

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

[Docket No. FWS-R4-ES-2009-0022]

RIN 1018-AX68

**Endangered and Threatened Wildlife and Plants; Determination of Endangered Species Status for Coquí Llanero Throughout Its Range and Designation of Critical Habitat****AGENCY:** Fish and Wildlife Service, Interior.**ACTION:** Final rule.

**SUMMARY:** We, the U.S. Fish and Wildlife Service, determine endangered species status under the Endangered Species Act of 1973 (Act), as amended, for the coquí llanero (*Eleutherodactylus juanariveroi*), and designate critical habitat. In total, we are designating approximately 615 acres (249 hectares) of a freshwater wetland in Sabana Seca Ward, Municipality of Toa Baja, Puerto Rico, as critical habitat. The effect of this regulation is to conserve the coquí llanero and its habitat under the Act.

**DATES:** This rule becomes effective on November 5, 2012.

**ADDRESSES:** This final rule is available on the Internet at <http://www.regulations.gov>. Comments and materials received, as well as supporting documentation used in preparing this final rule, are available for public inspection, by appointment, during normal business hours, at U.S. Fish and Wildlife Service, Caribbean Ecological Services Field Office, P.O. Box 491, Road 301 Km 5.1, Boquerón, PR 00622; by telephone, 787-851-7297; or by facsimile, 787-851-7440.

The coordinates or plot points or both from which the maps are generated are included in the administrative record for this critical habitat designation and are available at (<http://www.fws.gov/caribbean/es/Endangered-Main.html>), <http://www.regulations.gov> at Docket No. FWS-R4-ES-2009-0022, and at the Caribbean Ecological Services Field Office (see **FOR FURTHER INFORMATION CONTACT**). Any additional tools or supporting information that we may develop for this critical habitat designation will also be available at the Fish and Wildlife Service Web site and Field Office set out above, and may also be included in the preamble or at <http://www.regulations.gov>.

**FOR FURTHER INFORMATION CONTACT:** Marelisa Rivera, Deputy Field Supervisor, U.S. Fish and Wildlife Service, Caribbean Ecological Services

Field Office, P.O. Box 491, Road 301 Km 5.1, Boquerón, PR 00622; by telephone, 787-851-7297, extension 206; or by facsimile, 787-851-7440. If you use a telecommunications device for the deaf (TDD), call the Federal Information Relay Service (FIRS) at 800-877-8339.

**SUPPLEMENTARY INFORMATION:****Executive Summary**

*Why we need to publish a rule.* Under the Act, the Service shall designate critical habitat for any species or subspecies that is determined to be an endangered or threatened species, to the maximum extent prudent and determinable. On October 12, 2011, we published the proposed rule to list the coquí llanero as an endangered species (76 FR 63420). In that document, we explained that the species currently exists in a freshwater wetland at Sabana Seca, faces numerous threats, and therefore warrants listing under the Act as an endangered species. Additionally, we proposed the designation of the coquí llanero's critical habitat and discussed our criteria for the designation. This rule finalizes the protection proposed for the coquí llanero as an endangered species and the designation of 615 acres (249 hectares) in Sabana Seca Ward, Toa Baja, Puerto Rico, as critical habitat, following careful consideration of all comments we received during the public comment period.

*The basis for our action.* Under the Act, a species may be determined to be an endangered or threatened species based on any of the five factors: (A) The present or threatened destruction, modification, or curtailment of its habitat or range; (B) overutilization for commercial, recreational, scientific, or educational purposes; (C) disease or predation; (D) the inadequacy of existing regulatory mechanisms; or (E) other natural or manmade factors affecting its continued existence. Coquí llanero is determined to be an endangered species due to three of these five factors. Section 4(b)(2) of the Act states that the Secretary shall designate critical habitat on the basis of the best available scientific data after taking into consideration the economic impact, national security impact, and any other relevant impact of specifying any particular area as critical habitat. The Secretary may exclude an area from critical habitat if he determines that the benefits of such exclusion outweigh the benefits of specifying such area as part of the critical habitat, unless he determines, based on the best scientific data available, that the failure to designate such area as critical habitat

will result in the extinction of the species.

*Peer review and public comment.*

When we published the proposed rule on October 12, 2011, we opened a 60-day comment period on the proposed listing and critical habitat designation for the coquí llanero. On June 19, 2012, we reopened the comment period for an additional 30 days. During the comment periods, we sought comments from independent specialists (peer reviewers) on the specific assumptions and conclusions in our listing proposal to ensure that the designation of critical habitat is based on scientifically sound data, assumptions, and analyses. In addition, we sought comments from interested parties and the general public. We considered all comments and information received during the comment periods.

**Background**

This document consists of: (1) A final rule to list the coquí llanero as an endangered species; and (2) a final critical habitat designation for the coquí llanero.

**Previous Federal Actions**

On May 22, 2007, we received a petition, dated May 11, 2007, from the Caribbean Primate Research Center (CPRC) (CPRC 2007, pp. 1-29) requesting that the coquí llanero be listed as an endangered species under the Act. The petition also requested that we designate critical habitat concurrently with listing, if listing occurs. In a letter to the petitioner dated July 23, 2007, we acknowledged receipt of the petition and stated that (1) we would not be able to address the petition until funding became available, and (2) actions requested by this petition were precluded by court orders and settlement agreements for other listing actions that required nearly all of our listing funds for the current (2007) fiscal year.

On January 22, 2009, we received an amended petition dated January 13, 2009. The amended petition included updated information on current threats to the species and its habitat (CPRC 2009, pp. 1-19). On July 8, 2009, we published in the **Federal Register** (74 FR 32510) our finding that the petition to list the coquí llanero presented substantial information indicating that the requested action may be warranted, and we initiated a status review of the species.

On October 12, 2011, we published in the **Federal Register** (76 FR 63420) our 12-month finding on the petition, combined with a proposed rule to list the species as an endangered species

and designate critical habitat.

Publication of the proposed rule opened a 60-day public comment period.

On June 19, 2012, we published in the **Federal Register** (77 FR 36457) our evaluation of the potential economic impacts of the proposed critical habitat designation, and we reopened the public comment period for the proposed rule and critical habitat designation for 30 days.

#### Species Information

The coquí llanero, an endemic Puerto Rican frog, was first collected by Neftalí Ríos-López and Richard Thomas in 2005, from a freshwater herbaceous wetland on the closed U.S. Naval Security Group Activity Sabana Seca (USNSGASS) property and the Caribbean Primate Research Center (CPRC), Toa Baja, Puerto Rico (PR). This wetland area is considered as the “type locality” (similar location) because the species was first collected and described from this area. When discovered, the coquí llanero was only known to occur at the Ingenio Sector in the Sabana Seca Ward, Toa Baja, PR, located on the northern coast, north of Toa Alta and Bayamón, east of Dorado, and west of Cataño, approximately 12 miles (mi) (20 kilometers (km)) from San Juan, PR.

#### Taxonomy and Species Description

In 2007, the coquí llanero was described as a new species of the genus *Eleutherodactylus*, family *Leptodactylidae*. Although the coquí llanero is similar to *Eleutherodactylus gryllus* (cricket coquí or green coquí), differences in morphological ratios, body coloration, call frequency and structure, deoxyribonucleic acid (DNA), and habitat association indicate that it is a well-differentiated species (Ríos-López and Thomas 2007, pp. 53–60; CPRC 2009, p. 1). The coquí llanero is the smallest and only known herbaceous wetland specialist within the genus *Eleutherodactylus* in Puerto Rico (Ríos-López and Thomas 2007, p. 62). It has a mean snout-vent length of 0.58 inches (in) (14.7 millimeters (mm)) in males and 0.62 in (15.8 mm) in females. The nares (nasal passages) are prominent and a ridge connects them behind the snout tip, giving the tip a somewhat squared appearance. The species has well-developed glands throughout its body; its dorsal coloration is yellow to yellowish brown with a light, longitudinal, reversed comma mark on each side; and its mid-dorsal zone is broadly bifurcated (divided into two branches) (Ríos-López and Thomas 2007, p. 55). The species' communication call consists of a series of short, high-pitched notes, with call

duration varying from 4 to 21 seconds. The advertisement call has the highest frequency among all Puerto Rican *Eleutherodactylus*, between 7.38 and 8.28 kilohertz (Ríos-López and Thomas 2007, p. 61). The calling activity starts at approximately 4:30 p.m. and decreases significantly before midnight.

#### Distribution

The coquí llanero is found only on a palustrine herbaceous wetland at Sabana Seca Ward. When the species was first discovered and described, the author estimated that the coquí llanero occurs on approximately 445 acres (ac) (180 hectares (ha)) (Ríos-López and Thomas 2007, p. 60). Joglar (2007, p. 2) conducted additional surveys and estimated that the distribution of the species to occur on approximately 504.5 ac (204 ha). The Service has estimated the palustrine herbaceous wetland area where the coquí llanero is now found to be about 615 ac (249 ha) (Service 2011, unpublished data).

Vega-Castillo (2011) conducted diurnal and nocturnal surveys in wetland areas and channels located between PR Road–867 and PR Road–165 to the north of where the coquí llanero was found while evaluating the proposed alignment for a natural gas pipeline. These surveys were conducted during January 2011, using recorded male calling (Vega-Castillo 2011, pp. 9–12). During this period, Vega-Castillo (2011) detected at least 6 individual coquí llanero vocalizing at the edge of a vegetated drainage channel that is a tributary of the Cocal River. The locality where these individuals were reported is about 1.7 mi (2.7 km) northwest from the type locality. This area is mainly dominated by pasture (Vega-Castillo 2011, p. 12). In March 2011, Service biologists conducted several site visits to the area to confirm the report. In addition, the Service installed a recorder for a 24-hour period during March 2011, to detect individuals vocalizing in the area. However, the Service did not detect the species in this area. Based on the Service's observations, the area is highly degraded, dominated by lands cleared (burned) and converted to pastureland.

#### Habitat

The habitat for the coquí llanero comprises an area of approximately 615 ac (249 ha) that includes approximately 97 ac (39 ha) of Commonwealth land and 518 ac (209 ha) of Federal land (Geo-Marine 2002, pp. 2–13; Ríos-López and Thomas 2007, p. 60; Joglar 2007, p. 2; Tec Inc. and AH Environmental 2008, p. 3–2; PR Land Authority 2011,

unpublished data; Service 2011, unpublished data).

