the velocity of the water or wind decreases to a point that sand is deposited.

Fluvial Portion of the Sand Transport System

The water that forms the basis of the fluvial portion of the sand transport system in the Coachella Valley enters the system as precipitation during storm events (Griffiths *et al.* 2002, p. 5). These storm events cause flash flooding, which facilitates the erosion that generates sediment, and moves that sediment downstream in ephemeral streams and washes and eventually into the aeolian transport corridor. Most flooding events only transport small amounts of sediment to the valley floor; flooding events large enough to move large amounts of sediment are very infrequent (for example, the last large flooding event on the Whitewater River occurred in 1938) (Griffiths *et al.* 2002, p. 5).

Fluvial sand transport areas are stream channels that convey sediment downstream to fluvial sand depositional areas. In the portions of the Coachella Valley containing Units 1, 2, and 3, very little erosion of parent rock or sediment deposits takes place in fluvial transport areas compared to areas upstream where the sediment is generated. In Unit 4, sediment is generated in the same area where fluvial sand transport occurs. Fluvial transport channels include portions of the lower reaches of San Gorgonio River and Snow Creek (Unit 1), Whitewater River (Unit 2), Mission Creek and Morongo Wash (Unit 3), and unnamed channels through the alluvial valley floor deposits (relatively flat areas (< 10 percent slope)) at the base of the Indio Hills (Unit 4). Fluvial sand transport areas do not provide habitat for *Astragalus lentiginosus* var. *coachellae* and are not considered to be within the geographical area occupied by the taxon at the time of listing.

Fluvial sand depositional areas are broad, flat, depositional plains or channel terraces where sediment carried by fluvial sand transport channels is deposited (Griffiths *et al.* 2002, p. 5). During larger flood events, sediment can be deposited on bajada (large, coalescing alluvial fans) surfaces as floodplain deposits. There are four main fluvial sand depositional areas in the Coachella Valley: (1) In the Snow Creek/Windy Point area, which receives sediment from the San Gorgonio River and Snow Creek (Unit 1); (2) in the Whitewater Floodplain area, which receives sediment from the Whitewater River (Unit 2); (3) in the Willow Hole area, which receives sediment from Mission Creek and Morongo Wash (Unit 3); and (4) in the Thousand Palms area, which receives sediment from washes that move sediment from the alluvial deposits at the base of the Indio Hills (Unit 4). The fluvial sand depositional areas associated with Units 1, 2, and 3 do provide habitat for *Astragalus lentiginosus* var. *coachellae,* are currently occupied, and were within the geographical area occupied by the taxon at the time of listing. The fluvial sand depositional areas associated with Unit 4 are not known to provide habitat for the taxon, and are not considered to be within the geographical area occupied by the taxon at the time of listing.

Aeolian Portion of the Sand Transport System

The aeolian portion of the sand transport system begins where the fluvial portion of the system ends. Northerly and northwesterly winds pick up sand-sized grains of sediment accumulated in fluvial sand depositional areas, and carry them south/southeast through the valley and into aeolian depositional areas where they form sand fields and dunes (Griffiths *et al.* 2002, p. 7).

Aeolian sand source areas are the portions of the fluvial depositional areas that are subject to wind erosion. Winds erode these sediment accumulations and carry sand across aeolian sand transport areas. Between flooding events, which replenish the sediment in fluvial sand depositional areas, sand available for aeolian transport can be depleted by wind erosion. Aeolian sand source areas provide habitat for *Astragalus lentiginosus* var. *coachellae,* are currently occupied, and were within the geographical area occupied by the taxon at the time of listing.

Sand eroded from the aeolian sand source areas is blown into and across the aeolian sand transport areas. Sand may accumulate in aeolian transport areas when ample sand is available in upwind source areas; conversely, aeolian transport areas may be depleted of sand when sand is lacking upwind. Aeolian sand transport areas provide habitat for *Astragalus lentiginosus* var. *coachellae,* are currently occupied, and were within the geographical area occupied by the taxon at the time of listing.

Sand carried by wind through the aeolian sand transport areas is deposited when the velocity of the wind decreases sufficiently. This occurs mainly where wind is slowed by vegetation (for example, honey mesquite in the Willow Hole area), other objects, or geological features. In general, sand formations (for example, sand dunes and sand fields) persist in aeolian sand depositional areas, whereas sand accumulations in transport areas are more ephemeral. Aeolian sand depositional areas provide habitat for *Astragalus lentiginosus* var. *coachellae,* and support the highest numbers of the taxon within the geographical area occupied by the taxon currently and at the time of listing.

The fluvial and aeolian processes discussed above have been disrupted in many areas by development, alteration of stream flow, and the proliferation of nonnative plants. These threats to the persistence of *Astragalus lentiginosus* var. *coachellae* habitat are discussed further in the *Special Management Considerations or Protection* section below.

The sandy substrates suitable for *Astragalus lentiginosus* var. *coachellae* are dynamic in terms of spatial mobility and tendency to change back and forth from active to stabilized (Lancaster 1995, p. 231). This has significant consequences for *A. l.* var. *coachellae* because the plant's population densities differ on different types of sandy substrates, and the dynamics of the fluvial and aeolian sand transport processes create the variety of substrate types that support occurrences of the taxon.

Dynamics of sandy substrates in the Coachella Valley are controlled by two main factors: (1) The supply of sand-sized sediment released, transported, and deposited by the fluvial system (water-transported); and (2) the rate of aeolian (windblown) transport (Griffiths *et al.* 2002, pp. 4–8). The latter is affected primarily by wind fetch (the length of unobstructed area exposed to the wind).

As discussed above, most of the suitable sandy habitats in the Coachella Valley are generated from several drainage basins in the San Bernardino, Little San Bernardino, and San Jacinto Mountains and the Indio Hills (Lancaster *et al.* 1993, pp. i–ii; Griffiths *et al.* 2002, p. 10). Sediment is eroded and washed from hill slopes and channels in the local hills and alluvial sand deposits in the Thousand Palms area (Unit 4), and is transported downstream in stream channels and within alluvial fans during infrequent flood events (Lancaster *et al.* 1993, p. 28; Griffiths *et al.* 2002, p. 7). Fluvial sand transport is the dominant mechanism that moves sediment into fluvial sand depositional areas in the Coachella Valley (Griffiths *et al.* 2002, p. 7). The largest sand depositional area in the Coachella Valley is in the Whitewater River floodplain, northwest of the City of Palm Springs (Griffiths *et al.* 2002, p. 5).

The San Gorgonio Pass is between the two highest peaks in southern California: San Gorgonio Mountain (11,510 feet (ft) (3,508 meters (m))) to the north and San Jacinto Mountain (10,837 ft (3,303 m)) to the south. Westerly winds funneling through San Gorgonio Pass are the dominant mechanism by which aeolian sands are transported from bajadas and fluvial sand depositional areas to aeolian sand deposits in the Coachella Valley (Sharp and Saunders 1978, p. 12; Griffiths *et al.* 2002, p. 1). *Astragalus lentiginosus* var. *coachellae* is associated with various types of sand formations that are formed by these aeolian sand deposits (Sanders and Thomas Olsen Associates 1996, p. 3).

Summary of Changes From Proposed Rule

In the notice announcing the availability of the draft economic analysis for public review (77 FR 28846, May 16, 2012), we made a correction to the proposed revised critical habitat for *Astragalus lentiginosus* var. *coachellae* as identified and described in the preamble to the proposed rule published in the **Federal Register** on August 25, 2011 (76 FR 53224). The correction was to the description of Unit 1 (76 FR 53240). We proposed 316 acres (ac) (128 hectares (ha)) of tribal land (Morongo Band of Mission Indians) and 1,791 ac (725 ha) of private land as critical habitat in Unit 1. Of this area, we characterized 156 ac (63 ha) of tribal land and 1 ac (0.4 ha) of private land as being covered under the Western Riverside County Multiple Species Habitat Conservation Plan (Western Riverside County MSHCP), due to an incorrect interpretation of GIS data. These lands are within the boundaries of the Western Riverside County MSHCP, but they are inholdings (that is, they are not covered by or subject to the provisions of the Western Riverside County MSHCP or any other habitat conservation plan). All other acreages reported in the proposed rule are correct to the best of our knowledge, and the boundaries of the proposed revised critical habitat remain the same as described in the proposed rule. No part of the proposed critical habitat for *A. l.* var. *coachellae* is covered by the Western Riverside County MSHCP.

Since publication of the proposed revised critical habitat rule for *Astragalus lentiginosus* var. *coachellae* in the **Federal Register** on August 25, 2011 (76 FR 53224), we have received new GIS parcel data describing land ownership in the Coachella Valley. Because we used this new data to generate acreages for the final rule, acreages in the final rule may not match proposed critical habitat acreages for all land ownership categories (see Table 1). The new data also allowed us to remove roads from the acreages calculated for this final rule (critical habitat does not include manmade structures (such as buildings, aqueducts, runways, roads, and other paved areas) and the land on which they are located). The acreage of lands designated as critical habitat and lands excluded from the critical habitat designation (please see the Exclusions section for a discussion of the lands excluded from the designation under section 4(b)(2) of the Act) still sum to the total acreage of lands proposed as critical habitat, minus the area occupied by roads. A total of 255 ac (103 ha) of roads have been removed from this designation.

Critical Habitat

Background

Critical habitat is defined in section 3(5)(A) of the Act as:

(1) The specific areas within the geographical area occupied by the 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 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 be otherwise relieved, may include regulated taking.

Critical habitat receives protection under section 7 of the Act through the requirement that Federal agencies ensure, 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 requests Federal agency funding or authorization for 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 a reasonable and prudent alternative to avoid destruction or adverse modification of critical habitat.

Under section 3(5)(A)(i) of the Act's definition of critical habitat, areas within the geographical area occupied by the species at the time it was listed are included in a critical habitat designation if they contain physical or biological features (1) which are essential to the conservation of the species and (2) which may require special management considerations or protection. For these areas, critical habitat designations identify, to the extent known using the best scientific and commercial data available, those physical or biological features that are essential to the conservation of the species (such as space, food, cover, and protected habitat). In identifying those physical and biological features within an area, we focus on the principal biological or physical constituent elements (primary constituent elements such as roost sites, nesting grounds, seasonal wetlands, water quality, tide, soil type) that are essential to the conservation of the species. Primary constituent elements are those specific elements of the physical or biological features that provide for a species' life-history processes and are essential to the conservation of the species.

Under section 3(5)(A)(ii) of the Act's definition of critical habitat, 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. For example, an area currently occupied by the species but that was not occupied at the time of listing may be essential for the conservation of the species and may be included in the critical habitat designation. We designate critical habitat in areas outside the geographical area occupied by a species only when a designation limited to its range would be inadequate to ensure the conservation of the species.

The geographical area occupied by *Astragalus lentiginosus* var. *coachellae* at the time it was listed (1998) that contains the physical or biological features essential to the conservation of the species that may require special management considerations or protection includes ''the Coachella Valley between [the cities of] Cabazon and Indio'' (63 FR 53598). We are designating these areas under section 3(5)(A)(i) of the Act's definition of critical habitat. At the time of listing, the fluvial sand transport areas were not occupied (nor are they occupied today); however, we have identified fluvial sand transport areas as essential for the conservation of *A. l.* var. *coachellae* under section 3(5)(A)(ii) of the Act's definition of critical habitat, *i.e.,*''[s]pecific 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.''

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. Additional information sources may include the recovery plan for the species, articles in peer-reviewed journals, conservation plans developed by States and counties, scientific status surveys and studies, biological assessments, other unpublished materials, or experts' opinions or personal knowledge.

Habitat is dynamic, and species may move from one area to another over time. 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 area is unimportant or may not be needed 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) prohibitions described in section 9 of the Act. 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 or Biological Features

In accordance with sections 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 by the species at the time of listing to designate as critical habitat, we consider the physical or biological features essential to the conservation of the species and which 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 historical, geographical, and ecological distributions of a species.

We derive the specific physical or biological features essential to *Astragalus lentiginosus* var. *coachellae* from studies of this taxon's habitat, ecology, and life history as described in the Critical Habitat section of the proposed critical habitat rule published in the **Federal Register** on August 25, 2011 (76 FR 53224), 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 5-year review for *A. l.* var. *coachellae* signed on September 1, 2009 (Service 2009). We have determined that *A. l.* var. *coachellae* requires the following physical or biological features:

Space for Individual and Population Growth and for Normal Behavior

Astragalus lentiginosus var. *coachellae* has a limited geographical and ecological distribution. Within its limited range, *A. l.* var. *coachellae* requires space for the essential geomorphological processes on which it depends, including natural fluvial (water) and aeolian (wind) transport and deposition of sandy substrates (see the *Habitat* section of the proposed critical habitat rule for *A. l.* var. *coachellae* for more detailed discussion of fluvial and aeolian sand transport in Coachella Valley (76 FR 53226)). Protection of aeolian and fluvial processes is crucial to maintain habitat for *A. l.* var. *coachellae.* These processes are responsible for transporting and depositing sand that is the foundation of habitat for *A. l.* var. *coachellae.* Disruption, redirection, or curtailment of these processes can result in a lack of adequate amounts of sand to produce the different formations that support habitat (for example, active dunes and sand fields). Protecting aeolian sand transport corridors between *A. l.* var. *coachellae* occurrences is also important for the dispersal of the species' windblown fruits into temporally unoccupied habitat to reestablish reproductive occurrences (metapopulation structure). *Astragalus lentiginosus* var. *coachellae* can produce fruit and viable seed at very low rates without the aid of insect pollinators, but is dependent upon insect pollinators to generate the amount of seed typically produced by individuals of the taxon (Meinke *et al.* 2007, p. 37; also see comment number 7 in the Summary of Comments and Recommendations section below). Protecting aeolian sand transport corridors also provides space for pollinator movement between occurrences, which is important for the long-term maintenance of occurrences. Therefore, based on the information above, we identify areas supporting aeolian sand transport corridors that provide space for seed dispersal and pollinator movement, to be physical or biological features essential to the conservation of this taxon.

Food, Water, Air, Light, Minerals, or Other Nutritional or Physiological Requirements

Astragalus lentiginosus var. *coachellae* is primarily found on various types of sand formations including active sand dunes, stabilized or partially stabilized dunes, active sand fields, stabilized sand fields, shielded sand dunes and fields, ephemeral sand fields, and alluvial sand deposits on floodplain terraces of active washes. Each of these sand deposit formations provides habitat for *A. l.* var. *coachellae* to varying degrees (see *Habitat* section of the proposed critical habitat rule for *A. l.* var. *coachellae* for further discussion of sand formations that support the taxon (76 FR 53226)). The taxon also requires moving water and air to transport sand from areas where the sand originates to occupied habitat areas (depositional areas) (precipitation occurs mostly during large winter storms and intense summer thunderstorms (Griffiths *et al.* 2002, p. 5)). *Astragalus lentiginosus* var. *coachellae* can be found in abundance on shielded sand fields, and the *A. l.* var. *coachellae* plants in these areas are important for the conservation of the taxon. However, we do not consider shielded habitat to contain the physical or biological features essential to the conservation of the taxon because these areas are permanently cut off from the sand transport system. Shielded areas, although they currently contain sand formations, will eventually lose these formations as the winds remove sand over time. Therefore, based on the information above, we identify the other above-mentioned sand formations (active sand dunes, stabilized or partially stabilized dunes, active sand fields, stabilized sand fields, ephemeral sand fields, and alluvial sand deposits on floodplain terraces of active washes) to be a physical or biological feature essential to the conservation of this taxon.

The specific physiological and soil nutritional needs of *Astragalus lentiginosus* var. *coachellae* are not known at this time. The taxon shows variation in productivity and life-history patterns that appear to coincide with local variations in precipitation (wetter years result in higher levels of seed germination (for example, Barrows 1987, p. 2)) and variations across its range (plants in the northwestern portion of the range where rainfall is higher are more likely to grow larger and survive into their second year or longer (Meinke *et al.* 2007, p. 25)). However, the specific optimal soil moisture range for the taxon is unknown.

Additionally, the taxon does not grow in some areas that appear to contain suitable habitat. For example, *Astragalus lentiginosus* var. *coachellae* grows on some portions of the alluvial sand deposits on floodplain terraces of Morongo Wash, but not others, and it does not grow in the bed of the wash when the bed is dry even though the bed contains sandy substrates (J. Avery, USFWS Biologist, pers. obs. 2004–2009). These apparent inconsistencies may be due to microsite differences (such as nutrient availability, soil microflora or microfauna, soil texture, or moisture). Research is needed to determine the specific nutritional and physiological requirements of *A. l.* var. *coachellae.*

Sites for Reproduction

Astragalus lentiginosus var. *coachellae* plants, like most plants, do not require areas for breeding or reproduction other than the areas they occupy and any area necessary for pollinators and seed dispersal. Reproduction sites accommodate all phases of the plant's life history. Seeds likely require certain soil conditions to germinate (for example, moisture and nutrient levels within a certain range or close proximity to the soil surface), but as discussed above, we do not yet know what those requirements are. In addition, wind is important for the dispersal of the windblown fruits into

temporally unoccupied habitat (metapopulation structure) of *A. l.* var. *coachellae.*

The primary visitors of *Astragalus lentiginosus* var. *coachellae* appear to be nonnative honeybees (*Apis mellifera*) (Meinke *et al.* 2007, p. 36). These bees appear to be flexible in their choice of nesting sites. For example, bee nests were found in discarded tires, in *Tamarix* spp. trees, and under a bridge near *A. l.* var. *coachellae* occurrences (Meinke *et al.* 2007, p. 36).

Native solitary bees, which may be the natural pollinators of *Astragalus lentiginosus* var. *coachellae,* utilize several plant species as pollen and nectar sources (Karron 1987, p. 188). Maintaining adequate populations of these bees within or near *A. l.* var. *coachellae* occurrences, as well as between *A. l.* var. *coachellae* occurrences, likely depends on the presence of a variety of native plants in sufficient numbers. We do not know, however, why native bees have not yet been observed pollinating *A. l.* var. *coachellae.* Until specific pollinators for *A. l.* var. *coachellae* are identified, we are unable to consider protection of those pollinators' specific habitat explicitly via this critical habitat designation. Therefore, based on the information above, we identify aeolian sand transport corridors as providing space needed for pollen and seed dispersal and pollinator movement to be a physical or biological feature essential to the conservation of this taxon.

Habitats Protected From Disturbance or Representative of the Historical, Geographical, and Ecological Distributions of the Taxon

Astragalus lentiginosus var. *coachellae* is strongly associated with active, stabilized, ephemeral, and shielded sandy substrates in the Coachella Valley (Sanders and Thomas Olsen Associates 1996, p. 3; Barrows and Allen 2007, p. 323). This taxon is primarily found on loose aeolian (wind transported) or fluvial (water transported) sands that form dunes or sand fields and along margins of sandy washes (Sanders and Thomas Olsen Associates 1996, p. 3). Please see the Background section above for a description of the sand transport system.

In order to maintain adequate replenishment of sands into aeolian sand depositional areas, it is important that sand-transport corridors between fluvial and aeolian sand depositional areas remain unobstructed for wind passage. The strong wind energy in this region can also erode sands from wash margins and suitable *A. l.* var. *coachellae* habitat, temporally shifting *A. l.* var. *coachellae* habitat into other areas, and thereby allowing the taxon to be dispersed and to colonize new areas or recolonize previously occupied areas. As a result, it is also necessary to protect sufficient space to allow for these dynamic aeolian sand deposits to shift in their distribution. Therefore, based on the information above, we identify the fluvial and aeolian portions of the sand transport system that provide habitat protected from disturbance or representative of the historical, geographical, and ecological distributions of the taxon to be a physical or biological feature essential to the conservation of this taxon.

Primary Constituent Element for Astragalus lentiginosus var. coachellae

Under the Act and its implementing regulations, we are required to identify the physical or biological features essential to the conservation of *Astragalus lentiginosus* var. *coachellae* within the geographical area occupied at the time of listing, focusing on the features' primary constituent elements (PCEs). Primary constituent elements are those specific elements of the physical or biological features that provide for a species' life-history processes.

Based on our current knowledge of the physical or biological features and habitat characteristics required to sustain the taxon's life-history processes, we determine that the primary constituent element specific to *Astragalus lentiginosus* var. *coachellae* is:

Sand formations associated with the sand transport system in Coachella Valley, California. These sand formations have the following features:

(a) They are active sand dunes, stabilized or partially stabilized sand dunes, active or stabilized sand fields (including hummocks forming on leeward sides of shrubs), ephemeral sand fields or dunes, and fluvial sand deposits on floodplain terraces of active washes.

(b) They are found within the fluvial sand depositional areas, and the aeolian sand source, transport, and depositional areas of the sand transport system.

(c) They comprise sand originating in the hills surrounding Coachella Valley and alluvial deposits at the base of the Indio Hills, which is moved into the valley by water (fluvial transport) and through the valley by wind (aeolian transport).

We consider the fluvial sand depositional areas and the aeolian sand source, transport, and depositional areas of the sand transport system described in (b) to be within the geographical area occupied by *Astragalus lentiginosus* var. *coachellae* at the time the taxon was listed, whereas the fluvial sand transport areas referenced in (c) are considered to be outside the geographical area occupied by the taxon at the time of listing or currently. The sand formations provide substrate components and conditions suitable for growth. The aeolian sand transport corridor also provides space for seed dispersal and pollinator movement needed to maintain sand movement and genetic diversity of the taxon.

With this designation of critical habitat, we identify the physical or biological features essential to the conservation of the taxon, focusing on the identification of the features' primary constituent element sufficient to support the life-history processes of the taxon.

Special Management Considerations or Protection

When designating critical habitat, we assess whether the specific areas within the geographical area occupied by the species at the time of listing contain features that are essential to the conservation of the species and that may require special management considerations or protection. The features essential to the conservation of this taxon may require special management considerations or protection to reduce the following threats: direct and indirect effects of development (urban and recreational), nonnative plant species, unauthorized off-highway vehicle (OHV) impacts, mining and other activities or structures that may cause alteration of stream flow, and groundwater pumping.

Development

The Coachella Valley continues to attract increasing numbers of people and associated urban development. Urban and recreational development can impact *Astragalus lentiginosus* var. *coachellae* directly by converting suitable, often-occupied, habitat to structures, infrastructure, landscaping, or other nonnatural ground cover that does not support the growth of the taxon. Structures and landscaping can also impact *A. l.* var. *coachellae* habitat indirectly by altering local aeolian and fluvial regimes. Such alterations can result in degraded *A. l.* var. *coachellae* habitat downstream or downwind of developed areas by inhibiting the movement of loose, unconsolidated sands needed for the formation and maintenance of suitable habitat vital to the growth and reproduction of the taxon. If the sand transport system is

altered, sand cannot be moved through the valley effectively to replace sand lost from the system downstream/downwind as a result of ongoing fluvial and aeolian processes.

Special management considerations or protection of the essential physical or biological features within critical habitat areas are needed to address the threats posed to *Astragalus lentiginosus* var. *coachellae* habitat by urban and recreational development. Management actions that could ameliorate these threats include, but are not limited to: Protection of lands that support suitable habitat and associated sand transport systems and siting future development such that disruption of fluvial and aeolian sand transport processes is minimized and deposition areas are preserved. These management actions will protect the essential physical or biological features for the taxon by decreasing the direct loss of habitat to development and by helping to maintain the sand transport system and sand deposition areas that together provide the sand formations that are necessary components of *A. l.* var. *coachellae* habitat.

Preserving large areas of suitable habitat with intact wind and depositional regimes and preserving areas vital to the maintenance of the sand transport system are important to maintain existing habitat and prevent further habitat loss. Preserving a variety of different habitat types (for example, sand dunes, sand fields) throughout the range of the taxon should help maintain the genetic and demographic diversity (individuals in different age classes at any given time) of *Astragalus lentiginosus* var. *coachellae.*

Designing and orienting structures, infrastructure, and landscaping such that they minimize the blockage of sand movement will also help to prevent the disruption of the sand transport system and further habitat loss. For example, orienting a building so that the face of the building is at an oblique angle with the prevailing wind direction may allow more sand to move around the building than would occur if the face of the building were at a right angle with the direction of windblown sand movement. Planning development such that structures and landscaping are located outside of areas vital to sand transport will also help lessen the degradation of *Astragalus lentiginosus* var. *coachellae* habitat.

Nonnative Plants

Invasive nonnative plant species, such as *Brassica tournefortii* (Saharan mustard), *Schismus barbatus* (Mediterranean grass), and *Salsola tragus* (Russian-thistle), can impact *Astragalus lentiginosus* var. *coachellae* habitat by stabilizing loose sediments and reducing transport of sediment to downwind areas, thus making habitat unsuitable for *A. l.* var. *coachellae.* Additionally, *Tamarix* spp. (salt cedar) can create wind breaks in the aeolian transport system and is used to decrease the movement of sand, for example, onto railroad tracks and infrastructure right-of-ways in the Coachella Valley. Dense cover of nonnative taxa may also impede the natural wind dispersal of the mature fruits of *A. l.* var. *coachellae.* This will curtail natural reproduction within a given site and natural dispersal to repopulate temporally unoccupied sites.

Management activities that could ameliorate these threats include, but are not limited to: Active removal of nonnative plant species and targeted herbicide application (provided herbicides can be shown not to negatively impact *Astragalus lentiginosus* var. *coachellae* plants or seeds). These management activities will protect the essential physical or biological features for the taxon by helping to control nonnative plants, which can degrade *Astragalus lentiginosus* var. *coachellae* habitat.

