### **DEPARTMENT OF THE INTERIOR**

### Fish and Wildlife Service

50 CFR Part 17 RIN 1018-AU50

Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the Laguna Mountains Skipper (*Pyrgus ruralis lagunae*)

AGENCY: Fish and Wildlife Service,

Interior.

**ACTION:** Final rule.

SUMMARY: We, the U.S. Fish and Wildlife Service (Service), are designating critical habitat for the Laguna Mountains skipper (*Pyrgus ruralis lagunae*) pursuant to the Endangered Species Act of 1973, as amended (Act). In total, approximately 6,242 acres (ac) (2,525 hectares (ha)) fall within the boundaries of the critical habitat designation. The critical habitat is located in San Diego County, California, on lands under Federal (3,516 ac (1,423 ha)), State (381 ac (154 ha)), and private (2,345 ac (948 ha)) ownership.

**DATES:** This rule becomes effective on January 11, 2007.

ADDRESSES: Comments and materials received, as well as supporting documentation used in the preparation of this final rule, will be available for public inspection, by appointment, during normal business hours, at the Carlsbad Fish and Wildlife Office, 6010 Hidden Valley Road, Carlsbad, CA 92011 (telephone 760/431–9440). The final rule, economic analysis, and maps are available via the Internet at http://www.fws.gov/carlsbad/.

**FOR FURTHER INFORMATION CONTACT:** Jim Bartel, Field Supervisor, Carlsbad Fish and Wildlife Office, telephone, 760/431–9440; facsimile, 760/431–9624.

## SUPPLEMENTARY INFORMATION:

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

Attention to and protection of habitat is paramount to successful conservation actions. The role that designation of critical habitat plays in protecting habitat of listed species, however, is often misunderstood. As discussed in more detail below in the discussion of exclusions under ESA section 4(b)(2), there are significant limitations on the regulatory effect of designation under ESA section 7(a)(2). In brief, (1) designation provides additional protection to habitat only where there is a federal nexus; (2) the protection is

relevant only when, in the absence of designation, destruction or adverse modification of the critical habitat would in fact take place (in other words, other statutory or regulatory protections, policies, or other factors relevant to agency decisionmaking would not prevent the destruction or adverse modification); and (3) designation of critical habitat triggers the prohibition of destruction or adverse modification of that habitat, but it does not require specific actions to restore or improve habitat.

Currently, only 475 species or 36 percent of the 1,310 listed species in the U.S. under the jurisdiction of the Service have designated critical habitat. We address the habitat needs of all 1,310 listed species through conservation mechanisms such as listing, section 7 consultations, the section 4 recovery planning process, the section 9 protective prohibitions of unauthorized take, section 6 funding to the States, the section 10 incidental take permit process, and cooperative, nonregulatory efforts with private landowners. The Service believes that it is these measures that may make the difference between extinction and survival for many species.

In considering exclusions of areas originally proposed for designation, we evaluated the benefits of designation in light of Gifford Pinchot Task Force v. United States Fish and Wildlife Service. In that case, the Ninth Circuit invalidated the Service's regulation defining "destruction or adverse modification of critical habitat." In response, on December 9, 2004, the Director issued guidance to be considered in making section 7 adverse modification determinations. This critical habitat designation does not use the invalidated regulation in our consideration of the benefits of including areas in this final designation. The Service will carefully manage future consultations that analyze impacts to designated critical habitat, particularly those that appear to be resulting in an adverse modification determination. Such consultations will be reviewed by the Regional Office prior to finalizing to ensure that an adequate analysis has been conducted that is informed by the Director's guidance.

On the other hand, to the extent that designation of critical habitat provides protection, that protection can come at significant social and economic cost. In addition, the mere administrative process of designation of critical habitat is expensive, time-consuming, and controversial. The current statutory framework of critical habitat, combined with past judicial interpretations of the

statute, make critical habitat the subject of excessive litigation. As a result, critical habitat designations are driven by litigation and courts rather than biology, and made at a time and under a timeframe that limits our ability to obtain and evaluate the scientific and other information required to make the designation most meaningful.

In light of these circumstances, the Service believes that additional agency discretion would allow our focus to return to those actions that provide the greatest benefit to the species most in

need of protection.

# Procedural and Resource Difficulties in Designating Critical Habitat

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

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

all significantly delayed.

The accelerated schedules of courtordered designations have left the Service with limited ability to provide for public participation or to ensure a defect-free rulemaking process before making decisions on listing and critical habitat proposals, due to the risks associated with noncompliance with judicially imposed deadlines. This in turn fosters a second round of litigation in which those who fear adverse impacts from critical habitat designations challenge those designations. The cycle of litigation appears endless, and is very expensive, thus diverting resources from conservation actions that may provide relatively more benefit to imperiled species.

The costs resulting from the designation include legal costs, the cost of preparation and publication of the designation, the analysis of the

economic effects and the cost of requesting and responding to public comment, and in some cases the costs of compliance with the National Environmental Policy Act (NEPA). These costs, which are not required for many other conservation actions, directly reduce the funds available for direct and tangible conservation actions.

## **Background**

It is our intent in this document to reiterate and discuss only those topics directly relevant to the development and designation of critical habitat or relevant information obtained since the final listing. For more information on the biology and ecology of the Laguna Mountains skipper, refer to the final rule listing this species as endangered published in the **Federal Register** on January 16, 1997 (62 FR 2313), and the proposed critical habitat rule for the Laguna Mountains skipper published in the **Federal Register** on December 13, 2005 (70 FR 73699).

### **Previous Federal Actions**

Previous Federal actions for the Laguna Mountains skipper can be found in the proposed critical habitat rule published in the **Federal Register** on December 13, 2005 (70 FR 73699).

On January 10, 2003, the Center for Biological Diversity (Center) filed a lawsuit against the Service for violations under the Act and the Administrative Procedure Act (5 U.S.C. Subchapter II) for the Service's failure to designate critical habitat for the species (CBD v. USFWS Civ. No. 03-0058-BTM (NLS)). In a stipulated settlement agreement dated July 29, 2003, the Service agreed to reconsider its "not prudent" finding and propose critical habitat, if prudent, on or before November 30, 2005, and to publish a final critical habitat rule, if prudent, on or before November 30, 2006. This final rule complies with the settlement agreement.

## **Summary of Comments and Recommendations**

We requested comments from the public on the proposed designation of critical habitat for the Laguna Mountains skipper during three comment periods. The first comment period opened on December 13, 2006, associated with the publication of the proposed rule (70 FR 73699) and closed on February 13, 2006. The second comment period opened on April 13, 2006, associated with the announcement of a public hearing held on April 22, 2006, in Carlsbad, CA (71 FR 19157), and closed on May 15, 2006. We also requested comments on the proposed rule and draft economic

analysis (DEA) during a comment period that opened July 7, 2006 (71 FR 38593) and closed on August 7, 2006. We contacted appropriate Federal, State, and local agencies; scientific organizations; and other interested parties and invited them to comment on the proposed rule during these three comment periods.

During the first comment period, we received 8 comment letters directly addressing the proposed critical habitat designation: 4 from peer reviewers, 1 from a Federal agency, and 3 from organizations or individuals. During the second comment period, we received 1 comment letter from a Federal agency and 1 transcribed statement from an organization during the public hearing directly addressing the proposed critical habitat designation. During the final comment period associated with the DEA, we received 1 comment letter from a Federal agency and 1 comment from an organization directly addressing the proposed critical habitat designation and the draft economic analysis.

In total, seven commenters supported designation (2 comments were from the same commenter) of critical habitat for the Laguna Mountains skipper, two opposed designation (2 comments were from the same commenter), and one commenter expressed neither support nor opposition to the proposed critical habitat designation. Comments received are addressed in the following summary and incorporated into the final rule as appropriate.

## **Peer Review**

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

We reviewed all comments received from the peer reviewers and the public for substantive issues and new information regarding critical habitat for the Laguna Mountains skipper, and addressed them in the following summary.

#### **Peer Reviewer Comments**

(1) Comment: One peer reviewer stated that the PCEs appear appropriate; however use of the alternate hostplant Potentilla glandulosa may not be necessary or essential because its use may be limited to special circumstances.

Our Response: We agree P. glandulosa use appears to be limited to special circumstances, but we believe the scientific information available (Pratt 2006, p. 4) indicates it increases population survival probability in circumstances where this alternate hostplant co-occurs with the most commonly utilized hostplant, Horkelia clevelandii. Under special circumstances (e.g. dry environmental conditions), the Laguna Mountains skipper is likely to use this alternate hostplant that grows more commonly in shaded areas, and have a higher survival rate as compared to use of H. clevelandii under the same special circumstances.

(2) Comment: One peer reviewer commented that we should use presence of the hostplant, Potentilla glandulosa, as a criterion to identify critical habitat in addition to Horkelia clevelandii.

Our Response: As stated in our response to Comment 1, we believe P. glandulosa may only be a necessary or essential hostplant for population survival in circumstances where it cooccurs with H. clevelandii. Also, while the use by the Laguna Mountains skipper of P. glandulosa as a hostplant has been documented (Pratt 1999, p. 10; Osborne 2005), we have no occurrence data for P. glandulosa. Therefore, we are unable to map areas occupied by this hostplant species as critical habitat.

(3) Comment: Two peer reviewers suggested subunits should be connected because areas between subunits are essential for Laguna Mountains skipper movement. Both reviewers stated Laguna Mountains skippers disperse farther than 20 meters, and cautioned reliance on mark-release-recapture studies because they tend to underestimate dispersal ability. One reviewer stated he has observed a male Laguna Mountains skipper flying over trees; another stated he has seen Laguna Mountains skippers fly over 50 meters in seconds, and into forested areas without returning.

Our Response: We appreciate the information and agree that connectivity between subunits should be maintained to provide for species' movement. However, we based the delineation of critical habitat on the presence of the species or the presence of the primary constituent elements (PCEs) (e.g. hostplants within forest openings). Most areas between subunits are not known

to contain either the species or the PCEs. Movement areas cannot be identified as a PCE because, as reviewer comments indicated, areas that allow butterfly flight are relatively allinclusive and thus cannot be specifically described in a relevant way that differentiates essential habitat from non-essential habitat. Also, as a result of movement areas being relatively allinclusive, we do not know what specific geographic areas between subunits are essential for movement. Although a greater ability to disperse than commonly hypothesized would mean more frequent movement among habitat patches than indicated in the proposed critical habitat rule, it would not change how we identified critical habitat. See the Criteria Used To Identify Critical Habitat section below for more information.

(4) Comment: One peer reviewer noted compatibility of grazing with Laguna Mountains skipper occupancy depends not only on cattle density, but also environmental conditions. He stated that while cattle do not normally eat hostplants during larval butterfly development, he has observed heavy grazing on hostplants during drought years on Laguna Mountain.

Our Response: We appreciate this information and have incorporated it into the Special Management Considerations or Protection section of this final rule. We will also consider this information in future management recommendations.

(5) Comment: One peer-reviewer stated that the Laguna Mountains skipper may be extirpated on Laguna Mountain, and captive breeding is the only way to ensure long-term survival of the species.