The habitat of the coquí llanero is located within the subtropical moist forest life zone (tropical and subtropical forest ecosystems) (Ewel and Whitmore 1973, pp. 20–38). This life zone (areas with similar plant and animal communities) covers about 60.5 percent of the total area of Puerto Rico (Ewel and Whitmore 1973, p. 9). The species appears to be an obligate marsh dweller (Ríos-López 2007, p. 195). The coquí llanero has been found only in freshwater, herbaceous wetland habitat at an elevation of 55.8 ft (17 m) (Ríos-López and Thomas 2007, p. 60). The National Wetland Inventory (NWI) classifies the majority of this wetland as palustrine emergent persistent seasonally flooded, an area with surface water present for extended periods during the growing season. The soils of this wetland consist of swamp and marsh organic deposits from Pleistocene or recent origin or both (Ríos-López and Thomas 2007, p. 60). The species' habitat may represent a relic of an endemic seasonally to permanently flooded, herbaceous wetland habitat type (Ríos-López and Thomas 2007, p. 63). Herbaceous vegetation in this habitat shows a species composition consisting of *Blechnum serrulatum* (toothed midorus fern), *Thelypteris interrupta* (willdenow's maiden fern), *Sagittaria lancifolia* (bulltongue arrowhead), *Cyperus* sp. (flatsedges), *Eleocharis* sp. (spike rushes), and vines and grasses (Ríos-López and Thomas 2007, p. 60). The majority of coquí llanero have been found perching and calling on the toothed midorus fern and willdenow's maiden fern. At discovery, all the individuals collected were perching, sitting, or calling on herbaceous vegetation, mainly on ferns.

#### Biology

The coquí llanero is insectivorous (feeds on small insects). The species has been observed to reproduce only on *Sagittaria lancifolia* (bulltongue arrowhead) (CPRC 2009, p. 4). Egg clutches were found on leaf axils (21 egg clutches) or leaf surfaces (3 egg clutches) of only *Sagittaria lancifolia* (Ríos-López and Thomas 2007, p. 60) within the wetland area. Egg clutches comprise one to five eggs and are found on leaf axils or leaf surfaces between 1.3 feet (ft) (0.4 meters (m)) and 3.9 ft (1.2 m) above water level (Ríos-López and Thomas 2007, pp. 53–62). Observers did not witness parental care in the field (CPRC 2009, p. 5).

### Summary of Comments and Recommendations

Due to the nature of the proposed rule, we received combined comments from the public on the listing action and the critical habitat designation. We have addressed these issues in a single comment section.

We requested written comments from the public during two comment periods on the proposed listing of the coquí llanero and the proposed designation of critical habitat for the coquí llanero. The first comment period associated with the publication of the proposed rule (76 FR 63420) opened on October 12, 2011, and closed on December 12, 2011. We also requested comments on the proposed critical habitat designation and our evaluation of the potential economic impacts during a comment period that opened June 19, 2012, and closed on July 19, 2012 (77 FR 36457). We also contacted appropriate Federal, State, and local agencies, scientific organizations, and other interested parties and invited them to comment on the proposed rule and our evaluation of the potential economic impacts during these comment periods.

During the first comment period, we received 11 comment letters directly addressing either the proposed listing or proposed critical habitat designation. During the second comment period, we received 14 comment letters addressing the proposed critical habitat designation or the evaluation of the potential economic impacts. We did not receive any requests for a public hearing.

Substantive comments we received were grouped into four general issues specifically relating to the proposed listing determination or proposed critical habitat designation for the coquí llanero. These comments are addressed in the following summary and incorporated into the final rule, as appropriate.

#### Peer Review

In accordance with our peer review policy published on July 1, 1994 (59 FR 34270), we solicited expert opinions from six individuals with knowledge and 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 those individuals.

We reviewed all comments we received from the peer reviewers for substantive issues and new information regarding the proposed listing and critical habitat for the coquí llanero. The peer reviewers generally concurred with our methods and conclusions, and

provided additional information, clarifications, and suggestions to improve the final rule. Peer reviewers' comments are addressed in the following summary and are incorporated into this final rule, as appropriate.

#### Peer Reviewer Comments

(1) *Comment:* The peer reviewers and others commenters suggested various editorial changes to the final rule.

*Our Response:* We evaluated all of the suggested editorial changes, and we incorporated them into this final rule, as appropriate.

(2) *Comment:* A commenter suggests that "tree frog" is not a correct name for the coquí llanero (*Eleutherodactylus* sp.). He recommends that a generic name for the Puerto Rican *Eleutherodactylus* should be coquíes or frogs. Frogs known as "tree frogs" are usually members of the *Hylidae* or *Centrolenidae* taxonomic families.

*Our Response:* We acknowledge this recommendation and agree with the observation. The recommendation is incorporated into this final rule.

(3) *Comment:* A peer reviewer states that there have been very few publications and reports on this species. The peer reviewer suggested that more research is needed. The peer reviewer stated that since the species' description in 2007, there have been no peer-reviewed publications on this species. All information related to the species' conservation and its habitat is based on anecdotal information, such as personal communications, presentations, and non-published reports.

*Our Response:* The Service agrees that there is limited information and peer-reviewed publications on the coquí llanero. However, in accordance with section 4 of the Act, the Service is required to use, and has used, the best available scientific and commercial information in this rulemaking. We relied upon primary and original sources of information in order to meet the "best available scientific and commercial information" standard. We evaluated information from many different sources, including articles in peer-reviewed journals, former rules and habitat designations developed by the Commonwealth of Puerto Rico, scientific surveys and studies, other unpublished materials, and experts' opinions or personal knowledge. Also, in accordance with the peer review policy published on July 1, 1994 (59 FR 34270), we solicited expert opinions from knowledgeable individuals with scientific expertise that included familiarity with the species. Additionally, we requested comments

or information from other concerned governmental agencies, the scientific community, and any other interested parties.

(4) *Comment:* Peer reviewers and commenters state that the proposed natural gas pipeline project "Via Verde" will be a serious threat to the coquí llanero and its habitat by adversely affecting the hydrology of the occupied wetland.

*Our Response:* Via Verde's proposed right-of-way alignment through Toa Baja is approximately 1.5 miles (2.4 kilometers) northwest of the known wetland habitat supporting the coquí llanero (PRDNER 2007b, p. 16). The topography of the Sabana Seca has an east-to-west inclination (Morris 2007, p. 5); therefore, the project of concern will be located downstream of the coquí llanero's habitat.

We do not consider the proposed natural gas pipeline project a threat to the coquí llanero or its habitat because the best available scientific information does not indicate that it is a threat. If additional information becomes available on the impacts of the Via Verde project on the coquí llanero, we will reevaluate the threats and could, if appropriate, revise the designation.

(5) *Comment:* A peer reviewer and other interested parties petitioned the Service to exercise its authority under section 4(b)(7) of the Act to emergency list the coquí llanero as an endangered species. The petition was based on the species' severely limited geographic range, small population size, and several imminent threats to the ecosystem it depends upon for reproduction and survival.

*Our Response:* The Act at 16 U.S.C. 1533(b)(3)(A) establishes a single petition process for listing a species as an endangered or threatened species. There is no separate process in the Act or its implementing regulations for requesting an "emergency listing" as opposed to a "non-emergency" listing. Therefore, we treat a petition requesting emergency listing solely as a petition to list a species under the Act. Furthermore, although 16 U.S.C. 1533(b)(7) does empower the Secretary to list a species based upon an "emergency posing a significant risk to the well-being of [that] species," that type of listing is expressly committed to the Secretary's discretion, the exercise of which is not structured by any statutorily prescribed criteria or procedures.

Our initial review of this emergency petition did not indicate that an emergency listing was warranted because, at the time of the petition, the species was protected by the

Commonwealth of Puerto Rico and because the Service was in the process of listing the coquí llanero and designating critical habitat under the Act. On May 30, 2012, the protection given the coquí llanero by Puerto Rico's Commonwealth Law 241 and Regulation 6766 was overturned by the Supreme Court of Puerto Rico. However, the Service has continued to proceed with its final rule to list the coquí llanero as an endangered species and to designate critical habitat, which will provide the species protection under the Act.

As a result, the Commonwealth of Puerto Rico will also grant protection to the coquí llanero under the authority of the 1984 Cooperative Agreement between the Service and the Puerto Rico Department of Natural and Environmental Resources (PRDNER) under section 6 of the Act and under Puerto Rico's Regulation 6766. Under the cooperative agreement and Regulation 6766, if the Federal Government makes a designation of critical habitat or lists a species under the jurisdiction of the Commonwealth of Puerto Rico, the PRDNER will assure both the addition of the species to the Commonwealth list and the designation of critical habitat. After this final rule is effective, the coquí llanero will be protected by both entities, the Federal Government and the Commonwealth of Puerto Rico.

(6) *Comment:* A peer reviewer provided a new estimated mean population size for the coquí llanero,  $473.3 \pm 186$  individuals per hectare (or 192 per acre). This information was based on counts performed on 5 transects of 90 square meters each within the occupied wetland. The peer reviewer cautioned how these estimates may be misleading because the species is not evenly distributed throughout the landscape.

*Our Response:* We acknowledge the new estimated mean population size for the coquí llanero. In the proposed rule, we stated the estimated mean population size of the coquí llanero was approximately 181 individuals per ac (453 per ha). The new estimated mean population provided by the peer reviewer is based on the analysis of data collected from 5 transects of 90 square meters (area of 450 square meters) and, therefore, we consider it accurate. This data will be updated in this final rule based on the new information provided.

(7) *Comment:* A peer reviewer states that areas within the designated critical habitat are classified by the Toa Baja Municipality as urban soils (designated for urban development) and, if development occurred, it would affect

the hydrology of the wetland occupied by the coquí llanero.

*Our Response:* The Service recognizes that areas within the critical habitat designation are threatened by urban development (see *Summary of Factors Affecting the Species* section). The selection of sites to be included in the critical habitat designation is based on the needs of the species. Before we consider land ownership, we determine what is needed for the species' conservation based on the best available scientific and commercial information. The Service will always work on actions to support the recovery of the coquí llanero wherever possible. However, the designation of critical habitat does not impose a legally binding duty on private parties. The section entitled *Critical Habitat Designation for Coquí Llanero* will provide information on how critical habitat was determined and how development activities will be considered and evaluated.

(8) *Comment:* A peer reviewer and the Commonwealth of Puerto Rico suggest that the delimitation of critical habitat needs to be expanded east (the Commonwealth of Puerto Rico suggested at least 50 m (164 feet) passing over the maintenance dirt road, as any negative impact to this structure (e.g., oil spill, heavy sedimentation with water run-off) will directly impact the species.

*Our Response:* The Service has found no scientific justification for expanding critical habitat to the suggested area. The Service is designating areas as defined in section 3 of the Act. The Service has articulated a basis for designating the unit as critical habitat under the unit description in the *Final Critical Habitat Designation* section.

The Secretary could revise the designation, as appropriate and as resources allow, in the future if new information becomes available.

(9) *Comment:* Peer reviewers, the Commonwealth of Puerto Rico, and other commenters recommend that although the nearby limestone hills are not occupied by, nor provide habitat for, the species, the limestone hills should be included in the critical habitat designation. Some commenters have witnessed strong water run-off flooding in the wetland after significant rain events. Others suggest viewing the limestone hills as an ecosystem and considering them as part of the watershed because it is clear that they are essential for the conservation of the species. Although some reviewers are aware of the Navy's intention to protect the limestone hills in perpetuity, they still recommend including the hills as part of the critical habitat designation,

stating that the hydrological connection of the limestone hills with the wetland is essential for the protection of the coquí llanero. Some also request that the Service adopt the former designation of Critical Essential Natural Habitat by the PRDNER.