Unauthorized Off-Highway Vehicle (OHV) Impacts

Unauthorized OHV use may impact *Astragalus lentiginosus* var. *coachellae* habitat by making substrate conditions unsuitable for growth through the alteration of the sand transport system, changes in plant community composition, and disruption of the substrate, which can cause soils to lose moisture and may also impact soil microflora or microfauna (USFWS 2008, p. 8766). The native plant community associated with *A. l.* var. *coachellae* habitat allows for sand movement and does not inhibit dispersal. Disturbance from OHV use can affect the plant composition of the native plant community. Management activities that could ameliorate the threat of unauthorized OHV use include fencing and signage of habitat areas to assist in educating the public and engaging local authorities to improve the enforcement of laws prohibiting OHV unauthorized use. Control of unauthorized OHV use in habitat occupied by *A. l.* var. *coachellae* has recently improved through the efforts of a local law enforcement task force in habitat areas including lands managed by the Bureau of Land Management (BLM) in the Willow Hole (depositional area in Unit 3) and Snow Creek (depositional area in Unit 1) areas, although OHV use remains on many privately owned lands.

Alteration of Stream Flow

The construction and operation of water percolation ponds, sand and gravel mines, and, to a lesser degree, dikes and debris dams can negatively impact *Astragalus lentiginosus* var. *coachellae* habitat if they prevent the fluvial transport of sand to habitat areas through diversion, channelization, or damming (Griffiths *et al.* 2002, pp. 13, 23). For example, the percolation ponds constructed on BLM and Coachella Valley Water District lands in the Whitewater River floodplain have substantially altered the transport of sand to habitat areas downstream and downwind, resulting in the severe degradation of sand and loss of *A. l.* var. *coachellae* habitat in these areas (Griffiths *et al.* 2002, pp. 6, 42).

Management activities that could ameliorate the threats posed to *Astragalus lentiginosus* var. *coachellae* habitat by alteration of stream flow include, but are not limited to: Working with concerned parties to find and implement alternatives that allow for the removal or reconfiguration of existing barriers to fluvial sand transport, restoring sand transport to a more natural state, and working with concerned parties to design and implement future projects to maximize conservation/restoration of natural sand transport. These management activities will protect the essential physical or biological features for the taxon by helping to maintain the sand transport system that provides the sand that creates the sand formations that form the basis of *A. l.* var. *coachellae* habitat.

Groundwater Pumping

Hummocks (local accumulations of sand that form when sand accumulates around, and is held in place by, shrubs or clumps of vegetation) formed by *Prosopis* spp. (mesquite, which has deep tap roots to reach groundwater, and is thus adversely impacted when the groundwater table is lowered beyond the reach of its roots) and other shrubs contribute to the creation and stabilization of sand dunes and sand fields by anchoring dunes and making them less vulnerable to wind erosion. Windblown sand accumulates in areas where wind speed is reduced (by topographical features, rocks, shrubs, or other objects) near the ground (Fryberger and Ahlbrandt 1979, p. 440). *Prosopis glandulosa* var. *torreyana* (honey mesquite) is the native mesquite in western Riverside County. The shrubs in the hummock help to stabilize and support sand deposits around the

hummock, which support *Astragalus lentiginosus* var. *coachellae* occurrences and its sand dune and field habitat. These shrubs, unlike nonnative plants used as windbreaks as discussed above, do not degrade *A. l.* var. *coachellae* habitat by substantially blocking movement of sand to habitat areas downwind. The mesquite shrubs in the Banning Fault/Willow Hole area are senescent and appear to be dying, likely due to ongoing artificial lowering of groundwater levels in the subbasin to provide water for human use (Mission Springs Water District 2008, p. 4–97). Similar mesquite hummocks that existed historically have already been lost in and near the Thousand Palms Reserve (in the Thousand Palms Conservation Area), likely due to groundwater withdrawals (based on water well log data, field observation, and aerial photos) (J. Avery, pers. obs. 2006). Loss of the anchoring mesquite shrubs will lead to the loss of the associated hummocks over time by the erosion of sand deposits, therefore affecting *A. l.* var. *coachellae* habitat created or maintained by the trapping of sand.

Management activities that could ameliorate the threats posed to *Astragalus lentiginosus* var. *coachellae* habitat by groundwater pumping include, but are not limited to: Subsurface irrigation of existing mesquite plants, and the planting, restoring, and irrigating of mesquite where needed; and removal of extensive tamarisk, which can compete with *A. l.* var. *coachellae* for groundwater, along railroad rights-of-way, water courses, oases, etc. These management activities will protect the essential physical or biological features for *A. l.* var. *coachellae* by helping to maintain much of the extant mesquite hummocks within the range of the taxon and by restoring an undetermined acreage of historical mesquite hummocks that maintain (or will maintain) portions of *A. l.* var. *coachellae* habitat.

In summary, threats to *Astragalus lentiginosus* var. *coachellae* habitat include urban and recreational development, nonnative plant species, OHV impacts, alteration of stream flow, and groundwater pumping. We find that the areas designated as critical habitat within the geographical area occupied by the taxon at the time of listing contain the physical or biological features essential to the conservation of *A. l.* var. *coachellae* and that these features may require special management considerations or protection. Special management considerations or protection may be required to eliminate, or reduce to a negligible level, the threats affecting each unit or subunit and to preserve and maintain the essential features that the critical habitat units and subunits provide to *A. l.* var. *coachellae.* Additional discussions of threats facing individual sites are provided in the individual unit descriptions in the Critical Habitat Designation section below.

Criteria Used To Identify Critical Habitat

As required by section 4(b)(2) of the Act, we use the best scientific and commercial data available to designate critical habitat. We reviewed available information pertaining to the habitat requirements of the 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—are necessary to ensure the conservation of the species. We relied on information in articles in peer-reviewed journals, the Coachella Valley MSHCP/NCCP, survey reports and other unpublished materials, and expert opinion or personal knowledge. We also used the model developed by the Coachella Valley Mountains Conservancy (CVMC) to help identify *Astragalus lentiginosus* var. *coachellae* habitat (CVMC 2004). Finally, we used information from the proposed (69 FR 74468; December 14, 2004) and final (70 FR 74112; December 14, 2005) critical habitat rules, the current 5-year status review (Service 2009), the proposed revised critical habitat rule (76 FR 53224; August 25, 2011), and other information in our files.

We are designating critical habitat in areas within the geographical area occupied by the species at the time of listing in 1998. We also are designating specific areas outside the geographical area occupied by *A. l.* var. *coachellae* at the time of listing, because we have determined that such areas are essential for the conservation of the taxon. These areas support sand transport processes that are vital to maintaining suitable habitat, and therefore are essential for the conservation of the taxon.

Our use of a habitat model to help identify *Astragalus lentiginosus* var. *coachellae* habitat was supported by a peer reviewer who stated,

> ''Because *A. l.* var. *coachellae* is reliant on specialized, dynamic, habitat where not only the habitat must be preserved but the processes which create the habitat must be preserved[,] prediction of this habitat may be easier than documenting it. Because much of the habitat which is currently occupied by *A. l.* var. *coachellae* may only be occupied by seed in the soil seed bank and not [by an] easily identifiable vegetative form[,] the predictive power of a model is similarly important.'' (Knaus, 2011, p. 1)

Suitable habitat may be occupied by the taxon even if no plants appear above-ground for several years. *Astragalus lentiginosus* var. *coachellae* populations survive seasonal and annual drought periods through dormant seeds in the soil (seed bank) as well as root crowns. Consequently, the number of standing plants at any given time is only a limited indication of population size (Meinke *et al.* 2007, p. 39). It is not known how long *A. l.* var. *coachellae* seeds remain viable, but studies on *A. l.* var. *micans* demonstrate that buried seeds may remain viable for at least 8 years (Pavlik and Barbour 1988, p. 233). A study including *Astragalus lentiginosus* var. *salinus* found that more than 94 percent of seeds remained viable after being buried in the soil for 6 years (Ralphs and Cronin 1987, p. 794). Therefore, we also considered areas to be occupied where suitable habitat did not contain aboveground individuals, but likely contain seed banks and dormant root crowns of *A. l.* var. *coachellae*.

We also determined which areas outside the geographical area occupied by the taxon at the time of listing that provide for the fluvial transport of sand from areas where sediment is generated to fluvial depositional areas occupied by *Astragalus lentiginosus* var. *coachellae* are essential for the conservation of *A. l.* var. *coachellae* because they maintain *A. l.* var. *coachellae* habitat (see steps 1, 2, and 3 under Areas Outside the Geographical Area Occupied at the Time of Listing section below).

We defined the boundaries of each unit using the steps outlined below:

Areas Within the Geographical Area Occupied at the Time of Listing

(1) Potential suitable habitat for *Astragalus lentiginosus* var. *coachellae* was first identified using areas included in the Coachella Valley Mountains Conservancy (CVMC) species distribution model for the taxon (CVMC 2004). The CVMC model was developed using survey data for *A. l.* var. *coachellae* (Bureau of Land Management, unpublished data 2001), habitat variables, and expert opinion, and was created to assist in the design of preserves and to evaluate the potential benefits of the (then) proposed Coachella Valley MSHCP/NCCP for the plant (CVMC 2004). Environmental variables associated with *A. l.* var. *coachellae* occurrence locations were identified, and maps containing those

variables were combined with Geographic Information Systems (GIS) land use and habitat data to create the model. Eight types of habitats were used in the model: (1) Margins of active dunes, (2) active shielded desert dunes, (3) stabilized desert dunes, (4) stabilized sand fields, (5) stabilized shielded sand fields, (6) ephemeral sand fields, (7) active sand fields, and (8) mesquite hummocks. The habitat types used to create the model represented conditions that result from the dynamic process of sand movement in the Coachella Valley floor; these habitat types are found in fluvial sand depositional areas and aeolian sand source, transport, and depositional areas (see *Habitat* section above for a detailed discussion of these habitat types). During our analysis for the 2005 critical habitat designation for *A. l.* var. *coachellae,* we reviewed the validity of the environmental variables used to create the model with occurrence data and information about the plant's ecology. We found documentation of *A. l.* var. *coachellae* occurrences in all of the natural communities used to create the model, and concluded that the model was reasonably capable of identifying suitable habitat for *A. l.* var. *coachellae*. We mapped the modeled habitat using GIS software, and refined the map to include only areas that we estimate contain the physical or biological features essential to the conservation of the taxon.

(2) We analyzed lands covered by the Coachella Valley MSHCP/NCCP, and determined that *Astragalus lentiginosus* var. *coachellae* habitat within the plan's Conservation Areas sufficiently provides for the conservation of the taxon within areas covered by the Coachella Valley MSHCP/NCCP (Conservation Areas are a group of specific areas in which the bulk of the habitat conservation mandated by the HCP is to take place). We have determined that the modeled *A. l.* var. *coachellae* habitat outside of the Conservation Areas does not contain the physical or biological features essential to the conservation of the taxon because these areas exist as small, disjunct patches, other larger areas where sand transport has been blocked, or they do not contain documented occurrences of the taxon.

The modeled *Astragalus lentiginosus* var. *coachellae* habitat areas that are covered by the Coachella Valley MSHCP/NCCP and are within the Conservation Areas are connected to the fluvial portion of the sand transport system. The PCE is found in these modeled habitat areas (fluvial sand transport within Conservation Areas is discussed in Areas Outside the Geographical Area Occupied at the Time of Listing section below). Modeled *A. l.* var. *coachellae* habitat areas that are covered by the Coachella Valley MSHCP/NCCP but are outside of the Conservation Areas may contain the PCE, but for reasons discussed above, we do not consider these areas to meet the definition of critical habitat for *A. l.* var. *coachellae*. Therefore, in areas covered by the Coachella Valley MSHCP/NCCP, we confined the critical habitat designation to lands within the Conservation Areas.

(3) We added areas not covered under the Coachella Valley MSHCP/NCCP, but that have been determined by biologists familiar with the taxon, its habitat, and its distribution, to contain the physical or biological features essential to the conservation of the taxon (see the 2011 proposed critical habitat rule (76 FR 53224 (August 25, 2011)) for further discussion regarding these areas). The biologists used aerial map coverages, Service GIS data, and personal knowledge to determine these areas.

Areas Outside the Geographical Area Occupied at the Time of Listing

We determined that designating only those areas within the geographical area occupied at the time of listing (also identified as the occupied fluvial and aeolian depositional areas and intervening areas needed for aeolian sand transport, pollen and seed dispersal, and pollinator movement) would not sufficiently provide for the conservation of *Astragalus lentiginosus* var. *coachellae* because movement of sand from areas where sediment is generated into areas where the taxon grows is vital to the maintenance of habitat for the taxon. For sufficient fine-grained sands to reach the aeolian system on the valley floor and support *Astragalus lentiginosus* var. *coachellae,* it is necessary to protect major fluvial channels that transport sand from the surrounding drainage basins as well as bajadas and depositional areas. The Coachella Valley Multiple Species Habitat Conservation Plan/Natural Community Conservation Plan (Coachella Valley MSHCP/NCCP) identifies the protection of the above-mentioned geomorphological processes, including sand transport, as a conservation goal for several taxa, including *A. l.* var. *coachellae*. It will be impossible to conserve or recover this taxon if fluvial sand transport sites and processes are lost. Therefore, we determined that certain fluvial sand transport areas are essential for the conservation of *A. l.* var. *coachellae* and should be designated as critical habitat regardless of the fact that these areas are outside the geographical area occupied by *A. l.* var. *coachellae* at the time the species was listed. We used the following steps to determine which portions of the fluvial sand transport system are essential for the conservation of *A. l.* var. *coachellae:*

Units 1, 2, and 3

(1) We used aerial imagery to determine where the main stream channels conveying sand to the fluvial sand depositional areas in Units 1, 2, and 3 (San Gorgonio River, Whitewater River, Snow Creek, Mission Creek, and Morongo Wash) are located, and used GIS software to draw polygons that define the extent of these streams.

We considered only the lower reaches of main stream channels (fluvial sand transport areas) that move sediment from the base of the surrounding mountains and hills into the fluvial depositional areas on the valley floor to be essential for the conservation of the taxon. If the lower reaches of any of these main stream channels are lost, sand transport to portions of the occupied *Astragalus lentiginosus* var. *coachellae* habitat downstream and downwind will be lost as well. This has occurred where a sand mining operation located in the San Gorgonio River channel cut off delivery of sand from upstream areas, and reduced delivery of sand to the San Gorgonio River fluvial depositional areas by an estimated 14 percent (Griffiths *et al.* 2002, p. 21). Hence, a single project in a fluvial sand transport area could potentially hinder the movement of sand needed to maintain *A. l.* var. *coachellae* habitat.

To determine the upstream extent of the fluvial sand transport areas, we used GIS data to determine where the ground slope of the main stream channels becomes greater than 10 percent. Griffiths *et al.* (2002) found that the majority of the sand reaching the valley floor areas in Units 1, 2, and 3 is generated (eroded from parent rock) in portions of the mountain drainages where the ground slope is greater than 10 percent. We have identified the portions of main stream channels with a ground slope of less than 10 percent as sand transport areas (areas where sand is transported from the base of surrounding mountains and hills, but little sand is generated).

Unit 4

(2) The sand transport system moving sand into and through the Thousand Palms area (which contains Unit 4) differs from the system moving sand into and through Units 1, 2, and 3. In Unit 4, water moving through unnamed

washes erodes and moves sand from alluvial deposits at the base of the Indio Hills. Thus, both generation of sand and fluvial transport of sand into fluvial depositional areas occurs on these alluvial deposits. The occupied areas in Unit 4 depend on large flooding events to wash sands stored in channels on the alluvial valley floor deposits into fluvial sand depositional areas where the sand can be moved by aeolian processes. Therefore, for Unit 4, rather than using the 10 percent slope line to delineate fluvial sand transport areas as we did for Units 1, 2, and 3 (the areas supporting sand generation and fluvial sand transport in Unit 4 are less than 10 percent slope), we used aerial imagery to determine the extent of the alluvial deposits where the sand is stored, and used our GIS software to create a GIS polygon to encompass this area. We proposed this area in Unit 4 as critical habitat for *Astragalus lentiginosus* var. *coachellae* because the area and the fluvial sand transport processes it supports are vital to maintaining sand formations in the occupied portions of Unit 4 that form the basis of *A. l.* var. *coachellae* habitat in that unit.

Final Critical Habitat Designation

In this revised critical habitat designation for *Astragalus lentiginosus* var. *coachellae,* we selected areas based on the best scientific data available that possess those physical or biological features essential to the conservation of the taxon and that may require special management considerations or protection and other areas essential for the conservation of *A. l.* var. *coachellae*. 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 physical or biological features for *Astragalus lentiginosus* var. *coachellae*. 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. 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 may affect adjacent critical habitat.

The critical habitat designation is defined by the map or maps, as modified by any accompanying regulatory text, presented at the end of this document in the rule portion. We include more detailed information on the boundaries of the critical habitat designation in the preamble of this document. We will make the coordinates or plot points or both on which each map is based available to the public on *http://www.regulations.gov* at Docket No. FWS–R8–ES–2011–0064, on our Internet sites *http://www.fws.gov/carlsbad/GIS/CFWOGIS.html,* and at the Carlsbad Fish and Wildlife Office (see **FOR FURTHER INFORMATION CONTACT** above).

We are designating as critical habitat lands that we have determined are within the geographical area occupied at the time of listing and contain sufficient elements of the physical or biological features to support life-history processes essential to the conservation of the taxon, and lands outside of the geographical area occupied at the time of listing that we have determined are essential for the conservation of *Astragalus lentiginosus* var. *coachellae*.

We are designating four units as critical habitat for *Astragalus lentiginosus* var. *coachellae*. The critical habitat areas described below constitute our best assessment at this time of areas that meet the definition of critical habitat. Those four units are: (1) San Gorgonio River/Snow Creek System, (2) Whitewater River System, (3) Mission Creek/Morongo Wash System, and (4) Thousand Palms System. Table 1 shows acres of land proposed as critical habitat in the 2011 proposed revised critical habitat rule for *A. l.* var. *coachellae* (76 FR 53224), acres of land excluded from this critical habitat designation under section 4(b)(2) of the Act (see Exclusions Based on Other Relevant Impacts section below for detailed discussion of exclusions), and acres of land designated as critical habitat for *A. l.* var. *coachellae* as a result of this revised critical habitat rule for all four units. We are designating 7,550 ac (3,055 ha) in accordance with section 3(5)(A)(i) of the Act (specific areas within the geographical area occupied by the taxon at the time of listing) and 2,053 ac (831 ha) in accordance with section 3(5)(A)(ii) of the Act (specific areas outside the geographical area occupied by the taxon at the time of listing).

BILLING CODE 4310–55–P

Table 1. Critical habitat units and their ownership for *Astragalus lentiginosus* var. *coachellae*.

			Ownership										Total Area**	
			Federal*		State Government*		Local Government*		Private*		Tribal*			
			ac	ha	ac	ha	ac	ha	ac	ha	ac	ha	ac	ha
Unit 1	depositional/ occupied	Proposed	970	393	164	66	70	28	1,301	526	9	4	2,515	1,018
		Excluded	0	0	166	67	69	28	1,160	469	9	4	1,405	568
		Designated	993	402	0	0	64	26	40	16	0	0	1,097	444
	fluvial sand transport/ unoccupied	Proposed	179	72	0	0	63	25	490	198	307	124	1,039	420
		Excluded	0	0	0	0	25	10	469	190	304	123	798	323
		Designated	179	72	0	0	38	15	21	9	0	0	238	96
	Total	Proposed	1,149	465	164	66	134	54	1,791	725	316	128	3,553	1,438
		Excluded	0	0	166	67	94	38	1,629	659	313	127	2,203	891
		Designated	1,172	474	0	0	102	41	61	25	0	0	1,335	540

			Ownership										Total Area**	
			Federal*		State Government*		Local Government*		Private*		Tribal*			
			ac	ha	ac	ha	ac	ha	ac	ha	ac	ha	ac	ha
Unit 2	depositional/ occupied	Proposed	1,544	625	13	5	3,338	1,351	869	352	580	235	6,344	2,567
		Excluded	0	0	28	11	3,516	1,423	591	239	579	234	4,714	1,908
		Designated	1,558	631	0	0	18	7	19	8	0	0	1,596	646
	fluvial sand transport/ unoccupied	Proposed	397	161	8	3	133	54	417	169	0	0	954	386
		Excluded	0	0	8	3	0	0	382	154	0	0	389	157
		Designated	397	161	0	0	157	64	0	0	0	0	554	224
	Total	Proposed	1,941	786	20	8	3,471	1,405	1,286	520	580	235	7,298	2,953
		Excluded	0	0	35	14	3,516	1,423	973	394	0	0	5,103	2,065
		Designated	1,955	791	0	0	176	71	19	8	579	234	2,150	870

			Ownership										Total Area**	
			Federal*		State Government*		Local Government*		Private*		Tribal*			
			ac	ha	ac	ha	ac	ha	ac	ha	ac	ha	ac	ha
Unit 3	depositional/ occupied	Proposed	361	146	199	81	1,159	469	3,363	1,361	0	0	5,083	2,057
		Excluded	0	0	135	55	1,470	595	2,181	883	0	0	3,787	1,532
		Designated	361	146	0	0	50	21	800	324	0	0	1,211	490
	fluvial sand transport/ unoccupied	Proposed	140	57	0	0	669	271	1,912	774	0	0	2,722	1,101
		Excluded	0	0	0	0	706	286	885	358	0	0	1,591	644
		Designated	141	57	0	0	217	88	697	282	0	0	1,055	427
	Total	Proposed	501	203	199	81	1,829	741	5,275	2,135	0	0	7,805	3,158
		Excluded	0	0	135	55	2,176	880	3,067	1,241	0	0	5,378	2,176
		Designated	502	203	0	0	268	108	1,497	606	0	0	2,266	917

			Ownership										Total Area**	
			Federal*		State Government*		Local Government*		Private*		Tribal*			
			ac	ha	ac	ha	ac	ha	ac	ha	ac	ha	ac	ha
Unit 4	depositional/ occupied	Proposed	3,618	1,464	787	319	165	66	333	135	0	0	4,902	1,984
		Excluded	0	0	787	319	165	66	282	114	0	0	1,234	499
		Designated	3,621	1,465	0	0	0	0	25	10	0	0	3,646	1,475
	fluvial sand transport/ unoccupied	Proposed	49	20	911	369	272	109	914	370	0	0	2,146	868
		Excluded	0	0	911	369	377	152	642	260	0	0	1,929	781
		Designated	49	20	0	0	0	0	157	63	0	0	206	83
	Total	Proposed	3,667	1,484	1,698	687	436	176	1,247	505	0	0	7,048	2,852
		Excluded	0	0	1,698	687	541	218	924	374	0	0	3,163	1,280
		Designated	3,670	1,485	0	0	0	0	182	74	0	0	3,851	1,559

			Ownership										Total Area**	
			Federal*		State Government*		Local Government*		Private*		Tribal*			
			ac	ha	ac	ha	ac	ha	ac	ha	ac	ha	ac	ha
Totals	Subtotal: depositional/ occupied	Proposed	6,493	2,628	1,163	471	4,732	1,916	5,865	2,374	589	238	18,843	7,626
		Excluded	0	0	1,117	452	5,219	2,112	4,214	1,706	589	238	11,139	4,508
		Designated	6,534	2,644	0	0	133	54	884	358	0	0	7,550	3,055
	Subtotal: fluvial sand transport/ unoccupied	Proposed	765	309	918	372	1,137	460	3,734	1,511	307	124	6,861	2,776
		Excluded	0	0	918	372	1,108	448	2,377	962	304	123	4,707	1,905
		Designated	765	310	0	0	413	167	875	354	0	0	2,053	831
	Total	Proposed	7,258	2,937	2,081	842	5,870	2,376	9,599	3,885	896	363	25,704	10,402
		Excluded	0	0	2,035	823	6,327	2,561	6,592	2,668	893	361	15,847	6,413
		Designated	7,299	2,954	0	0	545	220	1,759	712	0	0	9,603	3,886

*The new GIS data used to determine the "Excluded" and "Designated" acreages reflect changes in ownership or more accurate characterization of ownership in the Coachella Valley since the previous data were compiled. Because of this, "Excluded" and "Designated" acreages in each column may not sum to the corresponding "Proposed" acreages, and "Excluded" or "Designated" acreages in some columns may be greater than the corresponding "Proposed" acreages.

**Roads have been removed from the "Excluded" and "Designated" acreages, due to availability of new GIS data. Because roads could not be removed from "Proposed" acreages (this data was not available until after the proposed revised critical habitat rule was published), "Excluded" and "Designated" acreages in the "Total Area" column do not sum to the corresponding "Proposed" acreages.

BILLING CODE 4310–55–C

We present brief descriptions of all units, and reasons why they meet the definition of critical habitat, for *Astragalus lentiginosus* var. *coachellae* below.

Unit 1: San Gorgonio River/Snow Creek System

Unit 1 consists of 1,172 ac (474 ha) of Federal land, 61 ac (25 ha) of private land, and 102 ac (41 ha) of local government-owned land in the Coachella Valley, Riverside County. Unit 1 contains approximately 238 ac (96 ha) of unoccupied fluvial sand transport area associated with the San Gorgonio River and Snow Creek drainages. These areas are being designated under section 3(5)(A)(ii) of the Act, because they are specific areas outside the geographical area occupied by the species at the time of listing and are essential for the conservation of the species. The remainder of Unit 1 consists of approximately 1,097 ac (444 ha) of occupied suitable habitat extending approximately from the eastern edge of the community of Cabazon to just west of Whitewater River, and is approximately bound by State Route 111 to the north and the foot of the San Jacinto Mountains to the south. These areas are being designated under section 3(5)(A)(i) of the Act, because they are within the geographical area occupied by the species at the time of listing and contain those physical or biological features essential to the conservation of the species. In total, Unit 1 consists of 1,335 ac (540 ha) of land.

Unoccupied fluvial sand transport areas in this unit contain active washes associated with San Gorgonio River and Snow Creek, which carry substrates created by fluvial erosion of the surrounding hills to occupied fluvial deposition areas in Unit 1 on the valley floor (Griffiths *et al.* 2002, pp. 10–11). The unoccupied areas in Unit 1 are essential for the conservation of *Astragalus lentiginosus* var. *coachellae* because they support the fluvial sand transport process crucial to the maintenance of the sand formations that form the foundation of *A. l.* var. *coachellae* habitat in the occupied areas of Unit 1.