Our Response: We acknowledge individuals have not been detected in this unit since 1999 (Pratt 1999, p. 7), and any remaining populations are not likely to be resilient enough to survive into the foreseeable future under current conditions. However, because insufficient evidence exists to conclude Laguna Mountain no longer supports an extant population in Unit 1, a presumption of extirpation would be premature. Even more detectable and highly surveyed butterfly populations that appeared to have been extirpated have been rediscovered, at least temporarily (e.g. Basu 1997, p.1, Essig Museum 2006). Surveys of varying intensity and duration were conducted in 8 of the 10 years between 1994 and 2003. During this 10-year period, only four adult skippers were found: A single individual in 1995 (Levy 1997, pp. ixxvi); one adult in 1996 (Levy 1997, pp. i-xxvi); and at least two adults in 1999

(Pratt 1999, p. 7). All observations of adult skippers have been at the El Prado/Laguna Campground. A single skipper larval shelter was found in 1997 at the Meadow Kiosk, along Sunrise Highway (Pratt 1999, p. 27). Despite recent intensive survey efforts at historical locations and select areas considered to be suitable skipper habitat (Faulkner 2000, p. 2; 2001, p. 2; 2002, p. 1; 2003, p. 2; 2004, p. 2; Osborne 2002, p. 2; 2003, p. 2), such as Agua Dulce campground, adult skippers have not been seen on Laguna Mountain since 1999. However, not all suitable habitat has been intensively surveyed and low density populations are difficult to detect. We agree captive breeding may be necessary to ensure long-term survival of the species on Laguna Mountain.

(6) Comment: One peer reviewer commented that the proposed critical habitat rule alluded to the Laguna Mountains skipper fitting a metapopulation distribution, while such distribution has not been established through research. He also stated the critical habitat designation was based on the species representing a metapopulation behavior.

Our Response: We do not know what type of population dynamics the species exhibits and did not intend to imply that we did understand such dynamics. Under the Species Status and Distribution section of the proposed rule, our statement, "If the Laguna Mountains skipper populations are characterized by metapopulation dynamics, habitat patches within the population distribution not occupied at any given time are still required for population viability," was intended to convey that not all suitable habitat is occupied at the same time and habitat that does not appear to be occupied at a given time is still important for population viability. We delineated critical habitat on Palomar and Laguna Mountains based on the following criteria (and not on metapopulation behavior): (1) Meadow complexes occupied by the Laguna Mountains skipper at the time of listing; (2) meadow complexes known to be currently occupied; and (3) meadow complexes historically, but not known to be currently, occupied but considered essential to the conservation of the species. For more information see the Criteria Used To Identify Critical Habitat section below.

(7) Comment: One peer reviewer stated that he agreed meadows are essential for survival of the species, and dependable water sources must be available. He expressed concern that loss of water in Laguna Mountain's

"upper Boiling Springs survey site" has greatly reduced the abundance and diversity of skipper species in the past 3 to 4 years. He expressed the opinion that water loss has resulted in extirpation of the "Hilda blue butterfly" from Palomar Mountain and stated that ground water monitoring is crucial for maintaining populations of the Laguna Mountains skipper.

Our Response: We appreciate this information and concurrence with our PCEs and criteria used to identify critical habitat. We agree that water availability is important for the species' conservation which is why it was included as a primary constituent element in the proposed and this final critical habitat rule.

(8) Comment: One peer reviewer disagreed with our statement "few, incomplete or no recent surveys have been conducted at sites not known to be occupied [Subunits 1B & 1C]." He stated that most sites on Laguna Mountain have been surveyed during the past 3 to 4 years, with negative results. He further stated that this does not mean the Laguna Mountains skipper is absent from those areas, but "rather has not been encountered during first generation protocol surveys."

Our Response: We appreciate the correction. To clarify, the majority of high-quality habitat sites on Laguna Mountain have been regularly surveyed for the past 3 to 4 years; however, some areas remain unsurveyed or only sporadically surveyed. We also agree this does not mean the Laguna Mountains skipper is absent from those areas which are adjacent to occupied habitat or were historically occupied.

(9) Comment: One peer reviewer questioned why subunits 1B and 1C were proposed for designation, because no Laguna Mountains skippers have been recorded from these units. She questioned why these specific areas were selected rather than other sites on Laguna Mountain where the hostplant grows.

Our Response: As stated in our response to Comment 5 we acknowledge populations on Laguna Mountain appear to be small; however, insufficient evidence exists to conclude Laguna Mountain no longer supports an extant population. Subunits 1B and 1C were included in the designation because: (1) These areas were considered to be historically occupied by the species; (2) they are the nearest to the occupied unit 1C where our data indicates they contain high densities of hostplant; and (3) they are likely to be important future species reintroduction sites on Laguna Mountain.

(10) Comment: One peer reviewer stated it was not known if all areas proposed as critical habitat were essential to conservation of the species. However, she also stated it seemed appropriate to designate patches of meadow habitat with hostplants between, and adjacent to, recent sightings of the Laguna Mountains skipper.

Our Response: As described in the Criteria Used to Identify Critical Habitat section of the proposed rule and this final rule, we delineated critical habitat to include patches of meadow habitat with hostplants between and adjacent to recent sightings of Laguna Mountains skippers. We cannot determine what geographic scale the peer reviewer was referring to.

(11) *Comment:* One peer reviewer stated she agreed that no areas outside of our proposed designation should have been proposed for designation. However, she also stated that of the areas not proposed for critical habitat designation, the area most likely to be essential is Dyche Valley on Palomar Mountain, south of Mendenhall Valley.

Our Response: We appreciate this information and concurrence with our proposed designation. We included a discussion in the proposed rule of unoccupied areas that may contain suitable habitat for the species as part of a discussion of the species' current status and distribution (see Status and Distribution section of the proposed rule). We did not include Dyche Valley because we had no hostplant or species occurrence information for this area, and therefore could not conclude it was essential to the species' conservation.

(12) Comment: Two peer reviewers stated Laguna Mountains skippers use more diverse nectar sources than indicated in the proposed critical habitat rule. One peer reviewer suggested the list of nectar sources should include Taraxacum vulgare (common dandelion) and the hostplant Horkelia clevelandii.

Our Response: We appreciate this information, and will consider it in future management recommendations. We believe the PCEs are sufficiently broad with regard to use of diverse nectar sources, and already include the hostplant *H. clevelandii*, therefore we did not revise our PCEs.

(13) Comment: One peer reviewer expressed concern that population size estimates and comparisons given in the proposed critical habitat rule were not reliable. He expressed particular concern that due to disease, parasitism, and predation, these kind of estimates extrapolated from immature life stages greatly overestimate population size.

Our Response: We agree that there is a high amount of uncertainty inherent in the population estimates and the effect of factors such as disease, parasitism, and predation on the population may not be accurately reflected. However, even with these limitations, the population estimates outlined in the proposed rule are currently the best available information. We appreciate this information and will consider it in future management recommendations.

#### **Public Comments**

(14) Comment: Two commenters stated that U.S. Forest Service (Forest Service or USFS) actions to date, and land management plans addressing conservation of Laguna Mountains skipper habitat, should result in exclusion of Cleveland National Forest lands from critical habitat designation.

Our Response: We acknowledge the Cleveland National Forest has implemented measures to minimize impacts to the Laguna Mountains skipper. We also acknowledge two existing Forest Service management plans contain general provisions for conservation of the Laguna Mountains skipper: the Land Management Plan for the Cleveland National Forest (LMP, Forest Service 2005, pp. 1-57) and a habitat management guide for four sensitive plant species in mountain meadows (Cleveland National Forest 1991, pp. 1–36). The habitat management guide, while providing more specific conservation measures than the land management plan, is still specific to "discrete [montane] meadow communities" and the four sensitive plant species. While these mapped community areas (Cleveland National Forest 1991, pp. 5-7) do include some areas identified as essential for Laguna Mountains skipper (e.g. southern Mendenhall Valley; see unit descriptions below), many smaller forest openings and adjacent open-canopy woodland areas are not included, such as Observatory Campground and Trail. Also, habitat management guides and plans do not mandate conservation measures, and therefore do not provide adequate protection of essential habitat. For example, the 1993 scheduled management action for Delphinium hesparium (Cleveland National Forest 1991 p.17), a grazing exclosure in the Garnet Kiosk area (southern Laguna Meadow area, also identified as essential to the Laguna Mountains skipper), has not yet been implemented. Existing Forest Service measures and management plans do not provide specific or sufficient enough conservation measures for Laguna

Mountains skipper habitat, and the benefits of including these areas within critical habitat are not outweighed by any potential benefits of excluding the areas (see Exclusions Under Section 4(b)(2) of the Act section of this final rule for a detailed discussion). Therefore, we did not exclude Forest Service lands from the final designation under section 4(b)(2) of the Act.

(15) Comment: One commenter stated that lands managed by the Cleveland National Forest should not be excluded from critical habitat designation based on their Land Management Plan because the plan provides few specific benefits to the species.

Our Response: For reasons discussed in the response to Comment 14 above, we did not exclude Forest Service lands from the final designation under section 4(b)(2) of the Act.

(16) Comment: Two commenters asserted that the Laguna Mountains skipper may be extirpated on Laguna Mountain; therefore designation of critical habitat at that location is not appropriate.

Our Response: As discussed in our response to Comment 5 above, insufficient information exists to conclude Laguna Mountain no longer supports an extant population in Unit 1. Therefore, we cannot agree at this time with the commenter's assertion. Also, if the Laguna Mountains skipper has been extirpated from Laguna Mountain, reintroduction will likely to be necessary to promote the conservation of the subspecies, and unoccupied habitat would still be considered essential. Current occupancy is not required for the designation of critical habitat if the area is essential to the conservation of the species.

(17) Comment: One commenter stated that if critical habitat is designated, a greater conservation value could be achieved by further limiting critical habitat designation to a "more refined boundary" within proposed critical habitat. Specific recommended refined boundaries, primarily following the U.S. Forest Service's habitat model for Laguna Mountains skipper, were delineated on maps provided with these comments.

Our Response: We re-evaluated the methodology used to delineate the proposed critical habitat unit boundaries and have revised the final critical habitat unit boundaries based on information provided by this commenter. In total, these revisions have resulted in the removal of approximately 420 ac (169 ha) from final critical habitat (see Summary of Changes from the Proposed Rule section below for a detailed discussion).

(18) Comment: One commenter stated that designation of critical habitat will "further hinder or destroy all economic activity" and "terminate or curtail recreational use" on Forest Service land on Laguna Mountain.

Our Response: Although designation of critical habitat may increase the number of Forest Service consultations on projects in essential habitat, and should increase conservation measures for the species at a few key locations, the designation should not significantly increase restrictions on economic activities or restrict recreational activities relative to current levels. As stated below (under Special Management Considerations or Protection), economic activities, such as relatively low density grazing, should not adversely modify habitat if carefully managed to minimize or avoid destruction of hostplants. The total estimated future costs (loss of economic gain due to critical habitat designation) in the Draft Economic Analysis over the next 20 years to grazing on Laguna Mountain range from \$42,000 to \$76,000 (Industrial Economics, Incorporated, p. ES-10). Total estimated future cost for recreational activities is \$3,305,000 (Industrial Economics, Incorporated, p. ES-10). Total future costs to grazing and recreation on Laguna Mountain average from \$167,350 to \$169,050 per year, a relatively low estimate. The Draft Economic Analysis states, "While changes in [livestock production and recreational camping] could affect the regional economy, the magnitude of the expected change is insignificant (i.e., less than one percent for grazing and less than 0.01 percent for camping) in light of the total size of the regional economy." (Industrial Economics, Incorporated, p. ES–13). Future cost value estimates will also be reduced by the reduction in area designated as critical habitat relative to what was proposed (see Summary of Changes from Proposed Rule below).

(19) Comment: One commenter stated that subunits 1B and 1C on Laguna Mountain should not be designated as critical habitat because: (1) Subunit 1A provides substantial habitat already; (2) subunits 1B and 1C are not contiguous with Laguna Meadow as stated in the proposed critical habitat rule; and (3) designation based on potential reintroduction is not justified.