*Our Response:* The Service has determined that hydrology is one of the primary constituent elements (PCEs) specific to the conservation of the coquí llanero and has recognized that changes in hydrology may result in changes in the wetland function and vegetation composition, as well as affect the connectivity with nearby habitats, all with serious effects to the coquí llanero. However, the available hydrological study for this area only describes the limits of the watersheds that, based on surface topography, are tributary to the wetland (i.e., surface water drainage patterns, not groundwater flow patterns). Hence, no information is available as to what extent the surface water patterns and quantities are essential in maintaining the actual conditions of the wetland (i.e., maintaining the PCEs), or if there are other water sources (e.g., groundwater) with an equivalent or more positive impact on the wetland other than surface water. Nonetheless, the Service has information indicating that ownership of the limestone hills is to be transferred by the U.S. Navy to the University of Puerto Rico for perpetual protection.

The Service acknowledges the recommendation of expanding the critical habitat designation. However, additional information is needed to determine the importance of the limestone hills to the conservation of the species and the additional area needed to maintain the hydrology of the wetland (i.e., the PCEs of the occupied habitat). If data become available in the future that justify the addition of the limestone hills and any other suitable areas to critical habitat, the Secretary may revise the designation, as appropriate and as resources allow, under the authority of section 4(a)(3)(A)(ii) of the Act.

(10) *Comment:* A peer reviewer and several commenters state that the Service should include Caño Campanero and Cocal River in the critical habitat designation because these water bodies are responsible for maintaining the wetland and may be natural corridors for individual coquí llanero migrating from the existing wetland, thus contributing to the species' persistence in Toa Baja.

*Our Response:* Although we recognize the importance of Caño Campanero and the Cocal River as drainage outlets for

the wetland, the best available scientific information does not indicate that these water bodies are essential for the conservation of the coquí llanero. Therefore, Caño Campanero and the Cocal River do not meet the definition of critical habitat under the Act and are not included in this final designation.

#### Comments From the States

Section 4(i) of the Act states, “the Secretary shall submit to the State agency a written justification for his failure to adopt regulations consistent with the agency’s comments or petition.” The only comment received from the Commonwealth of Puerto Rico was from a peer reviewer, who supported the listing and designation of critical habitat and recommended that the critical habitat for the coquí llanero be expanded. (See comments (8) and (9) and our responses).

#### Public Comments

##### General Comment Issue 1 Critical Habitat

(11) *Comment:* A commenter understands our conclusion that the limestone hills are important for the water supply of the wetland, but states that we should focus instead on the fact that contamination, hazardous substance release, or direct human impact (construction) of any virgin land within the watershed will likely affect the water amount and condition within the entire watershed.

*Our Response:* The Service agrees that contamination might constitute a threat to the species (see *Summary of Factors Affecting the Species*). However, the Service does not have sufficient information to determine the impacts to the watershed, and how those impacts would influence the wetland. The Service does have information on the surface water runoff towards the wetland (Gregory Morris 2007), but there is a lack of information to clearly understand the groundwater, water distribution, and contaminants that would enter the wetland. The Service considered both the importance of space for individual and population growth and for normal behavior, as well as sites for breeding, reproduction, or rearing (or development) of offspring when developing the PCEs. The PCEs in this final rule represent the best current understanding of the habitat requirements for the coquí llanero.

(12) *Comment:* A commenter requested that approximately 30 ac (12.1 ha) of an upland non-flooded area be excluded from the proposed critical habitat. The commenter’s rationale is that *Sagittaria lancifolia*, an essential

PCE for the conservation of the species, is clearly absent given that the parcel is a non-wetland.

*Our Response:* The approximate area being described occurs within the geographical area occupied by the species at the time of listing. Reports confirm that the coquí llanero occupies the area. The Service acknowledges that the area is between manmade structures, but those structures (e.g., buildings, houses, roads, and other paved areas) are not included because they do not contain the PCEs and because they do not meet the definition of critical habitat under the Act. The 30-ac area (12.1-ha), on the other hand, does not contain any structures and is connected to the main wetland area.

The fact that there is no *Sagittaria lancifolia* in the area only means that the coquí llanero will not lay their eggs there; however, the area contains other vegetation that is part of the same PCE. Therefore, we have determined that these lands meet the definition of critical habitat under the Act and remain within this final designation.

##### General Comment Issue 2 Outreach and Education

(13) *Comment:* A commenter recommends development of a public educational campaign to support the decision (listing and critical habitat designation).

*Our Response:* The Service agrees and will promote outreach for this final rule via a variety of media.

##### General Comment Issue 3 General Information

(14) *Comment:* A commenter clarified information regarding the entity that will be handling the disposal of the Navy Base’s lands. The proposed rule indicated that the Navy is conveying approximately 2,075 ac (840 ha) of the property to Sabana Seca Land Management (SSLM). However, the entity that will be marketing and selling the Base is named Sabana Seca Partners, LLC (SSPL), which is an entity different from SSLM.

*Our Response:* We acknowledge this comment and we have made the correction in this final rule.

#### Summary of Changes From Proposed Rule

The Service reviewed and fully considered all comments received from the public and peer reviewers in response to the proposed rule of October 12, 2011 (76 FR 63420), to list the coquí llanero as an endangered species and to designate its critical habitat. The Service also considered all comments received in response to the reopened comment

period on June 19, 2012 (77 FR 36457), and has made minor corrections, as appropriate, including the deletion of the reference to the coquí llanero as a tree frog as acknowledged in the response to comment (2), above.

#### Status Assessment for the Coquí Llanero

##### Summary of Factors Affecting the Species

Section 4 of the Act and its implementing regulations (50 CFR part 424) set forth the procedures for adding species to the Federal Lists of Endangered and Threatened Wildlife and Plants. A species may be determined to be an endangered or threatened species due to one or more of the five factors described in section 4(a)(1) of the Act: (A) The present or threatened destruction, modification, or curtailment of its habitat or range; (B) overutilization for commercial, recreational, scientific, or educational purposes; (C) disease or predation; (D) the inadequacy of existing regulatory mechanisms; or (E) other natural or manmade factors affecting its continued existence. Listing actions may be warranted based on any of the above threat factors, singly or in combination. Each of these factors is discussed below.

##### A. The Present or Threatened Destruction, Modification, or Curtailment of Its Habitat or Range

The coquí llanero was discovered in 2005. Additional on-the-ground surveys based upon habitat characteristics revealed no additional populations. As a result, we do not know if the historical range of the species may be different from its present, known range. Therefore, we present and discuss only factors that may affect the current habitat or range of coquí llanero in this section, including: (1) Urban development; (2) operation and possible expansion of a go-kart and motorbike racetrack in coquí llanero wetland habitat; (3) contamination from the Toa Baja Municipal Landfill (TBML); (4) habitat degradation for flood control projects; and (5) competition from invasive wetland plant species.

##### Urban Development

Large-scale residential projects that are currently planned within and around the site where the species is known to occur pose a threat to the coquí llanero and its habitat (González 2010, pers. comm.; Ríos-López 2010, pers. comm.). The most significant portion of this habitat falls within the southern portion of the USNSGASS. Its land comprises approximately 2,195 ac (888.3 ha), which is divided into two

large areas: the North and South Tracts. The North Tract accounts for approximately 1,330 ac (538.2 ha), with the majority of land currently leased to a local cattle farmer. The South Tract comprises approximately 865 ac (350.1 ha) and is where the coquí llanero is known to occur on 260 ac (105 ha).

The USNSGASS is disposing of the property in accordance with section 2801 of the National Defense Authorization Act (NDAA) for Fiscal Year 1996 (FY1996), Public Law 104–106, 110 Stat. 186 (10 U.S.C. 2871–2885), as amended. Section 2801 of NDAA provides the authority to the Department of Defense (DOD) to work with the private sector nationwide, in order to build and renovate family housing and ancillary facilities in key areas of need. The Navy is conveying approximately 2,075 ac (840 ha) of the property to a private entity, Sabana Seca Partners (SSPL), LLC, which is associated with the Navy's Public Private Venture partnership for military family housing (Tec Inc. and AH Environmental 2008, p. ES–1). SSPL will market and sell the closed Navy base property to non-Federal entities through Forest City Enterprises, Inc.

The environmental assessment (EA) for the transfer-disposal of USNSGASS property states that the property disposed of by the Navy would be redeveloped in a manner similar to surrounding areas (Tec Inc. and AH Environmental 2008, p. 4–1). According to the EA, the preferred alternative for the wetland area that contains occupied coquí llanero habitat is residential use (Tec Inc. and AH Environmental 2008, p. 2–2). Furthermore, coquí llanero wetland habitat is not within the areas that would be zoned for conservation by the Toa Baja municipality, and, according to their land-use plan, they intend to zone the area for residential development. Also, coquí llanero wetland habitat is not within the parcels conveyed to the University of Puerto Rico for the purpose of protection in perpetuity.

The ultimate reuse of the USNSGASS property would be determined by the non-Federal entities receiving the property from SSLM and Forest City Enterprise, Inc. The EA explains that the development within wetlands and the magnitude of the impacts that could occur, if such development was permitted, would be dependent upon the actual placement of new residential areas and the amount of wetland removal or alteration allowed for site development (Tec Inc. and AH Environmental 2008, p. 4–15). Possible impacts (approximately 221 ac (89 ha) of the palustrine emergent wetland (Tec

Inc. and AH Environmental 2008, p. 4–16)) could occur by draining and filling these wetlands, which are occupied by the coquí llanero, leaving little to no suitable habitat for the coquí llanero to carry out its life-history processes. In addition, filling the wetland for future development could require Clean Water Act (CWA; 33 U.S.C. 1251 *et seq.*) section 404 permits from the U.S. Army Corp of Engineers (Corps). If the development would likely adversely affect the species once it is federally listed, consultation under section 7 of the Act should be conducted between the Corps and the Service.

Nevertheless, prior to the discovery of the coquí llanero, land-use history for this area has shown that urban and commercial development has adversely impacted wetland resources, and, although not documented, presumably affected coquí llanero individuals and habitat. An example of those impacts is the fill of a freshwater emergent wetland for residential housing at the western end of coquí llanero habitat (Zegarra and Pacheco 2010, pers. obs.). The wetland where coquí llanero is currently present was previously impacted by the construction and maintenance of Redman Road. This road was constructed in an area identified in the NWI maps as freshwater emergent and forested shrub wetlands habitat, and the road's construction interrupted the natural flow of water and affected the hydrology of the wetland. Further adverse effects to the same wetland habitat can be observed in the residential community that exists on the boundary of the closed USNSGASS property near the intersection of PR Road 867 and Redman Road. This community has expanded over the past 40 years and presently consists of approximately 50 houses, 20 of which are on Navy property (U.S. Navy 2000 in Tec Inc. and AH Environmental 2008, p. 3–4). Prior to the closure of the USNSGASS, the Navy was planning to construct a new fence on the property to eliminate further encroachment on its land holdings (Tec Inc. and AH Environmental 2008, p. 3–6).