Occupied habitat areas of Unit 1 constitute one of the four main habitat areas supporting *Astragalus lentiginosus* var. *coachellae* (Coachella Valley MSHCP/NCCP, p. 9–21) and contain the physical or biological features essential to the conservation of *A. l.* var. *coachellae,* including active sand dunes, sand fields, and stabilized and partially stabilized sand fields that provide substrate components and conditions suitable for the growth of *A. l.* var. *coachellae* (Coachella Valley MSHCP/NCCP 2008, Table 10–1a) and areas over which unobstructed aeolian sand transport can occur. The essential features in Unit 1 may require special management considerations or protection to address threats from nonnative invasive plants and unauthorized OHV activity in the occupied areas and threats from alteration of stream flow in the unoccupied areas that impact habitat in the occupied areas. Please see the *Special Management Considerations or Protection* section of this rule for a discussion of the threats to *A. l.* var. *coachellae* habitat and potential management considerations.

The physical or biological features in the occupied areas in Unit 1 are also essential to the conservation of *Astragalus lentiginosus* var. *coachellae* because they support the westernmost occurrences of the taxon. Because of their geographic location, these plants and their habitat receive more rainfall than occurrences and suitable habitat farther east, which allows many individuals to survive more than one year, grow larger, and produce more seed, all of which promote the stability and reduce the chance of extirpation of the occurrences in this unit (Meinke *et al.* 2007, p. 33). Also, due to strong winds moving through this area from the west to east, the occupied habitat in Unit 1 likely acts as a source of seed (and hence, a source of genetic diversity) for areas of suitable habitat to the southeast (Meinke *et al.* 2007, p. 40). Unit 1 likely also contributes to the maintenance of genetic diversity in other occupied areas through the movement of pollinators (Meinke *et al.* 2007, p. 37).

Unit 2: Whitewater River System

Unit 2 consists of 1,955 ac (791 ha) of Federal land; 19 ac (8 ha) of private land; and 176 ac (71 ha) of local government-owned land in the Coachella Valley, Riverside County. Unit 2 contains approximately 554 ac (224 ha) of unoccupied fluvial sand transport areas associated with the Whitewater River watershed. These areas are being designated under section 3(5)(A)(ii) of the Act because they are specific areas outside the geographical area occupied by the species at the time of listing and are essential for the conservation of the taxon. The remainder of Unit 2 consists of approximately 1,596 ac (646 ha) of occupied suitable habitat and is approximately bound by State Route 111 to the west, the Southern Pacific Railroad to the north and east, and dense urban development in the cities of Palm Springs and Cathedral City to the south. These areas are being designated under section 3(5)(A)(i) of the Act because they are within the geographical area occupied by the species at the time of listing and contain those physical or biological features essential to the conservation of the species. In total, Unit 2 consists of 2,150 ac (870 ha) of land.

Unoccupied fluvial sand transport areas in this unit contain active washes associated with Whitewater River, which carry substrates created by fluvial erosion of the surrounding hills to occupied fluvial deposition areas in Unit 2 on the valley floor (Griffiths *et al.* 2002, pp. 10–11). The unoccupied areas in Unit 2 are essential for the conservation of *Astragalus lentiginosus* var. *coachellae* because they contain portions of the Whitewater River that support the fluvial sand transport process crucial to the maintenance of the sand formations that form the foundation of *A. l.* var. *coachellae* habitat in the occupied areas of Unit 2.

Occupied habitat areas of Unit 2 constitute one of the four main habitat areas supporting *Astragalus lentiginosus* var. *coachellae* (Coachella Valley MSHCP/NCCP, p. 9–21) and contain the physical or biological features essential to the conservation of *A. l.* var. *coachellae,* including active and ephemeral sand fields and stabilized and partially stabilized sand fields that provide substrate components and conditions suitable for the growth of *A. l.* var. *coachellae* (Coachella Valley MSHCP/NCCP 2008, Table 10–1a) and areas over which unobstructed aeolian sand transport can occur. The essential features in Unit 2 may require special management considerations or protection to address threats from nonnative plants, urban development, alteration of stream flow, unauthorized OHV activity in the occupied depositional areas, and threats from alteration of stream flow that impact habitat in occupied areas. Please see the *Special Management Considerations or Protection* section of this rule for a discussion of the threats to *A. l.* var. *coachellae* habitat and potential management considerations.

The physical or biological features in the occupied areas in Unit 2 are also essential to the conservation of *Astragalus lentiginosus* var. *coachellae* because they serve as a corridor between the habitat and occurrences to the west in Unit 1 and the habitat and occurrences to the east in Unit 3. Although Unit 2 does not serve as a substantial source of aeolian sand to Unit 3 relative to the onsite fluvial sand transport areas in Unit 3 (Mission Creek and Morongo Wash), it may serve as a corridor for gene flow by means of pollen and seed dispersal between Units 1, 2, and 3 due to dispersal of seeds from Unit 1 into Unit 2 and from Unit 2 into Unit 3, combined with movement of pollinators among the three units (Meinke *et al.* 2007, p. 37).

Unit 3: Mission Creek/Morongo Wash System

Unit 3 consists of 502 ac (203 ha) of Federal land, 1,497 ac (606 ha) of private land, and 268 ac (108 ha) of local government-owned land in the Coachella Valley, Riverside County. Unit 3 contains approximately 1,055 ac (427 ha) of unoccupied fluvial sand transport area associated with the Mission Creek watershed and a portion of the Morongo Wash watershed (north of Pierson Boulevard). These areas are being designated under section 3(5)(A)(ii) of the Act because they are specific areas outside the geographical area occupied by the species at the time of listing and are essential for the conservation of the taxon. The remainder of Unit 3 consists of approximately 1,211 ac (490 ha) of occupied habitat and includes sand deposits on the floodplain terraces of Morongo Wash south of Pierson Boulevard, and fluvial depositional areas and aeolian transport and depositional areas approximately bound (clockwise from the western boundary) by Little Morongo Road, 18th Avenue, Palm Drive, 20th Avenue, Artesia Road, and Mihalyo Road, in or near the City of Desert Hot Springs. These areas are being designated under section 3(5)(A)(i) of the Act, because they are within the geographical area occupied by the species at the time of listing. In total, Unit 3 consists of 2,313 ac (936 ha) of land.

Unoccupied fluvial sand transport areas in this unit contain active washes associated with Mission Creek and Morongo Wash (north of Pierson Boulevard), which carry substrates created by fluvial erosion of the surrounding hills to occupied fluvial deposition areas in Unit 3 on the valley floor (Griffiths *et al.* 2002, pp. 10–11). The unoccupied areas in Unit 3 are essential for the conservation of *Astragalus lentiginosus* var. *coachellae* because they contain portions of Mission Creek and Morongo Wash that support the fluvial sand transport process crucial to the maintenance of the sand formations that form the foundation of *A. l.* var. *coachellae* habitat in the occupied areas of Unit 3.

Occupied habitat areas of Unit 3 constitute one of the four main habitat areas supporting *Astragalus lentiginosus* var. *coachellae* (Coachella Valley MSHCP/NCCP, pp. 9–21–9–22) and contain the physical or biological features essential to the conservation of *A. l.* var. *coachellae* including stabilized and partially stabilized sand dunes, active and ephemeral sand fields, stabilized and partially stabilized sand fields, fluvial sand deposits on floodplain terraces of active washes (certain areas of Morongo Wash), and mesquite hummocks that provide substrate components and conditions suitable for the growth of *A. l.* var. *coachellae* (Coachella Valley MSHCP/NCCP 2008, Table 10–1a). Unit 3 also contains areas over which unobstructed aeolian sand transport can occur. The essential features in Unit 3 may require special management considerations or protection to address threats from nonnative plants, urban development, OHV use in the occupied floodplain terrace areas, and threats from alteration of stream flow that impact habitat in occupied areas. Please see the *Special Management Considerations or Protection* section of this rule for a discussion of the threats to *A. l.* var. *coachellae* habitat and potential management considerations.

The physical or biological features in occupied areas in Unit 3 are also essential to the conservation of *Astragalus lentiginosus* var. *coachellae* because they support the northernmost extent of the taxon's range and large occurrences containing high densities of the taxon. Each of these factors contributes to the overall genetic diversity of *A. l.* var. *coachellae* (Meinke *et al.* 2007, p. 35) and the maintenance of genetic diversity via the movement of seeds and pollinators (Meinke *et al.* 2007, p. 37). The large numbers of individuals also likely contribute numerous seeds to the soil seed bank. Unit 3 also contains the only area where *A. l.* var. *coachellae* is known to occur in large numbers on floodplain terraces of an active wash (Morongo Wash).

Unit 4: Thousand Palms System

Unit 4 consists of 3,670 ac (1,485 ha) of Federal land, and 182 ac (74 ha) of private land in the Coachella Valley, Riverside County. Unit 4 contains approximately 206 ac (83 ha) of unoccupied lands supporting fluvial sand transport and fluvial deposition (this unit contains alluvial sand deposition areas that are not occupied) associated with drainages originating in the Indio Hills. These areas are being designated under section 3(5)(A)(ii) of the Act because they are specific areas outside the geographical area occupied by the species at the time of listing and are essential for the conservation of the species. The remainder of Unit 4 consists of approximately 3,646 ac (1,475 ha) of occupied habitat area in the Thousand Palms Preserve along Ramon Road. These areas are being designated under section 3(5)(A)(i) of the Act because they are within the geographical area occupied by the

species at the time of listing and contain those physical or biological features essential to the conservation of the species. In total, Unit 4 consists of 3,851 ac (1,559 ha) of land.

Unoccupied areas in this unit contain active ephemeral washes that carry substrates from alluvial deposits to alluvial fan areas where they can be transported to occupied habitat areas via wind (Lancaster *et al.* 1993, p. 28). The unoccupied areas in Unit 4 are essential for the conservation of *Astragalus lentiginosus* var. *coachellae* because they contain alluvial sand deposits that support the fluvial and aeolian sand transport processes crucial to the maintenance of the sand formations that form the foundation of *A. l.* var. *coachellae* habitat in the occupied areas of Unit 4.

Occupied habitat areas of Unit 4 constitute one of the four main habitat areas supporting *Astragalus lentiginosus* var. *coachellae* (Coachella Valley MSHCP/NCCP, p. 9–22) and contain the physical or biological features essential to the conservation of *A. l.* var. *coachellae,* including active dunes, active sand fields, and mesquite hummocks that provide substrate components and conditions suitable for the growth of *A. l.* var. *coachellae* (Coachella Valley MSHCP/NCCP 2008, Table 10–1a), and areas over which unobstructed aeolian sand transport can occur. The essential features in the occupied portion of Unit 4 may require special management considerations or protection to address threats from nonnative plants. According to Meinke *et al.* (2007, p. 18), this area supports infestations of *Brassica tournefortii* (Saharan mustard); researchers observed thousands of acres of *A. l.* var. *coachellae* habitat inundated with dense populations of this nonnative plant species. Existing suburban development may require active management measures (for example, collection of sand from developed areas for redistribution within the wind movement corridor). The expansion of new urban development in areas supporting fluvial sand transport and deposition is also a threat to the essential features in this unit that may require special management considerations or protection, as are unauthorized OHV activity and a proposed flood control project that could disrupt or permanently destroy the sand transport system in the Thousand Palms area by diverting drainages that provide sand to occupied areas during large flooding events. Please see the *Special Management Considerations or Protection* section of this rule for a discussion of the threats to *A. l.* var. *coachellae* habitat and potential management considerations.

The physical or biological features in the occupied areas of Unit 4 are also essential to the conservation of the species because they support occurrences containing large numbers of the taxon that contribute to the overall genetic diversity of *Astragalus lentiginosus* var. *coachellae* (Meinke *et al.* 2007, p. 35) and because they are located in the southeasternmost portion of the taxon's range that is hydrologically independent and physically isolated from the other units. As such, this unit is important to help buffer excessive losses in other parts of the range.

Effects of Critical Habitat Designation

Section 7 Consultation

Section 7(a)(2) of the Act requires Federal agencies, including the Service, to ensure that any action 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 which 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 Courts 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, 442 (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) 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, or 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 sometimes may 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 physical or biological features to an extent that appreciably reduces the conservation value of critical habitat for *Astragalus lentiginosus* var. *coachellae.* 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. For *A. l.* var. *coachellae,* this includes supporting the sand formations that form the basis of the taxon's habitat and the areas over which the associated sand transport processes that sustain these sand formations occur.

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.

Activities that may affect critical habitat, when carried out, funded, or authorized by a Federal agency, should result in consultation for *Astragalus lentiginosus* var. *coachellae.* These activities include, but are not limited to:

(1) Actions that would interrupt the fluvial or aeolian transport of sand to areas occupied by *A. l.* var. *coachellae.* Such actions would lead to the degradation of the sand formations that form the basis of *A. l.* var. *coachellae* habitat by blocking sand from replenishing occupied areas where the sand is being removed by aeolian processes.

(2) Actions that would damage or kill plants that trap sand and create sand formations that support *A. l.* var. *coachellae* (such as hummocks that contain *Prosopis glandulosa* var. *torreyana* (honey mesquite)). These include actions that lower the groundwater table below the reach of root systems of plants such as *P. g.* var. *torreyana,* which results in the death of the plants, and the loss of the sand formations to wind erosion.

(3) Actions that alter waterways. Such actions could decrease the amount or alter the deposition location of sand entering the sand transport system, and thus reduce the amount of sand available for *A. l.* var. *coachellae* habitat.

(4) Actions that contribute to the introduction or proliferation of nonnative plants, such as *Brassica tournefortii* (Saharan mustard) and trees planted as windbreaks. Such actions may interfere with the movement of sand, which would prevent sand from moving downwind and contributing to the sand formations that form the basis of *A. l.* var. *coachellae* habitat.

(5) Actions such as development and landscaping that cover or remove substrate. Such actions convert suitable *A. l.* var. *coachellae* habitat to groundcover that does not support the taxon.

(6) Actions such as OHV use that disrupt substrates. Such actions can cause sufficient alteration of sand formations supporting *A. l.* var. *coachellae* occurrences to make the habitat unsuitable to support the taxon.

Exemptions

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

The Sikes Act Improvement Act 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 integrated natural resources management plan (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.''

There are no Department of Defense lands that meet the definition of critical habitat and, as a result, no lands have been exempted under section 4(a)(3)(B)(i) of the Act.

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.

In considering whether to exclude a particular area from the designation, we identify the benefits of including the area in the designation, identify the benefits of excluding the area from the designation, and evaluate 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.

When identifying the benefits of inclusion for an area, we consider the additional regulatory benefits that area

would receive from the protection from destruction or adverse modification as a result of actions with a Federal nexus; the educational benefits of mapping essential habitat for recovery of the listed species; and any benefits that may result from a designation due to State or Federal laws that may apply to critical habitat.

When identifying the benefits of exclusion, we consider, among other things, whether exclusion of a specific area is likely to result in conservation; the continuation, strengthening, or encouragement of partnerships; or implementation of a management plan that provides equal to or more conservation than a critical habitat designation would provide.

In the case of *Astragalus lentiginosus* var. *coachellae,* the benefits of critical habitat include public awareness of *A. l.* var. *coachellae* presence and the importance of habitat protection, and in cases where a Federal nexus exists, increased habitat protection for *A. l.* var. *coachellae* due to the protection from destruction or adverse modification of critical habitat. In practice, a Federal nexus exists only on Federal land or for projects undertaken, funded, or requiring authorization by a Federal agency.

When we evaluate the existence of a conservation plan, we consider a variety of factors, including but not limited to, whether the plan is finalized; how it provides for the conservation of the essential physical or biological features; whether there is a reasonable expectation that the conservation management strategies and actions contained in a management plan will be implemented into the future; whether the conservation strategies in the plan are likely to be effective; and whether the plan contains a monitoring program or adaptive management to ensure that the conservation measures are effective and can be adapted in the future in response to new information.

After identifying the benefits of inclusion and the benefits of exclusion, we carefully weigh the two sides to evaluate whether the benefits of exclusion outweigh those of inclusion. If our analysis indicates that the benefits of exclusion outweigh the benefits of inclusion, we then determine whether exclusion would result in extinction. If exclusion of an area from critical habitat will result in extinction, we will not exclude it from the designation.

Based on the information provided by entities seeking exclusion, as well as any additional public comments received, we evaluated whether certain lands in critical habitat Units 1 through 4 were appropriate for exclusion from this final designation pursuant to section 4(b)(2) of the Act. The Secretary is exercising his discretion to exclude several areas from critical habitat designation for *Astragalus lentiginosus* var. *coachellae.* Table 2 below provides approximate areas (ac, ha) of lands that meet the definition of critical habitat but are excluded under section 4(b)(2) of the Act in this final critical habitat rule.

TABLE 2—AREA EXCLUDED FROM CRITICAL HABITAT DESIGNATION BY CRITICAL HABITAT UNIT

Unit	Specific area	Area meeting the definition of critical habitat		Area excluded from critical habitat	
		acres	hectares	acres	hectares
1	Coachella Valley MSHCP/NCCP	1,898	768	1,898	768
	Morongo Band of Mission Indians Lands	313	127	313	127
	Unit 1 total	2,212	895	2,212	895
2	Coachella Valley MSHCP/NCCP	4,558	1,844	4,558	1,844
	Agua Caliente Band of Cahuilla Indians Lands	579	234	579	234
	Unit 2 total	5,137	2,078	5,137	2,078
3	Coachella Valley MSHCP/NCCP	5,491	2,222	5,491	2,222
4	Coachella Valley MSHCP/NCCP	3,193	1,292	3,193	1,292
Subtotal Coachella Valley MSHCP/NCCP		15,140	6,127	15,140	6,127
Subtotal Tribal lands		893	361	893	361
Total		15,874	6,413	15,874	6,413

We believe these areas are appropriate for exclusion under the ''other relevant factor'' provisions of section 4(b)(2) of the Act because:

(1) Their value for conservation will be preserved into the future by existing protective actions.

(2) Exclusion of these areas could help preserve the partnerships we developed with local stakeholders and encourage the establishment of future conservation and management of habitat for *Astragalus lentiginosus* var. *coachellae* and other sensitive taxa.

(3) Exclusion of these areas could help preserve our partnerships with tribes and foster future dialog and cooperative actions as well as development of habitat management plans on tribal lands.

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 (Industrial Economics, Inc. (IEc) 2012). The draft analysis, dated May 11, 2012, was made available for public review and comment from May 16 through June 15, 2012 (77 FR 28846; May 16, 2011). Following the close of the comment period, a final economic analysis (FEA) (dated January 29, 2013) of the potential economic effects of the designation was developed taking into consideration the public comments and any new information (IEc 2013).

The intent of the FEA is to quantify the economic impacts of all potential conservation efforts for *Astragalus lentiginosus* var. *coachellae;* some of these costs will likely be incurred regardless of whether we designate critical habitat (baseline). The economic impact of the 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 (for example, 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. The analysis looks retrospectively at baseline impacts incurred since the species was listed, and forecasts both baseline and incremental impacts likely to occur with the designation of critical habitat.

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. Decisionmakers 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 retrospectively at costs that have been incurred since 1998 (63 FR 53596, October 6, 1998), 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 a 20-year analysis period reflects the maximum amount of time under which future activities and economic impacts associated with the designation can be reliably projected, given available data and information. The FEA quantifies economic impacts of *Astragalus lentiginosus* var. *coachellae* conservation efforts associated with the following categories of activity: (1) Residential, commercial, and industrial development; (2) water management and use; (3) transportation activities; (4) energy development; (5) sand and gravel mining; and (6) Tribal activities.

The economic analysis includes high- and low-end estimates of incremental costs. Both estimates include the incremental impacts associated with addressing adverse modification in section 7 consultation. The high-end estimate also includes project modification costs associated with development in the City of Desert Hot Springs and railroad upgrades not covered by the Coachella Valley MSHCP/NCCP, as well as potential administrative costs incurred by the Agua Caliente Band of Cahuilla Indians. These costs are only included in the high estimate because of uncertainty over whether Desert Hot Springs will develop within the 100-year floodplain and whether railroad upgrades are likely, and because a public comment submitted by the Agua Caliente Band of Cahuilla Indians suggests that development may not occur within proposed revised critical habitat. As a result, the low-end impacts consist solely of administrative costs, except those that may be incurred by the Agua Caliente Band of Cahuilla Indians (IEc 2013, p. 4–2).

Implementation of conservation activities for residential, commercial, and industrial development is the largest cost category in the high-end estimate of incremental impacts. All of these costs are projected to occur in the unoccupied portion of Unit 3, within the City of Desert Hot Springs. Proponents of transportation activities, such as road and bridge construction and maintenance, are likely to experience the next largest impacts after residential, commercial, and industrial development. No incremental project modification costs are estimated for water management activities. Although two water districts, Metropolitan Water District of Southern California and the Desert Water Agency, may experience incremental impacts for projects occurring in unoccupied, fluvial habitat, characteristics of potential projects and specific project modifications that could be recommended for projects are uncertain. Project modification costs therefore could not be estimated. The FEA does not estimate any incremental project modification costs for energy projects, because these projects are located within occupied habitat, where we cannot reasonably differentiate between actions that avoid jeopardy to the species and actions needed solely to avoid destruction or adverse modification of critical habitat, and because the construction and development of new wind energy facilities is a covered activity under the MSHCP/NCCP. No incremental project modification costs are anticipated for mining activities.

The FEA also does not anticipate any incremental project modification costs on Agua Caliente Band of Cahuilla Indians lands because the proposed revised critical habitat on those lands is occupied habitat, where we cannot reasonably differentiate between actions that avoid jeopardy to the species and actions needed solely to avoid destruction or adverse modification of critical habitat. The Morongo Band of Mission Indians do not anticipate economic activity within proposed revised critical habitat on Morongo Band of Mission Indians lands, because these areas are located entirely within the floodplain; therefore, the FEA does not estimate any incremental project modification costs for Tribal activities. The total incremental impacts are estimated to be $270,000 to $880,000 ($24,000 to $77,000 annualized) in present-value terms using a 7 percent discount rate over the next 20 years (2012 to 2032) in areas proposed as revised critical habitat (IEc 2012, pp. ES–2–ES–3, ES–7–ES–9).

Our economic analysis did not identify any disproportionate costs that are likely to result from the designation. Consequently, the Secretary has determined not to exercise his discretion to exclude any areas from this designation of critical habitat for *Astragalus lentiginosus* var. *coachellae* based on economic impacts.

A copy of the FEA with supporting documents is available at *http://www.fws.gov/carlsbad/GIS/CFWOGIS.html, http://www.regulations.gov* at Docket No. FWS–R8–ES–2011–0064, and at the Carlsbad Fish and Wildlife Office (see **FOR FURTHER INFORMATION CONTACT**).

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 Department of Defense (DOD) where a national security impact might exist. In preparing this final rule, we have determined that the lands meeting the definition of critical habitat for *Astragalus lentiginosus* var. *coachellae* are not owned or managed by the Department of Defense, and, therefore, we anticipate no impact on national security. Consequently, the Secretary is not exercising 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.

Land and Resource Management Plans, Conservation Plans, or Agreements Based on Conservation Partnerships

When we evaluate whether a current land management or conservation plan (HCPs as well as other types) provides adequate management or protection, we consider a variety of factors, including but not limited to, whether the plan is finalized; how it provides for the conservation of the essential physical or biological features; whether there is a reasonable expectation that the conservation management strategies and actions contained in a management plan will be implemented into the future; whether the conservation strategies in the plan are likely to be effective; and whether the plan contains a monitoring program or adaptive management to ensure that the conservation measures are effective and can be adapted in the future in response to new information.

We believe that the Coachella Valley Multiple Species Habitat Conservation Plan and Natural Community Conservation Plan (Coachella Valley MSHCP/NCCP) provides adequate management or protection for the taxon, and, to continue and strengthen our conservation partnerships with the plan's participants and to foster additional partnerships, the Secretary is exercising his discretion to exclude lands covered by this plan that provide for the conservation of *Astragalus lentiginosus* var. *coachellae*. Details of our analysis for this plan are described below.

Exclusions Under Section 4(b)(2) of the Act—Coachella Valley MSHCP/NCCP

The Coachella Valley MSHCP/NCCP is a large-scale, multijurisdictional habitat conservation plan encompassing about 1.1 million ac (445,156 ha) in the Coachella Valley of central Riverside County. The Coachella Valley MSHCP/NCCP is also a ''Subregional Plan'' under the State of California's Natural Community Conservation Planning (NCCP) Act, as amended. An additional 69,000 ac (27,923 ha) of tribal reservation lands distributed within the plan area boundary are not included in the Coachella Valley MSHCP/NCCP. The Coachella Valley MSHCP/NCCP addresses 27 listed and unlisted ''covered species,'' including *Astragalus lentiginosus* var. *coachellae*. On October 1, 2008, the Service issued a single incidental take permit (TE–104604–0) under section 10(a)(1)(B) of the Act to 19 permittees under the Coachella Valley MSHCP/NCCP for a period of 75 years. Participants in the Coachella Valley MSHCP/NCCP include eight cities (Cathedral City, Coachella, Indian Wells, Indio, La Quinta, Palm Desert, Palm Springs, and Rancho Mirage); the County of Riverside, including the Riverside County Flood Control and Water Conservation District, Riverside County Parks and Open Space District, and Riverside County Waste Management District; the Coachella Valley Association of Governments; Coachella Valley Water District; Imperial Irrigation District; California Department of Transportation; California State Parks; Coachella Valley Mountains Conservancy; and the Coachella Valley Conservation Commission (the created joint powers regional authority). The Coachella Valley MSHCP/NCCP was designed to establish a multiple-species habitat conservation program that minimizes and mitigates the expected loss of habitat and incidental take of covered species, including *A. l.* var. *coachellae* (USFWS 2008, pp. 1–207, and Appendix A, pp. 10–50).