Our Response: As stated in the proposed rule, Subunits 1B and 1C were proposed as critical habitat because they are connected to occupied habitat, were historically occupied, and contain physical and biological features essential to the conservation of the species. To clarify, while not physically

connected, these subunits are ecologically connected to occupied habitat (Laguna Meadow) by relatively undisturbed forested habitat that allows for species movement between Laguna Meadow and Subunits 1B and 1C. We have clarified this in the Critical Habitat Designation section of this final rule. We also stated in the proposed rule that we believe that given the species' small population size and very limited range, reintroduction may be necessary for long-term persistence of the species. Since critical habitat identifies areas essential to species conservation, we believe inclusion of these unoccupied areas in final critical habitat is justified.

(20) Comment: One commenter stated the designation of independent, nonconnected subunits within each mountain contradicts the statement in the proposed rule that connectivity areas among meadows are required for species' survival. The commenter stated that Laguna Mountains skippers are "highly mobile" and known to fly through forested environments, and failure to designate critical habitat connecting subunits could reduce the likelihood of species survival.

*Our Response:* See response to Comment 3 above.

(21) Comment: One commenter stated because hostplant mapping and knowledge of habitat use by Laguna Mountains skippers is incomplete, all areas within hostplant elevation limits on Laguna Mountain should be designated as critical habitat.

Our Response: We acknowledge that hostplant mapping and knowledge of habitat use by Laguna Mountains skippers is incomplete; however, we are required to use the best available information to designate habitat that contains the primary constituent elements required by the species and is essential to the conservation of the species. In the absence of more complete hostplant mapping information, we limited the designation to those areas that the available information indicates contain the PCEs and are essential to the conservation of the species.

(22) Comment: One commenter wanted to make sure that critical habitat designation would not affect the fire safety of human and natural communities on Laguna Mountain.

Our Response: The designation of critical habitat will not affect fire safety of human communities on Laguna Mountain. Public safety is always the first priority in the event of a fire. Also, the local Service field office has several biologists trained as resource advisors who work cooperatively with firefighters to ensure that impacts to

natural communities are minimized to the maximum extent practicable during fire fighting activities. As stated below (under Special Management Considerations or Protection), fire management activities, such as tree and brush removal for fuel modification, should not adversely modify habitat if carefully managed to minimize or avoid destruction of hostplants.

(23) Comment: One commenter objected to our assertion that critical habitat provides little benefit above that provided by other provisions of the Act.

Our Response: As discussed in the sections "Designation of Critical Habitat Provides Little Additional Protection to Species," "Role of Critical Habitat in Actual Practice of Administering and Implementing the Act," and "Procedural and Resource Difficulties in Designating Critical Habitat" and other sections of this and other critical habitat designations, we believe that, in most cases, other conservation mechanisms provide greater incentives and conservation benefits than does the designation of critical habitat. These other mechanisms include the section 4 recovery planning process, section 6 funding to the States, section 7 consultations, the section 9 protective prohibitions of unauthorized take, the section 10 incidental take permit process, and cooperative programs with private and public landholders and tribal nations.

Comments Related to the Draft Economic Analysis (DEA)

(24) Comment: One comment stated that the DEA fails to evaluate benefits associated with protecting critical habitat for the Laguna Mountains skipper. The same commenter noted that cost savings associated with protecting the hydrological function of meadows and conducting fire abatement around proposed new utility structures throughout critical habitat should be included in the DEA.

Our Response: Section 4(b)(2) of the Act requires the Secretary to designate critical habitat based on the best scientific data available after taking into consideration the economic impact, impact on national security, and any other relevant impact, of specifying any particular area as critical habitat. The Service's approach for estimating economic impacts includes both economic efficiency and distributional effects. The measurement of economic efficiency is based on the concept of opportunity costs, which reflect the value of goods and services foregone in order to comply with the effects of the designation (e.g., lost economic opportunity associated with restrictions

on land use). Where data are available, the economic analyses do attempt to measure the net economic impact. However, no data was found that would allow for the measurement of such an impact, nor was such information submitted during the public comment period.

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

We note, as a practical matter, it is difficult to develop credible estimates of such values, as they are not readily observed through typical market transactions and can only be inferred through advanced, tailor-made studies that are time consuming and expensive to conduct. We currently lack both the budget and time needed to conduct such research before meeting our courtordered final rule deadline. In summary, we believe that society places significant value on conserving any and all threatened and endangered species and the habitats upon which they depend and thus needs only to consider whether the economic impacts (both positive and negative) are significant enough to merit exclusion of any particular area without causing the species to go extinct.

(25) Comment: One comment stated that the DEA overestimates costs associated with conserving the Laguna Mountains skipper, because it includes economic impacts attributable to listing under the ESA. The comment further stated that the costs associated with listing of a species are separate from critical habitat designation and therefore should not be included in the economic impacts analysis for critical habitat designation.

Our Response: The economic analysis is intended to assist the Secretary in determining whether the benefits of excluding particular areas from the designation outweigh the biological benefits of including those areas in the designation. Also, this information allows us to comply with direction from the U.S. 10th Circuit Court of Appeals that "co-extensive" effects should be included in the economic analysis to inform decision-makers regarding which areas to designate as critical habitat

(New Mexico Cattle Growers Association v. U.S. Fish and Wildlife Service (248 F.3d 1277)).

This analysis identifies those potential activities believed to be most likely to threaten the Laguna Mountains skipper and its habitat and, where possible, quantifies the economic impact to avoid, mitigate, or compensate for such threats within the boundaries of the critical habitat designation. Where critical habitat is being proposed after a species is listed, some future impacts may be unavoidable, regardless of the final designation and exclusions under section 4(b)(2) of the Act. However, due to the difficulty in making a credible distinction between listing and critical habitat effects within critical habitat boundaries, this analysis considers all future conservation-related impacts to be co-extensive with the designation.

(26) Comment: One comment stated the costs for fuel management projects are underestimated because they do not include increased costs associated with additional planning and analysis as well as higher treatment costs that might be associated with avoiding certain areas within proposed critical habitat areas.

Our Response: We revised the DEA to include the costs associated with additional planning, analysis, and treatment required to ensure that Laguna Mountains skipper habitat is avoided. Cleveland National Forest staff estimate these costs to be approximately \$2,000 per fuels management project and three fuels management projects per year in proposed critical habitat areas, or approximately \$6,000 per year.

(27) Comment: One comment stated the administrative costs associated with section 7 consultations for the Cleveland National Forest are "very much underestimated."

Our Response: Based on information provided by the Cleveland National Forest, we revised the DEA's estimate of future administrative costs associated with section 7 consultations. As shown in Exhibit 8–8 of the DEA, administrative costs are forecasted to be \$1.4 million (undiscounted dollars) over the next 20 years. In present value terms, costs are \$1.1 million, assuming a three percent discount rate; and \$828,000, assuming a seven percent discount rate.

Summary of Changes From Proposed Rule

Based on information received from Terrell (2006a, p. 3 and 4) during the public comment periods, we reevaluated the proposed critical habitat boundaries. Terrell (2006a, p. 3 and 4) suggested we limit critical habitat designation to Cleveland National Forest's Laguna Mountains skipper modeled habitat (Winter 2000, pg. 1) within proposed critical habitat units. Methodology in Winter (2000, pg. 1) was described as follows:

"Elevation between 4000 and 6100 feet. Vegetation type is grassland that is within 100 meters of contact with oak woodland/conifer forest vegetation type and conifer/woodland type that is within 100 meters of contact with grassland. As of 3/6 [2000], heb (herbaceous in veg cover was limited by 3 soil types, crouch, reiff, loamy alluvial). Additional work included incorporating entire meadows in addition to the edges based on the 100m contact above, and excluding the most southern (Corta Madera) portions of screen due to vegetation surveys indicating no presence of *Horkelia* [on] private lands."

This qualitative method of delineating meadows in many areas on Laguna Mountain is similar to the information we used in our critical habitat proposal (see Criteria Used to Identify Critical Habitat section below). Terrell (2006a, pp. 5, 6) provided a map using Winter's (2000) methods to map habitat within proposed critical habitat units, and recommended limiting critical habitat designation to those areas. We considered this information and agreed that using the modeled habitat constituted the best available scientific information, thus justifying some unit boundary adjustments; however additional data on habitat type use (e.g., open oak woodland at Pine Hill (Osborne 2002)) and host plant distribution since 2000 justify including some areas not mapped by Winter (2000, pg.1).

We overlaid the Cleveland National Forest's Laguna Mountains skipper modeled habitat (Winter 2000, pg. 1) boundaries on the proposed critical habitat boundaries for Unit 1 (Laguna Mountain) and removed those areas from proposed critical habitat which fell outside of the modeled habitat and for which we did not have main hostplant (Horkelia clevelandii) occurrence data (see the Criteria Used To Identify Critical Habitat section below for a detailed discussion). This re-evaluation resulted in the removal of approximately 420 ac (169 ha) from Unit 1 (Laguna Mountain). The areas removed were primarily located in the northeastern portion of Subunit 1B, the southwestern portion of Subunit 1C, and the southeastern portion of Subunit 1A, as well as open woodland north of Boiling Springs Ravine in Subunit 1A. This re-evaluation of proposed critical habitat boundaries did not result in any changes to lands designated in Unit 2.

#### Critical Habitat

Critical habitat is defined in section 3 of the Act as-(i) the specific areas within the geographical area occupied by a species, at the time it is listed in accordance with the Act, on which are found those physical or biological features (I) essential to the conservation of the species and (II) that may require special management considerations or protection; and (ii) specific areas outside the geographical area occupied by a species at the time it is listed, upon a determination that such areas are essential for the conservation of the species. Conservation, as defined under section 3 of the Act means to use and the use of all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to the Act are no longer necessary. Such methods and procedures include, but are not limited to, all activities associated with scientific resources management such as research, census, law enforcement, habitat acquisition and maintenance, propagation, live trapping, and transplantation, and, in the extraordinary case where population pressures within a given ecosystem cannot be otherwise relieved, may include regulated taking.

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

To be included in a critical habitat designation, the habitat within the area occupied by the species must first have features that are essential to the conservation of the species. Critical habitat designations identify, to the extent known using the best scientific data available, habitat areas that provide essential life cycle needs of the species (i.e., areas on which are found the primary constituent elements, as defined at 50 CFR 424.12(b)).

Habitat occupied at the time of listing may be included in critical habitat only

if the essential features thereon may require special management considerations or protection. Thus, we do not include areas where existing management is sufficient to conserve the species. (As discussed below, such areas may also be excluded from critical habitat pursuant to section 4(b)(2)). Areas outside of the geographic area occupied by the species at the time of listing may only be included in critical habitat if they are essential for the conservation of the species. Accordingly, when the best available scientific data do not demonstrate that the conservation needs of the species require additional areas, we will not designate critical habitat in areas outside the geographical area occupied by the species at the time of listing. An area currently occupied by the species but not known to be occupied at the time of listing will likely, but not always, be essential to the conservation of the species and, therefore, typically included in the critical habitat designation.

The Service's Policy on Information Standards Under the Endangered Species Act, published in the Federal Register on July 1, 1994 (59 FR 34271), and Section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001 (Pub. L. 106– 554; H.R. 5658) and the associated Information Quality Guidelines issued by the Service, provide criteria, establish procedures, and provide guidance to ensure that decisions made by the Service represent the best scientific data available. They require Service 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 determining which areas are critical habitat, a primary source of information is generally the listing package for the species. Additional information sources include the recovery plan for the species, articles in peer-reviewed journals, conservation plans developed by States and counties, scientific status surveys and studies, biological assessments, or other unpublished materials and expert opinion or personal knowledge. All information is used in accordance with the provisions of Section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001 (Pub. L. 106-554; H.R. 5658) and the associated Information Quality Guidelines issued by the Service.