Implementing the preferred alternative of the EA for the disposal of the USNSGASS may result in the destruction of approximately 416 ac (168 ha) of wetlands, including coquí llanero habitat (Tec Inc. and AH Environmental 2008, p. 4–5). Additionally, implementing the preferred alternative would most likely result in new residential development (Tec Inc. and AH Environmental 2008, p. 4–6). According to the Puerto Rican Planning Board (PRPB) Web site, 11 development projects are under

evaluation around the southern section of the wetland type locality, possibly impacting 1,087 ac (440 ha) (<http://www.jp.gobierno.pr>, accessed February 2010). Urban development adjacent to the wetland type locality would fragment and directly impact suitable habitat for the coquí llanero and would limit the species' population expansion in the area. In addition, with the creation of new residential projects, traffic would be expected to increase, and, thus, the three primary roadways surrounding the USNSGASS would likely require some improvements (Tec Inc. and AH Environmental 2008, p. 4–6). Vehicle traffic on roads within the essential habitat of amphibian species can be a direct source of mortality and, in some instances, can be catastrophic and should not be underestimated (Glista *et al.* 2007, p. 85). According to Janice González, Director of the Caribbean Primate Research Center (CPRC), approximately 30 CPRC employees drive vehicles on Redman Road daily, as it is currently the main access road to the CPRC (González 2010, pers. comm.). Any improvement of the road or increase in traffic may affect the suitability of the wetland. The biological effects to the coquí llanero from the existing road network around the southern section of the wetlands are not well understood. The combination of habitat fragmentation and high vehicle use of the roads may negatively impact the coquí llanero and its habitat through loss of habitat connectivity, degradation of water quality, direct mortality, edge effects of the road and wetland, and changes in hydrology.

For the above reasons, we conclude that urban development and associated infrastructure and human use are a threat to the coquí llanero by direct mortality and due to permanent loss, fragmentation, or alteration of its habitat.

#### Go-Kart and Motorbike Racetrack

Although the Service does not have information regarding the specific date of the construction of the existing racetrack, we estimate that approximately 29 ac (11.6 ha) of freshwater emergent and forested shrub wetlands were impacted. These data were quantified using Geographic Information Systems analysis with aerial photography and the NWI layers. The Puerto Rico Department of Natural and Environmental Resources (PRDNER) provided a photograph of the coquí llanero's habitat that was filled by the construction of the racetrack (PRDNER 2007b, p. 25). It is also evident that the racetrack floods during heavy rain events and serves as a

potential source of contamination with oil, gasoline, and other pollutants, affecting the suitability of the coquí llanero's habitat (PRDNER 2007b, p. 25). The possible effects of waterborne contaminants on the coquí llanero are discussed under Factor E.

Comments submitted by SSLM (2009, p. 4) expressed concern regarding the operators of the racetrack removing soil to expand the parking lot. The soil was deposited on the USNSGASS grounds, affecting coquí llanero habitat by filling part of the wetland. Joglar (2007, p. 2) identified the wetland area contiguous to the racetrack as occupied by the coquí llanero.

Based on the above information, we conclude that any further expansion of the racetrack or its operation may potentially impact the coquí llanero through permanent loss, alteration, or contamination of its habitat.

#### Toa Baja Municipal Landfill (TBML)

The current operation of the TBML constitutes a threat to the coquí llanero. The landfill is located inland on top of a limestone hill 0.5 mi (0.8 km) south of the known coquí llanero habitat. The polluted discharge or runoff waters from the continued operation of the landfill may pose a threat to the species because underground contaminated waters and leachates reaching the wetlands may change water quality, soils, and consequently plant composition (CPRC 2009, pp. 6–9). See discussion below under Factor E.

The legal representative for the Toa Baja Municipal Administration sent a letter to the Service dated September 8, 2009, supporting the listing of the coquí llanero as an endangered species and supporting the PRDNER Essential Critical Natural Habitat delineation, except for one 83-ac (33.6-ha) parcel necessary for the implementation of TBML closure activities ordered by the U.S. Environmental Protection Agency (EPA). According to a PRDNER technical assistance letter dated February 26, 2010 (PRDNER 2010, pp. 1–6), another area on the north side of the TBML is also being considered for use in closure activities. The area identified as Area B by the Puerto Rico Environmental Quality Board (EQB) is located within the area formerly designated by PRDNER as Essential Critical Natural Habitat for the coquí llanero. Activities identified in the closure procedures will direct the TBML storm water drainages towards the wetland. Storm water that drains from the TBML currently flows into coquí llanero habitat and is contaminated with leachate (see Factor E discussion). In addition, the TBML closure measures

would modify the hydrology of the area and could adversely affect the hydrology of the wetland by affecting part of the limestone hills, which supply water to the wetland and affect the suitability of habitat for the species.

Based on the above information, we conclude that the current operation and possible closure measures of the TBML are a threat to the coquí llanero by potentially altering the hydrology of its wetland habitat and by contaminating the wetland with landfill runoff.

#### Channel-Clearing Activities for Flood Control

The municipality of Toa Baja periodically removes riparian vegetation along the main drainage channel within the wetland where the species is known to occur. These flood control measures are implemented during the rainy season to facilitate water flow and prevent flooding of nearby communities such as Ingenio, Villas del Sol, and Brisas de Campanero. However, channel-clearing activities may facilitate drainage and drying of the wetland, and accelerate colonization of invasive, herbaceous vegetation along the edges of the channel towards the wetland (Ríos-López 2009, p. 3). Preliminary studies on the reproductive biology of the coquí llanero suggest that wetland areas subjected to prolonged dry periods (e.g., towards the edges of wetland) are characterized by greater vegetation cover of grasses instead of the native ferns and arrowheads that the coquí llanero depends on for reproduction and survival. These areas also have a disproportionate abundance of coquí llanero egg clutch predators, both native and exotic mollusks and insects (Ríos-López 2009, pp. 3, 11).

Based on the above information, we conclude that channel-clearing activities may be an indirect threat to the coquí llanero because they prolong dryer conditions along the edges of the wetland, allowing invasive plants and predators to colonize the wetland.

#### Invasive Wetland Plant Species

Invasive native wetland plants such as *Typha domingensis* (Southern cattail) may invade and alter diverse native wetland communities, often resulting in plant monocultures that support few wildlife species (Houlahan and Findlay 2004, p. 1132). Southern cattail may alter the wetland attributes, including geomorphology, fire regime, hydrology, microclimate, nutrient cycling, and productivity (Woo and Zedler 2002, p. 509). Based on our previous experience in the Laguna Cartagena National Wildlife Refuge, the southern cattail colonized disturbed areas faster than

other native wetland plants, thereby excluding the native plants. The southern cattail is currently found in patches within coquí llanero wetland habitat (Service 2011, pers. obs.). If the southern cattail continues to spread and colonizes coquí llanero wetland habitat, it could replace all *Sagittaria lancifolia* and the ferns that the coquí llanero depends on for reproduction and normal behavior.

Therefore, we conclude that invasive wetland species are a threat to the coquí llanero due to changes in the wetland hydrology and plant species composition the coquí llanero needs for survival.

#### Summary of Factor A

Based on the best scientific and commercial information available, we find that urban development, the operation of the existing race track, activities associated with the operation and future closure of the TBML, channel-clearing activities for flood control, and invasive plant species pose a threat to the species. The scope of this factor is exacerbated because the only known population of coquí llanero occurs on land that is slated for development and surrounded by lands subject to urban development. Because these threats are already occurring, and are expected to continue into the future, on the extremely localized known range of the coquí llanero, they are having or are likely to have a significant impact on the species.

#### B. Overutilization for Commercial, Recreational, Scientific, or Educational Purposes

The coquí llanero is not a commercially valuable species or a species sought after for recreational or educational purposes. However, this recently discovered species could be actively sought for scientific purposes. Forty-five coquí llanero specimens were collected for scientific purposes in 2005 to describe the species, and some specimens have been deposited in universities and private collections (Ríos-López and Thomas 2007, p. 54). In addition, an undisclosed number of eggs and individuals were collected for scientific research of the species' reproductive biology, potential captive breeding capability, and pathogen sampling. Despite scientific collection having been identified as a possible contribution to the decline of other coquí species in Puerto Rico, scientific collection had not previously been identified as a threat to this species because the coquí llanero had legal protection under Commonwealth Law 241 and PRDNER Regulation 6766,

promulgated in 2007. Commonwealth Law 241 and PRDNER Regulation 6766 prohibited collection of the coquí llanero without authorization of the Secretary of the PRDNER (PRDNER 2007a, p. 9). However, on May 30, 2012, the Supreme Court of Puerto Rico overturned the protection and critical habitat designation established by the PRDNER for the coquí llanero (*Municipio de Toa Alta, et al. v. PRDNER*, 2012 TSPR 94), leaving the species without legal protection. This issue is discussed under Factor D.

As a recently discovered species, the coquí llanero is recognized for its rarity and restricted range. However, there is no regulation limiting its collection, making the species more attractive to collectors and scientists. Currently, only a few researchers are conducting studies on the species. Although collection could be a significant threat to the species due to its restricted range and because collection could potentially occur at any time, we do not have information indicating that the coquí llanero is being collected. Therefore, we conclude that overutilization for commercial, recreational, scientific, or educational purposes is not a threat to the coquí llanero.

#### C. Disease or Predation

The effects of diseases or predation on the coquí llanero are not well known. Because the species is known from only one location, and population size is not well estimated, disease and predation could pose a threat to its survival.

##### Disease

The pathogenic chytrid fungus, *Batrachochytrium dendrobatidis* (*Bd*), is a widespread pathogen that is hypothesized to be the cause of mass mortality in some amphibian populations (Pilliod *et al.*, 2009, p. 1260). Chytridiomycosis (disease caused by the fungus) results when *Bd* invades keratinized tissue (tissue that makes the outside of the skin tough and resistant to injury) of an amphibian, disrupting cutaneous functions, compromising the host's immune system, and affecting the amphibian's behavior (Pilliod *et al.*, 2009, p. 1260). In Puerto Rico, the fungus appears to be endemic above 1968.5 ft (600 m), occurring from east of Luquillo Mountain (El Yunque National Forest) throughout the Central Cordillera up to Maricao (Burrowes *et al.* 2008, p. 322). This occurrence is outside of the coquí llanero's known range (see *Species Information*). Additionally, five coquí llanero individuals have been sampled for *Bd*, with negative results (Burrowes *et al.* 2008, p. 323). Although *Bd* has been

detected at lower elevations in other tropical environments, the best scientific and commercial information available for coquí llanero indicates that this fungus is not a current threat to this species, nor is it likely to become so in the near future, even taking into consideration changing environmental conditions due to climate change (see discussion under Factor E). Based on the above information, we conclude that disease is not currently a threat to the coquí llanero.