The permit covers incidental take resulting from habitat loss and disturbance associated with urban development and other proposed covered activities. These activities include public and private development within the plan area that requires discretionary and ministerial actions by permittees subject to consistency with the Coachella Valley MSHCP/NCCP policies. An associated Management and Monitoring Program is also included in the Coachella Valley MSHCP/NCCP and identifies specific management actions for the conservation of *Astragalus lentiginosus* var. *coachellae*.

Approximately 36,398 ac (14,730 ha) of modeled habitat for *Astragalus lentiginosus* var. *coachellae* occurs in the Coachella Valley MSHCP/NCCP Plan Area (Coachella Valley MSHCP/NCCP 2008, p. 9–25). Under the Coachella Valley MSHCP/NCCP, approximately 15,706 ac (6,356 ha) of modeled *A. l.* var. *coachellae* habitat will be lost to development. To mitigate this loss, the Coachella Valley MSHCP/NCCP will preserve 7,176 ac (2,904 ha) of modeled habitat for the taxon in perpetuity. Another 4,497 ac (1,820 ha) are anticipated to be conserved through complementary and cooperative efforts by Federal and State agencies and nongovernmental organizations. Additionally, 7,707 ac (3,118 ha) of *A. l.* var. *coachellae* modeled habitat within the Plan Area were preserved prior to completion of the Coachella Valley MSHCP/NCCP (acres which coincidentally occur on three Coachella Valley fringe-toed lizard (*Uma inornata*) reserves in the Coachella Valley Preserve System). These lands and the 11,650 ac (4,715 ha) of lands yet to be conserved under the Coachella Valley MSHCP/NCCP will total 19,357 ac (7,833 ha) of *A. l.* var. *coachellae* modeled habitat within the Coachella Valley MSHCP/NCCP Reserve System.

As habitat areas are acquired under the Coachella Valley MSHCP/NCCP, they are legally protected within the Reserve System and the direct impacts of development are precluded. All areas covered under the Coachella Valley MSHCP/NCCP that meet the definition of critical habitat for *A. l.* var. *coachellae* fall within the Conservation Areas of the HCP. The Conservation Areas of the Coachella Valley MSHCP/NCCP are predetermined areas that provide habitat for species covered under the plan; these areas are designed to conserve natural communities, ecological processes, and biological corridors and linkages between major habitat areas. The Coachella Valley MSHCP/NCCP Reserve System will be assembled from land conserved within these Conservation Areas. This protection, as well as implementation of the avoidance, minimization, and mitigation measures and management and monitoring programs identified in the Coachella Valley MSHCP/NCCP, will reduce impacts to this taxon compared to what would have occurred otherwise.

Benefits of Inclusion—Coachella Valley MSHCP/NCCP

Regulatory Benefits (Endangered Species Act)

The principal benefit of including an area in a critical habitat designation is the requirement of Federal agencies to ensure actions they fund, authorize, or carry out are not likely to result in the destruction or adverse modification of any designated critical habitat, the regulatory standard of section 7(a)(2) of the Act under which consultation is completed. Federal agencies must consult with the Service on actions that may affect critical habitat and must avoid destroying or adversely modifying critical habitat. Federal agencies must also consult with us on actions that may affect a listed species and refrain from undertaking actions that are likely to jeopardize the continued existence of such species. The analysis of effects to critical habitat is a separate and different analysis from that of the effects to the species. Therefore, the difference in outcomes of these two analyses represents the regulatory benefit of critical habitat. The regulatory standards are different, as the jeopardy analysis

investigates the action's impact on the survival and recovery of the species, while the adverse modification analysis focuses on the action's effects on the designated habitat's contribution to conservation. This will, in many instances, lead to different results and different regulatory requirements. Thus, critical habitat designations may provide greater benefits to the recovery of a species than would listing alone.

For some species (including *Astragalus lentiginosus* var. *coachellae*), and in some locations (in particular, those occupied by the taxon), the outcome of these analyses will be similar, because effects to habitat will often also result in effects to the species and it is often difficult or impossible to differentiate between actions that avoid jeopardy to the species and actions needed solely to avoid destruction or adverse modification of critical habitat. However, much of the land considered for exclusion from this critical habitat designation is not occupied by the taxon (areas supporting fluvial sand transport processes). In these areas, impacts to critical habitat will not result in direct impacts to *A. l.* var. *coachellae* plants. Therefore, the outcome of an adverse modification analysis in these areas would differ from the outcome of a jeopardy analysis.

Critical habitat may provide a regulatory benefit for *Astragalus lentiginosus* var. *coachellae* when there is a Federal nexus present for a project that might adversely modify critical habitat. A Federal nexus generally exists where land is federally owned, or where actions proposed on non-Federal lands require a Federal permit or Federal funding. In the absence of a Federal nexus, the regulatory benefit provided through section 7 consultation under the Act does not exist. Any activities over which a Federal agency has discretionary involvement or control affecting designated critical habitat on Federal land would trigger a duty to consult under section 7. However, no Federal lands are covered under the Coachella Valley MSHCP/NCCP.

The potential for a Federal nexus for activities proposed on non-Federal lands varies widely and depends on the particular circumstances of each case. Nevertheless, because the breadth of potential Federal actions that may trigger a duty to consult under section 7 is quite broad, we cannot say with certainty that future development of, or activities on, non-Federal lands will always lack a Federal nexus. In some portions of the lands identified as critical habitat for *Astragalus lentiginosus* var. *coachellae* that are covered under the Coachella Valley MSHCP/NCCP, a Federal nexus seems possible despite the areas in question not being on Federal lands. The unoccupied fluvial sand transport areas of the essential habitat covered under the Coachella Valley MSHCP/NCCP may fall within the jurisdiction of the U.S. Army Corps of Engineers (Corps) pursuant to section 404 of the Clean Water Act. Therefore, we expect there will be a Federal nexus for projects in the fluvial sand transport areas, as projects that impact these areas may require Corps permits. Also, highway or railroad improvement projects on lands adjacent to Interstate Highway 10 or the Southern Pacific railway line that are covered by the Coachella Valley MSHCP/NCCP may have a Federal nexus via the U.S. Department of Transportation. Thus, designation of these areas as critical habitat for *A. l.* var. *coachellae* could provide a regulatory benefit. However, where there is no discernible Federal nexus on lands covered under the Coachella Valley MSHCP/NCCP that we've identified as critical habitat for *A. l.* var. *coachellae,* we consider the regulatory benefit of designation of those non-Federal lands to be small.

If protections provided by critical habitat designation are redundant with protections already in place on lands identified as areas that meet the definition of critical habitat for *Astragalus lentiginosus* var. *coachellae,* the benefits of inclusion in critical habitat are reduced. All areas that meet the definition of critical habitat covered under the Coachella Valley MSHCP/NCCP fall within the Conservation Areas of the HCP. Within the Conservation Areas, protections afforded *Astragalus lentiginosus* var. *coachellae* and its habitat by the Coachella Valley MSHCP/NCCP include, for example, requiring permittees to comply with applicable avoidance, minimization, and mitigation measures and land-use adjacency guidelines (standards delineated for land uses adjacent to or within Conservation Areas necessary to avoid or minimize edge effects), and conservation of suitable habitat and those areas supporting the geomorphologic processes sustaining the sand formations in those areas (sand transport system) (Coachella Valley MSHCP/NCCP 2008, Section 4 and Section 9.2.2).

Protective measures required by the Coachella Valley MSHCP/NCCP for the conservation of *Astragalus lentiginosus* var. *coachellae* habitat in the Conservation Areas are similar to protections that we would require through consultation provisions under section 7(a)(2) of the Act for *A. l.* var. *coachellae* critical habitat. Adding another layer of regulatory protections by designating critical habitat on lands in the Conservation Areas of the Coachella Valley MSHCP/NCCP, therefore, will not likely add any protection for the taxon. In some rare cases, the amount or type of protection required by a consultation under section 7(a)(2) of the Act to address impacts to critical habitat could differ from the protective measures provided by the Coachella Valley MSHCP/NCCP; however, we do not know under what circumstances this would occur, if ever. For these reasons, we believe the protections provided by the Coachella Valley MSHCP/NCCP in the Conservation Areas substantially diminish any regulatory benefits of designating critical habitat on these lands.

Educational Benefit

Designating critical habitat also can be beneficial because the process of proposing critical habitat provides the opportunity for peer review and public comment on lands we propose to designate as critical habitat, our criteria used to identify those lands, potential impacts from the proposal, and information on the taxon itself. The designation of critical habitat may generally provide previously unavailable information to the public. Public education regarding the potential conservation value of an area may also help focus conservation and management efforts on areas of high conservation value for certain species. Information about *Astragalus lentiginosus* var. *coachellae* and its habitat that reaches a wide audience, including parties concerned about and engaged in conservation activities, is valuable because the public may not be aware of documented (or undocumented) *A. l.* var. *coachellae* occurrences and unoccupied areas supporting sand transport processes that have not been conserved or are not being managed.

However, the educational benefits of designating critical habitat for *Astragalus lentiginosus* var. *coachellae* are small and largely redundant to those derived through conservation efforts currently being implemented in the private and permittee-owned or controlled lands covered under the Coachella Valley MSHCP/NCCP. As described above, the process of developing the Coachella Valley MSHCP/NCCP has involved several partners including (but not limited to) the eight participating local jurisdictions, Riverside County,

California Department of Fish and Game, and Federal agencies. The educational benefits of critical habitat designation derived through informing Coachella Valley MSHCP/NCCP partners and other members of the public of areas important for the long-term conservation of *A. l.* var. *coachellae* have already been and continue to be achieved through development and implementation of the Coachella Valley MSHCP/NCCP. We, therefore, believe that the educational benefits of designating critical habitat for *A. l.* var. *coachellae* on lands covered under the Coachella Valley MSHCP/NCCP are small.

Educational benefits of designating critical habitat for *Astragalus lentiginosus* var. *coachellae* are also largely redundant to those derived through the publication of the previous proposed and final critical habitat rules for *A. l.* var. *coachellae.* These documents discuss *A. l.* var. *coachellae* biology and habitat requirements, the location of areas containing the physical or biological features essential to the conservation of the taxon, and the importance of areas supporting sand transport processes needed to maintain suitable habitat for the taxon. Because this information was made available to the public in these documents, we believe there is little educational benefit of designating critical habitat for *A. l.* var. *coachellae.*

Regulatory Benefit (Other State, Local, and Federal Laws)

The designation of critical habitat for some species may also strengthen or reinforce some of the provisions in other State and Federal laws, such as the California Environmental Quality Act (CEQA). These laws analyze the potential for projects to significantly affect the environment. To date, the local jurisdictions have not required additional measures associated with critical habitat for any species in their discretionary approval processes (for example, pursuant to CEQA), and are unlikely to do so in the future. This potential benefit is, therefore, negligible in the Coachella Valley.

In summary, we believe that the regulatory benefit through section 7(a)(2) of the Act of designating critical habitat is small on non-Federal lands covered under the Coachella Valley MSHCP/NCCP and occupied by *Astragalus lentiginosus* var. *coachellae* because the likelihood of a future Federal nexus in these areas is small, and because the existing protections afforded the taxon and its habitat by the Coachella Valley MSHCP/NCCP likely diminish any regulatory benefits that might be gained. The regulatory benefit of designation is likely higher in unoccupied fluvial sand transport areas, due to the greater possibility for a Federal nexus (via permits required for impacts to ''Waters of the United States'' by the Corps). However, the benefits of inclusion are similarly diminished in the fluvial sand transport areas by the protections provided by the Coachella Valley MSHCP/NCCP. Additionally, we believe the educational benefits of designating critical habitat for *A. l.* var. *coachellae* on lands covered by the Coachella Valley MSHCP/NCCP are small due to stakeholder involvement in the design and implementation of the Coachella Valley MSHCP/NCCP and publication of relevant information in the previous proposed and final critical habitat rules in 2004 and 2005. There are no potential ancillary benefits under other laws that would result from designation of non-Federal lands in the Coachella Valley.

Benefits of Exclusion—Coachella Valley MSHCP/NCCP

We believe conservation benefits would be realized by forgoing designation of critical habitat for *Astragalus lentiginosus* var. *coachellae* on lands covered by the Coachella Valley MSHCP/NCCP, including: (1) Continuance and strengthening of our effective working relationships with all Coachella Valley MSHCP/NCCP jurisdictions and stakeholders to promote conservation of the *A. l.* var. *coachellae,* its habitat, and 26 other taxa covered by the HCP and their habitat; (2) allowance for continued meaningful collaboration and cooperation in working toward protecting and recovering this taxon and the many other taxa covered by the HCP, including conservation benefits that might not otherwise occur; (3) encouragement for local jurisdictions to fully participate in the Coachella Valley MSHCP/NCCP; and (4) encouragement of additional HCP and other conservation plan development in the future on other private lands for this and other federally listed and sensitive taxa.

In the case of *Astragalus lentiginosus* var. *coachellae* in the Coachella Valley, the partnership and commitment by the permittees of the Coachella Valley MSHCP/NCCP resulted in lands being conserved and managed for the long term that will contribute to the recovery of the taxon.

We developed a close partnership with the permittees of the Coachella Valley MSHCP/NCCP through the development of the HCP, which incorporates protections (conserved lands) and management for *Astragalus lentiginosus* var. *coachellae,* its habitat, the fluvial sand transport areas, and the physical or biological features essential to the conservation of this taxon. Additionally, many landowners perceive critical habitat as an unfair and unnecessary regulatory burden given the expense and time involved in developing and implementing complex regional and jurisdiction-wide HCPs, such as the Coachella Valley MSHCP/NCCP (as discussed further in Comment 15 below in the Summary of Comments and Recommendations section of this rule). Exclusion of Coachella Valley MSHCP/NCCP lands could help preserve the partnerships we developed with the County of Riverside, Coachella Valley Association of Governments, and other local jurisdictions in the development of the HCP, foster future partnerships and development of future HCPs, and encourage the establishment of future conservation and management of habitat for *A. l.* var. *coachellae* and other sensitive taxa.

The Coachella Valley MSHCP/NCCP provides substantial protection and management for *Astragalus lentiginosus* var. *coachellae,* the fluvial sand transport areas, and the physical or biological features essential to the conservation of the taxon. It also addresses conservation issues from a coordinated, integrated perspective rather than a piecemeal, project-by-project approach (as would occur under section 7 of the Act or through smaller HCPs), thus resulting in coordinated landscape-scale conservation that can contribute to genetic diversity by preserving covered species populations, habitat, and interconnected linkage areas that support recovery of *A. l.* var. *coachellae* and other listed taxa. Also, because impacts to plant species do not require an incidental take permit, protections that plants receive under HCPs related to covered activities without a Federal nexus are benefits that most likely would not be realized otherwise. Additionally, in order for the conservation anticipated by the Coachella Valley MSHCP/NCCP to be fully realized, it is vital that permittees continue to work with the Service during the implementation process to ensure the goals of the plan are met despite unanticipated issues that are likely to arise given the scope and complexity of the plan. Therefore, it is important that we encourage full participation in such plans and encourage voluntary coverage of listed plant taxa in such plans.

In summary, we believe excluding land covered by the Coachella Valley MSHCP/NCCP from critical habitat will

provide the significant benefit of maintaining existing regional HCP partnerships and fostering new ones.

Weighing Benefits of Exclusion Against Benefits of Inclusion—Coachella Valley MSHCP/NCCP

We reviewed and evaluated the exclusion of approximately 15,140 ac (6,127 ha) of land within the boundaries of the Coachella Valley MSHCP/NCCP from our revised designation of critical habitat, and we determined the benefits of excluding these lands outweigh the benefits of including them. The regulatory benefits of including the portion of these lands occupied by *Astragalus lentiginosus* var. *coachellae* in the designation are small because of the unlikelihood of a Federal nexus. The regulatory benefits of including the portion of these lands not occupied by the taxon (areas supporting fluvial sand transport processes) are greater due to the possibility of a Federal nexus through the Corps. However, these benefits are reduced by the existence of protections provided through the Coachella Valley MSHCP/NCCP that are mostly redundant to the regulatory protections that would be achieved through designation of critical habitat. The educational benefits of including lands covered under the Coachella Valley MSHCP/NCCP are small in occupied areas and unoccupied areas.

We believe the benefits of excluding lands covered by the Coachella Valley MSHCP/NCCP from critical habitat are more significant. Exclusion of these lands from critical habitat will help preserve the partnerships we have developed with local jurisdictions and project proponents through the development and ongoing implementation of the Coachella Valley MSHCP/NCCP and aid in fostering future partnerships for the benefit of listed species. Designation of lands covered by the Coachella Valley MSHCP/NCCP may discourage other partners from seeking, amending, or completing HCCP/NCCP plans that cover *Astragalus lentiginosus* var. *coachellae* and other listed taxa. Designation of critical habitat does not require that management or recovery actions take place on the lands included in the designation. The Coachella Valley MSHCP/NCCP, however, will provide for significant conservation and management of *A. l.* var. *coachellae* and its habitat and help achieve recovery of this species through habitat enhancement and restoration, functional connections to adjoining habitat, and monitoring efforts. Additional HCPs or other management plans potentially fostered by this exclusion would also help to recover this and other federally listed species. Therefore, in consideration of the relevant impact to current and future partnerships, as summarized in the *Benefits of Exclusion—Coachella Valley MSHCP/NCCP* section above, we determined the significant benefits of exclusion outweigh the benefits of critical habitat designation.

Exclusion Will Not Result in Extinction of the Species—Coachella Valley MSHCP/NCCP

We determined that the exclusion of 15,140 ac (6,127 ha) of land within the boundaries of the Coachella Valley MSHCP/NCCP from the designation of critical habitat for *Astragalus lentiginosus* var. *coachellae* will not result in extinction of the taxon. Protections afforded the taxon and its habitat by the Coachella Valley MSHCP/NCCP provide assurances that the taxon will not go extinct as a result of excluding these lands from the critical habitat designation. The jeopardy standard of section 7 of the Act will also provide protection in occupied areas when there is a Federal nexus. Therefore, based on the above discussion, the Secretary is exercising his discretion to exclude 15,140 ac (6,127 ha) of land within the boundaries of the Coachella Valley MSHCP/NCCP from this final critical habitat designation.

Exclusions Under Section 4(b)(2) of the Act—Tribal Lands

In accordance with the Secretarial Order 3206, ''American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act'' (June 5, 1997); the President's memorandum of April 29, 1994, ''Government-to-Government Relations with Native American Tribal Governments'' (59 FR 22951); Executive Order 13175; and the relevant provision of the Departmental Manual of the Department of the Interior (512 DM 2), we believe that fish, wildlife, and other natural resources on tribal lands are better managed under tribal authorities, policies, and programs than through Federal regulation wherever possible and practicable. Based on this philosophy, we believe that, in most cases, designation of tribal lands as critical habitat provides very little additional benefit to federally listed species. Conversely, such designation is often viewed by tribes as an unwarranted and unwanted intrusion into tribal self-governance, thus compromising the government-to-government relationship essential to achieving our mutual goals of managing for healthy ecosystems upon which the viability of threatened and endangered species populations depend. We take into consideration our partnerships and existing conservation actions that tribes have implemented or are currently implementing when conducting our analysis under section 4(b)(2) of the Act in this final revised critical habitat designation. We also take into consideration conservation actions that are planned as part of our ongoing commitment to the government-to-government relationship with tribes. Section 4(b)(2) of the Act allows the Secretary to exclude areas from critical habitat based on economic impacts, impacts to National security, or other relevant impacts if the Secretary determines that the benefits of such exclusion outweigh the benefits of designating the area as critical habitat. However, an exclusion cannot occur if it will result in the extinction of the species concerned.

We determined approximately 893 ac (361 ha) of lands owned by or under the jurisdiction of two Tribes meet the definition of critical habitat under the Act. These tribal lands are found within Units 1 and 2, and are owned by or under the jurisdiction of the Morongo Band of Mission Indians and the Agua Caliente Band of Cahuilla Indians. In making our final decision with regard to these tribal lands, we considered the factors listed above. Under section 4(b)(2) of the Act, the Secretary is exercising his discretion to exclude approximately 893 ac (361 ha) of land comprised of all reservation lands from this final revised critical habitat designation (this is all of the tribal land proposed as critical habitat for *A. l.* var. *coachellae*). As described in our analysis below, this conclusion was reached after considering the relevant impacts of specifying these areas as critical habitat.

For our 4(b)(2) balancing analysis we considered our partnership with the Agua Caliente Band of Cahuilla Indians and analyzed the benefits of including and excluding those lands within the Agua Caliente Band of Cahuilla Indians Reservation boundary that meet the definition of critical habitat. The Agua Caliente Indian Reservation consists of approximately 31,500 acres of land in a checkerboard of parcels found primarily in the City of Palm Springs, and the Cities of Cathedral City and Rancho Mirage, and unincorporated Riverside County, California. This area includes approximately 579 ac (234 ha) that meet the definition of *Astragalus lentiginosus* var. *coachellae* critical habitat in Unit 2, all of which are within the Agua Caliente Band of Cahuilla Indians

Reservation boundary. The Agua Caliente Band of Cahuilla Indians has worked with our office to develop a draft HCP that includes *A. l.* var. *coachellae* as a covered taxon, and includes conservation measures for the taxon and its habitat. Although the Agua Caliente Band of Cahuilla Indians notified us in a letter dated October 6, 2010, that they suspended their pursuit of a Section 10(a) permit for their draft HCP (ACBCI 2010a, p. 1), they consider the draft plan to be a Tribal-approved, final document and implement it as such for land-use planning on all Reservation lands. The Tribe is continuing to implement the conservation strategies outlined in the document, and has expressed their intention to continue to do so (Park 2011, p. 1; pers. com. J. McBride, 2012) and protect and manage natural resources within their jurisdiction (ACBCI 2010b, p. ES–1; Park 2011, p. 1).

The Tribe is implementing numerous provisions aimed specifically at protecting *Astragalus lentiginosus* var. *coachellae* habitat (ACBCI 2010b, pp. 2–3, 4–32, 4–53, 4–67, 4–106)), including in areas meeting the definition of critical habitat for the taxon. Conservation objectives for *A. l.* var. *coachellae* include avoidance, minimization, and/or mitigation of impacts to active or ephemeral sand fields within the Section 6 Target Acquisition Area (most of the Agua Caliente Band of Cahuilla Indians lands that meet the definition of critical habitat for *A. l.* var. *coachellae* are within the Section 6 (Township 4 South, Range 5 East) Target Acquisition Area, which contains the sand formations that form the basis of *A. l.* var. *coachellae* habitat (see *Primary Constituent Element for* Astragalus lentiginosus *var.* coachellae section above)). Within the Section 6 Target Acquisition Area, acquisition or dedication of lands to the Habitat Preserve and management in perpetuity is targeted to occur for mitigation of impacts to covered species (including *A. l.* var. *coachellae*). The Tribe anticipates conservation of at least 177 acres within the Section 6 Target Acquisition Area, and acquisition of a minimum of 640 acres of habitat for conservation in other areas that are potentially suitable to support the taxon. We anticipate that these provisions and others aimed at avoiding direct and indirect impacts to the taxon and avoiding, minimizing, or mitigating impacts to its habitat, sand sources, and sand transport will play an important role in conserving the taxon and preventing adverse alteration of *A. l.* var. *coachellae* habitat.

We determined approximately 313 ac (127 ha) of lands owned by or under the jurisdiction of the Morongo Band of Mission Indians meet the definition of critical habitat under the Act for *Astragalus lentiginosus* var. *coachellae.* For our section 4(b)(2) balancing analysis we considered our partnership with the Tribe and analyzed the benefits of including and excluding those lands within the Morongo Band of Mission Indians Reservation boundary that meet the definition of critical habitat.

The Morongo Band of Mission Indians (formerly the Morongo Band of Cahuilla Mission Indians of the Morongo Reservation) Reservation consists of over 35,000 ac of land on the western end of the Coachella Valley. This area includes approximately 313 ac (12 ha) that meet the definition of *Astragalus lentiginosus* var. *coachellae* critical habitat in Unit 1. Almost all (97 percent) of these Tribal lands identified as essential for the conservation of *A. l.* var. *coachellae* are fluvial sand transport areas not occupied by the taxon. The Morongo Band of Mission Indians has not completed a management plan that specifically provides for conservation of processes contributing to the maintenance of *A. l.* var. *coachellae* habitat. However, the Tribe has land designations and management policies and practices that contribute to the conservation of the fluvial sand transport areas identified as essential habitat for *A. l.* var. *coachellae* (Martin 2011, pp. 1–2).

For example, human impacts will be limited in the areas meeting the definition of critical habitat due to their significant value to the Tribe in their natural state, and because they are subject to natural hazards, minimizing their development value. Also, the Morongo Band of Mission Indians have instituted an ordinance limiting recreational OHV use to areas where such activities will not impact fluvial sand transport or habitat areas. Additionally, the Morongo Environmental Protection Department—Resource Conservation program has implemented nonnative species removal projects throughout Morongo Band of Mission Indians lands with consultation from the Inland Empire Resource Conservation District and the Natural Resources Conservation Service (U.S. Department of Agriculture). Over 65 percent of the Morongo Band of Mission Indians lands are listed as ''Open Space/Conservation element areas'' in the Morongo Band of Mission Indians General Plan, including active ephemeral washes that contribute to the San Gorgonio River fluvial sand transport system and large areas unobstructed by development, that contain suitable habitat with intact wind and depositional regimes. We anticipate that the Morongo Band of Mission Indians' dedication to maintaining natural resources and minimizing impacts to those resources on their lands will contribute greatly to the conservation of *A. l.* var. *coachellae,* its habitat, and sand transport processes on the Morongo Band of Mission Indians Reservation.