Section 4 of the Act requires that we designate critical habitat on the basis of the best scientific data available. Habitat

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

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

### **Primary Constituent Elements**

In accordance with section 3(5)(A)(i) of the Act and regulations at 50 CFR 424.12, in determining which areas to designate as critical habitat within areas occupied by the species at the time of listing, we consider those physical and biological features (PCEs) that are essential to the conservation of the species and that may require special management considerations or protection. These include, but are not limited to space for individual and population growth and for normal behavior; food, water, air, light, minerals, or other nutritional or physiological requirements; cover or shelter; sites for breeding, reproduction, and rearing (or development) of offspring; and habitats that are protected from disturbance or are representative of the historical geographical and ecological distributions of a species.

The specific primary constituent elements required for the Laguna Mountains skipper are derived from the biological needs of the Laguna Mountains skipper as described in the Background section of the proposed rule (70 FR 73699).

Food, Water, or Other Nutritional or Physiological Requirements

Laguna Mountains skippers require sunlight provided in the open meadows, open woodlands, or other forest openings. Butterflies are exothermic (i.e., they remain at the same temperature as their environment) and, like most insects, body temperature is of overriding importance in limiting flight (Chapman 1982, p. 217–272). Butterfly flight activity is limited by light intensity. Therefore, they require areas for basking in the sun in order to raise their body temperature for flight (Chapman 1982, p. 217-272). Additionally, surface moisture such as puddles and seeps (not flowing water) provide water and minerals for adults. Adult Laguna Mountains skippers need annual or perennial nectar sources including meadow and woodlandassociated herbaceous annual wildflowers, and perennial herbs (e.g. Horkelia clevelandii, Lasthenia spp. (goldfields), Pentachaeta aurea (goldenrayed pentachaeta), Ranunculus spp. (buttercups), and Sidalcea spp. (checkerbloom)).

Sites for Breeding and Reproduction

Laguna Mountains skippers require Horkelia clevelandii to lay eggs on and for the caterpillars to eat and construct their pupal shelters. The species has also been documented on Potentilla glandulosa (Pratt 1999, p. 10; Osborne 2005). However, P. glandulosa may only be used as a hostplant for population survival in special circumstances (e.g., dry environmental conditions) where it occurs near H. clevelandii. Hostplant patches must be dense enough to support breeding (provide multiple and diverse sites for depositing eggs), although the exact host-plant patch size and density required for breeding is not known. A "patch" of hostplants may consist of one to several clumps of H. clevelandii or P. glandulosa growing together, as well as numerous individual plants that are growing in close proximity to each other.

Space for Individual and Population Growth, and for Normal Behavior

The species' current geographic range is fragmented and small, population densities are relatively low, and the quality of most breeding habitat has been compromised to some degree by grazing, recreation impacts, or alien plants. Therefore, all landscape connectivity areas among occupied meadows and forest openings that adult Laguna Mountains skippers can move through are required for the conservation of the species. To facilitate

the use of connectivity areas for adult movement between breeding sites, maintenance of populations of hostplants and adult nectar sources is important, even if they are not likely to be used for breeding.

Historical and Geographic Distribution of the Species

The occupied areas designated as critical habitat are representative of the historical and geographical distribution of the species. Areas included in the final designation that are not known to be occupied were all historically occupied and will restore a portion of the historical geographic distribution of the Laguna Mountains skipper. Connectivity is required for recolonization of habitat to occur (e.g., after extirpation by fire) and for genetic diversity to be maintained.

Primary Constituents for the Laguna Mountains Skipper

Pursuant to our regulations, we are required to identify the known physical and biological features (PCEs) essential to the conservation of the Laguna Mountains skipper. All areas designated as critical habitat for the Laguna Mountains skipper are within the species' historical geographic range and contain sufficient PCEs to support at least one life history function.

Based on our current knowledge of the life history, biology, and ecology of the species and the requirements of the habitat to sustain the essential life history functions of the species, we have determined that the Laguna Mountains skipper's PCEs are:

- (1) The hostplants, *Horkelia clevelandii* or *Potentilla glandulosa*, in meadows or forest openings needed for reproduction.
- (2) Nectar sources suitable for feeding by adult Laguna Mountains skippers, including *Lasthenia* spp., *Pentachaeta* aurea, *Ranunculus* spp., and *Sidalcea* spp. found in woodlands or meadows.
- (3) Wet soil or standing water associated with features such as seeps, springs, or creeks where water and minerals are obtained during the adult flight season.

This designation is designed for the conservation of areas supporting PCEs necessary to support the life history functions which were the basis for the proposal. In general, critical habitat units are designated based on sufficient PCEs being present to support one or more of the species' life history functions. In this instance, all units contain all PCEs and support multiple life processes. Because not all life history functions require all the PCEs,

not all critical habitat will uniformly contain all the PCEs.

## Criteria Used To Identify Critical Habitat

As required by section 4(b)(1)(A) of the Act, we use the best scientific data available in determining areas that contain the features that are essential to the conservation of the Laguna Mountains skipper. We have also reviewed available information that pertains to the habitat requirements of this species. Information sources include data from field surveys for Horkelia clevelandii, regional Geographic Information System (GIS) vegetation and species coverages, data compiled in the California Natural Diversity Database (CNDDB), and survey data for the Laguna Mountains skipper from reports submitted by biologists holding section 10(a)(1)(A) recovery permits. We identified critical habitat based on the assessment of those physical and biological components identified above, the known and historical occurrences of Laguna Mountains skipper, and available information on the distribution of H. clevelandii. We designated no areas outside the individual mountains presently occupied by the species.

To delineate critical habitat, we identified meadow complexes (meadows and forest openings connected by open forest canopy) on Palomar and Laguna Mountains occupied by the Laguna Mountains skipper at the time of listing and known to be currently occupied. The species was known to occupy only one meadow complex (Laguna Meadow) on Laguna Mountain at the time of listing, but we also identified two meadow complexes on Laguna Mountain that contain habitat with features essential to the conservation of the species. These meadow complexes were not known to be occupied at the time of listing, however, they have not been extensively surveyed, and Laguna Mountain as a whole was historically considered to be occupied by the skipper. These areas are important for expansion and enhancement of populations in Laguna Meadow and are therefore considered essential to the conservation of the species.

Using infrared satellite imagery, we visually outlined meadows and forest openings that contained species or hostplant occurrence data. Maps were produced by overlaying a 328 square ft (100 square m) grid on the initial handdrawn polygons and selecting those grid cells that fell within the hand drawn polygons. Specifically, on Palomar Mountain (Unit 2) we defined subunits

based on the selected grid cells because meadows were more clearly defined and species occupancy and distribution information was more clearly defined. On Laguna Mountain (Unit 1), where meadows were not as clearly defined and species distribution information and occupancy was less certain, we then overlaid the Cleveland National Forest's Laguna Mountains skipper modeled habitat boundaries and removed areas outside of the modeled habitat for which we did not have occurrence data for the species or its main hostplant (Horkelia clevelandii). Specifically, we removed: (1) All grid cells more than 328 ft (100 m) distant from species occurrence locations, hostplant occurrence locations, or Forest Service modeled habitat; (2) remaining grids cells not connected to the three subunits of Unit 1; and (3) all grid cells with over 97 percent of their area more than 328 ft (100 m) distant from species occurrence locations, hostplant occurrence locations habitat.

When determining critical habitat boundaries, we made every effort to avoid including within the boundaries of the map contained within this final rule developed areas such as buildings, paved areas, and other structures that lack PCEs for the Laguna Mountains skipper. The scale of the maps prepared under the parameters for publication within the Code of Federal Regulations may not reflect the exclusion of such developed areas. Any such structures and the land under them inadvertently left inside critical habitat boundaries shown on the maps of this final rule have been excluded by text in the final rule and are not designated as critical habitat. Therefore, Federal actions limited to these areas would not trigger section 7 consultation, unless they may affect the species or primary constituent elements in adjacent critical habitat.

We are designating critical habitat on lands that we have determined were occupied at the time of listing and contain sufficient primary constituent elements to support life history functions essential for the conservation of the species. We are also designating lands that were not known to be occupied at the time of listing but have been determined to be essential for the conservation of the Laguna Mountains skipper.

## Special Management Considerations or Protection

When designating critical habitat, we assess whether the areas determined to be occupied at the time of listing support the primary constituent elements that may require special management considerations or

protection. Threats to those essential features that define critical habitat (PCEs) for the Laguna Mountains skipper include the direct and indirect impacts of human development and recreation, surface and groundwater management practices, and grazing intensity.

Areas identified as critical habitat are composed of 38 percent private land holdings, where habitat is subject to rural development and overgrazing, potential stream and groundwater diversions, and recreational activities. State and Federal landholdings (6 and 56 percent, respectively) are also subject to grazing and recreational activities. While designation of critical habitat does not impose any management requirements, particularly on State or private land, the following are measures that could be undertaken to benefit the species.

Grazing can cause direct mortality of larvae and eggs by trampling and consumption. The density of cattle grazed in meadow habitat should be monitored and managed as well as levels of habitat degradation resulting from existing levels of grazing. Environmental conditions should also be considered when determining appropriate cattle density in meadow habitat occupied by the Laguna Mountains skipper. While cattle do not normally eat hostplants while larvae are developing, they have been observed grazing on hostplants during drought years on Laguna Mountain (Pratt 2006, p. 4). Adaptive management may be needed to adjust cattle grazing intensity, and protection measures may include exclosures to prevent grazing of hostplants. Monitoring of potential changes in hydrology caused by stream and groundwater diversions should be undertaken and any necessary management to prevent habitat conversion from wet to dry meadows, or open woody canopy to closed.

On Palomar Mountain, commercial drinking water projects and stream alterations on private lands are currently diverting stream and groundwater to an unknown extent. Drying of meadows results in vegetation changes (for a general discussion see Naumburg et al. 2005) that could eliminate primary constituent elements within Laguna Mountains skipper habitat (e.g. hostplants and surface moisture, PCEs 1 and 3). Recreational activities such as camping and horseback riding can cause direct mortality of Laguna Mountains skipper larvae by trampling, and may increase encroachment of exotic vegetation affecting the availability of hostplants (PCE 1) and nectar sources (PCE 2).

Changes in surface and groundwater availability due to disturbance by cattle and humans can also result in meadow habitat conversion (PCE 1).

The provisions within two Forest Service management documents promote the conservation of the Laguna Mountains skipper. The Land Management Plan provides long-term management direction for National Forest Service lands (Terrell 2006a, pg. 1; and b, pp. 1-2). In addition, the Cleveland National Forest has a habitat management guide for four sensitive plant species in mountain meadows habitat (Cleveland National Forest 1991, pp.1-36). While the USFS has completed some conservation actions for the species, the avoidance and mitigation standards in both management plans are general and do not specify what actions are needed, or what is considered essential habitat. Therefore, habitat essential to the Laguna Mountains skipper where special management actions may be needed to minimize impacts resulting from recreation, grazing, and exotic plant invasion needs to be identified.

Areas designated as critical habitat contain physical and biological features essential for the conservation of the Laguna Mountains skipper that may require some level of management or protection to address current and future threats to the Laguna Mountains skipper. Subunits 2A, 2B, and 2C may require special management due to all threats described above. All subunits in Unit 1 may require special management due to all threats described above except diverting stream and groundwater. Subunit 2D may require management primarily of recreation impacts. Fire management activities, such as logging, fuel modification, or relatively low density grazing, should not adversely modify habitat if carefully and adaptively managed to minimize or avoid destruction of hostplants.