Predation is a threat to the coquí llanero, particularly at the dryer edges of the wetland. The eggs are preyed on by ants and by a terrestrial invertebrate. Information provided by Ríos-López (2009, p. 11) indicates that natural predation pressure may be strong and that interspecific competition for breeding sites may be significant. Preliminary data indicated that the coquí llanero has the lowest reproductive output of any coquí species in Puerto Rico, averaging three eggs per clutch (PRDNER 2007a, p. 3; Ríos-López and Thomas 2007, p. 60; Ríos-López 2009, p. 5). Egg predation by native and exotic invertebrates was observed, with some predators consuming entire egg masses in 3 days. However, the information available suggests that flooded conditions may limit predation pressure against the coquí llanero. Predators of the coquí llanero rarely invade more permanent flooded areas of the wetland, suggesting that predation could be exacerbated by the destruction, modification, or curtailment of the species' habitat (see discussion under Factor A).

Based on the best scientific and commercial information available, we have determined that disease is not a threat to the coquí llanero. However, predation is a threat to the continued existence of the species.

#### D. The Inadequacy of Existing Regulatory Mechanisms

PRDNER designated the coquí llanero as Critically Endangered and designated its habitat as Essential Critical Natural Habitat under Commonwealth Law 241 and Regulation 6766 in July 2007 (PRDNER 2007a and 2007b). Article 2 of Regulation 6766 included all prohibitions and stated the designation as "critically endangered," which prohibited any person from taking the species; it prohibited harm, possession, transportation, destruction, or import or export of individuals, nests, eggs, or juveniles without previous authorization from the Secretary of PRDNER (PRDNER 2007a, p. 9). Article 2.06 also prohibited collecting, harassing, hunting, and removing,

among other activities, of listed animals within the jurisdiction of Puerto Rico (PRDNER 2007a, p. 9).

The PRDNER designated approximately 1,602 ac (648 ha) as "Essential Critical Natural Habitat" under Regulation 6766 (PRDNER 2007b, p. 28). The coquí llanero's habitat was the first designated essential critical natural habitat under Commonwealth Law 241 and Regulation 6766. Article 4.05 of this regulation specifies that an area designated as Essential Critical Natural Habitat cannot be modified unless scientific studies determine that such designation should be changed.

SSLM brought a lawsuit against the PRDNER, alleging that the agency designated as critical habitat of the coquí llanero areas in excess of what is required for the conservation of the species. SSLM challenged the PRDNER designation, arguing the area does not reflect the presence of the coquí llanero or physical and biological characteristics that sustain the species.

On May 30, 2012, the Supreme Court of Puerto Rico held that PRDNER did not follow the designation process required by Commonwealth Law 170 (Ley de Procedimientos Administrativos Uniformes del Estado Libre Asociado de Puerto Rico, del 12 de Agosto de 1988, 3 L.P.R.A. sec. 2101, *et seq.*), and overturned the PRDNER designation of the coquí llanero as "critically endangered" and the designated "essential critical natural habitat" (*Municipio de Toa Alta, et al. v. PRDNER*, 2012 TSPR 94). Therefore, presently, PRDNER's designations for the coquí llanero as critically endangered and its essential critical natural habitat, are invalid, and Commonwealth Law 241 and Regulation 6766 provide no protection for the species and its habitat. Additionally, the coquí llanero is not currently on the Commonwealth list of endangered and threatened species.

The Clean Water Act (CWA), 33 U.S.C. 1251 *et seq.*, administered by the Corps, establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. The objective of the CWA is to restore and maintain the chemical, physical, and biological integrity of the nation's waters by preventing point and nonpoint pollution sources. The CWA has a stated goal that "\* \* \* wherever attainable, an interim goal of water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water be achieved by July 1, 1983." States are responsible for setting and

implementing water quality standards that align with the requirements of the CWA. Overall, implementation of the CWA could benefit the coquí llanero through the point and nonpoint source programs.

Nonpoint source (NPS) pollution comes from many diffuse sources, unlike pollution from industrial and sewage treatment plants. NPS pollution is caused by rainfall (water) moving over and through the ground. As the runoff moves, it transports natural and human-made pollutants to lakes, rivers, wetlands, coastal waters and ground waters. States report that nonpoint source pollution is the leading remaining cause of water quality problems. The effects of nonpoint source pollutants on specific waters vary and may not always be fully assessed. However, these pollutants have harmful effects on fisheries and wildlife ([http://www.epa.gov/owow\\_keep/NPS/whatis.html](http://www.epa.gov/owow_keep/NPS/whatis.html)).

Sources of NPS pollution within the watershed that feed the wetland occupied by the coquí llanero include clearing of riparian vegetation, urbanization, road construction, and other practices that allow bare earth to enter streams. The Service does not have any specific information about the sensitivity of the coquí llanero to common NPS pollutants likely released from the activities discussed under Factor A, above. Because there is very little information known about water quality parameters necessary to fully protect the coquí llanero, it is difficult to determine whether the CWA is adequately addressing the habitat and water quality threats to the species. However, based on the information currently available, the Service does not believe that the current water quality conditions are a threat to the species.

Similarly, the CWA has mechanisms in place to protect the integrity of wetlands such that water quality is maintained. The Service currently consults with the Corps on wetland fill permits, and we anticipate that this process will adequately protect the integrity of the emergent wetland occupied by the coquí llanero. Therefore, we do not find that inadequate implementation of the CWA is a threat to the species at this time.

#### Summary of Factor D

The sole regulatory mechanisms that protected the coquí llanero, Commonwealth Law 241 and Regulation 6766, have been invalidated by the court and are no longer in effect. Further, after evaluating the CWA, we determined that it provides adequate protection to the wetland occupied by the species

and, therefore, inadequate implementation to the CWA is not a threat to the coquí llanero at this time. We are not aware of any other existing regulatory mechanisms that address the threats to the species and its habitat identified under the other factors. In summary, we do not find that the inadequacy of existing regulatory mechanisms is a threat to the species.

#### *E. Other Natural or Manmade Factors Affecting Its Continued Existence*

In the following section, we discuss the highly specialized ecological requirements of the species, as well as water and soil pollution, use of herbicides, brush fires, competition, climate change, and human use of and access to the wetland area.

#### Highly Specialized Ecological Requirements

Because of its highly specialized ecological requirements for reproduction, the coquí llanero's vulnerability to other threats discussed in this rule is exacerbated. As mentioned in the *Background* section, the coquí llanero is known to exist in only one freshwater wetland in the municipality of Toa Baja, and after several searches in other similar locations (apparently there are few or no wetlands with similar plant composition), the species was not detected. Ríos-López and Thomas (2007, p. 60) found that the breeding events of the coquí llanero were limited to one plant species, *Sagittaria lancifolia*. This plant is an obligate wetland indicator species. A general description of the major substrate types of the wetland that the coquí llanero currently inhabits indicates a 7.4 percent vegetation cover of *S. lancifolia* (Ríos-López 2009, p. 9). The coquí llanero may also be selecting an intermediate *S. lancifolia* size class for egg laying, which suggests further specialization (Ríos-López 2010, unpubl. data, p. 8). Also, current research by Ríos-López (2010, unpubl. data, p. 11) suggests that reproduction may not occur randomly in space, but rather seems to be limited to plants located in areas of little disturbance, in areas that are permanently flooded, and in areas that are away from the wetland's edges.

We find that the highly specialized ecological requirements of the coquí llanero exacerbate its vulnerability to other threats, such that the continued existence of the species is likely to be impacted.

#### Water and Soil Pollution

CPRC (2009, p. 6), PRDNER (2007b, p. 24), EGIS, Inc. (2007, p. 4), and Joglar

(2007, p. 6) identify the TBML leachates as a threat to the coquí llanero. This landfill is located on the limestone hills to the south of the wetland known to be occupied by the coquí llanero. The CPRC submitted to EGIS a photograph of contaminated leachates draining towards that wetland. The leachate study submitted by EGIS described the hydrology of the area as typical of karst zones (area of limestone soil characterized by sinks, ravines, and underground streams) near the coast in which the runoff generated in the limestone hills, including at the TBML, flows at or near the surface through a series of channels and small valleys that ultimately reach the marshes and wetlands areas (including coquí llanero habitat) to the north of the TBML (EGIS 2007, Appendix B, p. 7). The study specifies that a dark-colored leachate is currently flowing from the TBML towards the closed USNSGASS property, and that even during periods of drought, the leachate flows continuously towards the USNSGASS property, with flows increasing during rain events (EGIS 2007, Appendix B, p. 23). The leachate study identified high levels of arsenic, cyanide, sodium, lead, and chromium, among other elements. There did not appear to be much indication of petroleum-related pollutants, although sampling more strategically near the racetrack could more accurately assess this contamination impact relative to the coquí llanero's habitat (EGIS 2007, p. 5).

Additional analytical laboratory results from other threat zones associated with the wetland indicated elevated levels of certain heavy metals, coliform bacteria, chemical oxygen demand, and pesticides (EGIS 2007, p. 18). High coliform bacteria counts could be from several sources (e.g., septic systems) or the CPRC (EGIS 2007, p. 5). Of particular concern is the possibility of bioaccumulation of toxins throughout the wetland food chain (PRDNER 2007b, p. 24). It is highly probable that the contaminated conditions of the soil and standing water would not be hospitable to a sensitive amphibian species, such as the coquí llanero, that absorbs chemicals through the skin (EGIS 2007, p. 5). Such chemicals could directly affect the coquí llanero's development, cause abnormalities, or act indirectly by increasing its susceptibility to other environmental stressors such as infectious diseases and predation (Taylor *et al.*, 2005, p. 1497). We have no information indicating any negative response of the species to soil and water pollution. However, we consider water

and soil pollution a potential threat to the species at this time.

#### Herbicides

The CPRC (2009, p. 7) identified the use of herbicides for maintenance of green areas in the closed USNSGASS as a current threat to the species. However, SSLM (2009, p. 9) claims they do not use herbicides on the borders of the wetland as part of maintenance work on the USNSGASS property, and that the practice of using herbicides is not in accordance with its institutional environmental policies and the activities authorized to SSLM at the USNSGASS by the Navy. During a site visit by the Service, there were no signs of the use of herbicides along Redman Road within the area where coquí llanero occurs at the USNSGASS. Moreover, a conversation with Ríos-López (2011 pers. comm.) confirmed that practice had apparently ceased.

Nevertheless, herbicides may still be able to enter into the wetland because of possible herbicide use in the urban housing areas near the coquí llanero's habitat. These herbicides could cause developmental abnormalities (e.g., limb malformations) to the coquí llanero. In fact, pesticides have been known to be dispersed through precipitation and wind (Sparling *et al.* 2001, p. 1595; Fellers *et al.* 2004, p. 2176). Other research suggests that important changes in an ecological community's food web resulted from pesticide and herbicide exposure, which influence the susceptibility of amphibian species to contaminants (Boone and James 2003, p. 829). We have no information indicating any negative response of the species to herbicides. However, we consider the use of herbicides in the surrounding area as a potential threat to the species at this time.