Most of the lands that meet the definition of critical habitat within the Morongo Band of Mission Indians Reservation are areas supporting the fluvial transport of sand carried by the San Gorgonio River into areas occupied by major occurrences of *Astragalus lentiginosus* var. *coachellae.* Lands that meet the definition of critical habitat within the Agua Caliente Indian Reservation are all areas with sand formations that form the basis of suitable habitat for *A. l.* var. *coachellae.* Activities on lands that meet the definition of critical habitat within these tribal reservations could affect the taxon directly and also affect sand transport processes. Therefore, we want to foster strong partnerships with these Tribes and work cooperatively toward conservation of *A. l.* var. *coachellae.*

Benefits of Inclusion—Tribal Lands

Regulatory Benefits (Endangered Species Act)

The principal benefit of including an area in a critical habitat designation is the requirement of Federal agencies to ensure actions they fund, authorize, or carry out are not likely to result in the destruction or adverse modification of any designated critical habitat, the regulatory standard of section 7(a)(2) of the Act under which consultation is completed. Federal agencies must consult with the Service on actions that may affect critical habitat and must avoid destroying or adversely modifying critical habitat. Federal agencies must also consult with us on actions that may affect a listed species and refrain from undertaking actions that are likely to jeopardize the continued existence of such species. The analysis of effects to critical habitat is a separate and different analysis from that of the effects to the species. Therefore, the difference in outcomes of these two analyses represents the regulatory benefit of critical habitat. The regulatory standards are different, as the jeopardy analysis investigates the action's impact on the survival and recovery of the species, while the adverse modification analysis focuses on the action's effects on the designated habitat's contribution to

conservation. This will, in many instances, lead to different results and different regulatory requirements. Thus, critical habitat designations may provide greater benefits to the recovery of a species than would listing alone, especially in instances when critical habitat has been designated where the species does not occur.

Critical habitat may provide a regulatory benefit for *Astragalus lentiginosus* var. *coachellae* when there is a Federal nexus present for a project that might adversely modify critical habitat. On tribal reservations there is a Federal nexus through the Bureau of Indian Affairs (BIA) for projects that could adversely modify critical habitat. Therefore, there may be a regulatory benefit of including the tribal lands in the designation, as some projects on tribal lands identified as essential habitat within Units 1 and 2 may require consultation with the Service.

However, if protections provided by critical habitat are redundant with protections already in place, the benefits of inclusion in critical habitat are reduced. As discussed above, although the Agua Caliente Band of Cahuilla Indians are no longer pursuing a Section 10(a) permit for their draft HCP (ACBCI 2010a, p. 1), the Tribe is continuing to implement the conservation strategies outlined in the document, and plans to continue doing so (Park 2011, p. 1; pers. com. J. McBride, 2012). The protections afforded sand transport processes and *Astragalus lentiginosus* var. *coachellae* habitat by these conservation strategies provide for avoidance, minimization, and mitigation of impacts to *A. l.* var. *coachellae* habitat, and habitat conservation and management (see above discussion of conservation objectives on Agua Caliente Band of Cahuilla Indians lands for more detail). Morongo Band of Mission Indians also provides protection for sand transport processes and *A. l.* var. *coachellae* habitat through Tribal ordinances, management activities, protections provided in the Tribe's General Plan, and the fact that the Tribe considers Tribal lands meeting the definition of critical habitat to be of significant value in their natural state. The regulatory benefits of designating critical habitat for *A. l.* var. *coachellae* on Agua Caliente Band of Cahuilla Indians and Morongo Band of Mission Indians lands are reduced by these protections, which are to some extent redundant to the regulatory protections provided by critical habitat designation. We expect that the avoidance and minimization of impacts to, and conservation of, *A. l.* var. *coachellae* habitat that would likely result from consultation under section 7 of the Act on designated Tribal lands where there is a Federal nexus would be similar to the protections already put in place by the Tribes. Therefore, we anticipate the regulatory benefit of including the tribal lands in the designation to be small.

Educational Benefit

Designating critical habitat also can be beneficial because the process of proposing critical habitat provides the opportunity for peer review and public comment on lands we propose to designate as critical habitat, our criteria used to identify those lands, potential impacts from the proposal, and information on the taxon itself. We believe the designation of critical habitat may generally provide previously unavailable information to the public. Public education regarding the potential conservation value of an area may also help focus conservation and management efforts on areas of high conservation value for certain species. Information about *Astragalus lentiginosus* var. *coachellae* and its habitat that reaches a wide audience, including parties concerned about and engaged in conservation activities, is valuable because the public may not be aware of documented (or undocumented) *A. l.* var. *coachellae* occurrences and unoccupied areas supporting sand transport processes that have not been conserved or are not being managed.

Due to the existence of survey data and development of the Agua Caliente Band of Cahuilla Indians' draft HCP, stakeholders in the region are likely aware of the existence of *A. l.* var. *coachellae* on the portions of Agua Caliente Band of Cahuilla Indians lands proposed as critical habitat and the importance of these areas to the conservation of the taxon. Morongo Band of Mission Indians lands in Unit 1 consist entirely of areas not occupied by *A. l.* var. *coachellae* that support fluvial sand transport processes crucial to maintaining the sand formations in Unit 1 upon which the taxon depends. During the development of the proposed revised critical habitat rule, we met with representatives from the Morongo Band of Mission Indians and the BIA to inform them of the proposal. As a result of this meeting and further interactions with tribal representatives and the BIA, we believe the importance of the fluvial sand transport areas on Morongo Band of Mission Indians lands to the conservation of *A. l.* var. *coachellae* has been amply communicated to those with the most direct influence over the management of these areas. The public and local stakeholders have also been made aware of the importance of these areas to *A. l.* var. *coachellae* conservation through the development and implementation of the Coachella Valley MSHCP/NCCP. We, therefore, believe there is no significant educational benefit to including Tribal lands in the designation.

Educational benefits of designating critical habitat for *Astragalus lentiginosus* var. *coachellae* are also largely redundant to those derived through the publication of the previous proposed and final critical habitat rules for *A. l.* var. *coachellae.* These documents discuss *A. l.* var. *coachellae* biology and habitat requirements, the location of areas containing the physical or biological features essential to the conservation of the taxon, and the importance of areas supporting sand transport processes needed to maintain suitable habitat for the taxon. Because this information was made available to the public in these documents, we believe there is little educational benefit of designating critical habitat for *A. l.* var. *coachellae.*

Regulatory Benefit (Other State, Local, and Federal Laws)

The designation of critical habitat for some species may also strengthen or reinforce some of the provisions in other State and Federal laws, such as the California Environmental Quality Act (CEQA). These laws analyze the potential for projects to significantly affect the environment. To date, the local jurisdictions have not required additional measures associated with critical habitat in their discretionary approval processes (for example, pursuant to the California Environmental Quality Act), and are unlikely to do so in the future. This potential benefit is, therefore, negligible in the Coachella Valley.

In summary, we believe there would likely only be a minimal regulatory benefit of *Astragalus lentiginosus* var. *coachellae* critical habitat designation on Agua Caliente Band of Cahuilla Indians and Morongo Band of Mission Indians lands, and no significant educational benefits.

Benefits of Exclusion—Tribal Lands

We believe significant benefits would be realized by forgoing designation of critical habitat on reservation lands managed by the Agua Caliente Band of Cahuilla Indians and the Morongo Band of Mission Indians. These benefits include:

(1) Continuance and strengthening of our effective working relationships with all tribes to promote conservation of

Astragalus lentiginosus var. *coachellae* and its habitat;

(2) Allowance for continued meaningful collaboration and cooperation in working toward recovering this species, including conservation benefits that might not otherwise occur; and

(3) Encouragement of this and other tribes to complete management plans for this and other federally listed and sensitive species and habitats, and engage in collaboration and cooperation with the Service and other organizations and individuals interested in conservation of the taxon, its habitat, and other biota of mutual interest.

We believe that fish, wildlife, and other natural resources on tribal lands are better managed under tribal authorities, policies, and programs than through Federal regulation wherever possible and practicable. We are committed to ongoing meaningful collaboration and cooperation with all the affected tribes. For land on the Morongo Band of Mission Indians Reservation, which is not currently covered by an HCP, we will continue to work with BIA and the Tribe to develop species and habitat management plans to promote *Astragalus lentiginosus* var. *coachellae* conservation. For land on the Agua Caliente Band of Cahuilla Indians Reservation, where development and natural resources are being managed in accordance with the Tribe's conservation strategies, which include protections for *A. l.* var. *coachellae,* we will continue to work with the Tribe as they implement these strategies.

Critical habitat designation is often viewed by tribes as an unwarranted and unwanted intrusion into tribal self-governance, thus compromising the government-to-government relationship essential to achieving our mutual goals of managing for healthy ecosystems upon which the viability of threatened and endangered species populations depend. For example, in comments submitted during the public comment periods, the Morongo Band of Mission Indians, the Agua Caliente Band of Cahuilla Indians, and the U.S. Bureau of Indian Affairs indicated designation of critical habitat for *Astragalus lentiginosus* var. *coachellae* on tribal lands would negatively impact tribal relations. Both affected tribes submitted comments indicating they were opposed to critical habitat designation or believed their lands should be excluded. Exclusion of tribal reservation lands from critical habitat will help preserve the partnerships we have developed, reinforce those relationships we are building with tribes, and foster future partnerships and development of future management plans. Therefore, we believe excluding tribal reservation lands from critical habitat provides the significant benefit of maintaining and strengthening existing conservation partnerships and fostering new ones.

Weighing Benefits of Exclusion Against Benefits of Inclusion—Tribal Lands

We reviewed and evaluated the benefits of inclusion and the benefits of exclusion of Agua Caliente Band of Cahuilla Indians reservation lands and Morongo Band of Mission Indians reservation lands as critical habitat for *Astragalus lentiginosus* var. *coachellae.* Including these areas in the critical habitat designation for *A. l.* var. *coachellae* may provide some additional protection under section 7(a)(2) of the Act when there is a Federal nexus, although we expect any benefits to be small, because they would be at least partially redundant to existing protections provided by the Tribes. We do not anticipate educational benefits or ancillary regulatory benefit from other laws such as CEQA from designating these areas as critical habitat.

The benefits of excluding Agua Caliente Band of Cahuilla Indians reservation lands and Morongo Band of Mission Indians reservation lands from critical habitat are significant. Exclusion of these lands from critical habitat will help preserve the partnerships we have developed and reinforce those we are building with the Tribes, and exclusion will foster future partnerships and development of management plans. As discussed above, both Tribes are implementing measures that further the conservation of *Astragalus lentiginosus* var. *coachellae* habitat and land supporting sand transport processes needed to maintain that habitat. Damaging our partnerships with the Tribes could have the effect of dissuading the Tribes from continuing these conservation efforts. Agua Caliente Band of Cahuilla Indians, Morongo Band of Mission Indians, and BIA emphasized through comment letters provided during the public comment period their belief that designation of critical habitat on tribal lands undermines tribal sovereign governmental authority and interferes with the cooperative government-to-government trust relationship between the tribes and the United States. We have excluded tribal lands from previous critical habitat designations, which has provided the benefit of strengthening our partnerships with tribal interests in the past, and we are committed to working with our tribal partners to further the conservation of *Astragalus lentiginosus* var. *coachellae* and other endangered and threatened species. Therefore, in consideration of the relevant impact to our government-to-government relationship with tribes and our current and future conservation partnerships, we determined the significant benefits of exclusion outweigh the benefits of critical habitat designation.

In summary, we find that the exclusion of Agua Caliente Band of Cahuilla Indians and Morongo Band of Mission Indians reservation lands from this final critical habitat designation will preserve our partnerships with tribes and foster future dialog and cooperative actions as well as development of habitat management plans. These partnership benefits are significant and outweigh the potential regulatory benefits and any small educational benefits of including these portions of Unit 1 and Unit 2 in critical habitat for *Astragalus lentiginosus* var. *coachellae.*

Exclusion Will Not Result in Extinction of the Species—Tribal Lands

We determined that the exclusion of 893 ac (361 ha) of Agua Caliente Band of Cahuilla Indians and Morongo Band of Mission Indians reservation land from the revised designation of *Astragalus lentiginosus* var. *coachellae* critical habitat will not result in extinction of the taxon for the following reasons. First, the jeopardy standard of section 7 of the Act and routine implementation of conservation measures through the section 7 process due to occupancy of *Astragalus lentiginosus* var. *coachellae* will provide protection to the taxon on Agua Caliente Band of Cahuilla Indians and Morongo Band of Mission Indians lands occupied by the taxon where there is a Federal nexus. Also, on the Morongo Band of Mission Indians lands, most of which support fluvial sand transport processes, the Tribe's intention to maintain the areas in their natural state will help ensure the movement of sand into occupied areas will continue unimpeded. Additionally, both Tribes provide protection for the taxon, its habitat, and the processes supporting its habitat via the avenues of conservation discussed above. Therefore, based on the above discussion, the Secretary is exercising his discretion to exclude approximately 893 ac (361 ha) of Agua Caliente Band of Cahuilla Indians and Morongo Band of Mission Indians reservation land from this revised critical habitat designation.

Summary of Comments and Recommendations

We requested comments or information from the public on the proposed revised designation of critical habitat for *Astragalus lentiginosus* var. *coachellae* during two comment periods. 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. The first comment period, associated with the publication of the proposed revised rule (76 FR 53224), opened on August 25, 2011, and closed on October 24, 2011. The Service published a notice announcing the publication of the proposed revised critical habitat designation in The Press-Enterprise on September 2, 2011. We also requested comments on the proposed revised critical habitat designation and associated draft economic analysis during a comment period that opened May 16, 2012, and closed on June 15, 2012 (a notice announcing the availability of the draft economic analysis for the proposed revised critical habitat designation was published in the **Federal Register** on May 16, 2012 (77 FR 28846)). We received one request for a public hearing. The public hearing was conducted on May 31, 2012, in Palm Springs, California. No comments were received during the public hearing.

During the first comment period, we received 17 comment letters directly addressing the proposed revised critical habitat designation. During the second comment period, we received three comment letters addressing the proposed revised critical habitat designation or the draft economic analysis. All substantive information provided during comment periods has either been incorporated directly into this designation or addressed below. Comments received were grouped into five general issues specifically relating to the proposed revised critical habitat designation for *Astragalus lentiginosus* var. *coachellae* and are addressed in the following summary and incorporated into the final rule as appropriate.

Peer Review

In accordance with our peer review policy published on July 1, 1994 (59 FR 34270), we solicited expert opinions from two experts in plant biology and one expert in the geomorphology of the Coachella Valley, all of whom are knowledgeable individuals with scientific expertise that included familiarity with the geographic region in which *Astragalus lentiginosus* var. *coachellae* occurs and the geological processes that sustain its habitat. We received responses from two peer reviewers.

We reviewed all comments received from the two peer reviewers for substantive issues and new information regarding critical habitat for *Astragalus lentiginosus* var. *coachellae.* In general, the peer reviewers supported the methods used to determine the proposed revised critical habitat boundaries, but disagreed with our decision not to propose the hills and mountains where sediment is generated via water erosion, and disagreed with the potential for any exclusions in the final designation. The peer reviewers also provided additional information, clarification, and suggestions to improve the final critical habitat rule. Peer reviewer comments, additional information, clarification, and suggestions are addressed in the following summary and incorporated into the final rule as appropriate.

Peer Reviewer Comments

Comment 1: One peer reviewer expressed strong support for the geo-biological approach we used to identify critical habitat for *Astragalus lentiginosus* var. *coachellae.*

Another peer reviewer expressed support of our use of modeled habitat to identify critical habitat for *Astragalus lentiginosus* var. *coachellae.*

Response to Comment 1: We appreciate the peer reviewers' comments. We believe the methods used to produce the revised critical habitat designation are well-supported and both peer reviewers generally agreed on the validity of our methods.

Comment 2: One peer reviewer pointed out that there may be higher quality GIS data available now than were available at the time the model was generated, and that there might be relevant GIS data available now that did not exist or was not accessible when the model was generated. The peer reviewer stated that the modeled habitat we used for this analysis ''should be presented as a dynamic perspective of habitat which may change in the future''—in other words, that we should clearly state that the data informing the model that serve as part of the basis for this critical habitat designation may change over time.

Response to Comment 2: Any future improvements in the quality of the data available to inform habitat models of the type used in part to identify critical habitat for *Astragalus lentiginosus* var. *coachellae* may be used to create future models to guide future actions for the conservation of the taxon. However, discussions of these potential improvements are beyond the scope of this critical habitat rule.

Comment 3: One peer reviewer expressed concern that we did not propose sand source areas in the hills and mountains surrounding the Coachella Valley, where sediment is generated via water erosion (areas having 10 percent slope or more) on the basis of presumed redundancy of transport channels and eroding uplands (which, according to the reviewer, could be reduced with inappropriate development). The reviewer urged us to make certain that the critical habitat designation includes all possible sand source areas, especially in light of the degree of existing impairment of the sand supply system. Additionally, the reviewer stated that if specific areas of critical habitat are subsequently excluded by the Secretary under section 4(b)(2) of the Act, protection of all possible source areas will become that much more urgent.

Response to Comment 3: The extensive areas in the hills and mountains that are ten percent slope or greater and generate sediment via erosion are important, but including all possible sand source areas in the critical habitat designation is not essential for the conservation of *Astragalus lentiginosus* var. *coachellae.* We have determined that the areas supporting fluvial sand transport processes (i.e., main stream channels in Units 1, 2, and 3; and alluvial deposits containing multiple washes in Unit 4) are essential for the conservation of *A. l.* var. *coachellae* because without these areas, sand would not be moved from the base of hills and mountains into the areas occupied by *A. l.* var. *coachellae,* which would result in serious degradation of *A. l.* var. *coachellae* habitat. We therefore did not propose areas with ten percent slope or greater as critical habitat for the taxon (see *Criteria Used To Identify Critical Habitat* section above for more discussion).

Comment 4: One peer reviewer expressed concern regarding the exclusions we considered in the proposed rule. The peer reviewer urged caution regarding exclusions that might, according to the reviewer, compromise the sand supply system. The peer reviewer also was not convinced that the Coachella Valley MSHCP/NCCP provides adequate levels of funding, implementation, and oversight of management actions required to maintain or improve habitat for *Astragalus lentiginosus* var. *coachellae* (for example, removal of nonnative

plants, modifications to groundwater availability, and mesquite restoration).

Response to Comment 4: Please see the Exclusions section above for our explanation of why we do not expect the exclusions we have made in this critical habitat designation to compromise the sand transport system. In that section, we also discuss implementation of the Coachella Valley MSHCP/NCCP and why we believe the HCP adequately provides for the conservation of *Astragalus lentiginosus* var. *coachellae* and its habitat.

Comment 5: One peer reviewer feels that redundancy is an important aspect of building a robust system for the protection of biological resources, and that the Service should contribute to this redundancy by including areas in this critical habitat designation that are already receiving protection under HCPs. This peer reviewer pointed out the need for redundancy of protections if we are interested in building robust systems of conservation and was concerned that protections afforded *Astragalus lentiginosus* var. *coachellae* through the Coachella Valley fringe-toed lizard HCP could be lost if the fringe-toed lizard is delisted.

Response to Comment 5: We also agree that redundancy of protections can be beneficial. However, the lands acquired under the Coachella Valley fringe-toed lizard HCP have been subsumed into and are managed as part of the Coachella Valley MSHCP/NCCP reserve system, which we believe adequately provides for the protection of *Astragalus lentiginosus* var. *coachellae* and its habitat regardless of the listing status of the Coachella Valley fringe-toed lizard. Part of the incentive for land managers to participate in the HCP process is the prospect of streamlining regulatory oversight of development and conservation planning. Critical habitat designated for a plant does not always add an extra regulatory layer (for example, when there is no Federal nexus triggering section 7 consultation). However, land managers may view designation of critical habitat as adding an extra layer of costly and time-consuming regulatory procedure. This perception may dissuade some land managers in other areas from considering HCPs worth pursuing for other species. Designation of critical habitat for a plant within an operable established HCP could jeopardize future conservation actions by other potential applicants by reducing the perceived value of the HCP process for stakeholders.

Comment 6: One peer reviewer stated that the Service should determine what we would like to propose as critical habitat before soliciting opinions. The reviewer stated that because a large portion of the proposed critical habitat may be excluded, those reviewing the proposal cannot have a concrete idea of how many acres will be included and where these acres exist, which, according to the reviewer, makes it very difficult to judge the merits of the proposal.

This peer reviewer also requested we clarify the fact that all Tribal lands that were proposed as critical habitat for *Astragalus lentiginosus* var. *coachellae* were also considered for exclusion from the designation.

Response to Comment 6: We provided the acreage of areas being considered for exclusion from the critical habitat designation in the proposed critical habitat rule for *Astragalus lentiginosus* var. *coachellae.* We do not know at the time the proposal is published, which, if any, of these areas will be excluded from the final designation because we rely in part on comments received during the comment period following publication of the proposed rule to determine which areas being considered for exclusion in fact warrant exclusion from the designation. We did not indicate lands being considered for exclusion on the maps in the proposed rule.

In the Exclusions section above, we have clarified the fact that all Tribal lands that were proposed as critical habitat for *Astragalus lentiginosus* var. *coachellae* were also considered for exclusion from the designation.

Comment 7: One peer reviewer asserted that much more is known about the pollination and reproductive biology of other desert *Astragalus* taxa at Ash Meadows NWR, and that this information could be of use in Coachella Valley. The reviewer recommended the Pavlik and Barbour (1986) report (Biological Conservation 46 (1988), pp. 217–242) for further information.

This peer reviewer also asserted that we were incorrect when we stated in the proposed critical habitat rule that Mazer and Travers found *Astragalus lentiginosus* var. *piscinensis* to be incapable of autogamy (the reviewer sited Mazer and Travers 1992, p. 91). The reviewer points out that Mazer and Travers (1992) reported *A. l.* var. *piscinensis* to have produced selfed seed at very low levels, which is consistent with the finding of Meinke *et al.* (2007) that *A. l.* var. *coachellae* produces selfed seed at very low levels. The reviewer goes on to state that they observed low levels of selfed seed set in *A. l.* var. *variabilis* in greenhouse studies.

The reviewer also stated that percentages and sample sizes would better summarize data from the pollinator exclusion study of Meinke *et al.* (2007, p. 36), and provided references for our soil seed bank viability discussion including Ziemkiewicz and Cronin (1987) (Journal of Rangeland Management 34(2): pp. 94–97) and Ralphs and Cronin (1987) (Weed Science 35: pp. 792–795).

Response to Comment 7: We appreciate the peer reviewer's suggestions and the information provided. We have incorporated this information into the appropriate sections of this rule.

Comment 8: One peer reviewer noted that much of the work cited in the proposed critical habitat rule is unpublished. This reviewer suggested that perhaps the Service should consider incentivizing publication in a peer-reviewed journal.

Response to Comment 8: We appreciate the peer reviewer's suggestion and will continue to encourage publication of results in peer-reviewed research journals.

Comment 9: One peer reviewer suggested that Table 2 in the proposed rule could be improved by presenting the amount of occupied and modeled lands organized by political categories used in Table 2 of the proposed rule, then listing all of the exclusions, and then presenting what remains as proposed critical habitat. The reviewer stated that it would add greater transparency to know what may be required to ensure for the continued existence of the taxon, and what is actually being protected if this information were in one place.

This peer reviewer suggested the proposed critical habitat rule could also be improved by providing better maps. In these maps, the reviewer feels it would be very valuable to include the considered exclusions and land ownership, particularly Federal lands because of the differences in protection provided to plants by the Act on Federal versus non-Federal lands.

Response to Comment 9: We appreciate the peer reviewer's suggestions. We have organized the land ownership table in this critical habitat final rule as suggested (see Table 1). We will consider adding greater detail to maps included in critical habitat rules, but the printing standards of the **Federal Register** are not compatible with detailed features that would show parcel-level land ownership data. We constructed the critical habitat units using Geographic Information System (GIS). The resulting critical habitat GIS shapefiles are available by request from

the Carlsbad Field Office (see **FOR FURTHER INFORMATION CONTACT**).

Comment 10: One peer reviewer pointed out that application of herbicide may affect the soil seed bank and suggested we conduct a study which explores the effects of various herbicides on the seed bank of *Astragalus lentiginosus* var. *coachellae* prior to implementing any management activities involving herbicide.

Response to Comment 10: We appreciate the peer reviewer's concern and have edited the appropriate section of this final critical habitat rule to address the potential for herbicides to adversely impact the soil seed bank. Potential impacts from herbicides will be considered during implementation of management activities affecting *Astragalus lentiginosus* var. *coachellae.*

Comment From Tribal Interests

Comment 11: The Agua Caliente Band of Cahuilla Indians asserted that the protections afforded by their draft 2010 Tribal Habitat Conservation Plan (draft 2010 Tribal HCP) are equal to those expected to be provided by a critical habitat designation. Agua Caliente Band of Cahuilla Indians listed the goals for conserving *Astragalus lentiginosus* var. *coachellae* as outlined in the draft 2010 Tribal HCP and described the measures put forth in the draft 2010 Tribal HCP aimed at conserving *A. l.* var. *coachellae* habitat. They also included language from the draft 2010 Tribal HCP describing tribal lands on the Coachella Valley floor and the fluvial sand transport process areas and planned mitigation for development impacts in these areas.

The Agua Caliente Band of Cahuilla Indians also described their relationship with the Service by stating, ''The Tribe has, for the past 14 years, been a consistent partner with the Service to develop and implement a series of increasingly detailed and sophisticated Tribal HCPs that provide protection to endangered and sensitive species on the Reservation. It is important to note that the Tribe has always acted in good faith and chose to develop these plans which include strict provisions for conservation.'' According to the Agua Caliente Band of Cahuilla Indians, the Secretary's decision to include or exclude tribal lands from the critical habitat designation should be based on the adequacy and value of the tribal/Federal partnership, not on the formal approval of the draft Tribal Habitat Conservation Plan. They state that this position is supported by the Secretary's exclusion of Agua Caliente Band of Cahuilla Indians lands from the critical habitat designation for Peninsular bighorn sheep.