## **Critical Habitat Designation**

We are designating 2 units, further divided into 7 subunits, as critical habitat for the Laguna Mountains skipper. Unit 1, Laguna Mountain, consists of subunits 1A, 1B, and 1C. Unit 2, Palomar Mountain, consists of subunits 2A, 2B, 2C, and 2D. Lands being designated are under Federal (3,516 ac (1,423 ha)), private (2,361 ac (954 ha)), and State (381 ac (154 ha)) ownership. Table 1 outlines the acreage and landownership of the areas designated as critical habitat for the Laguna Mountains skipper. The critical habitat areas described below constitute our best assessment at this time of areas determined to be occupied at the time

of listing, containing the primary constituent elements essential for the conservation of the species that may require special management considerations or protection, and those additional areas found to be essential to the conservation of the Laguna Mountains skipper. All three PCEs are generally distributed throughout all the subunits: Nectar sources are the most evenly distributed PCE (PCE 2); host plants (PCE 1) are generally concentrated near the edges of larger meadows, streams, and in forest openings; wet areas are the most localized (PCE 3), found in association with natural seeps, cattle troughs, streams, and ponds or lakes.

Table 1.—Area, in Acres (ac) and Hectares (ha), and Landownership of the Areas Designated as Critical Habitat for the Laguna Mountains Skipper

Critical habitat unit/subunit	Total area ac (ha)	Federal <sup>1</sup> ac (ha)	Private ac (ha)	State 2 ac (ha)	
Unit 1—	-Laguna Mountain				
Subunit 1A (Laguna Meadow)	2,610 (1,056) 233 (94) 500 (202)	2,531 (1,024) 233 (94) 374 (151)	79 (32) 0 126 (51)	0 0 0	
Unit 1 Total	3,343 (1,352)	3,138 (1,269)	205 (83)	0	
Unit 2—	Palomar Mountain				
Subunit 2A (Mendenhall Valley and Observatory Campground) Subunit 2B (Upper French Valley, Observatory Trail, and Palomar Observatory Meadows)	1,092 (442) 998 (404) 547 (221) 262 (106)	231 (94) 93 (38) 40 (16) 14 (6)	861 (348) 905 (366) 316 (128) 58 (23)	0 0 191 (77) 190 (77)	
Unit 2 Total	2,899 (1,173)	378 (154)	2,140 (865)	381 (154)	
Total of Units 1 and 2	6,242 (2,525)	3,516 (1,423)	2,345 (948)	381 (154)	

<sup>&</sup>lt;sup>1</sup> Federal lands = U.S. Forest Service.

## Unit 1: Laguna Mountain

Unit 1 encompasses approximately 3,343 ac (1,352 ha) (Table 1), and is approximately centered on Laguna Mountain peak located in south-central San Diego County, east of the community of Alpine, California. This unit is divided into three subunits which each contain all of the primary constituent elements. This unit is crucial to the species primarily because the species was first described from this unit and represents the southernmost portion of the species" range. Maintaining two widely separate units (i.e., Laguna and Palomar Mountains), and multiple subunits limits the potential for a catastrophic event to extirpate all remaining populations. Because the number of known occupied sites and low population densities are not sufficient to overcome the threat of extirpation, connectivity and expansion into unoccupied meadow complexes is necessary for the conservation of the Laguna Mountains skipper. Connectivity is important for recolonization of habitat to occur (e.g., after extirpation by fire) and genetic diversity to be maintained among local populations.

## Unit 1A: Laguna Meadow

Unit 1A (2,610 ac (1,056 ha)) is currently occupied and was known to

be occupied at the time of listing. This subunit contains habitat features essential to the conservation of the species and is the site where the species was first described (i.e., northern Laguna Meadow, near Little Laguna Lake). Until 2000, adult skippers were consistently found in this area. The Cleveland National Forest lands in this unit are subject to grazing and recreational activities, and special management considerations such as grazing density adjustments or exclosures to protect hostplants may be required to maintain the PCEs. This subunit contains 2,531 (1,024 ha) of Forest Service managed lands and 79 ac (32 ha) of privately owned land (Table

## Unit 1B: Filaree Flat

Subunit 1B (233 ac (94 ha)) is not currently known to be occupied, and was not known to be occupied at the time of listing, but was historically occupied. This subunit is essential because: (1) It contains habitat features essential to the conservation of any populations occupying Subunit 1A (2) provides for population expansion and enhancement; (3) minimizes habitat fragmentation; and (4) is representative of the historical geographical and ecological distribution of the species.

This subunit contains 233 ac (94 ha) of Forest Service managed lands (Table 1).

Unit 1C: Agua Dulce Campground and Horse Meadow

Subunit 1C (500 ac (202 ha)) is not currently known to be occupied and was not known to be occupied at the time of listing. This subunit is essential because: (1) It contains habitat features essential to the conservation of any populations occupying Subunit 1A; (2) provides for population expansion and enhancement; (3) minimizes habitat fragmentation; and (4) is representative of the historical geographical and ecological distribution of the species. This subunit contains 374 ac (151 ha) of Forest Service managed lands and 126 ac (51 ha) of privately owned land (Table 1).

## Unit 2: Palomar Mountain

Unit 2 encompasses approximately 2,899 ac (1,173 ha) (Table 1), and is approximately centered on Palomar Mountain peak located in north-central San Diego County near the border of Riverside County. Unit 2 consists of four subunits which each contain all of the primary constituent elements. Unit 2 includes the most densely populated area in the species" range and encompasses the northernmost portion of the range. Maintaining two widely

<sup>&</sup>lt;sup>2</sup> State Lands = California State Parks.

separate units (*i.e.*, Laguna and Palomar Mountains) and multiple subunits limits the potential for a catastrophic event to extirpate all remaining populations.

Unit 2A: Mendenhall Valley and Observatory Campground

Subunit 2A (1,092 ac (442 ha)) is known to be currently occupied and was occupied at the time of listing. Subunit 2A supports the largest known population of Laguna Mountains skipper and represents the best opportunity for the conservation of this species. This unit is composed of a large amount of private land holdings with habitat potentially subject to future rural development and other land use changes, overgrazing, stream diversion, and private recreational use. This subunit is the only meadow complex (i.e., Mendenhall Valley and associated forest openings) where multiple adults have been consistently detected since the time of listing. Lands in this subunit are subject to grazing activities, and special management considerations such as hostplant distribution monitoring, exclosure maintenance, and grazing density adjustments may be required to maintain the PCEs. This subunit contains 231 ac (94 ha) of Forest Service managed lands and 861 ac (348 ha) of privately owned land (Table 1).

Unit 2B: Upper French Valley, Observatory Trail, and Palomar Observatory Meadows

Subunit 2B (998 ac (404 ha)) is known to be currently occupied and was occupied at the time of listing. The distribution of small forest openings and meadows, and the five occurrence records along the Observatory Trail, indicate historical occupancy of Laguna Mountains skipper populations in unsurveyed portions of Upper French Valley. Lands in this subunit are subject to grazing and recreational activities, and special management considerations such as hostplant distribution monitoring, grazing and recreation exclosure maintenance, and grazing density adjustments may be required to maintain the PCEs. This subunit contains 93 ac (38 ha) of Forest Service managed lands and 905 ac (366 ha) of privately owned land (Table 1).

Unit 2C: Upper Doane Valley and Girl Scout Camp

Subunit 2C (547 ac (221 ha)) is known to be currently occupied, but was not known to be occupied at the time of listing. Subunit 2C is essential because: (1) It contains habitat features essential to the conservation of the species; (2) allows for population expansion and enhancement; and (3) minimizes habitat

fragmentation. This subunit contains 40 ac (16 ha) of Forest Service managed lands, 316 ac (128 ha) of privately owned land, and 191 ac (77 ha) of Stateowned land (*i.e.*, California State Parks) (Table 1).

Unit 2D: Lower French Valley and Lower Doane Valley

Subunit 2D (262 ac (106 ha)) is known to be currently occupied and was occupied at the time of listing. Reports of multiple Laguna Mountains skipper observations in this subunit in 2005 (Walker 2006) indicate relatively high current densities in these valleys, and has confirmed the importance of this subunit for species conservation. Lands in this subunit are subject to grazing activities, and special management considerations such as hostplant distribution monitoring, exclosure maintenance, and grazing density adjustments may be required to maintain the PCEs. This subunit contains 14 (6 ha) of Federal land (i.e., Forest Service), 58 ac (23 ha) of privately owned land, and 190 ac (77 ha) of State-owned land (i.e., California State Parks) (Table 1).

## **Effects of Critical Habitat Designation**

Section 7 Consultation

Section 7(a) of the Act requires Federal agencies, including the Service, to evaluate their actions with respect to any species that is proposed or listed as endangered or threatened and with respect to its critical habitat, if any is proposed or designated. Regulations implementing this interagency cooperation provision of the Act are codified at 50 CFR part 402.

Section 7(a)(4) of the Act requires Federal agencies to confer with us on any action that is likely to jeopardize the continued existence of a species proposed for listing or result in destruction or adverse modification of proposed critical habitat. This is a procedural requirement only. However, once proposed species becomes listed, or proposed critical habitat is designated as final, the full prohibitions of section 7(a)(2) apply to any Federal action. The primary utility of the conference procedures is to maximize the opportunity for a Federal agency to adequately consider proposed species and critical habitat and avoid potential delays in implementing their proposed action as a result of the section 7(a)(2) compliance process, should those species be listed or the critical habitat designated.

Under conference procedures, the Service may provide advisory conservation recommendations to assist the agency in eliminating conflicts that may be caused by the proposed action. The Service may conduct either informal or formal conferences. Informal conferences are typically used if the proposed action is not likely to have any adverse effects to the proposed species or proposed critical habitat. Formal conferences are typically used when the Federal agency or the Service believes the proposed action is likely to cause adverse effects to proposed species or critical habitat, inclusive of those that may cause jeopardy or adverse modification.

The results of an informal conference are typically transmitted in a conference report; while the results of a formal conference are typically transmitted in a conference opinion. Conference opinions on proposed critical habitat are typically prepared according to 50 CFR 402.14, as if the proposed critical habitat were designated. We may adopt the conference opinion as the biological opinion when the critical habitat is designated; if no substantial new information or changes in the action alter the content of the opinion (see 50 CFR 402.10(d)). As noted above, any conservation recommendations in a conference report or opinion are strictly advisory.

Once a species is listed or critical habitat is designated, section 7(a)(2) of the Act requires Federal agencies to ensure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of such a species or to destroy or adversely modify its critical habitat. Recent decisions by the 5th and 9th Circuit Courts of Appeals have invalidated our regulatory definition of "adverse modification" at 50 CFR 402.02 (see Gifford Pinchot Task Force v. U.S. Fish and Wildlife Service, 378 F.3d 1059 (9th Cir. 2004) and Sierra Club v. U.S. Fish and Wildlife Service et al., 245 F.3d 434, 442F (5th Cir. 2001)). Pursuant to current national policy and the statutory provisions of the Act, we determine destruction or adverse modification based on whether, with implementation of the proposed Federal action, the affected critical habitat would remain functional (or retain the current ability for the primary constituent elements to be functionally established) 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. As a result of this consultation, compliance with the requirements of section 7(a)(2) will be documented through the Service's 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, but are likely to adversely affect, listed species or critical habitat.