#### Brush Fires

Brush fires have been identified as a current threat to the species (CPRC 2009, p. 6). SSLM (2009, p. 9) mentioned that the only fire incidents reported since 2007 have occurred on the North Tract of the USNSGASS and were limited to two or three incidents per year during the drought season. The habitat of the coquí llanero is surrounded by several developments (e.g., race track and urban housing) that facilitate exposure and invasion of any accidental or deliberate fires into the wetland footprint and adjacent forest. This could exacerbate the entrance of invasive plants such as southern cattail and change the vegetation composition of the wetland (see discussion under Factor A). Changes to the wetland could create an environment where the cattail

dominates the vegetation make-up and converts the wetland to a monotypic vegetation environment. This would reduce the plants that coquí llanero depends on. In addition, these brush fires may encroach on the coquí llanero's current limited habitat. A possibly extinct coquí species in Puerto Rico (i.e., *Eleutherodactylus jasperi*) with limited distribution and highly specialized ecological requirements is known to have been adversely affected by fires in its type locality (Díaz 1984, p. 4).

Therefore, we believe that brush fires may be a threat to the coquí llanero and its habitat.

#### Competition

A common, and more widespread, coquí species of Puerto Rico (i.e., *Eleutherodactylus cochranae*) can utilize the same habitats as the coquí llanero, specifically the *S. lancifolia* egg-laying locations, displacing and damaging the coquí llanero's eggs. These competitors rarely invade more permanently flooded areas of the wetland, suggesting a synergism between hydrology alteration and competition that may result in magnified, negative biological interactions against the coquí llanero (Ríos-López 2009, p. 4).

Competition is a threat to the coquí llanero, particularly at the dryer edges of the wetland. This threat could be exacerbated by the destruction, modification, or curtailment of the species habitat (see discussion under Factor A). The available information suggests that flooded conditions may limit competition pressure against the coquí llanero. Therefore, based on the best scientific and commercial information available to us, we conclude that competition is a threat to the continued existence of the species.

#### Climate Change

"Climate" refers to an area's long-term average weather statistics (typically from at least 20 or 30 year periods), including the mean and variation of surface variables such as temperature, precipitation, and wind; "climate change" refers to a change in the mean or variability or both of climate properties that persists for an extended period (typically decades or longer), whether due to natural processes or human activity (Intergovernmental Panel on Climate Change (IPCC) 2007a, p. 78). Although changes in climate occur continuously over geological time, changes are now occurring at an accelerated rate. For example, at continental, regional, and ocean basin scales, recent observed changes in long-

term trends include: A substantial increase in precipitation in eastern parts of North America and South America, northern Europe, and northern and central Asia, and an increase in intense tropical cyclone activity in the North Atlantic since about 1970 (IPCC 2007a, p. 30); and an increase in annual average temperature of more than 2 °F (1.1 °Celsius) across the United States since 1960 (Global Climate Change Impacts in the United States (GCCIOUS) 2009, p. 27). Examples of observed changes in the physical environment include: An increase in global average sea level, and declines in mountain glaciers and average snow cover in both the northern and southern hemispheres (IPCC 2007a, p. 30); substantial and accelerating reductions in Arctic sea-ice (e.g., Comiso *et al.* 2008, p. 1); and a variety of changes in ecosystem processes, the distribution of species, and the timing of seasonal events (e.g., GCCIOUS 2009, pp. 79–88).

The IPCC used Atmosphere-Ocean General Circulation Models and various greenhouse gas emissions scenarios to make projections of climate change globally and for broad regions through the 21st century (Meehl *et al.* 2007, p. 753; Randall *et al.* 2007, pp. 596–599), and reported these projections using a framework for characterizing certainty (Solomon *et al.* 2007, pp. 22–23). The projections include: (1) It is virtually certain there will be warmer and more frequent hot days and nights over most of the earth's land areas; (2) it is very likely there will be increased frequency of warm spells and heat waves over most land areas, and the frequency of heavy precipitation events will increase over most areas; and (3) it is likely that increases will occur in the incidence of extreme high sea level (excludes tsunamis), intense tropical cyclone activity, and the area affected by droughts (IPCC 2007b, p. 8, Table SPM.2). More recent analyses using a different global model and comparing other emissions scenarios resulted in similar projections of global temperature change across the different approaches (Prinn *et al.* 2011, pp. 527, 529).

All models (not just those involving climate changes) have some uncertainty associated with projections due to assumptions used, data available, and features of the models. With regard to climate change, this includes factors such as assumptions related to emissions scenarios, internal climate variability, and differences among models. However, under all global models and emissions scenarios, the overall projected trajectory of surface air temperature is one of increased warming compared to current

conditions (Meehl *et al.* 2007, p. 762; Prinn *et al.* 2011, p. 527). Climate models, emissions scenarios, and associated assumptions, data, and analytical techniques will continue to be refined, as will interpretations of projections, as more information becomes available. For instance, some changes in conditions are occurring more rapidly than initially projected, such as melting of Arctic sea-ice (Comiso *et al.* 2008, p. 1; Polyak *et al.* 2010, p. 1797), and since 2000, the observed emissions of greenhouse gases, which are a key influence on climate change, have been occurring at the mid-to higher levels of the various emissions scenarios developed in the late 1990s and used by the IPCC for making projections (e.g., Raupach *et al.* 2007, Figure 1, p. 10289; Manning *et al.* 2010, Figure 1, p. 377; Pielke *et al.* 2008, entire). Also, the best scientific and commercial data available indicate that average global surface air temperature is increasing and several climate-related changes are occurring and will continue for many decades even if emissions are stabilized soon (e.g., Meehl *et al.* 2007, pp. 822–829; Church *et al.* 2010, pp. 411–412; Gillett *et al.* 2011, entire).

Changes in climate can have a variety of direct and indirect impacts on species, and can exacerbate the effects of other threats. Rather than assessing “climate change” as a single threat in and of itself, we examine the potential consequences to species and their habitats that arise from changes in environmental conditions associated with various aspects of climate change. For example, climate-related changes to habitats, predator-prey relationships, disease and disease vectors, or conditions that exceed the physiological tolerances of a species, occurring individually or in combination, may affect the status of a species. Vulnerability to climate change impacts is a function of sensitivity to those changes, exposure to those changes, and adaptive capacity (IPCC 2007, p. 89; Glick *et al.* 2011, pp. 19–22). As described above, in evaluating the status of a species, the Service uses the best scientific and commercial data available, and this includes consideration of direct and indirect effects of climate change. As is the case with all potential threats, if a species is currently affected or is expected to be affected by one or more climate-related impacts, this does not necessarily mean the species is an endangered or threatened species as defined under the Act. If a species is listed as endangered or threatened, this knowledge regarding its vulnerability to, and impacts from,

climate-associated changes in environmental conditions can be used to help devise appropriate strategies for its recovery.

While projections from global climate model simulations are informative and in some cases are the only or the best scientific information available, various downscaling methods are being used to provide higher-resolution projections that are more relevant to the spatial scales used to assess impacts to a given species (see Glick *et al.* 2011, pp. 58–61). The effects of climate change on coastal wetlands could be significant if sea level rises. Changes in precipitation patterns and warmer temperatures can likewise have detrimental effects on wetland function (Mitsch and Gosselink 2007, p. 313). Climate-linked amphibian population declines in Puerto Rico have been explained by a possible synergistic interaction between drought and the pathological effect of the chytrid fungus (Burrowes *et al.* 2004, p. 141) (see Factor C discussion). While we do not have specific information for the coquí llanero and its habitat, information in the literature suggests that changes in environmental conditions that may result from climate change can influence the spread of nonnative, invasive species; fire; and precipitation levels, thereby potentially impacting the coquí llanero.

#### Human Access or Use

Although we currently do not have any information on the visitor use of the wetland where the coquí llanero is known to occur, Ríos-López (2009, p. 3) suggests that visitation for educational, research, or recreational purposes may have significant impact on the unique vegetation assemblage of the wetland. These activities could result in vegetation destruction from the development of research transects and observation trails. Up to a 4-month delay of vegetation regeneration was documented after a transect was established for these activities and up to an 8-month delay of vegetation regeneration after a helicopter hovered approximately 30 ft (9 m) above a section of the wetland. Afterwards, short-term results included reduced calling by male coquí llanero and invasion by another edge-associated coquí species, *Eleutherodactylus antillensis*, on the bent vegetation that had formed a raft-like area (Ríos-López 2009, p. 3). However, because the wetland area is generally closed to visitors and research limited and only by permit, human impact from these activities is expected to be minimal.

Therefore, we conclude that human access or use is currently not a

significant threat to the coquí llanero and its habitat.

#### Summary of Factor E

In summary, the coquí llanero may be threatened by a variety of natural and manmade factors that may affect the continued existence of the species. The primary natural or manmade factors affecting the species are its highly specialized ecological requirements, which exacerbate the threats posed by other factors to the coquí llanero, and competition with other coquí species for egg-laying sites. Other potential threats that may affect the species are landfill leachate pollution, the use of herbicides, the threat of fire to the species' habitat, and changes in environmental conditions resulting from climate change. We determined that human access or use is not currently a significant threat to the coquí llanero and its habitat. Based on the best available information, we conclude that the coquí llanero may be threatened by other natural or manmade factors affecting its continued existence. Factors including the coquí llanero's highly specialized ecological requirements, landfill leachate pollution, the use of herbicides, brush fires, competition, and environmental effects resulting from climate change are potential threats that may be expected to increase in the future depending on activities surrounding the species' habitat, placing the coquí llanero at risk.

#### Cumulative Impacts

Some of the threats discussed in this finding could work in concert with one another to cumulatively create situations that potentially impact coquí llanero beyond the scope of the combined threats that we have already analyzed.

#### Summary of Factors

The main factors from section 4(a)(1) of the Act that threaten coquí llanero are Factors A, C, and E. The primary threat to the species is from habitat modification (Factor A) in the form of urban development and ongoing threats of habitat destruction and modification. Predation may also present a current threat to the coquí llanero, particularly at the dryer edges of the wetland, and its isolation makes it particularly susceptible to disease and predation (Factor C). Other natural or manmade factors affecting its continued existence, particularly its specialized ecological requirements, also may be threats to the species (Factor E). Further, there are no existing regulatory mechanisms in place that address the threats to the species or its habitat (Factor D). These factors pose

imminent threats to the species because they are currently occurring. Depending on the intensity and immediacy of such threats, these factors, either by themselves or combined, are operative threats that act on the species and its habitat.