Further, Agua Caliente Band of Cahuilla Indians state they would have a disincentive to continue enforcing the draft 2010 Tribal HCP with respect to *Astragalus lentiginosus* var. *coachellae* if critical habitat is designated on Agua Caliente Band of Cahuilla Indians lands. And without enforcement of the draft HCP, ''conservation on the Reservation will proceed in an incomplete and piecemeal fashion, using section 7 consultations where there is a Federal nexus, and no fee collection or mitigation on fee land,'' according to the Agua Caliente Band of Cahuilla Indians.

Although they have not finalized the draft 2010 Tribal HCP and secured a permit under section 10(a)(1)(B) of the Act, Agua Caliente Band of Cahuilla Indians state that because they have been enforcing the terms of the draft 2010 Tribal HCP and continue to maintain their relationship with the Service, Agua Caliente Band of Cahuilla Indians lands should be excluded from the critical habitat designation for *A. l.* var. *coachellae.*

Additionally, Agua Caliente Band of Cahuilla Indians expressed support for exclusion of tribal lands from the designation under section 4(b)(2) of the Act, because such an exclusion would be in keeping with Secretarial Order 3206 (June 5, 1997) entitled, ''American Indian Tribal Rights, Federal-Tribal Trust responsibilities, and the Endangered Species Act'' (discussed in the Exclusions Under Section 4(b)(2) of the Act—Tribal Lands section above).

In summary, Agua Caliente Band of Cahuilla Indians supports exclusion of tribal lands from this critical habitat designation and reliance on the draft 2010 Tribal HCP to avoid ''additional, unnecessary regulatory burden'' they feel would result from designation of critical habitat on their lands.

Response to Comment 11: We understand that the Agua Caliente Band of Cahuilla Indians considers the draft Tribal HCP to be a Tribal-approved, final document and implements it as such for land-use planning on all Reservation lands. We have taken their dedication to implementing their draft Tribal HCP and resulting conservation efforts for *Astragalus lentiginosus* var. *coachellae* and its habitat as well as other taxa and biological resources, their continuing partnership with the Service, and issues of tribal self-governance and government-to-government relations into consideration when comparing the benefits of including Agua Caliente Band of Cahuilla Indians lands to the benefits of excluding those lands. Based on the results of this evaluation, the Secretary is exercising his discretion to exclude all Agua Caliente Band of Cahuilla Indians lands from this final revised critical habitat designation (see Exclusions Under Section 4(b)(2) of the Act—Tribal Lands section above).

Comment 12: The Morongo Band of Mission Indians requested that their lands be excluded from the critical habitat designation for *Astragalus lentiginosus* var. *coachellae.* In support of this request, the Morongo Band of Mission Indians provided descriptions of land designations and management policies and practices they assert will preserve and limit impacts to biological resources including fluvial sand transport processes on Morongo Band of Mission Indians lands. They also described nonnative plant removal projects and a tribal ordinance aimed at controlling OHV use on Morongo Band of Mission Indians lands. They argued that although they have not completed a management plan that specifically provides for conservation of *A. l.* var. *coachellae,* the policies and practices they have implemented contribute to the conservation and continuance of fluvial sand transport and thus eliminate the need for designation of proposed Morongo Band of Mission Indians lands.

The Morongo Band of Mission Indians also provided a discussion of tribal self-governance and the protocols of a government-to-government relationship under Secretarial Order 3206, stating that ''* * * Congressional and Administrative policies should continue to promote tribal self-government, self-sufficiency, and self-determination, recognizing and endorsing the fundamental rights of Morongo to set our own priorities and make decisions affecting our resources and distinctive ways of life. Morongo Band of Mission Indians has the ability and resources to manage [Morongo Band of Mission Indians lands proposed as critical habitat for *Astragalus lentiginosus* var. *coachellae*] and implement reasonable and prudent alternatives to avoid destruction or adverse modifications to fluvial sand transport in [these areas].''

Response to Comment 12: We have taken the Morongo Band of Mission Indians' contributions to the conservation of biological resources on their lands, their continuing partnership with the Service, as well as issues of tribal self-governance and government-to-government relations into consideration when comparing the benefits of including Tribal lands to the benefits of excluding those lands. Based on the results of this evaluation, the Secretary is exercising his discretion to exclude all Morongo Band of Mission

Indians lands from this final revised critical habitat designation (see Exclusions Under Section 4(b)(2) of the Act—Tribal Lands section above).

Comment 13: The U.S. Bureau of Indian Affairs (BIA) expressed their support of comments submitted by Agua Caliente Band of Cahuilla Indians and Morongo Band of Mission Indians regarding the proposed critical habitat for *Astragalus lentiginosus* var. *coachellae* and requested that Agua Caliente Band of Cahuilla Indians and Morongo Band of Mission Indians lands be excluded from the final critical habitat designation for the taxon. The BIA considers designation of critical habitat on Indian lands as an infringement upon and taking of Indian assets by a fellow trustee (the Service). They outlined a number of Federal policies and congressional actions relevant to Indian tribes regarding the Endangered Species Act, which they feel support their request that Agua Caliente Band of Cahuilla Indians and Morongo Band of Mission Indians lands be excluded.

The BIA also asserted that Agua Caliente Band of Cahuilla Indians and Morongo Band of Mission Indians lands should be excluded because designating critical habitat on these lands would jeopardize partnerships between the Service and both tribes. According to the BIA, excluding Agua Caliente Band of Cahuilla Indians and Morongo Band of Mission Indians lands from the critical habitat designation would allow voluntary partnerships to continue, which they feel would have a long-term benefit for *Astragalus lentiginosus* var. *coachellae.*

Response to Comment 13: We evaluated the benefits of exclusion of all reservation lands from this final revised critical habitat designation. Maintaining and fostering partnerships and good working relationships with tribes are benefits of exclusion and are supported by Secretarial Order 3206. Consistent with Secretarial Order 3206 and Executive Order 13175, we also believe tribal lands are better managed under tribal authorities, policies, and programs than through Federal regulation wherever possible and practicable. We found the benefits of excluding Morongo Band of Mission Indians lands and Agua Caliente Band of Cahuilla Indians lands to be greater than the benefits of including these lands in the critical habitat designation (see Exclusions Under Section 4(b)(2) of the Act—Tribal Lands section above for a detailed discussion). Therefore, the Secretary is exercising his discretion to exclude Agua Caliente Band of Cahuilla Indians and Morongo Band of Mission Indians reservation lands from this final revised critical habitat designation.

We recognize and value our relationships with both tribes and will continue to work cooperatively with them to conserve federally listed species on their lands.

Comment 14: The BIA asserted that it is justified and appropriate to automatically remove lands from a critical habitat designation that are subsequently brought into Trust by a tribe upon incorporation into the Tribal management plan.

Response to Comment 14: The revision of a designation of critical habitat either by the inclusion or exclusion of any specific area is required to be accomplished through a rulemaking process by which the revisions are proposed for public review and comment, and then a final rule is issued following consideration of all comments and best available scientific information. Revisions to critical habitat cannot be automatic.

Comments From HCP Administrators and Permittees

Comment 15: One commenter stated opposition to the Service's proposed critical habitat designation for *Astragalus lentiginosus* var. *coachellae* on approximately 158 ac (64 ha) within Western Riverside County MSHCP boundaries. The commenter provided reasoning in support of their opposition.

Response to Comment 15: The 158 ac (64 ha) to which the commenter refers is not covered under the Western Riverside County MSHCP. The Service was in error when we stated in the proposed critical habitat rule that this area was covered under the Western Riverside County MSHCP; this area is actually Morongo Band of Mission Indians land. We corrected this error in the **Federal Register** notice announcing the availability of the draft Economic Analysis for the proposed revised critical habitat designation published on May 16, 2012 (77 FR 28849), and we explain the error in the Summary of Changes from Proposed Rule section above. No lands covered under the Western Riverside County MSHCP have been proposed or designated as critical habitat for *Astragalus lentiginosus* var. *coachellae.* The commenter's issue is therefore moot.

Comment 16: One commenter provided a description of the Coachella Valley MSHCP/NCCP and explained how the Coachella Valley MSHCP/NCCP is expected to add approximately 175,000 ac to an existing 550,000 ac of public and private conserved land to create a reserve system of 725,000 ac, and they explained how the MSHCP funds ongoing management and biological monitoring and establishes an endowment to continue management and monitoring in perpetuity. The commenter stated that the MSHCP has been and continues to be successful in conserving land to protect *Astragalus lentiginosus* var. *coachellae* and other species and summarized the number of acres conserved within the sand transport system by MSHCP partners since 1996 and by the Coachella Valley Conservation Commission since the MSHCP was permitted. According to the commenter, areas within the sand transport system are considered a conservation priority for the Coachella Valley Conservation Commission, which administers the local implementation of the Coachella Valley MSHCP/NCCP.

The commenter asserted that any designation of critical habitat on land under the jurisdiction of Coachella Valley MSHCP/NCCP permittees is unnecessary and counterproductive to the goal of implementing a comprehensive, landscape-level approach to conservation in the region. The commenter stated that critical habitat designations represent a species-by-species and project-by-project implementation of the Act that fails to provide the landscape-level conservation, with attendant management and monitoring, that is necessary to preserve sensitive species and the natural systems upon which they depend.

The commenter asserted that the Coachella Valley MSHCP/NCCP stakeholders have demonstrated the depth of their commitment to the success of the MSHCP and stated that the addition of another layer of regulation through this critical habitat designation after the stakeholders have demonstrated their dedication to the MSHCP would damage the Service's partnership with MSHCP stakeholders and create a disincentive for participation in the MSHCP.

This commenter's recommendation that lands covered under the Coachella Valley MSHCP/NCCP be excluded from the critical habitat designation for *Astragalus lentiginosus* var. *coachellae* was supported by a second commenter. The second commenter also stated that excluding these lands would not compromise the policies and programs aimed at protecting and restoring the taxon, and that there is no advantage either for the agencies, landowners, and citizens committed to the environmental health of the Coachella Valley or for *A. l.* var. *coachellae* in including these areas in the critical habitat designation.

Additionally, the second commenter stated that, as a Coachella Valley MSHCP/NCCP permittee, the Riverside County Flood Control and Water Conservation District is subject to applicable MSHCP provisions including the requirement to contribute mitigation to assist in achieving the regional conservation objectives identified in the MSHCP, which includes a number of specific regional objectives to ensure long-term conservation of *Astragalus lentiginosus* var. *coachellae.* The commenter went on to state that Riverside County Flood Control and Water Conservation District projects within the proposed revised critical habitat areas are subject to a Joint Project Review process required for projects that are located within Conservation Areas, and that these projects are also subject to review by the Service as described in the MSHCP. Compliance with the MSHCP by the Riverside County Flood Control and Water Conservation District and other Coachella Valley MSHCP/NCCP permittees ensures that the species will be conserved on a regional basis as intended when the Service authorized the final MSHCP, according to the commenter.

Two more commenters also supported the recommendation that lands covered by the Coachella Valley MSHCP/NCCP should be excluded from the critical habitat designation for *Astragalus lentiginosus* var. *coachellae.*

Both the third and fourth commenters expressed concern with the proposed designation of critical habitat on lands covered under the Coachella Valley MSHCP/NCCP, particularly those lands owned and managed by the Riverside County Flood Control and Water Conservation District and the Coachella Valley Water District. The third commenter's issues included their belief that designating critical habitat on lands covered under the Coachella Valley MSHCP/NCCP will—

- Provide negligible, if any, benefits to *Astragalus lentiginosus* var. *coachellae;*
- Negate any benefits to the MSHCP permittees from their efforts to provide regional conservation for *A. l.* var. *coachellae* and invest in establishing a regional habitat-based long-term conservation program; and
- Run counter to statements made in the Implementing Agreement for the Coachella Valley MSHCP/NCCP (commenter cited Section 14.11 of the Coachella Valley MSHCP/NCCP Implementing Agreement and Section 6.8 of the Coachella Valley MSHCP/NCCP).

The fourth commenter stated that the Coachella Valley Water District, another permittee of the Coachella Valley MSHCP/NCCP, has provided a commitment to the success of the MSHCP, including establishing constructed habitat, restoring and enhancing existing habitat, conserving 7,000 ac of Coachella Valley Water District lands (including over 1,800 ac of its land within the Whitewater River floodplain that provides habitat for *Astragalus lentiginosus* var. *coachellae*) and a $3.58 million contribution to an endowment fund for monitoring and adaptive management. This commenter also briefly described the permittees' responsibilities under the Coachella Valley MSHCP/NCCP, stating that the approach to conservation that the permittees have committed to under the MSHCP has been vetted and approved by the Service and California Department of Fish and Game. The commenter asserted that Coachella Valley Water District's commitment to the success of the Coachella Valley MSHCP/NCCP is also demonstrated by their active participation in the development and implementation of the MSHCP and their ongoing cooperation with partners and wildlife agencies.

The fourth commenter expressed concern that the proposed critical habitat designation puts in question the Service's commitment to the Coachella Valley MSHCP/NCCP objectives and implementation, and that designating critical habitat on lands covered under the Coachella Valley MSHCP/NCCP will jeopardize the ultimate success of the MSHCP.

Designating critical habitat on lands covered by the Coachella Valley MSHCP/NCCP would create duplicative and redundant regulatory efforts, according to both the third and fourth commenters (this issue is discussed further in *Response to Comment 18* below). For this reason and those outlined above, the third commenter requested that lands within the Coachella Valley MSHCP/NCCP boundaries be excluded from the final critical habitat designation for *Astragalus lentiginosus* var. *coachellae,* and the fourth commenter requested that the Service terminate efforts to adopt a revised critical habitat designation for *A. l.* var. *coachellae.*

The third and fourth commenters also asserted that designating critical habitat on lands covered by the Coachella Valley MSHCP/NCCP would create a duplicative and redundant regulatory burden, which they suggest could delay efficient and timely operation and maintenance of water and flood control infrastructure on lands covered by the Coachella Valley MSHCP/NCCP.

The third commenter stated that these potential delays could jeopardize public health and safety. This commenter stated that the inclusion of existing flood control facilities within the final critical habitat area would trigger the section 7 consultation process for any Riverside County Flood Control and Water Conservation District maintenance, repair, replacement, and rehabilitation activities. The commenter expressed concern that this may prevent or delay maintenance of these flood control facilities and thereby pose a potential threat to public health and safety. Therefore, the commenter stated that the existing Cabazon Channel, Chino Canyon Levee, Whitewater River Levee, Mission Creek Channel, and Desert Hot Springs Channel Line E facilities should be excluded from the final revised critical habitat designation for *Astragalus lentiginosus* var. *coachellae.*

The fourth commenter asserted that this critical habitat designation is unwarranted, redundant, and counterproductive considering the success they assert has already been achieved conserving critical habitat for *Astragalus lentiginosus* var. *coachellae* through the Coachella Valley MSHCP/NCCP.

Response to Comment 16: We have considered the aforementioned commenters' concerns. In exercising his discretion to exclude areas from critical habitat under section 4(b)(2) of the Act, the Secretary weighed the benefits of exclusion against the benefits of inclusion. We did not exclude areas based on the existence of management plans or other conservation measures; however, we acknowledge that the existence of a plan may reduce the benefits of inclusion of an area in critical habitat to the extent the protections provided under the plan are largely redundant with conservation benefits of the critical habitat designation. Thus, in some cases, the benefits of exclusion in the form of sustaining and encouraging partnerships that result in on-the-ground conservation of listed species may outweigh the benefits of inclusion. Based on the discussion in the Exclusions Under Section 4(b)(2) of the Act—Coachella Valley MSHCP/NCCP section above, the Secretary is exercising his discretion to exclude all lands covered by the Coachella Valley MSHCP/NCCP from this final revised critical habitat designation.

Comment 17: One commenter asserted that because the City of Desert Hot Springs is currently requiring all

projects within Coachella Valley MSHCP/NCCP Conservation Areas to undergo the Joint Project Review process, and is actively working to formally bring their entire city into the MSHCP through a Major Amendment, excluding all land under the jurisdiction of the City of Desert Hot Springs from the critical habitat designation for *Astragalus lentiginosus* var. *coachellae* is warranted.

Response to Comment 17: The City of Desert Hot Springs did not submit comments on the proposed critical habitat designation during either public comment period and did not request exclusion from this designation. We are proceeding with this designation based on the current conditions and participants of the Coachella Valley MSHCP/NCCP in awareness and consideration of changes in participation of Desert Hot Springs.

Comment 18: One commenter asserted that many necessary public infrastructure projects, including flood control and the regional transportation network, must involve Federal land to some degree, and virtually all of the Federal land in the area in question is administered by BLM, whose 2002 BLM California Desert Conservation Area Plan Amendment for the Coachella Valley already requires BLM actions to be consistent with the Coachella Valley MSHCP/NCCP. According to the commenter, including Federal land in the critical habitat designation is redundant and counterproductive to the conservation partnership that currently exists between BLM, State and Federal wildlife agencies, and local jurisdictions. The commenter asserted that Federal lands must, therefore, be excluded from the critical habitat designation.

This commenter's recommendation that Federal lands be excluded from the critical habitat designation for *Astragalus lentiginosus* var. *coachellae* was supported by two other commenters. The second commenter also asserted that excluding these lands would not compromise the policies and programs aimed at protecting and restoring the taxon, and that there is no advantage either for the agencies, landowners, and citizens committed to the environmental health of the Coachella Valley or for *A. l.* var. *coachellae* in including these areas in the critical habitat designation. The third commenter stated that designation of critical habitat on Federal land within the Coachella Valley MSHCP/NCCP plan area would create an additional layer of regulation impacting efficient and timely operation and maintenance of critical water and flood control infrastructure on Coachella Valley Water District lands within the plan area.

Response to Comment 18: We acknowledge that the BLM participates in the management of certain Conservation Areas or portions of Conservation Areas within the reserve system of the Coachella Valley MSHCP/NCCP and provides conservation of biological resources in accordance with the California Desert Conservation Area Plan Amendment for the Coachella Valley. We appreciate and commend the efforts of the BLM to work with the Coachella Valley MSHCP/NCCP permittees and to conserve federally listed species on their lands.

The Secretary has the discretion to exclude an area from critical habitat under section 4(b)(2) of the Act after taking into consideration the economic impact, the impact on national security, and any other relevant impact if he determines that the benefits of such exclusion outweigh the benefits of designating such area as critical habitat, unless he determines that the exclusion would result in the extinction of the species concerned. Based on the record before us, the Secretary is not exercising his discretion to exclude the BLM lands, and we are designating these lands as critical habitat for *Astragalus lentiginosus* var. *coachellae.*

Comment 19: One commenter stated that Unit 3 of the proposed critical habitat contains the existing Mission Creek Channel and Unit 2 contains the existing Chino Canyon and Whitewater River Levees. According to the commenter, the channel and levees are existing manmade features and structures that do not contain the primary constituent element essential to the conservation of *Astragalus lentiginosus* var. *coachellae.*

Response to Comment 19: The Secretary is exercising his discretion to exclude lands covered under the Coachella Valley MSHCP/NCCP from this critical habitat designation under section 4(b)(2) of the Act. Because Riverside County Flood Control and Water Conservation District is a permittee of the Coachella Valley MSHCP/NCCP, Mission Creek Channel and Chino Canyon and Whitewater River Levees have been excluded from this designation.

Comments Regarding Wind Energy

Comment 20: One commenter stated that although Unit 2 of the proposed critical habitat is characterized as unoccupied in the proposed rule, it contains significant wind energy installations and potential solar energy installations.

Response to Comment 20: Throughout the proposed and final revised critical habitat rules, we use the term ''unoccupied'' to refer to areas that, to our knowledge, are not occupied by the target taxon, in this case *Astragalus lentiginosus* var. *coachellae.* We do not intend the term ''unoccupied'' to imply that an area is not occupied by manmade structures. It seems the commenter was referring to the entirety of Unit 2 as being characterized as unoccupied, which is incorrect; only the fluvial sand transport areas (the Whitewater River channel) of Unit 2 are characterized as unoccupied. To our knowledge, there are no wind energy installations in the unoccupied fluvial sand transport areas of Unit 2.

Comment 21: Five commenters expressed concern that designating critical habitat on lands occupied by wind energy projects would conflict with Federal and California State policies aimed at promoting alternative energy by potentially introducing unknown regulatory burdens and restrictions on the operation of wind energy facilities.

Of these five commenters, four also stated that suitable *Astragalus lentiginosus* var. *coachellae* habitat is found in abundance on wind energy sites along with the aeolian and fluvial sand transport that occurs in these areas. All four commenters explained that wind- and water-borne sands are able to flow freely in between wind turbines, creating suitable habitat for the taxon. Two of these commenters go on to assert that approximately 90 percent of the area occupied by wind power facilities is suitable for *A. l.* var. *coachellae* and sand transport. One commenter also asserted that wind energy is a long-term land use that does not disturb soils or destroy individual plants in the course of daily or yearly operations.

These four commenters also describe how measures in place to protect wind power facilities from vandalism also provide protection for *Astragalus lentiginosus* var. *coachellae* (for example, ''Our wind project is completely fenced off and patrolled against trespassing and illegal dumping. This eliminates off-road vehicles, trash dumping and illegal landscape disposal from this habitat area.'').

For the above reasons, these five commenters asserted that lands containing wind energy facilities should be excluded from the final critical habitat designation for *Astragalus lentiginosus* var. *coachellae.* Four of these commenters go on to recommend the specific areas that should be excluded: The disturbance footprint of

existing roads, wind turbines, foundations, transformers, pole lines, underground and overhead lines, meteorological towers, communication facilities, fences and gates, storage yards, and electrical substations and interconnects.

Response to Comment 21: The Service appreciates any protections that may be provided the taxon and its habitat on wind energy facilities.

The area the commenters referred to in their comment, bounded by Interstate 10 to the west and Indian Canyon Road to the east, has multiple landowners. Some of these landowners are permittees of the Coachella Valley MSHCP/NCCP, others, such as the BLM (a Federal agency), are not. The Secretary has the discretion to exclude an area from critical habitat under section 4(b)(2) of the Act after taking into consideration the economic impact, the impact on national security, and any other relevant impact if he determines that the benefits of such exclusion outweigh the benefits of designating such area as critical habitat, unless he determines that the exclusion would result in the extinction of the species concerned. In exercising his discretion to exclude areas from critical habitat under section 4(b)(2) of the Act, the Secretary weighed the benefits of exclusion against the benefits of inclusion, and is exercising his discretion to exclude all lands covered under the Coachella Valley MSHCP/NCCP from this final revised critical habitat designation (see *Response to Comment 16* and Exclusions Under Section 4(b)(2) of the Act—Coachella Valley MSHCP/NCCP section above for more detailed discussion). Any lands covered under the Coachella Valley MSHCP/NCCP containing wind power facilities are, therefore, excluded from this critical habitat designation.

Based on the record before us, the Secretary is not exercising his discretion to exclude lands in the area in question that are not covered by the Coachella Valley MSHCP/NCCP, such as BLM lands, and we are designating these lands as critical habitat for *Astragalus lentiginosus* var. *coachellae.*

However, when determining critical habitat boundaries within this final rule, despite our efforts to avoid including developed areas such as lands covered by buildings, pavement, and other structures because such lands lack the physical or biological features for *Astragalus lentiginosus* var. *coachellae,* 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. 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 may affect the adjacent critical habitat. So although some of the lands containing wind energy facilities have been designated as critical habitat for *A. l.* var. *coachellae* (those lands not covered under the Coachella Valley MSHCP/NCCP), those areas that are covered by pavement or structures are not included in the designation and are excluded by text.

Because the areas in question are occupied by *Astragalus lentiginosus* var. *coachellae,* and any project in these areas with a Federal nexus would require consultation with the Service under section 7 of the Act to address potential impacts to the taxon, the economic analysis for the critical habitat designation did not predict project modification costs to wind energy interests due to the designation of critical habitat, only administrative costs of adding adverse modification analyses to these future section 7 consultations.

Comments From Other Interested Parties

Comment 22: One commenter expressed strong support for our designation of critical habitat for *Astragalus lentiginosus* var. *coachellae,* in particular because of the documented population declines of *A. l.* var. *coachellae* (some up to 77 percent according to the commenter) and the general lack of successful recruitment (the commenter cited USFWS 2009).

This commenter went on to observe that the proposed critical habitat appears to include most of the extant locations for *Astragalus lentiginosus* var. *coachellae* and appears to include the sand transport corridors, sand formations, and alluvial areas that remain viable in the Coachella Valley area, and that these areas are essential to maintaining the unique habitat upon which *A. l.* var. *coachellae* depends.

Response to Comment 22: We appreciate the commenter's support of our proposed designation.

Comment 23: One commenter stated that none of the areas proposed for critical habitat should be considered for exclusion from the final designation. This commenter also strongly recommended we utilize the Service's ''policy for evaluation of conservation efforts when making listing decisions'' (PECE) (68 FR 15100) when considering exclusions from the final critical habitat designation. Although the policy was developed in the context of listing rather than designation of critical habitat, the commenter asserted that the criteria apply equally well to determining the benefits of any conservation plan in the context of considering exclusions.