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

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

Federal activities that may affect the Laguna Mountains skipper or its designated critical habitat will require section 7 consultation under the Act. Activities on State, Tribal, local or private lands requiring a Federal permit (such as a permit from the Corps under section 404 of the Clean Water Act or a permit under section 10(a)(1)(B) of the Act from the Service) or involving some other Federal action (such as funding from the Federal Highway Administration, Federal Aviation Administration, or the Federal Emergency Management Agency) will also be subject to the section 7

consultation process. Federal actions not affecting listed species or critical habitat, and actions on State, Tribal, local or private lands that are not federally-funded, authorized, or permitted, do not require section 7 consultations.

Application of the Jeopardy and Adverse Modification Standards for Actions Involving Effects to the Laguna Mountains Skipper and Its Critical Habitat

## Jeopardy Standard

When performing jeopardy analyses for the Laguna Mountains skipper, the Service applies an analytical framework that relies heavily on the importance of core area populations to the survival and recovery of the Laguna Mountains skipper. The section 7(a)(2) analysis is focused not only on these populations but also on the habitat conditions necessary to support them.

The jeopardy analysis usually expresses the survival and recovery needs of the Laguna Mountains skipper in a qualitative fashion without making distinctions between what is necessary for survival and what is necessary for recovery. Generally, if a proposed Federal action is incompatible with the viability of the affected core area population(s), inclusive of associated habitat conditions, a jeopardy finding is considered to be warranted, because of the relationship of each core area population to the survival and recovery of the species as a whole.

### Adverse Modification Standard

The analytical framework described in the Director's December 9, 2004, memorandum is used to complete section 7(a)(2) analyses for Federal actions affecting Laguna Mountains skipper critical habitat. The key factor related to the adverse modification determination is whether, with implementation of the proposed Federal action, the affected critical habitat would remain functional (or retain the current ability for the primary constituent elements to be functionally established) to serve its intended conservation role for the species. Generally, the conservation role of Laguna Mountains skipper critical habitat units is to support viable core area populations.

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

or adversely modify critical habitat may also jeopardize the continued existence of the species.

Activities that may destroy or adversely modify critical habitat are those that alter the PCEs to an extent that the conservation value of critical habitat for the Laguna Mountains skipper is appreciably reduced. Activities that, when carried out, funded, or authorized by a Federal agency, may affect critical habitat and therefore result in consultation for the Laguna Mountains skipper include, but are not limited to:

(1) Actions that destroy Laguna Mountains skipper hostplants and immature life stages of the species. Such activities could include, but are not limited to overgrazing by livestock, vegetation removal, and recreational activities. These activities could eliminate breeding and nectaring resources for the adults, and directly destroy eggs, pupae, or larvae.

destroy eggs, pupae, or larvae. (2) Actions that would, over the longterm or permanently destroy habitat containing primary constituent elements. Such activities could include, but are not limited to: removal or destruction of hostplants and nectar sources by paving or piling logs; erection of permanent structures or cultivation of large shrubs or trees that impede adult movement; manipulation of seeps, springs, or creeks that eliminates surface moisture; paved road construction in occupied habitat; and rural development that eliminates or fragments habitat. These activities reduce the amount of available habitat and directly and indirectly increase the extirpation probability of associated Laguna Mountains skipper populations.

(3) Actions that would alter the vegetation of meadow habitat, for example invasion of exotic species or forest encroachment. Such activities could include, but are not limited to, stream or groundwater diversion. These activities could decrease the area of open meadow and soil moisture content and eliminate suitable Laguna Mountains skipper oviposition sites.

Fire management activities, such as tree and brush removal for fuel modification, or relatively low density grazing should not adversely modify habitat if carefully managed to minimize or avoid destruction of hostplants.

All of the units identified as critical habitat contain features essential to the conservation of the Laguna Mountains skipper. All units are within the geographic range of the species. Federal agencies already consult with us on activities in areas currently occupied by the Laguna Mountains skipper, or if the species may be affected by the action, to

ensure that their actions do not jeopardize the continued existence of the Laguna Mountains skipper.

Exclusions Under Section 4(b)(2) of the Act

Section 4(b)(2) of the Act states that critical habitat shall be designated, and revised, on the basis of the best available scientific data 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 [s]he determines that the benefits of such exclusion outweigh the benefits of specifying such area as part of the critical habitat, unless [s]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 Secretary is afforded broad discretion and the Congressional record is clear that in making a determination under the section the Secretary has discretion as to which factors and how much weight will be given to any factor.

Under section 4(b)(2), in considering whether to exclude a particular area from the designation, we must identify the benefits of including the area in the designation, identify the benefits of excluding the area from the designation, and determine whether the benefits of exclusion outweigh the benefits of inclusion. If an exclusion is contemplated, then we must determine whether excluding the area would result in the extinction of the species.

Forest Service actions, completed and ongoing, contribute to the conservation of the Laguna Mountains skipper and its habitat. The Cleveland National Forest has implemented measures to minimize impacts to the Laguna Mountains skipper, pursuant to consultation with the Service under section 7 of the Act (Service Biological Opinions 1-6-05-F-773.9, 1-6-99-F-22, and 1-6-01-F-1694). Implemented post-listing impact minimization measures include: (1) An exclosure to reduce recreation impacts and tree thinning to enhance habitat in 1997 at Observatory Campground; (2) grazing exclosures to study grazing effects in 1996, 1999, and 2000, at Mendenhall Valley, Little Laguna Meadow, and Laguna Meadow; (3) visitor impact monitoring and visitor capacity reduction to minimize recreation impacts at Laguna Campground; and (4) habitat studies and surveys from 2000 to 2006 to increase biological knowledge of the species.

Provisions within two Forest Service management documents also promote conservation of the Laguna Mountains skipper. The Cleveland National Forest has a habitat management guide for four sensitive plant species in mountain meadows habitat (Cleveland National Forest 1991, pp. 1–36). While the habitat management guide is designed to facilitate conservation of meadow habitat and protection of sensitive plant species affected by grazing and recreation, it does not specifically provide for conservation of the Laguna Mountains skipper. In addition, the 2005 Land Management Plan for the Cleveland National Forest (LMP) provides long-term strategic management direction for Forest Service lands (Terrell 2006a, pp. 1; 2006b, pp. 1-2). According to the Forest Service Land Management Plan Part 1: Southern California National Forests Vision (Forest Service 2005, p. 3):

The purpose of the [LMP] is to articulate the long-term vision and strategic management direction for each southern California national forest and to facilitate the development of management activities . . . It is important to emphasize that the revised forest plans are completely strategic. They do not make project level decisions nor do they compel managers to implement specific actions or activities. Current uses are carried forward. Any changes made to existing uses or new proposals will be determined at the project level according to the requirements of the National Environmental Policy Act.

New hostplant and Laguna Mountains skipper locations have been recorded since the Cleveland National Forest developed a model (map) of Laguna Mountains skipper habitat (Winter 2000, pg. 1). Although Forest Service modeled habitat (Winter 2000, pg. 1) comprised 67 percent (4,464 of 6,662 acres (1,807 of 2,696 ha)) of Laguna Mountains skipper proposed critical habitat, some areas of proposed critical habitat where hostplant occurrence data were concentrated fell outside of Forest Service modeled habitat (e.g., at the southern end of subunit 1A).

The Forest Service LMP provides some species-specific directions for protecting the Laguna Mountains skipper, including the standard, "[a]void or mitigate, following consultation, activities resulting in direct trampling or erosion problems to Laguna Mountains Skipper suitable and occupied habitat and adjacent areas.' Because there are relatively large areas of habitat not known to be occupied on Laguna and Palomar Mountains, designation of critical habitat will help identify where consultation and conservation is needed for the Laguna Mountains skipper. Because the benefits of exclusion of the areas identified as critical habitat within the Cleveland National Forest do not outweigh the benefits of inclusion of these areas, we did not exclude Forest Service lands from the final designation under section 4(b)(2) of the Act.

Based on the best available information including the prepared economic analysis, we believe that all of the units known to occupied at the time of listing contain the features essential for conservation of the species and that the units not known to be currently occupied are essential for the conservation of the species. Our economic analysis indicates an overall low cost resulting from the designation. Therefore, we have found no areas for which the benefits of exclusion outweigh the benefits of inclusion, and have not excluded any areas from this designation of critical habitat for the Laguna Mountains skipper based on economic impacts.

Pursuant to section 4(b)(2) of the Act, we must consider other relevant impacts in addition to economic ones. We are not aware of any habitat conservation plans currently being developed for Laguna Mountains skipper on any lands included in this final designation. Also, this designation does not include any Tribal lands or trust resources. Therefore, we anticipate no impact to national security, Tribal lands, partnerships, or habitat conservation plans from this critical habitat designation. As such, we have considered these potential impacts but are not excluding any lands from this designation under section 4(b)(2).

## **Economic Analysis**

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

Following the publication of the proposed critical habitat designation, we conducted an economic analysis to estimate the potential economic effect of the designation. The draft analysis was made available for public review on July 7, 2006 (71 FR 38593). We accepted comments on the draft analysis until August 7, 2006. We respond to the comments we received on the draft

analysis in the Summary of Comments and Recommendations section above.

The primary purpose of the economic analysis is to estimate the potential economic impacts associated with the designation of critical habitat for the Laguna Mountains skipper. This information is intended to assist the Secretary in making decisions about whether the benefits of excluding particular areas from the designation outweigh the benefits of including those areas in the designation. This economic analysis considers the economic efficiency effects that may result from the designation, including habitat protections that may be co-extensive with the listing of the species. It also addresses distribution of impacts, including an assessment of the potential effects on small entities and the energy industry. This information can be used by the Secretary to assess whether the effects of the designation might unduly burden a particular group or economic

This analysis focuses on the direct and indirect costs of the rule. However, economic impacts to land use activities can exist in the absence of critical habitat. These impacts may result from, for example, local zoning laws, State and natural resource laws, and enforceable management plans and best management practices applied by other State and Federal agencies. Economic impacts that result from these types of protections are not included in the analysis as they are considered to be part of the regulatory and policy baseline.

Laguna Mountains skipper conservation activities are likely to primarily impact recreational camping and utility maintenance activities. The draft economic analysis estimates the potential total future impacts to range from \$6.5 million to \$8.9 million (undiscounted) over 20 years. Discounted future costs are estimated to be \$3.7 million to \$5.1 million over this same time period (\$351,000 to \$480,000 annually) using a real rate of 7 percent, or \$5.0 million to \$6.9 million (\$337,000 to \$461,000 annually) using a real rate of 3 percent. Differences in the low and high impact estimates result primarily from uncertainty regarding the potential impacts to utility companies conducting maintenance activities and making repairs in proposed critical habitat. The low-end estimate of costs assumes grazing on private lands is not affected and biologists' time on site during utility repairs and maintenance is limited to one day per project. Costs under this estimate are dominated (88 percent) by welfare losses to campers in Subunits 1A and 1C. The high-end

estimate of costs assumes grazing activities on private lands in proposed critical habitat will be restricted and that utility projects will last longer than a single day. Costs under this estimate are dominated by lost camping opportunities (64 percent) and to a lesser extent costs to utilities (22 percent). In the low-end estimate, 95 percent of the costs are associated with Subunits 1A and 1C. In the high-end estimate, Subunits 1A and 1C again dominate total costs, accounting for 83 percent of total estimated impacts.

A copy of the final economic analysis with supporting documents is included in our administrative record and may be obtained by contacting U.S. Fish and Wildlife Service, Branch of Endangered Species (see ADDRESSES section) or for downloading from the Internet at <a href="http://www.fws.gov/carlsbad/">http://www.fws.gov/carlsbad/</a>.