#### Determination

The Act defines an endangered species as any species that is "in danger of extinction throughout all or a significant portion of its range" and a threatened species as any species "that is likely to become endangered throughout all or a significant portion of its range within the foreseeable future." We have carefully assessed the best scientific and commercial information available regarding the past, present, and future threats to the coquí llanero, and have determined that the continued existence of the coquí llanero is threatened by urban development and associated activities, changes in hydrology, surface and ground pollution, use of herbicides, invasion of nonnative species, predation, climate change, brush fires, and competition. Significant threats are occurring now and are likely to continue in the foreseeable future, at a high intensity, and across the species' limited range and not limited to or concentrated in any significant portion of its range; therefore, we have determined the species is currently on the brink of extinction. Because these threats are placing the species in danger of extinction now and not only at some point in the foreseeable future, we find this species meets the definition of an endangered species, not a threatened species. Hence, on the basis of the best available scientific and commercial information, we determined the coquí llanero as an endangered species in accordance with sections 3(6) and 4(a)(1) of the Act.

#### Significant Portion of the Range

We evaluated the current range (one known population occupying approximately 615 acres (248.8 ha) of wetland) of the coquí llanero to determine if there is any apparent geographic concentration of potential threats for the species. The coquí llanero is highly restricted in its range and the threats occur throughout its range. We considered the potential threats due to urban development, changes in hydrology, surface and ground pollution, invasion of nonnative species, brush fires, competition, predation, the inadequacy of existing regulatory mechanisms, chemical contaminants, and climate change. We found no concentration of threats

because of the species' limited and curtailed range, and the uniformity of the threats throughout its entire range. Having determined that the coquí llanero is in danger of extinction throughout its entire range, it is not necessary to evaluate whether there are any significant portions of its range. Therefore, we find that factors affecting the species are essentially uniform throughout its range, indicating no portion of the range of the species warrants further consideration of possible endangered or threatened species status under the Act.

#### Available Conservation Measures

Conservation measures provided to species listed as endangered or threatened under the Act include recognition, recovery actions, requirements for Federal protection, and prohibitions against certain practices. Recognition through listing results in public awareness and conservation by Federal, State, Tribal, and local agencies; private organizations; and individuals. The Act encourages cooperation with the States and requires that recovery actions be carried out for all listed species. The protection required by Federal agencies and the prohibitions against certain activities are discussed, in part, below.

The primary purpose of the Act is the conservation of endangered and threatened species and the ecosystems upon which they depend. The ultimate goal of such conservation efforts is the recovery of these listed species, so that they no longer need the protective measures of the Act. Subsection 4(f) of the Act requires the Service to develop and implement recovery plans for the conservation of endangered and threatened species. The recovery planning process involves the identification of actions that are necessary to halt or reverse the species' decline by addressing the threats to its survival and recovery. The goal of this process is to restore listed species to a point where they are secure, self-sustaining, and functioning components of their ecosystems.

Recovery planning includes the development of a recovery outline shortly after a species is listed and preparation of a draft and final recovery plan. The recovery outline guides the immediate implementation of urgent recovery actions and describes the process to be used to develop a recovery plan. Revisions of the plan may be done to address continuing or new threats to the species, as new substantive information becomes available. The recovery plan identifies site-specific management actions that set a trigger for

review of the five factors that control whether a species remains endangered or may be downlisted or delisted, and methods for monitoring recovery progress. Recovery plans also establish a framework for agencies to coordinate their recovery efforts and provide estimates of the cost of implementing recovery tasks. Recovery teams (comprised of species experts, Federal and State agencies, nongovernment organizations, and stakeholders) are often established to develop recovery plans. When completed, the recovery outline, draft recovery plan, and the final recovery plan will be available on our Web site (<http://www.fws.gov/endangered>), or from our Caribbean Ecological Services Field Office (see **FOR FURTHER INFORMATION CONTACT**).

Implementation of recovery actions generally requires the participation of a broad range of partners, including other Federal agencies, States, Tribal, nongovernmental organizations, businesses, and private landowners. Examples of recovery actions include habitat restoration (e.g., restoration of native vegetation), research, captive propagation and reintroduction, and outreach and education. The recovery of many listed species cannot be accomplished solely on Federal lands because their range may occur primarily or solely on non-Federal lands. To achieve recovery of these species requires cooperative conservation efforts on private, State, and Tribal lands.

Once this species is listed (see **DATES**), funding for recovery actions will be available from a variety of sources, including Federal budgets, State programs, and cost share grants for non-Federal landowners, the academic community, and nongovernmental organizations. In addition, under section 6 of the Act, the Commonwealth of Puerto Rico will be eligible for Federal funds to implement management actions that promote the protection or recovery of the coquí llanero. Information on our grant programs that are available to aid species recovery can be found at: <http://www.fws.gov/grants>.

Section 7(a) of the Act requires Federal agencies to evaluate their actions with respect to any species that is proposed or listed as endangered or threatened and with respect to its critical habitat, if any is designated. 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 the Service 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. If a species is listed subsequently, 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 the species or destroy or adversely modify its critical habitat. If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency must enter into formal consultation with the Service.

Federal agency actions within the species habitat that may require conference or consultation or both as described in the preceding paragraph include: Federal activities that may affect the coquí llanero including, but not limited to, the carrying out or the issuance of permits for discharging fill material on wetlands for road or highway construction; installation of pipelines; development of residential, tourism, or commercial facilities; farming; channeling or stream alterations; discharge of contaminated waters; wastewater facility development; and renewable energy projects. Additional detail is provided below:

(1) Actions that would significantly alter the structure and function of the wetland. Such actions or activities could include, but are not limited to, the filling or excavation of the wetland. The filling or excavation of the wetland would alter the hydrology of the site and would destroy the vegetation where the coquí llanero spends all of its life stages. The filling or excavation of wetlands could result in the direct mortality of the species because it will destroy the only known population and locality where the coquí llanero is found.

(2) Actions that would significantly alter the vegetation structure in and around the wetland. Such actions or activities could include, but are not limited to, vegetation cutting for expanding or maintaining roads, construction of new roads, and development of new residences or commercial establishments. The alteration of the vegetation structure may change the wetland characteristics by changing the microhabitat (e.g., change in temperature and humidity levels) and could result in direct mortality of individuals and egg clutches through desiccation from sun exposure.

(3) Actions that may alter the natural flow of water. Such actions or activities could include, but are not limited to, changes in the limestone hills located to the south of the wetland. The alteration of these limestone hills may affect the integrity of the wetland (e.g., change in

hydrology, replenishment of water, sedimentation deposition or erosion). These activities could reduce the wetland composition, including the vegetation, and could result in direct or cumulative adverse effects to the species.

(4) Actions that would significantly degrade water quality (for example, contaminants and excess nutrients). Such actions or activities could include, but are not limited to, landfill discharges, heated effluents into surface water or connected groundwater, and the spill of petroleum-based products by the nearby go-kart race track. These activities could alter water conditions that can consequently alter the plant composition in the wetland by exposing the species to more competition and result in direct or cumulative adverse effects to the species and its life cycle.

The Act and its implementing regulations set forth a series of general prohibitions and exceptions that apply to all endangered wildlife. The prohibitions of section 9(a)(2) of the Act, codified at 50 CFR 17.21 for endangered wildlife, in part, make it illegal for any person subject to the jurisdiction of the United States to take (includes harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect; or to attempt any of these), import, export, ship in interstate commerce in the course of commercial activity, or sell or offer for sale in interstate or foreign commerce any listed species. Under the Lacey Act (18 U.S.C. 42–43; 16 U.S.C. 3371–3378), it is also illegal to possess, sell, deliver, carry, transport, or ship any such wildlife that has been taken illegally. Certain exceptions apply to agents of the Service and State conservation agencies.

We may issue permits to carry out otherwise prohibited activities involving endangered and threatened wildlife species under certain circumstances. Regulations governing permits are codified at 50 CFR 17.22 for endangered species, and at 17.32 for threatened species. With regard to endangered wildlife, a permit must be issued for the following purposes: for scientific purposes, to enhance the propagation or survival of the species, and for incidental take in connection with otherwise lawful activities.

### **Critical Habitat Designation for Coquí Llanero**

#### **Background**

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

(1) The specific areas within the geographical area occupied by the species, at the time it is listed in accordance with the Act, on which are

found those physical or biological features

(a) Essential to the conservation of the species and

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

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

Conservation, as defined under section 3 of the Act, means to use and the use of all methods and procedures that are necessary to bring an endangered or threatened species to the point at which the measures provided under 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 Federal agencies carrying out, funding, or authorizing the destruction or adverse modification of critical habitat. Section 7(a)(2) requires consultation on Federal actions that may affect critical habitat. The designation of critical habitat does not affect land ownership or establish a refuge, wilderness, reserve, preserve, or other conservation area. Such designation does not allow the government or public to access private lands. Such designation does not require implementation of restoration, recovery, or enhancement measures by non-Federal landowners. Where a landowner seeks or requests Federal agency funding or authorization for an action that may affect a listed species or critical habitat, the consultation requirements of section 7(a)(2) would apply, but even in the event of a destruction or adverse modification finding, Federal action agency's and the applicant's obligation is not to restore or recover the species, but to implement reasonable and prudent alternatives to avoid destruction or adverse modification of critical habitat.

Under the first prong of the Act's definition of critical habitat, areas within the geographical area occupied by the species at the time it was listed are included in a critical habitat designation if they contain physical or biological features (1) which are

essential to the conservation of the species and (2) which may require special management considerations or protection. For these areas, critical habitat designations identify, to the extent known using the best scientific and commercial data available, those physical or biological features that are essential to the conservation of the species (such as space, food, cover, and protected habitat). In identifying those physical and biological features within an area, we focus on the principal biological or physical constituent elements (primary constituent elements such as roost sites, nesting grounds, seasonal wetlands, water quality, tide, soil type) that are essential to the conservation of the species. Primary constituent elements are those specific elements of the physical or biological features that provide for a species' life-history processes and are essential to the conservation of the species.

Under the second prong of the Act's definition of critical habitat, we can designate critical habitat in areas outside the geographical area occupied by the species at the time it is listed, upon a determination that such areas are essential for the conservation of the species. For example, an area currently occupied by the species but that was not occupied at the time of listing may be essential to the conservation of the species and may be included in the critical habitat designation. We designate critical habitat in areas outside the geographical area occupied by a species only when a designation limited to its range would be inadequate to ensure the conservation of the species.

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

When we are determining which areas should be designated as critical habitat, our primary source of information is

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

Habitat is dynamic, and species may move from one area to another over time. We recognize that critical habitat designated at a particular point in time may not include all of the habitat areas that we may later determine are necessary for the recovery of the species. For these reasons, a critical habitat designation does not signal that habitat outside the designated area is unimportant or may not be needed for recovery of the species. Areas that are important to the conservation of the species, both inside and outside the critical habitat designation, will continue to be subject to: (1) Conservation actions implemented under section 7(a)(1) of the Act, (2) regulatory protections afforded by the requirement in section 7(a)(2) of the Act for Federal agencies to insure their actions are not likely to jeopardize the continued existence of any endangered or threatened species, and (3) section 9 of the Act's prohibitions on taking any individual of the species, including taking caused by actions that affect habitat. Federally funded or permitted projects affecting listed species outside their designated critical habitat areas may still result in jeopardy findings in some cases. These protections and conservation tools will continue to contribute to recovery of this species. Similarly, critical habitat designations made on the basis of the best available information at the time of designation will not control the direction and substance of future recovery plans, habitat conservation plans (HCPs), or other species conservation planning efforts if new information available at the time of these planning efforts calls for a different outcome.