Response to Comment 23: Section 4(b)(2) of the Act requires the Secretary to designate critical habitat after taking into consideration the economic impacts, national security impacts, and any other relevant impacts of specifying any particular area as critical habitat. An area may be excluded from critical habitat if it is determined that the benefits of exclusion outweigh the benefits of designating a particular area as critical habitat, unless the failure to designate will result in the extinction of the species. The exclusions in this final rule are supported under section 4(b)(2) of the Act. After analyzing the benefits of inclusion and exclusion of proposed critical habitat on lands covered by the Coachella Valley MSHCP/NCCP and on Agua Caliente Band of Cahuilla Indians and Morongo Band of Mission Indians reservation lands, we determined that the benefits of exclusion outweigh the benefits of inclusion for all of these areas (see Exclusions Under Section 4(b)(2) of the Act—Coachella Valley MSHCP/NCCP and Exclusions Under Section 4(b)(2) of the Act—Tribal Lands sections above). Service biologists continue to work with the permittees of the Coachella Valley MSHCP/NCCP, the Morongo Band of Mission Indians, and the Agua Caliente Band of Cahuilla Indians to ensure the conservation of *Astragalus lentiginosus* var. *coachellae* and its habitat.

The PECE Policy outlines specific criteria by which conservation or management actions and programs are evaluated for use in making listing determinations under the Act. However, the PECE Policy explicitly states that the Policy is not to be used for evaluating conservation or management actions for critical habitat designations. More appropriately, with regard to critical habitat, these actions and programs should be considered under section 4(b)(2) of the Act, and, if the Secretary wants to exercise his discretion to exclude an area from a critical habitat designation, evaluated through the balancing analysis under section 4(b)(2) of the Act to determine if the benefits of excluding the specific areas covered by them from critical habitat outweigh the benefits of including them in the designation.

Comment 24: One commenter urged us to determine whether the various

conservation and management plans in the Coachella Valley manage for recovery of *Astragalus lentiginosus* var. *coachellae.* The commenter expressed concern that many habitat conservation plans allow what the commenter sees as substantial destruction of habitat such that even with mitigation, they result in a net loss of habitat and thus do not ensure recovery of covered species.

The commenter goes on to state that:

''In invalidating a 1986 regulation that collapsed the definition of adverse modification with jeopardy, the Ninth Circuit concluded that the regulation 'finds that adverse modification to critical habitat can only occur when there is so much critical habitat lost that a species' very survival is threatened,' which would 'drastically narrow the scope of protection commanded by Congress under the ESA.' (*Gifford Pinchot Task Force* v. *United States Fish and Wildlife Service,* 378 F.3d 1059 (9th Cir. 2004). This and other court decisions demonstrate that critical habitat must receive a greater degree of protection than is typically provided by HCPs or other management plans. Given this disparity, we ask that when determining whether to exclude essential habitat based on an HCP, FWS makes a determination as to whether the HCP will ensure recovery of the species, which for [*Astragalus lentiginosus* var. *coachellae**], which is limited by habitat, would mean increasing the amount of habitat over time.''

*(The commenter refers to 'flycatcher' here; we presume the commenter intended to refer to *Astragalus lentiginosus* var. *coachellae.*)

Response to Comment 24: We appreciate the commenter's concerns regarding the long-term recovery of *Astragalus lentiginosus* var. *coachellae.* However, the Secretary is vested with broad discretion under section 4(b)(2) in evaluating whether the benefits of excluding an area from critical habitat designation outweigh the benefits of designating the area, so long as exclusion of an area will not result in extinction of a species. We consider a number of factors in a section 4(b)(2) analysis, including (but not limited to) the protections afforded for a species and its essential habitat under an HCP, whether there are conservation partnerships that would be encouraged by designation of, or exclusion from, critical habitat, particularly partnerships that include voluntary protections for listed plant species in an HCP or other management plan, and the economic, regulatory, and educational impacts of including a particular area as critical habitat. Please see the Exclusions section for further discussion.

We found the benefits of excluding lands that are covered under the Coachella Valley MSHCP/NCCP to be greater than the benefits of including these lands. Please see the Exclusions under Section 4(b)(2) of the Act—Coachella Valley MSHCP/NCCP section above for a detailed discussion. The Service views the partnerships we share with permittees of the HCP and local landowners and managers as having greater potential to provide for the recovery of the taxon than designation of critical habitat in areas covered under the HCP, which could damage these partnerships and thus reduce potential for recovery.

Comment 25: One commenter requested that we provide evidence that designating critical habitat in addition to any HCPs or other management plans would do any harm. The commenter asserts that real evidence of harm from critical habitat designation, such as a landowner abandoning a plan or even threatening to take such action, is lacking, and that the Service does not have or require such data to support this conclusion.

Response to Comment 25: We have received comment letters from some of the Coachella Valley MSHCP/NCCP permittees, the Coachella Valley Conservation Commission, the Agua Caliente Band of Cahuilla Indians, the Morongo Band of Mission Indians, and the Bureau of Indian Affairs in response to the proposed rule to designate critical habitat for *Astragalus lentiginosus* var. *coachellae,* all stating that the partnerships that we share with these entities will be damaged by designation of critical habitat on tribal lands or lands covered under the Coachella Valley MSHCP/NCCP. We consistently receive similar comments from HCP stakeholders and other partners in response to rules proposing critical habitat designation on lands covered by HCPs and other areas where conservation of biological resources is carried out in conjunction with the Service via partnerships. We believe these communications are sufficient evidence of the potential to damage partnerships and diminish conservation efforts of partners by adding a real or perceived regulatory burden of critical habitat designation.

Comment 26: One commenter is concerned that we did not include all of the extant locations where *Astragalus lentiginosus* var. *coachellae* is documented to occur and a robust identification of the sand sources required to sustain the taxon's habitat over time. The commenter requested that we consider all of the areas identified in the five-year review for *A. l.* var. *coachellae* to support the taxon or provide a justification for why they were not included.

In particular, the commenter asked that we consider adding areas where numerous plants have been documented to occur between Units 2, 3, and 4 between Rancho Mirage and Thousand Palms and in Indian Wells near Highway 111, and elsewhere.

Response to Comment 26: The commenter did not define ''robust identification.'' We do indicate what areas surrounding the Coachella Valley contribute sand required to sustain *Astragalus lentiginosus* var. *coachellae* habitat in both the proposed revised critical habitat rule and this final revised rule, and we believe that more detailed discussion of these areas is outside of the scope of these rules. In both the proposed and final revised rules, we have outlined our methods and reasoning for not proposing all areas occupied by the taxon (see *Criteria Used To Identify Critical Habitat* section above).

Comment 27: One commenter asked that we consider all sand source areas identified in the 2004 critical habitat proposal as part of this critical habitat designation or provide a justification for why they are not included.

Response to Comment 27: We provided an explanation of the methods and reasoning behind our decision not to propose the hills and mountains where sediment is generated via water erosion (fluvial sand source areas) in Units 1, 2, and 3 as critical habitat for *Astragalus lentiginosus* var. *coachellae* in the *Criteria Used To Identify Critical Habitat* section above, as well as in our response to peer reviewer comment number 3.

Comment 28: One commenter expressed concern that, while the Agua Caliente Band of Cahuilla Indians are continuing to implement the draft HCP, there is no information on the adequacy of the draft HCP or the permanence of the Tribe's commitment to maintain its provisions.

The commenter also stated that because the Morongo Band of Mission Indians has not completed a management plan, there are no assured protections or management actions in place, and the partnerships' effectiveness is questionable.

The commenter goes on to assert that exclusion of these Tribal lands from this critical habitat designation would set a precedent that is unfair to Tribes that actually have plans in place that are either HCPs or functional equivalents, and incentivize inaction rather than encouraging Tribes to actually work with the Service on tangible conservation benefits. Balancing in favor of exclusion of Tribal lands from critical habitat designations appears to the commenter to be politically

motivated rather than based on on-the-ground facts.

Response to Comment 28: In accordance with the Secretarial Order 3206, ''American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act'' (June 5, 1997); the President's memorandum of April 29, 1994, ''Government-to-Government Relations with Native American Tribal Governments'' (59 FR 22951); Executive Order 13175; and the relevant provision of the Departmental Manual of the Department of the Interior (512 DM 2), we believe that fish, wildlife, and other natural resources on tribal lands are better managed under tribal authorities, policies, and programs than through Federal regulation wherever possible and practicable. Based on this philosophy, we believe that, in most cases, designation of tribal reservation lands as critical habitat provides very little additional benefit to threatened and endangered species. Conversely, such designation is often viewed by tribes as unwarranted and an unwanted intrusion into tribal self-governance, thus compromising the government-to-government relationship essential to achieving our mutual goal of managing for healthy ecosystems upon which the viability of threatened and endangered species populations depend.

The exclusion of Agua Caliente Band of Cahuilla Indians and Morongo Band of Mission Indians reservation lands is likewise based on the importance of the government-to-government relationship with these Tribes, our conservation partnership with the Tribes, and their current management of tribal lands, as described in Martin (2011, pp. 1–2), Park (2011, pp. 1–11) and ACBCI (2010b).

Please see the Exclusions Under Section 4(b)(2) of the Act—Tribal Lands section of this final rule for additional discussion.

Comment 29: One commenter expressed concern that we have not considered whether nonparticipating agencies or special districts have the potential to interfere with the Coachella Valley MSHCP/NCCP permittees' ability to achieve the HCP's conservation goals and objectives, and that we have not provided an analysis of potential threats from noncovered activities to achieving the conservation goals of the Coachella Valley MSHCP/NCCP. The commenter feels that a legitimate balancing test must take these factors into account.

Response to Comment 29: Lands that are not under the jurisdiction of the permittees of the Coachella Valley MSHCP/NCCP have not been excluded from this critical habitat designation and are, therefore, subject to the provisions of section 7 of the Act. We have not analyzed the potential for interference of nonpermittee entities with the implementation of the Coachella Valley MSHCP/NCCP because we believe such issues, if they arise, can be anticipated and managed by communicating and working with our partners in the Coachella Valley area.

Comment 30: One commenter stated that permittees of the Coachella Valley MSHCP/NCCP should be relieved of critical habitat obligations as long as the plan is properly functioning, but that nonpermittees within the plan area should obtain no such benefits. The commenter asserted that giving nonparticipants a ''free ride'' is an incentive not to participate in large-scale HCP/NCCPs.

Response to Comment 30: To our knowledge, we have not excluded any nontribal lands not explicitly covered by the Coachella Valley MSHCP/NCCP from this critical habitat designation.

Comments Regarding the Economic Analysis

Comment 31: One peer reviewer asserted that the economic impact assessment under section 4(b)(2) of the Act must take into account the large decline in land values that has occurred since 2005, especially in desert regions of California.

Response to Comment 31: Presumably, the peer reviewer anticipated that the DEA would estimate the costs of the designation in terms of lost development opportunities, measured in terms of reduced land values. In fact, the analysis takes a slightly different approach. As described in Section 4.2 of the FEA, incremental project modifications resulting from the designation are unlikely in most areas, with the exception of unoccupied portions of Unit 3 in the City of Desert Hot Springs. Because the City does not yet have an approved HCP, we assume that, if development occurs in this area and a Federal nexus exists, project modification costs would be attributable to the designation. As a proxy for the cost of such project modifications, we use the per-housing-unit mitigation fee currently required under the Coachella Valley MSHCP/NCCP. This value, as of 2012, is $1,254 per unit in low-density residential developments and $5,600 per acre of commercial and industrial development. The MSHCP/NCCP mitigation fees, obtained directly from the Coachella Valley Association of Governments, represent the best available information regarding the unit cost of efforts to protect the plant.

Comment 32: One commenter stated that in the event that the Riverside County Flood Control and Water Conservation District flood control systems are not excluded from the critical habitat designation from *Astragalus lentiginosus* var. *coachellae,* the Service's economic analysis of the revised critical habitat designation for *A. l.* var. *coachellae* will need to evaluate the potential direct and indirect adverse impacts to the existing Cabazon Channel, Chino Canyon Levee, Whitewater River Levee, Mission Creek Channel, and Desert Hot Springs Channel Line E facilities and surrounding areas that include but are not limited to: (1) Increased costs associated with species surveys and section 7 consultation process; (2) increased risk that the flood control systems may fail to provide the full measure of protection to the public as a result of lengthy section 7 consultation process and implementation of any mitigation requirements (e.g., avoidance, minimization, onsite/offsite compensatory, etc.) imposed through that process; (3) increased costs (e.g., increased flood insurance rates, etc.) imposed on the local community through the National Flood Insurance Program as a result of not meeting FEMA requirements; (4) potential damages to the communities that may result if critical maintenance activities are delayed; (5) additional costs associated with duplicate mitigation requirements; (6) potential conflicts between mitigation requirements and the associated existing flood control facilities; (7) the costs associated with amending the Coachella Valley MSHCP/NCCP; and (8) the consequential costs if the final rule negates the successful implementation of the Coachella Valley MSHCP/NCCP.

Response to Comment 32: The Secretary is exercising his discretion to exclude all lands covered under the Coachella Valley MSHCP/NCCP, including Riverside County Flood Control and Water Conservation District lands, from this critical habitat designation (see Exclusions Under Section 4(b)(2) of the Act—Coachella Valley MSHCP/NCCP section above).

Comment 33: Four commenters expressed concern regarding potential economic impacts the designation of critical habitat could have on wind energy firms located within the critical habitat designation.

Response to Comment 33: Because the areas in question are occupied by *Astragalus lentiginosus* var. *coachellae* and any project in these areas with a Federal nexus would require consultation with the Service under

section 7 of the Act to address potential impacts to the taxon, the economic analysis for the critical habitat designation did not predict project modification costs to wind energy interests due to the designation of critical habitat, only the administrative costs of adding adverse modification analyses to these future section 7 consultations. We, therefore, conclude that potential economic impacts to these wind energy interests will be small.

Comment 34: One commenter stated that because the costs estimated in the DEA are low, there is no basis for economic exclusion of any of the areas proposed as critical habitat for *Astragalus lentiginosus* var. *coachellae.*

Response to Comment 34: Based on the information presented in the Economic Analysis, the Secretary is not exercising his discretion to exclude any areas from this designation based on economic impacts (see Exclusions Based on Economic Impacts section above for more detailed discussion).

Comment 35: One commenter expressed appreciation for the Service's clear separation of postdesignation baseline costs from the incremental future costs of designation in the DEA.

Response to Comment 35: We thank the commenter for their review and comments.

Comment 36: A comment provided on the DEA states that because the majority of the proposed critical habitat falls within the plan area of the Coachella Valley MSHCP/NCCP, section 7 consultation costs should be significantly streamlined. The comment suggests that, as a result, the DEA overestimates administrative impacts from the proposed revised designation.

Response to Comment 36: The DEA relies on the best available information on administrative costs, compiled from interviews with Service staff, action agency staff, and private consultants. Although consultation costs may be streamlined for projects covered by the Coachella Valley MSHCP/NCCP that have a Federal nexus, each Federal action still requires consultation with the Service if the action may affect listed species or critical habitat. Therefore, to avoid underestimating the potential impacts of the designation, the DEA assumes the level of effort required for these consultations will be similar to effort associated with consultations undertaken for activities not covered by an HCP.

Comment 37: One commenter asserts that the DEA fails to provide supporting data to justify the cost of section 7 consultations.

Response to Comment 37: As described in Exhibit 2–2 of the DEA, the consultation cost model is based on data gathered from three Service field offices (including a review of consultation records and interviews with field office staff), telephone interviews with action agency staff (for example, BLM, Forest Service, U.S. Army Corps), and telephone interviews with private consultants who perform work in support of permittees. In the case of Service and Federal agency contacts, we determined the typical level of effort required to complete several different types of consultations (hours or days of time), as well as the typical General Schedule (GS) level of the staff member performing this work. In the case of private consultants, we interviewed representatives of firms in California and New England to determine the typical cost charged to clients for these efforts (for example, biological survey, preparation of materials to support a Biological Assessment). The model is periodically updated with new information received in the course of data collection efforts supporting economic analyses and public comment on more recent critical habitat rules. In addition, the GS rates are updated annually.

Comment 38: One commenter states that incremental costs associated with the City of Desert Hot Springs are highly unlikely. This commenter states that costs are estimated for the development of lands located within the floodplain, which the City is unlikely to develop. Additionally, the commenter suggests that consultation may be unlikely because the City of Desert Hot Springs will soon be a permittee of the Coachella Valley MSHCP/NCCP. Therefore, the commenter asserts that future incremental costs are inflated.

Response to Comment 38: The DEA accounts for the uncertainty associated with the potential for development within the floodplain by excluding these costs from the low estimate and including them in the high estimate. Our interview with City officials suggested that they would prefer to avoid development within the floodplain. However, because the City has no official restrictions preventing such development, such development is possible. Development projections for this area are based on Southern California Association of Governments growth forecasts. Until the City of Desert Hot Springs becomes a permittee of the Coachella Valley MSHCP/NCCP via a major amendment, these costs are considered incremental to the baseline. Because this amendment had not yet been finalized as of the time of the economic analysis, incremental costs are estimated. In addition, section 7 consultation is still required for activities with a Federal nexus that are not covered under the Coachella Valley MSHCP/NCCP and may affect listed species or critical habitat, and, as a result, the potential for incremental impacts will still exist after the City of Desert Hot Springs becomes a permittee.

Comment 39: One commenter states that the low estimate of administrative impacts, as described on Page 4–2 of the DEA, is not clearly attributed.

Response to Comment 39: Section 4.8 of the DEA describes in detail the methodology used to estimate incremental administrative costs. The methodology involves projecting the consultation history from the past 18 years forward. In particular, Exhibit 4–5 presents the projected number of consultations by economic activity and critical habitat unit. This exhibit notes which projected consultations—only those occurring on the Agua Caliente Reservation—are excluded from the low estimate. All other consultations are included in both the low and high estimates.

Comment 40: According to a comment submitted by the Agua Caliente Band of Cahuilla Indians, the DEA incorrectly identifies the Tribal Habitat Conservation Plan (THCP) as a draft plan.

Response to Comment 40: The Tribal Habitat Conservation Plan of the Agua Caliente Band of Cahuilla Indians is considered a ''draft'' plan because the Service has not issued an incidental take permit associated with this document under section 10(a)(1)(B) of the Endangered Species Act. Text has been added to the Final Economic Analysis (FEA) to clarify this assertion. Additionally, the FEA notes that the Tribe considers this plan a Tribal-approved, final document and implements it as such for land-use planning on all Reservation lands, despite having withdrawn the request for a section 10(a)(1)(B) incidental take permit.

Comment 41: According to a comment submitted by the Agua Caliente Band of Cahuilla Indians, the DEA incorrectly states the size of the Agua Caliente Indian Reservation.

Response to Comment 41: The acreage reported in the DEA is taken from the following reference: Tiller, Veronica E. Velarde. ''Tiller's Guide to Indian Country: Economic Profiles of American Indian Reservations.'' Bow Arrow Publishing Company, 2005 (364). Based on updated information provided by the Tribe in this comment, the FEA corrects the acreage of the Reservation to 31,500 acres.

Comment 42: One comment submitted by the Agua Caliente Band of Cahuilla Indians states that in paragraph 160, the DEA incorrectly identifies the Tribe as the party that engaged in consultation with the Service for three previous projects.

Response to Comment 42: The text has been revised in the FEA to correctly indicate that the Bureau of Indian Affairs, and not the Tribe, engaged directly in consultation with the Service for past projects occurring on Agua Caliente Reservation land.

Comment 43: One commenter states that the DEA fails to include consideration of benefits resulting from the designation of critical habitat. In particular, this commenter suggests that the DEA fails to quantify ancillary benefits including the protection and improvement of water quality; preservation of natural habitat to benefit other species; and prevention of development in flood-prone areas, despite existing economic literature monetizing these benefits. This commenter suggests that these benefits should be assessed and quantified where possible or otherwise included in a detailed qualitative analysis.

Response to Comment 43: The primary purpose of this critical habitat designation is to support the conservation of *Astragalus lentiginosus* var. *coachellae.* As described in Chapter 5 of the DEA, quantification and monetization of this conservation benefit requires information on the incremental change in the probability of conservation resulting from the designation. Such information is not available, and, as a result, monetization of the primary benefit of critical habitat designation is not possible.

Other ancillary benefits of the designation may include: Increased residential property values adjacent to preserved habitat; increased recreational opportunities; preservation of habitat for other species; and improvements in water quality, among others. Although economic literature does exist that monetizes similar benefits, these studies are necessarily site-specific. For example, using benefits transfer techniques to estimate changes in residential property value based on the existing economic literature would require knowledge of the characteristics of the specific lands preserved as a result of the designation of critical habitat, including proximity to residential properties and the amount of existing open space in the area. Without knowing where lands will be preserved (for example, through mitigation fees) as a result of this designation, it is impossible to estimate such benefits. Similarly, quantifying benefits associated with improved water quality would require information regarding baseline water quality, hydrologic and chemical modeling to estimate changes in water quality, and risk analysis to determine avoided human health risk based on changes to water quality. These types of analyses are beyond the scope of the DEA. As a result, benefits associated with the designation of critical habitat are discussed qualitatively.

Comment 44: One commenter expresses concern that the designation of critical habitat may impact routine maintenance and operations of the Colorado River Aqueduct on Metropolitan Water District of Southern California (MWD) lands. These activities may include aqueduct inspection and cleaning, replacement and rebuilding of infrastructure, and maintenance of patrol and access roads. Additionally, the comment mentions an upcoming mine pit reclamation project on MWD lands that may be affected by the designation of critical habitat.

Response to Comment 44: As of the time of publication of the DEA, we were unable to confirm with MWD the types of activities ongoing or planned for these lands. However, in information subsequently provided, MWD states that routine maintenance and operations of the Colorado River Aqueduct do not require the involvement of a Federal agency. As a result, activities associated with the Colorado River Aqueduct are unlikely to have a nexus for section 7 consultation. Incremental impacts are therefore not anticipated to result from these activities. The mine pit reclamation project may have a Federal nexus for consultation through the U.S. Army Corps of Engineers Clean Water Act section 404 permitting process. The FEA has been revised to incorporate new information on MWD activities in these areas, as provided in the public comment and the information received subsequent to the submission of the DEA. Administrative impacts are estimated for these MWD activities in the FEA.

Required Determinations

Regulatory Planning and Review (Executive Orders 12866 and 13563)

Executive Order 12866 provides that the Office of Information and Regulatory Affairs (OIRA) will review all significant rules. The Office of Information and Regulatory Affairs has determined that this rule is not significant.

Executive Order 13563 reaffirms the principles of E.O. 12866 while calling for improvements in the nation's regulatory system to promote predictability, to reduce uncertainty, and to use the best, most innovative, and least burdensome tools for achieving regulatory ends. The executive order directs agencies to consider regulatory approaches that reduce burdens and maintain flexibility and freedom of choice for the public where these approaches are relevant, feasible, and consistent with regulatory objectives. E.O. 13563 emphasizes further that regulations must be based on the best available science and that the rulemaking process must allow for public participation and an open exchange of ideas. We have developed this rule in a manner consistent with these requirements.

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 an 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 the 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 lentiginosus* var. *coachellae* 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. 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., residential, commercial, and industrial development; water management and use; transportation activities; energy development; sand and gravel mining; and Tribal activities). 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 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 lentiginosus* var. *coachellae.* 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 reinitiate 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 lentiginosus* var. *coachellae* and the designation of critical habitat. The analysis is based on the estimated impacts associated with the rulemaking as described in Chapters 1 through 4 and Appendix A of the analysis and evaluates the potential for economic impacts related to: (1) Residential, commercial, and industrial development; (2) water management and use; (3) transportation activities; (4) energy development; (5) sand and gravel mining; and (6) Tribal activities.

Estimated incremental impacts of this critical habitat designation consist primarily of additional administrative cost of considering adverse modification during section 7 consultation and incremental project modification costs resulting from activities not covered under the Coachella Valley MSHCP/NCCP. The Service and the action agency are the only entities with direct compliance costs associated with this critical habitat designation, although small entities may participate in section 7 consultation as a third party. It is, therefore, possible that the small entities may spend additional time considering critical habitat during section 7 consultation for *Astragalus lentiginosus* var. *coachellae.* The FEA indicates that the incremental impacts potentially incurred by small entities are limited to development activities.

The FEA estimates annualized project modification costs of approximately $52,000 in Unit 3, and annualized third party administrative costs ranging from $156 to $263, depending on whether a consultation is formal or informal and whether the project location is considered occupied or unoccupied, distributed across all four units. Because information on the number of projects or developers likely to be affected is not available, the FEA assumes that a single developer bears all costs associated with growth in proposed revised critical habitat. Under this assumption, $52,260 in incremental costs would accrue to one developer per year. Assuming the average small entity has annual revenues of approximately $5.1 million, this annualized impact represents approximately one percent of annual revenues. The assumption that all costs accrue to one developer likely overstates the impact significantly; thus, we estimate incremental impacts to small developers of less than one percent of annual revenues.

The FEA also concludes that none of the governmental entities with which the Service might consult on *Astragalus lentiginosus* var. *coachellae* for water management and use, transportation, mining, energy development, or Tribal activities meet the definitions of small as defined by the Small Business Administration (SBA) (IEc 2012, p. A–4–A–5); therefore, impacts to small governmental entities due to transportation and habitat management activities are not anticipated.

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 *Astragalus lentiginosus* var. *coachellae* 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.