## **Required Determinations**

Regulatory Planning and Review

In accordance with Executive Order 12866, this document is a significant rule in that it may raise novel legal and policy issues, but will not have an annual effect on the economy of \$100 million or more or affect the economy in a material way. Due to the tight timeline for publication in the **Federal** Register, the Office of Management and Budget (OMB) has not formally reviewed this rule. As explained above, we prepared an economic analysis of this action. We used this analysis to meet the requirement of section 4(b)(2) of the Act to determine the economic consequences of designating the specific areas as critical habitat. We also used it to help determine whether to exclude any area from critical habitat, as provided for under section 4(b)(2), if we determine that the benefits of such exclusion outweigh the benefits of specifying such area as part of the critical habitat, unless we determine, 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.

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

Under the Regulatory Flexibility Act (RFA) (as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996), whenever an agency is required to publish a notice of rulemaking for any proposed or final rule, it must prepare and make available for public comment a regulatory flexibility analysis that describes the effect of the rule on small entities (i.e., small businesses, small organizations, and small government

jurisdictions). However, no regulatory flexibility analysis is required if the head of 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 statement of factual basis for certifying that the rule will not have a significant economic impact on a substantial number of small entities. The SBREFA also amended the RFA to require a certification statement.

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 to 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., housing development, grazing, oil and gas production, timber harvesting). 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 conducted, funded, or permitted by Federal agencies. Some kinds of activities are unlikely to have any Federal involvement and so will not be affected by critical habitat designation. In areas where the species is present, Federal agencies already are required to consult with us under section 7 of the Act on activities they fund, permit, or implement that may affect the Laguna Mountains skipper. 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

Our economic analysis determined that costs involving conservation measures for the Laguna Mountains skipper would be incurred for activities involving: (1) Grazing activities; (2) recreational camping activities; (3) recreational hiking activities; (4) utility activities; (5) rural development; (6) other activities on Federal lands; and, (7) Laguna Mountains skipper management activities on State lands. As explained in our draft economic analysis, impacts of skipper conservation are not anticipated to affect small entities in five of these seven categories: hiking; utilities; rural development; other activities on Federal lands; and management activities on State lands. Since neither Federal nor State governments are defined as small entities by the Small Business Administration (SBA), the economic impacts borne by the Forest Service and the California Department of Fish and Game (CDFG) resulting from implementation of skipper conservation activities or modifications to activities on Federal lands are not relevant to this analysis. Likewise, neither of the major utility companies involved (SDG&E and AT&T) would fit the SBA definition of small entities. Accordingly, the small business analysis focuses on economic impacts to grazing and recreational camping activities.

The designation includes areas of USFS and private lands that are used for livestock grazing. On some Federal allotments that contain Laguna Mountains skipper habitat, meadow areas have been excluded from grazing, thus reducing the carrying capacity, or permitted Animal Unit Months (AUMs), on those allotments. Historically, returns to cattle operations have been low throughout the West. In recent years, these returns have been lower due

to the recent wildfires and droughts in California. As a result, any reductions in grazing effort for the Laguna Mountains skipper may affect the sustainability of ranching operations in these areas. The analysis assumes that in the future, grazing efforts on proposed critical habitat areas will be reduced, or in the high-end estimate, eliminated on private land due to skipper concerns. Private ranchers could be affected either by reductions in federally permitted AUMs that they hold permits to, or by reductions on grazing efforts on private property to avoid adverse impacts on Laguna Mountains skipper habitat. The expected reduction in AUMs is based on an examination of historical grazing levels, section 7 consultations, and discussions with range managers, wildlife biologist, and permittees. Based on this analysis, the high-end impact on grazing activities is estimated at an annual reduction of 1,979 AUMs, of which 1,363 are federally permitted and 618 are private. The majority of these AUM reductions fall on two ranchers: one operating in Subunit 1A and another operating in Subunit 2A. Therefore, cumulatively over 20 years, two ranchers could be affected by total reductions in AUMs due to Laguna Mountains skipper conservation activities.

The economic analysis considers lower- and upper-bounds of potential economic impact on recreational camping activities. The lower-bound equals no economic impact. In the upper-bound, economic impacts are estimated for recreational campers whose activities may be interrupted by Laguna Mountains skipper conservation activities resulting in a decrease in the number of camping trips. Scenario 2 concludes that camping trips may decrease by as many as 5,352 trips per year. If fewer camping trips were to occur within proposed critical habitat areas, local establishments providing services to campers may be indirectly affected by Laguna Mountains skipper conservation activities. Decreased visitation may reduce the amount of money spent in the region across a variety of industries, including food and beverage stores, food service and drinking places, accommodations, transportation and rental services.

The economic analysis uses regional economic modeling—in particular a software package called IMPLAN—to estimate the total economic effects of the reduction in economic activity in camping-related industries in the one county (San Diego County) associated with Laguna Mountains skipper conservation activities. Commonly used by State and Federal agencies for policy

planning and evaluation purposes, IMPLAN translates estimates of initial trip expenditures (e.g., food, lodging, and gas) into changes in demand for inputs to affected industries. Changes in output and employment are calculated for all industries and then aggregated to determine the regional economic impact of reduced recreational camping-related expenditures potentially associated with Laguna Mountains skipper conservation activities.

This analysis uses the average expenditures reported by the 2001 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation for California for fishing, hunting and wildlife-associated recreation, or approximately \$26.23 per trip. This pertrip estimate of expenditures is then combined with the number of camping trips potentially lost due to Laguna Mountains skipper conservation activities (a 1-year loss of 5,352 trips per year) to estimate the regional economic impacts. When compared to the \$192 billion dollar regional economy of San Diego County, the potential loss generated by a decrease in camping trips is a relatively small impact (i.e., less than 0.01 percent). Therefore based on these results, this analysis determines no significant effect on camping-related industries due to Laguna Mountains skipper conservation activities in San Diego County.

In general, two different mechanisms in section 7 consultations could lead to additional regulatory requirements for the approximately four small businesses, on average, that may be required to consult with us each year regarding their project's impact on Laguna Mountains skipper and its habitat. First, if we conclude, in a biological opinion, that a proposed action is likely to jeopardize the continued existence of a species or adversely modify its critical habitat, we can offer "reasonable and prudent alternatives." Reasonable and prudent alternatives are alternative actions that can be implemented in a manner consistent with the scope of the Federal agency's legal authority and jurisdiction, that are economically and technologically feasible, and that would avoid jeopardizing the continued existence of listed species or result in adverse modification of critical habitat. A Federal agency and an applicant may elect to implement a reasonable and prudent alternative associated with a biological opinion that has found jeopardy or adverse modification of critical habitat. An agency or applicant could alternatively choose to seek an exemption from the requirements of the Act or proceed without implementing

the reasonable and prudent alternative. However, unless an exemption were obtained, the Federal agency or applicant would be at risk of violating section 7(a)(2) of the Act if it chose to proceed without implementing the reasonable and prudent alternatives.

Second, if we find that a proposed action is not likely to jeopardize the continued existence of a listed animal, we may identify reasonable and prudent measures designed to minimize the amount or extent of take and require the Federal agency or applicant to implement such measures through nondiscretionary terms and conditions. We may also identify discretionary conservation recommendations designed to minimize or avoid the adverse effects of a proposed action on listed species or critical habitat, help implement recovery plans, or to develop information that could contribute to the recovery of the species.

Based on our experience with consultations pursuant to section 7 of the Act for all listed species, virtually all projects-including those that, in their initial proposed form, would result in jeopardy or adverse modification determinations in section 7 consultations—can be implemented successfully with, at most, the adoption of reasonable and prudent alternatives. These measures, by definition, must be economically feasible and within the scope of authority of the Federal agency involved in the consultation. We can only describe the general kinds of actions that may be identified in future reasonable and prudent alternatives. These are based on our understanding of the needs of the species and the threats it faces, as described in the final listing rule and this critical habitat designation. Within the final critical habitat units, the types of Federal actions or authorized activities that we have identified as potential concerns are:

- (1) Regulation of activities affecting waters of the United States by the Corps under section 404 of the Clean Water Act;
- (2) Regulation of water flows, damming, diversion, and channelization implemented or licensed by Federal agencies;
- (3) Regulation of timber harvest, grazing, mining, and recreation by the USFS and BLM;
- (4) Road construction and maintenance, right-of-way designation, and regulation of agricultural activities;
- (5) Hazard mitigation and postdisaster repairs funded by the FEMA; and
- (6) Activities funded by the EPA, U.S. Department of Energy, or any other Federal agency.

It is likely that a developer or other project proponent could modify a project or take measures to protect the Laguna Mountains skipper. The kinds of actions that may be included if future reasonable and prudent alternatives become necessary include conservation set-asides, management of competing nonnative species, restoration of degraded habitat, and regular monitoring. These are based on our understanding of the needs of the species and the threats it faces, as described in the final listing rule and proposed critical habitat designation. These measures are not likely to result in a significant economic impact to project proponents.

In summary, we have considered whether this would result in a significant economic effect on a substantial number of small entities. Federal involvement, and thus section 7 consultations, would be limited to a subset of the area designated. Only two potential small entities engaged in grazing may be impacted by the designation of critical habitat for the Laguna Mountains skipper, and the potential economic loss attributable to impacts to recreational activities is small (i.e., less than 0.01 percent). Therefore, for the above reasons and based on currently available information, we certify that the rule will not have a significant economic impact

Small Business Regulatory Enforcement Fairness Act (5 U.S.C. 801 et seq.)

on a substantial number of small

analysis is not required.

entities, and a regulatory flexibility

Under SBREFA, this rule is not a major rule. Our detailed assessment of the economic effects of this designation is described in the economic analysis. Based on the effects identified in the economic analysis, we believe that this rule will not have an annual effect on the economy of \$100 million or more, will not cause a major increase in costs or prices for consumers, and will not have significant adverse effects on competition, employment, investment, productivity, innovation, or the ability of U.S.-based enterprises to compete with foreign-based enterprises. Refer to the final economic analysis for a discussion of the effects of this determination.

#### Executive Order 13211

On May 18, 2001, the President issued Executive Order 13211 on regulations that significantly affect energy supply, distribution, and use. Executive Order 13211 requires agencies to prepare Statements of Energy Effects when undertaking certain actions. This final

rule to designated critical habitat for the Laguna Mountains skipper 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:

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

The designation of critical habitat does not impose a legally binding duty on non-Federal government entities or private parties. Under the Act, the only regulatory effect is that Federal agencies must ensure that their actions do not destroy or adversely modify critical habitat under section 7. While non-Federal entities who receive Federal funding, assistance, permits or

otherwise require approval or authorization from a Federal agency for an action may be indirectly impacted by the designation of critical habitat, the legally binding duty to avoid destruction or adverse modification of critical habitat rests squarely on the Federal agency. Furthermore, to the extent that non-Federal entities are indirectly impacted because they receive Federal assistance or participate in a voluntary Federal aid program, the Unfunded Mandates Reform Act would not apply; nor would critical habitat shift the costs of the large entitlement programs listed above on to State governments.

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

#### Federalism

In accordance with Executive Order 13132, the rule does not have significant Federalism effects. A Federalism assessment is not required. In keeping with DOI and Department of Commerce policy, we requested information from, and coordinated development of, this final critical habitat designation with appropriate State resource agencies in California. The designation of critical habitat for the Laguna Mountains skipper may impose nominal additional regulatory restrictions to those currently in place and, therefore, may have an 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 features essential to the conservation of the species are more clearly defined, and the primary constituent elements of the habitat necessary to the conservation of the species are specifically identified. While making this definition and identification does not alter where and what federally sponsored activities may

occur, it may assist these local governments in long-range planning (rather than waiting for case-by-case section 7 consultations to occur).