The economic analysis finds that none of these criteria are relevant to this analysis. Thus, based on information in the economic analysis, energy-related impacts associated with *Astragalus lentiginosus* var. *coachellae* 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 *et seq.*), 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. It excludes ''a condition of Federal assistance.'' It also excludes ''a duty arising from participation in a voluntary Federal program,'' unless the regulation ''relates to a then-existing Federal program under which $500,000,000 or more is provided annually to State, local, and tribal governments under entitlement authority,'' if the provision would ''increase the stringency of conditions of assistance'' or ''place caps upon, or otherwise decrease, the Federal Government's responsibility to provide funding,'' and the State, local, or tribal governments ''lack authority'' to adjust accordingly. At the time of enactment, these entitlement programs were: Medicaid; Aid to Families with Dependent Children 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 because it would not produce a Federal mandate of $100 million or greater in any year; that is, it is not a ''significant regulatory action'' under the Unfunded Mandates Reform Act. The FEA concludes incremental impacts may occur due to administrative costs of section 7 consultations for development, transportation, and flood control projects activities; however, these are not expected to significantly affect small governments. Incremental impacts stemming from various species conservation and development control activities are expected to be borne by the Federal Government, State agencies, local water and flood control districts, and wind energy and mining companies that are not considered small governments. 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 E.O. 12630 (''Government Actions and Interference with Constitutionally Protected Private Property Rights''), we analyzed the potential takings implications of designating critical habitat for *Astragalus lentiginosus* var. *coachellae* in a takings implications assessment. As discussed above, the designation of critical habitat affects only Federal actions. Although private parties that receive Federal funding, assistance, or 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. The takings implications assessment concludes that this designation of critical habitat for *Astragalus lentiginosus* var. *coachellae* 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), this rule does not have significant Federalism effects. A federalism impact summary statement is not required. In keeping with Department of the Interior and Department of Commerce policy, we requested information from, and coordinated development of, this critical habitat designation with appropriate State resource agencies in California. We did not receive comments from State agencies. The designation of critical habitat in areas currently occupied by *Astragalus lentiginosus* var. *coachellae* may impose nominal additional regulatory restrictions to those currently in place and, therefore, is expected to have little incremental impact on State and local governments and their activities. The designation may have some benefit to these governments in that the areas that contain the physical or biological features essential to the conservation of the 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 local governments in long-range planning (rather than having them wait for case-by-case section 7 consultations 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 Office of the Solicitor has determined that the rule does not unduly burden the judicial system and that it 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 identifies the elements of physical or biological features essential to the conservation of the *Astragalus lentiginosus* var. *coachellae* within the designated areas to assist the public in understanding the habitat needs of the species. The designated areas of critical habitat are presented on maps, and the rule provides several options for the interested public to obtain more detailed information, if desired.

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 Ninth 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), E.O. 13175, and the Department of the Interior's manual at 512 DM 2, we readily acknowledge our responsibility to communicate meaningfully with recognized Federal tribes on a government-to-government basis. 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.

In the proposed revisions to critical habitat published in the **Federal Register** on August 25, 2011 (76 FR 53224), we proposed approximately 316 ac (128 ha) in Unit 1 within the boundary of the Morongo Band of Mission Indians Reservation, and 580 ac (235 ha) in Unit 2 within the boundary of the Agua Caliente Band of Cahuilla Indians Reservation, as critical habitat for *Astragalus lentiginosus* var. *coachellae.* We worked directly with the tribes to determine economic and other burdens expected to result from critical habitat designation on tribal lands, and as a result of information exchanged and in consideration of impacts to our government-to-government relationship with tribes and our current and future conservation partnerships, the Secretary is exercising his discretion to exclude all lands within tribal reservation boundaries meeting the definition of critical habitat for *Astragalus lentiginosus* var. *coachellae* from this final revised designation under section 4(b)(2) of the Act (see Exclusions Under Section 4(b)(2) of the Act—Tribal Lands section above).

References Cited

A complete list of all references cited is available on the Internet at *http://www.regulations.gov* and upon request from the Carlsbad Fish and Wildlife Office (see **FOR FURTHER INFORMATION CONTACT**).

Author(s)

The primary authors of this rulemaking are the staff members of the Carlsbad Fish and Wildlife Office.

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; 1531–1544; and 4201–4245, unless otherwise noted.

■ 2. Amend § 17.12(h) by revising the entry for ''*Astragalus lentiginosus* var. *coachellae''* under Flowering Plants in the List of Endangered and Threatened Plants to read as follows:

§ 17.12 Endangered and threatened plants.

* * * * *

(h) * * *

Species		Historic range	Family	Status	When listed	Critical habitat	Special rules
Scientific name	Common name						
FLOWERING PLANTS							
*	*	*	*	*	*		*
Astragalus lentiginosus var. *coachellae*.	Coachella Valley milk-vetch.	U.S.A. (CA)	Fabaceae	E	647	17.96(a)	NA
*	*	*	*	*	*		*
*	*	*	*	*	*		*

■ 3. Amend § 17.96(a) by revising the entry for ''*Astragalus lentiginosus* var. *coachellae* (Coachella Valley milk-vetch)'' under Family Fabaceae to read as follows:

§ 17.96 Critical habitat—plants.

(a) *Flowering plants.*

* * * * *

Family Fabaceae: *Astragalus lentiginosus* var. *coachellae* (Coachella Valley milk-vetch)

(1) Critical habitat units are depicted for Riverside County, on the maps below.

(2) Within these areas, the primary constituent element of the physical or biological features essential to the conservation of *Astragalus lentiginosus* var. *coachellae* consists of sand formations associated with the sand transport system in Coachella Valley, California. These sand formations have the following features:

(i) They are active sand dunes, stabilized or partially stabilized sand dunes, active or stabilized sand fields (including hummocks forming on leeward sides of shrubs), ephemeral sand fields or dunes, and fluvial sand deposits on floodplain terraces of active washes.

(ii) They are found within the fluvial sand depositional areas, and the aeolian sand source, transport, and depositional areas of the sand transport system.

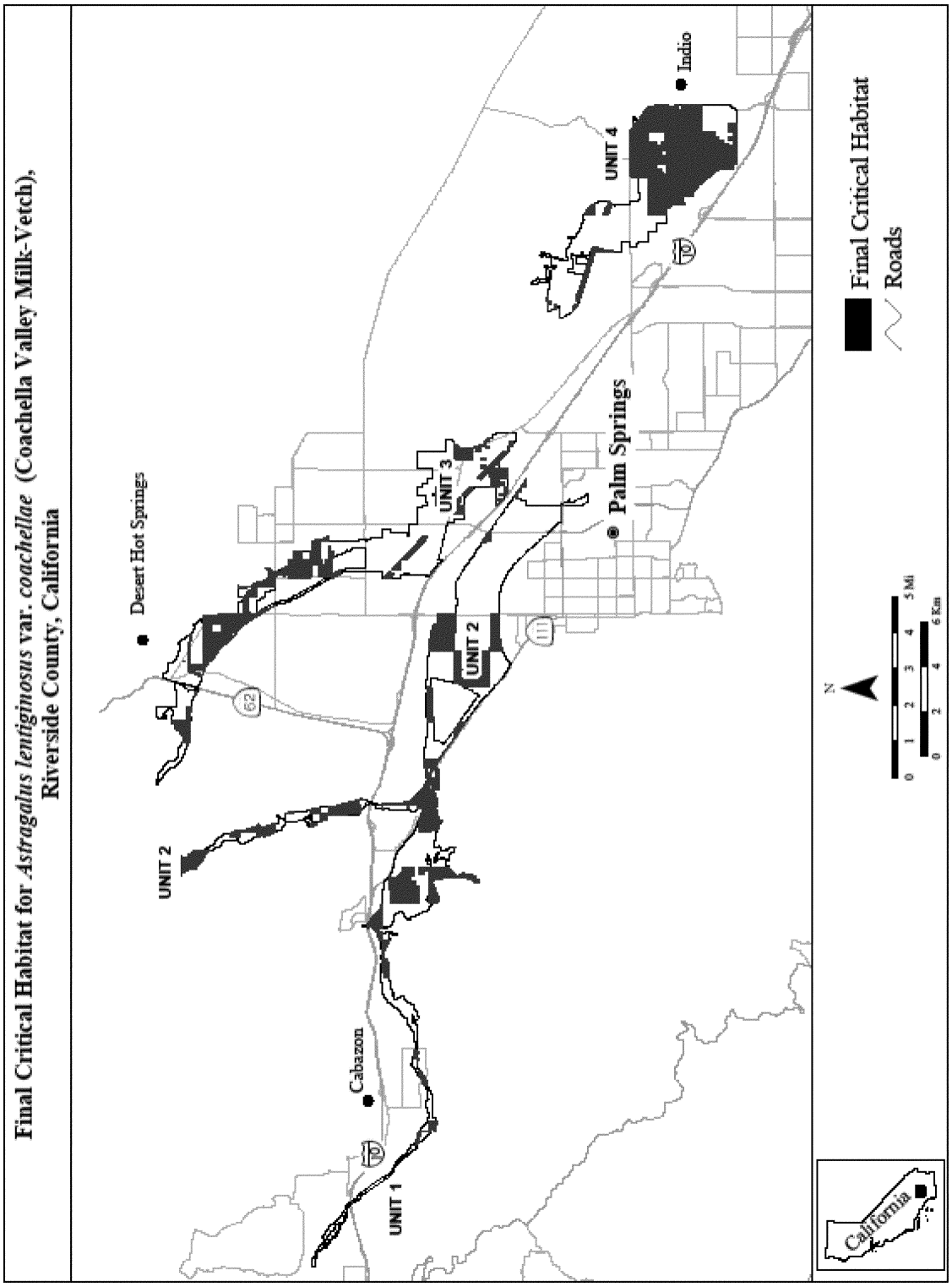
(iii) They comprise sand originating in the hills surrounding Coachella Valley and alluvial deposits at the base of the Indio Hills, which is moved into the valley by water (fluvial transport) and through the valley by wind (aeolian transport).

(3) Critical habitat does not include manmade structures (such as buildings, aqueducts, runways, roads, and other paved areas) and the land on which they are located existing within the legal boundaries on March 15, 2013.

(4) *Critical habitat map units.* Data layers defining map units were created using a base of U.S. Geological Survey 7.5′ quadrangle maps. Critical habitat units were then mapped using Universal Transverse Mercator (UTM) zone 11, North American Datum (NAD) 1983 coordinates. The maps in this entry, as modified by any accompanying regulatory text, establish the boundaries of the critical habitat designation. The coordinates or plot points or both on which each map is based are available to the public at the Service's Internet site, *http://www.fws.gov/carlsbad/GIS/CFWOGIS.html, http://www.regulations.gov* at Docket No. FWS–R8–ES–2011–0064, and at the field office responsible for this designation. You may obtain field office location information by contacting one of the Service regional offices, the addresses of which are listed at 50 CFR 2.2.

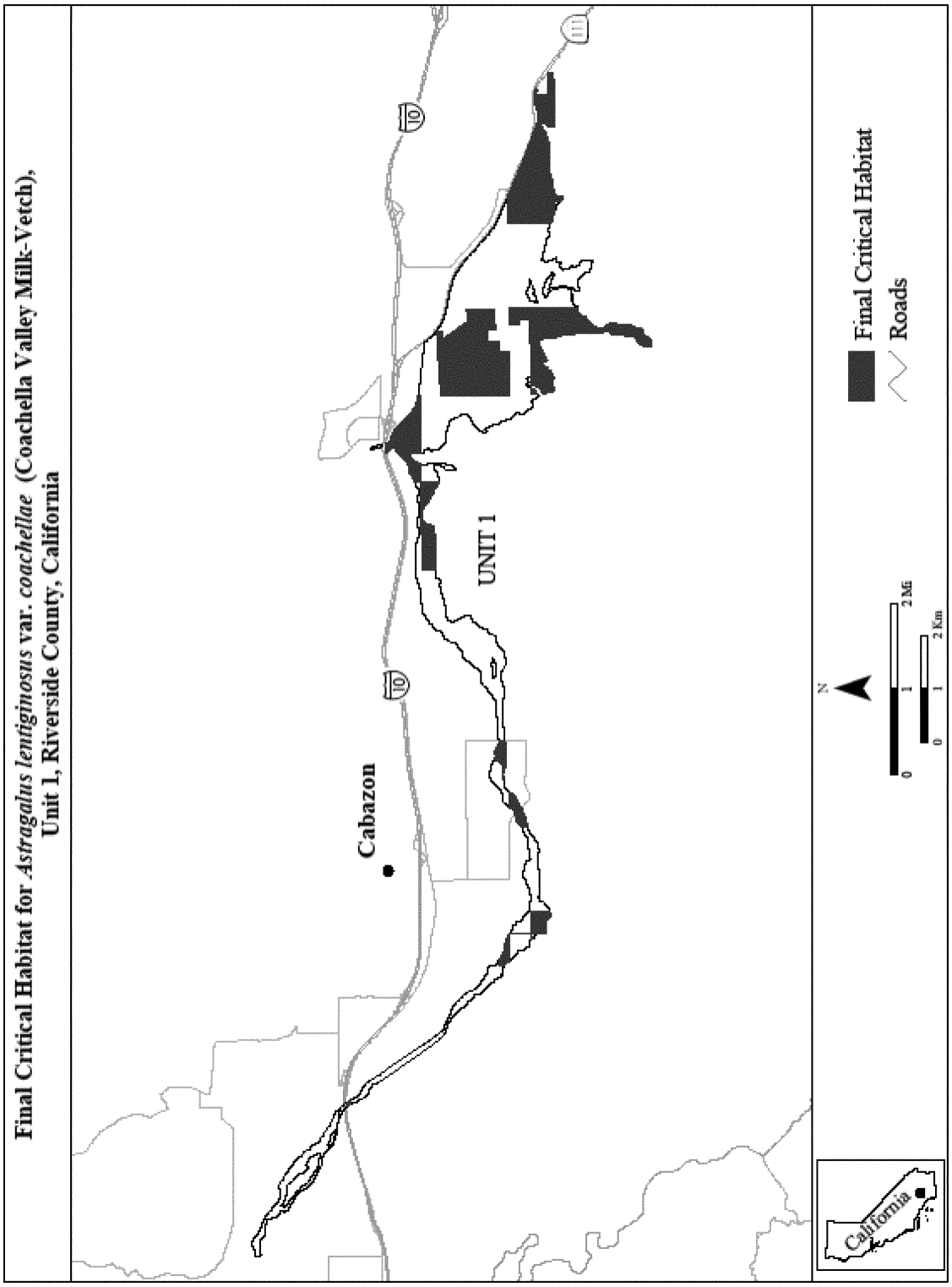
BILLING CODE 4310–55–P

(5) *Note:* Index map of four critical habitat units designated for *Astragalus lentiginosus* var. *coachellae* follows:



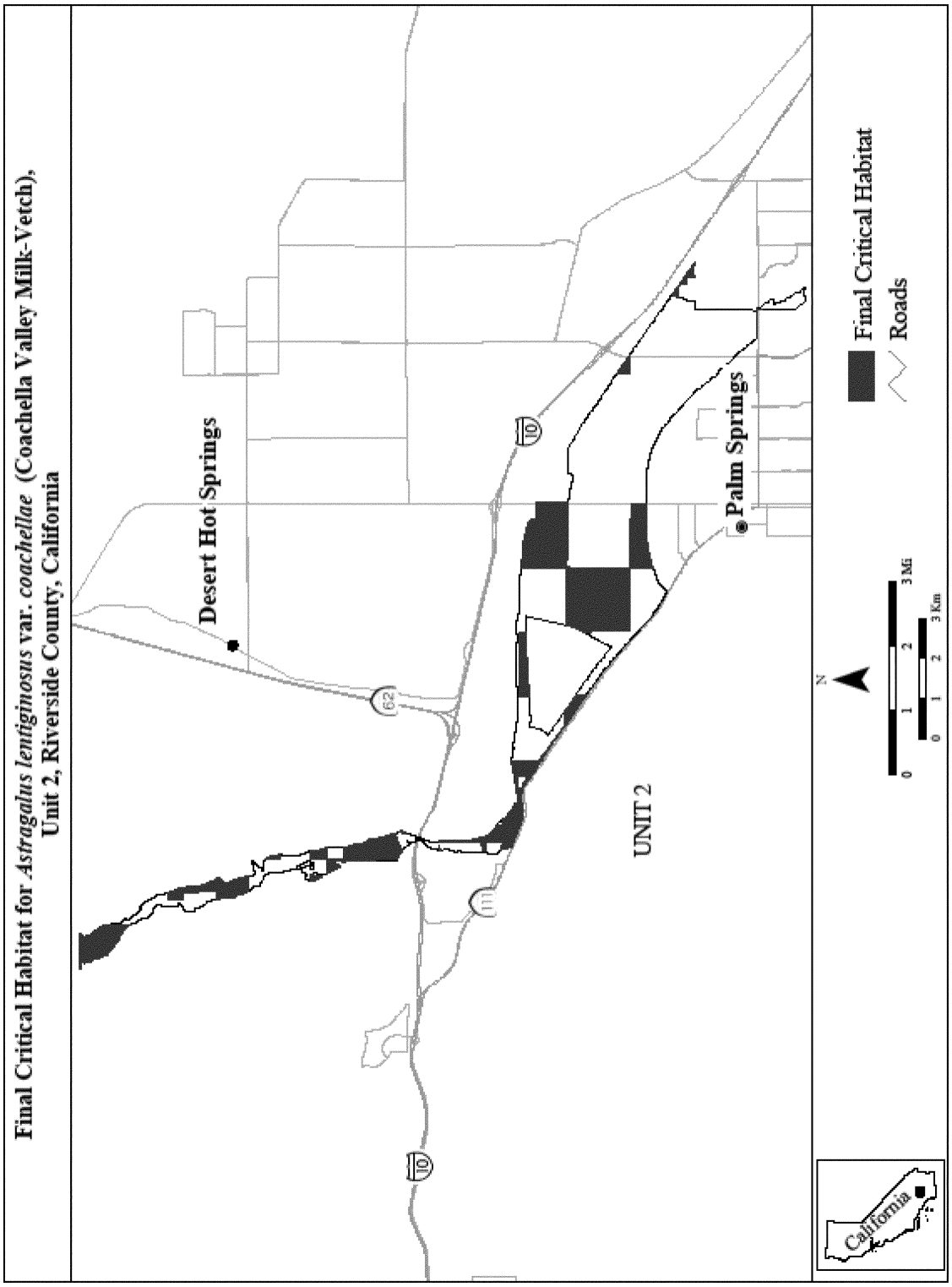
(6) Unit 1: San Gorgonio River/Snow Creek System.

(i) Note: Map of Unit 1 follows:



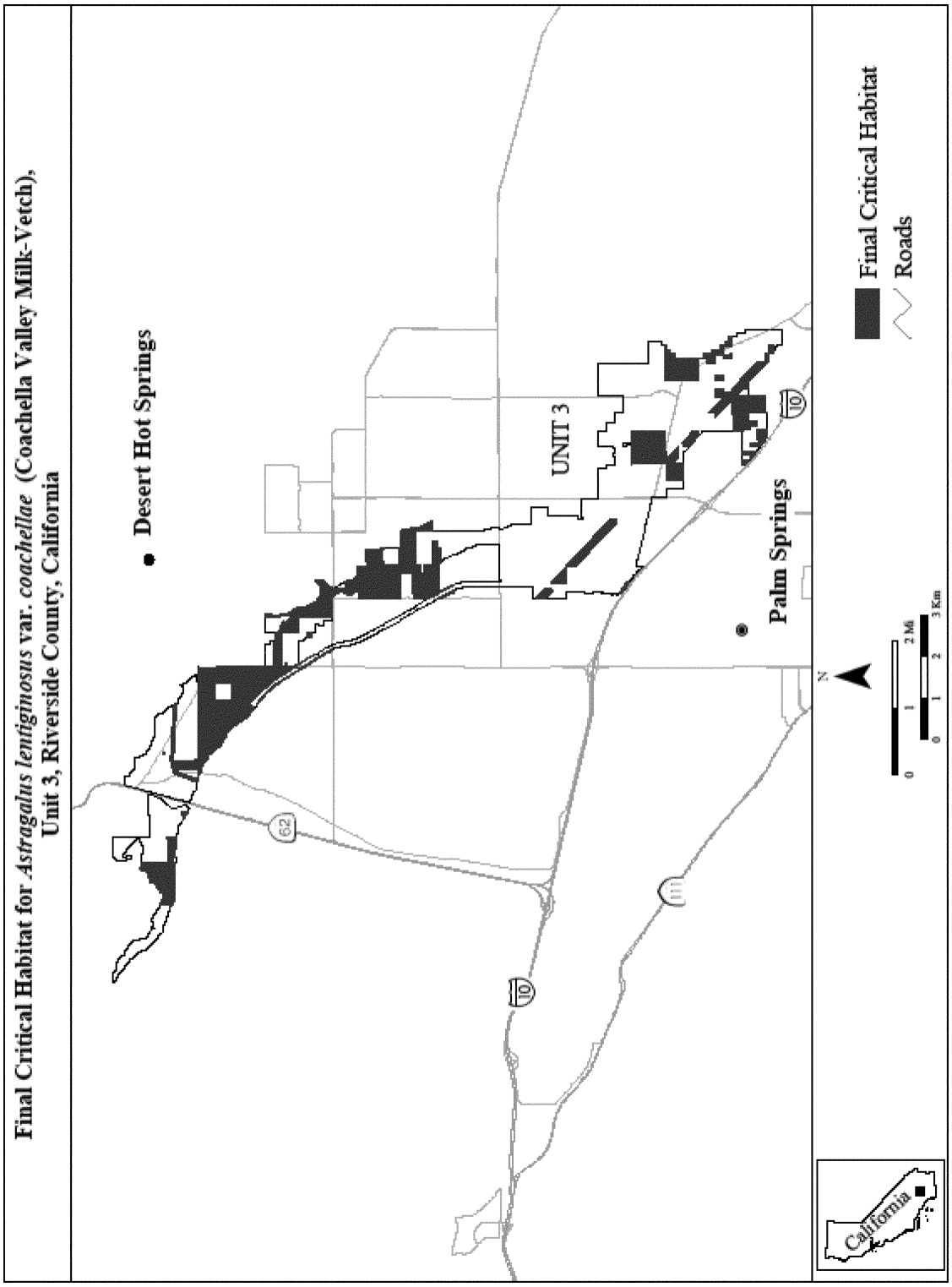
(7) Unit 2: Whitewater River System.

(i) Note: Map of Unit 2 follows:



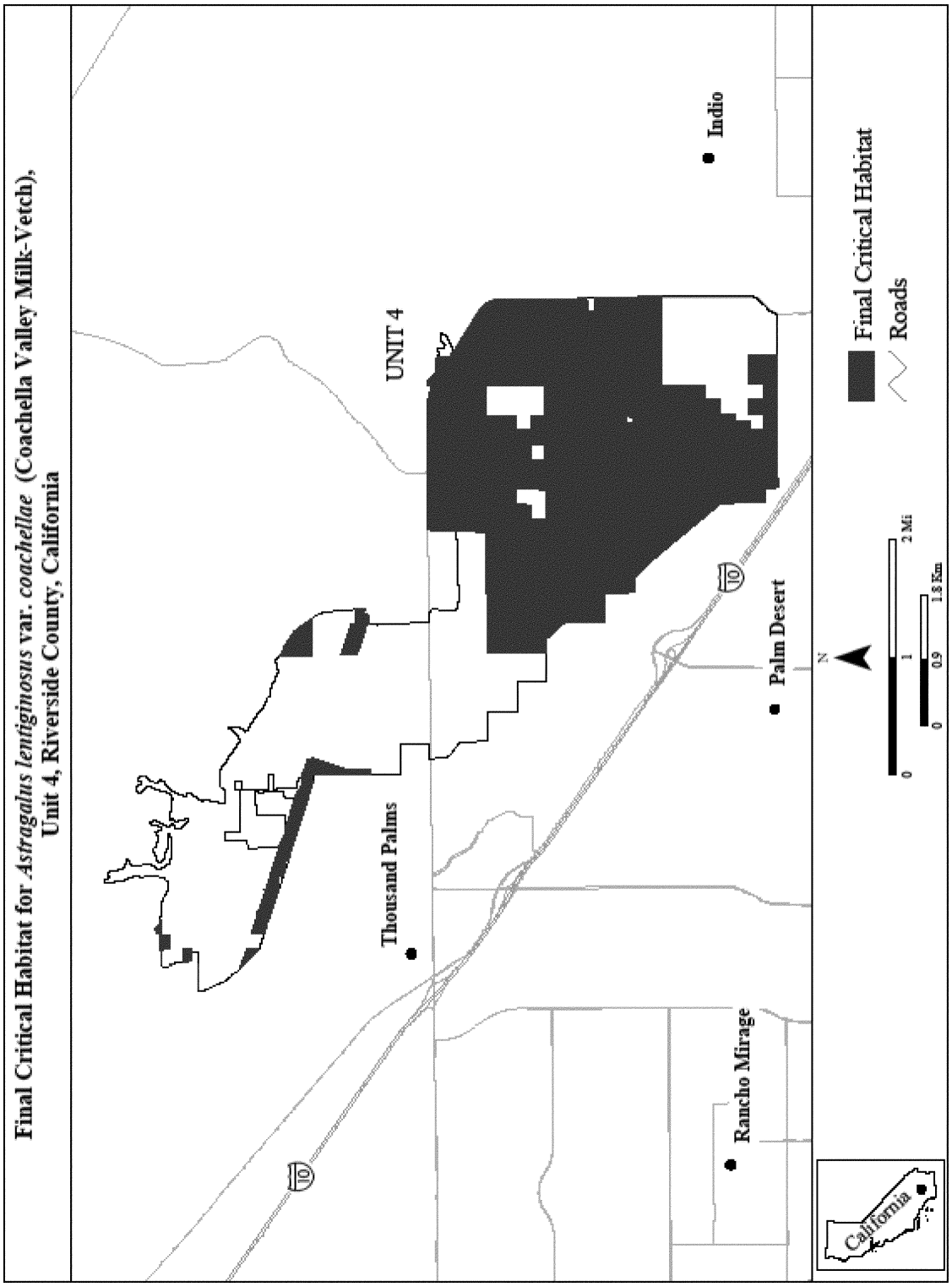
(8) Unit 3: Mission Creek/Morongo Wash System.

(i) Note: Map of Unit 3 follows:



(9) Unit 4: Thousand Palms System.

(i) Note: Map of Unit 4 follows:



* * * * *

Dated: February 1, 2013.

Michael J. Bean,

Acting Principal Deputy Assistant Secretary for Fish and Wildlife and Parks.

[FR Doc. 2013–03109 Filed 2–12–13; 8:45 am]

BILLING CODE 4310–55–C