### Civil Justice Reform

In accordance with Executive Order 12988, the Office of the Solicitor has determined that the rule does not unduly burden the judicial system and meets the requirements of sections 3(a) and 3(b)(2) of the Order. We are designating critical habitat in accordance with the provisions of the Endangered Species Act. This final rule uses standard property descriptions and identifies the primary constituent elements within the designated areas to assist the public in understanding the habitat needs of the Laguna Mountains skipper.

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. This rule will not impose recordkeeping or reporting requirements on State or local governments, individuals, businesses, or organizations. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

#### National Environmental Policy Act

It is our position that, outside the Tenth Circuit, we do not need to prepare environmental analyses as defined by the NEPA in connection with designating critical habitat under the Endangered Species Act of 1973, as amended. We published a notice outlining our reasons for this determination in the **Federal Register** on October 25, 1983 (48 FR 49244). This assertion was upheld in the courts of the Ninth Circuit (*Douglas County* v. *Babbitt*, 48 F. 3d 1495 (9th Cir. Ore. 1995), cert. denied 116 S. Ct. 698 (1996).)

Government-to-Government Relationship with Tribes

In accordance with the President's memorandum of April 29, 1994,

"Government-to-Government Relations with Native American Tribal Governments" (59 FR 22951), Executive Order 13175, and the Department of Interior's manual at 512 DM 2, we readily acknowledge our responsibility to communicate meaningfully with recognized Federal Tribes on a government-to-government basis. We have determined that there are no Tribal lands supporting Laguna Mountains skipper habitat that meets the definition of critical habitat. Therefore, critical habitat for the Laguna Mountains skipper has not been designated on Tribal lands.

### **References Cited**

A complete list of all references cited in this rulemaking is available upon request from the Field Supervisor, Carlsbad Fish and Wildlife Office (see ADDRESSES section).

#### Author(s)

The primary authors of this package are staff from 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; 16 U.S.C. 1531–1544; 16 U.S.C. 4201–4245; Pub. L. 99–625, 100 Stat. 3500; unless otherwise noted.

■ 2. In § 17.11(h), revise the entry for "Laguna Mountains skipper" under "INSECTS" to read as follows:

## § 17.11 Endangered and threatened wildlife.

\* \* \* \* \* \* (h) \* \* \*

Species			Vertebrate			Critical	
Common name	Scientific name	Historic range	population where endangered or threatened	Status	When listed	habitat	Special rules
*	*	*	*	*	*		*
INSECTS							
*	*	*	*	*	*		*
Skipper, Laguna Mountains.	Pyrgus ruralis lagunae.	U.S.A. (CA)	Entire	E	604	17.95(i)	NA
*	*	*	*	*	*		*

3. In § 17.95(i), add an entry for Laguna Mountains Skipper (*Pyrgus ruralis lagunae*) under "INSECTS" in the same alphabetical order as this species appears in the table in § 17.11(h) to read as follows:

## § 17.95 Critical habitat—fish and wildlife.

(i) Insects.

\* \* \* \*

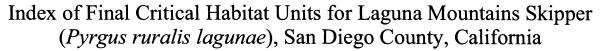
Laguna Mountains Skipper (*Pyrgus ruralis lagunae*)

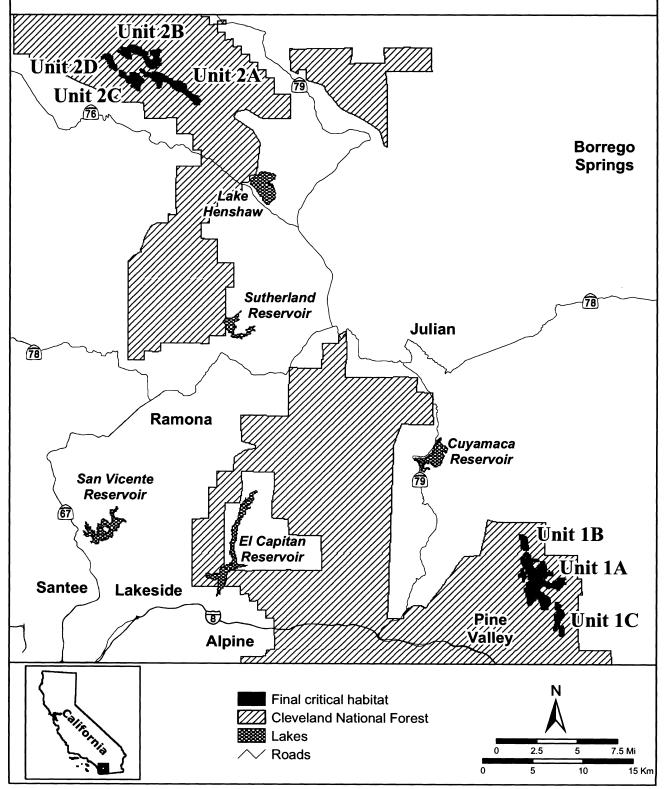
(1) Critical habitat units are depicted for San Diego County, California, on the maps below.

- (2) The primary constituent elements of critical habitat for the Laguna Mountains skipper are the habitat components that provide:
- (i) The hostplants, *Horkelia* clevelandii or *Potentilla glandulosa*, which are needed for reproduction, in meadows or forest openings.
- (ii) Nectar sources suitable for feeding by adult Laguna Mountains skipper, including *Lasthenia* spp., *Pentachaeta* aurea, *Ranunculus* spp., and *Sidalcea* spp., found in woodlands or meadows.
- (iii) Wet soil or standing water associated with features such as seeps, springs, or creeks where water and

minerals are obtained during the adult flight season.

- (3) Critical habitat does not include man-made structures existing on the effective date of this rule and not containing one or more of the primary constituent elements, such as buildings, aqueducts, airports, and roads, and the land on which such structures are located.
- (4) Data layers defining map units were created on a base of USGS 1:24,000 quadrangle maps, and critical habitat units were then mapped using Universal Transverse Mercator (UTM) coordinates.
- (5) Note: Map 1 (index map) follows: BILLING CODE 4310-55-P



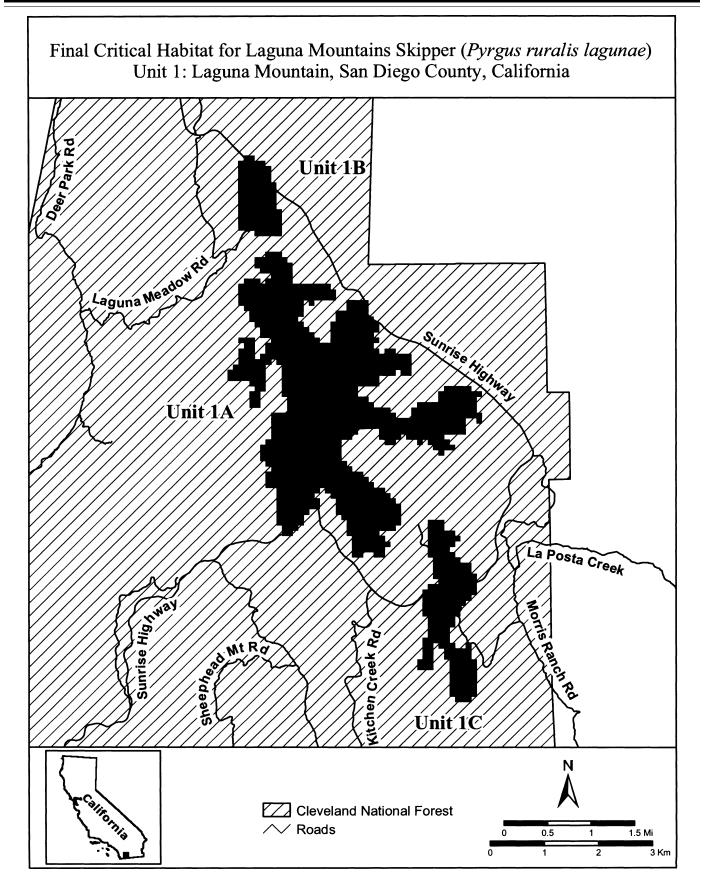


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(6) Unit 1: Laguna Mountain, San

3636500; 551600, 3636500; 551600,

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Diego County, California. From USGS
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                                        3640600; 550100, 3640600; 550100,
1:24,000 quadrangle maps Monument
                                                                                 3636300; 551800, 3636300; 551800,
Peak and Mount Laguna.
                                        3640500; 550200, 3640500; 550200,
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following UTM NAD27 coordinates
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                                                                                   (iv) Note: Map of Unit 1 (Map 2,
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                                                                                Subunits 1A, 1B, and 1C) follows:
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                                                                                BILLING CODE 4310-55-P
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(7) Unit 2: Palomar Mountain, San
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Diego County, California. From USGS
                                        512300, 3688500; 512000, 3688500;
                                                                                3690400; 512600, 3690400; 512600,
1:24,000 quadrangle maps Boucher Hill
                                        512000, 3688600; 511900, 3688600;
                                                                                3690600; 512500, 3690600; 512500,
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                                        511900, 3688500; 511700, 3688500;
and Palomar Observatory.
                                                                                3690800; 512300, 3690800; 512300,
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following UTM NAD27 coordinates (E,
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                                        511300, 3689300.
511700, 3689000; 511800, 3689000;
                                                                                lands bounded by the following UTM
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                                          (ii) Subunit 2B: lands bounded by the
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                                        following UTM NAD27 coordinates
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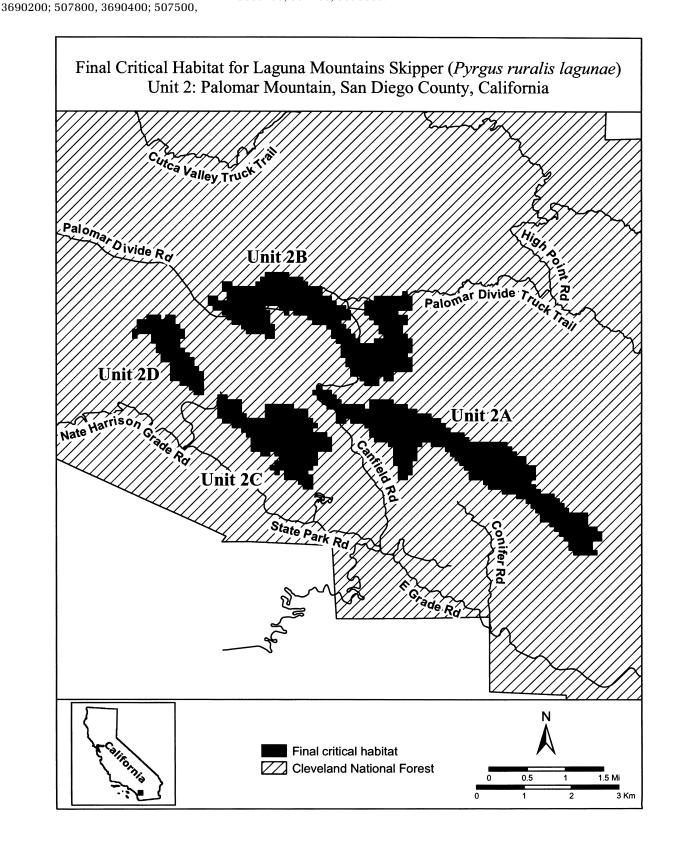
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(v) Note: Map of Unit 2 (Map 3, Subunits 2A, 2B, 2C, and 2D) follows: BILLING CODE 4310–55-P



Dated: November 21, 2006.

David M. Verhey,

Acting Assistant Secretary for Fish and Wildlife and Parks.

[FR Doc. 06–9498 Filed 12–11–06; 8:45 am]

BILLING CODE 4310-55-C