#### *Physical and Biological Features*

In accordance with sections 3(5)(A)(i) and 4(b)(1)(A) of the Act and the regulations at 50 CFR 424.12, in determining which areas within the geographical area occupied at the time of listing (2012) to designate as critical habitat, we consider the physical and biological features essential to the conservation of the species which may require special management considerations or protection. These include, but are not limited to:

(1) Space for individual and population growth and for normal behavior;

(2) Food, water, air, light, minerals, or other nutritional or physiological requirements;

(3) Cover or shelter;

(4) Sites for breeding, reproduction, or rearing (or development) of offspring; and

(5) Habitats that are protected from disturbance or are representative of the historic, geographical, and ecological distributions of a species.

We derive the specific physical or biological features essential for the coqui llanero from studies of this species' habitat, ecology, and life history as described in the *Critical Habitat* section of the proposed rule to designate critical habitat published in the **Federal Register** on October 12, 2011 (76 FR 63420), and in the information presented below.

Unfortunately, little is known of the specific habitat requirements for coqui llanero other than it requires a palustrine herbaceous wetland and a specific vegetation composition. To identify the physical and biological needs of the species, we have relied on current conditions at locations where the species exists and the limited information available on this species. We have determined that coqui llanero requires the following physical or biological features.

#### *Space for Individual and Population Growth and for Normal Behavior*

Coqui llanero is restricted to a palustrine (freshwater) herbaceous wetland located on both Commonwealth and Federal lands in the Sabana Seca Ward, Toa Baja, Puerto Rico. The Service has estimated the palustrine herbaceous wetland area occupied by the species to cover approximately 615 ac (249 ha).

These wetland areas are within the subtropical moist forest life zone (Ewel and Whitmore 1973, p. 72). The variables used to delineate any given life zone are mean annual precipitation and mean annual temperature. The life zones and associations of which they are composed only define the potential vegetation or range of vegetation types that might be found in an area (Ewel and Whitmore 1973, p. 5). The mean annual precipitation for Puerto Rico is about 55 to 65 in (21.7 to 25.6 cm) a year (NOAA Web site 2009, [http://www.srh.noaa.gov/sju/?n=climo\\_annual01](http://www.srh.noaa.gov/sju/?n=climo_annual01)), and the temperature is 79.4 °F (26.3 °C) (Geo-Marine 2002, p. 2-1). The palustrine herbaceous wetland is where the non-tidal water regime may be seasonal to permanently flooded (NWI

Maps, Cowardin *et al.* 1979, pp. 10–22) and found at low elevations up to approximately 56 ft (17 m) (Ríos-López and Thomas 2007, p. 61). As of today, the coquí llanero has not been found in areas outside the marsh. However, based on current knowledge, it appears to be an obligate marsh-dwelling species (Ríos-López and Thomas 2007, p. 62).

The current herbaceous vegetation in these wetlands consists of *Blechnum serrulatum* and *Thelypteris interrupta* (ferns), *Sagittaria lancifolia* (bulltongue arrowhead), *Cyperus* sp. (flatsedges), *Eleocharis* sp. (spike rushes), and vines and grasses. Although several of these plants have been documented at other sites in Puerto Rico, the vegetation composition (combination and abundance of each plant) is a unique ecosystem not found in other places in Puerto Rico (PRDNER 2007b, p. 11). Studies indicate that the coquí llanero perch, sit, or call on or from the herbaceous vegetation and mainly on the ferns (Ríos-López and Thomas 2007, p. 60; PRDNER 2007b, p. 9). Wetlands are maintained by water quantity, channel slope, and sediment input to the system through periodic flooding. Changes in one or more of these parameters can result in changes in the wetland function and vegetation composition, with serious effects to coquí llanero. In addition, hydrology (the occurrence, circulation, and distribution of waters) is also an important factor to the wetland because it will connect areas that are separated by roads and other structures, hence making available nearby habitats for coquí llanero.

Hydrology connects the areas of currently known habitat of the species. Although the areas have several manmade drainage ditches used for agricultural purposes in the past, these have not modified the watershed boundaries (G.L. Morris Eng. 2007, p. 3; PRDNER 2007b, p. 19). The topography of the Sabana Seca–Ingenio area, in general, has an east to west inclination where the surface and ground water from the limestone hills to the south of PR Road–867 discharges into the wetland, and eventually goes north and northwest connecting to Caño Campanero, and then to Cocal River, ending in the Atlantic Ocean (PRDNER 2007b, p. 15). Factors that might threaten the water quality or the water flow of these drainages may affect the currently known population of coquí llanero.

Hydrologic conditions are important for the maintenance of a wetland structure and function. Hydrology includes the transport of energy (water) and nutrients to and from wetlands

through pathways such as precipitation, surface run-off, groundwater, tides, and flooding rivers. This could affect species composition and richness, primary conductivity (salinity), organic accumulation, and nutrient cycling within the wetlands (Mitsch and Gosselink 2007, p. 107). Wetlands are sometimes referred to as “the kidneys of the landscape” because they filter the downstream waters and waste received from natural and human sources (Mitsch and Gosselink 2007, p. 4). Polluted waters that enter the wetland through its hydrology may affect the habitat of coquí llanero. For example, an increase in the current polluted waters from the continued operation of the landfill pose a threat to the species and its habitat because underground contaminated waters and leachates may change water quality, soils, and consequently plant composition in the wetland. In addition, nonpoint source run-off from adjacent land surfaces (e.g., pesticides, herbicides, fertilizers, and sediments), and random spills or unregulated discharge events (e.g., petroleum-based substances from the nearby go-kart race track) may threaten the species and its habitat (see discussion under Factor A above). This could be particularly harmful during drought conditions when water flows are low and pollutants are more concentrated.

On the basis of the information above, the palustrine herbaceous wetland located in the Sabana Seca–Ingenio area provides space for normal behaviors of the coquí llanero. In addition, hydrology is essential to the maintenance, structure, and function of the wetland. The water quality and water flow that discharges onto the wetland allows the growth of the required vegetation composition on which the coquí llanero depends for normal behavior, growth, and viability during most of its life stages. Therefore, we have identified the palustrine herbaceous wetland, and particularly the hydrology and vegetation of this area, to be physical or biological features for this species.

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

Although the life history of the coquí llanero has not been studied, the life histories of other amphibians in the *Eleutherodactylus* genus indicate that amphibians are opportunistic feeders where diets reflect the availability of food of appropriate size (Duellman and Trueb 1994, p. 229; Joglar, 2005, p. 73). The wetland provides a variety of food sources (insects) for the coquí llanero. Food availability might be affected by

water quality and contamination of the wetland. Contaminated waters may change water quality, soils, and consequently plant composition in the wetland. These changes can open an opportunity to other species (plants or animals) to overshadow the current species present in the wetland, forcing the coquí llanero to compete for available food sources or to move to other less competitive sites.

Therefore, based on the information above, we identify food availability provided by the palustrine herbaceous wetland to be a physical or biological feature for this species.

#### *Cover or Shelter*

The coquí llanero appears to be an obligate marsh-dwelling species because it has not been found in areas outside of the marsh (Ríos-López and Thomas 2007, p. 62). The palustrine herbaceous wetland provides cover and shelter for coquí llanero. The vegetation found in the palustrine wetland consists of herbaceous emergent vegetation characterized by erect, rooted herbaceous hydrophytes usually dominated by perennial plants (Cowardin *et al.* 1979, p. 19), like ferns, *Sagittaria lancifolia*, flatsedges, spike rushes, vines, and grasses (Ríos-López and Thomas 2007, p. 60; PRDNER 2007b, p. 9). Studies on the species show normal behavior (e.g., perching, sitting, or calling) occurs on the herbaceous vegetation (Ríos-López and Thomas 2007, p. 60; PRDNER 2007b, p. 9) (see “*Space for Individual and Population Growth and for Normal Behavior*”).

Therefore, based on the information above, we identify the vegetation (i.e., plant species, structure, and composition) of the palustrine herbaceous wetland located in the Sabana Seca–Ingenio area to be a physical or biological feature for this species.

#### *Sites for Breeding, Reproduction, or Rearing (or Development) of Offspring*

Callings or sound production by animals is a method of advertising the presence of one individual to others of the same species. It is common in animals that have low density dispersal and in animals that jump or fly. Anurans (any amphibian of the Order Anura, comprising the frogs and toads) have well-developed vocal structures capable of producing sounds that serve to attract mates, advertise territories, or express distress (Duellman and Trueb 1994, p. 87). It has been documented that the coquí llanero uses the herbaceous vegetation in the wetland, especially the ferns, as calling areas.

In addition, it has been determined that the species deposits their egg clutches only in the leaf axis of *Sagittaria lancifolia*, and it appears that the species does not provide parental care (Ríos-López and Thomas 2007, p. 60; PRDNER 2007b, pp. 5, 9). Also, the coquí llanero has direct development (embryos do not have an intermediate phase like tadpoles or aquatic larvae) where they develop directly to terrestrial amphibians (miniatures of the adults); hence the vegetation provides the only protection that egg clutches and the offspring might receive.

Therefore, based on the information above, we identify the herbaceous vegetation, especially *Sagittaria lancifolia* and the ferns, of the palustrine wetland to be an important physical or biological feature for this species.

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

The palustrine herbaceous wetland area where the coquí llanero currently exists consists of Federal lands, part of which are lands previously managed by the U.S. Naval Security Group Activity (NSGA) and areas owned by the Commonwealth of Puerto Rico (University of Puerto Rico, PR Land Authority). The area previously managed by the NSGA had restricted access to people; thus, the coquí llanero had experienced little disturbance from the military operations. The NSGA was managed as a high-frequency, direction-finding facility and provided communications and related support, including communications relay, communications security, and communication manpower assistance, to components of the U.S. Navy and other Department of Defense (DOD) elements (Geo-Marine 2002, p. 1–3). All DOD installations have to complete and implement an integrated natural resources management plan (INRMP) to ensure that all natural resources on the site are managed. However, the NSGA ceased operations in 2005, when technological advances and changes eliminated the need to continue the operations at the site. The area is no longer managed as a military base, and the INRMP implementation does not apply anymore. At present, the area is proposed for transfer or disposal, or a combination of both, and is currently leased to a private party to sell the area for private development (see *Exemptions* below).

In 2007, the PRDNER designated Essential Critical Natural Habitat for the coquí llanero that includes the

palustrine herbaceous wetland and the limestone hills found south of the wetland area. As part of the designation process, the PRDNER contracted a third party to conduct a study to determine the surface water drainage pattern of the area. The study concluded that the limestone hills located south of the palustrine wetland contribute to the hydrology that maintains the wetland (PRDNER 2007b, p. 28). However, the limestone hills runoff is not the only water source feeding the wetland. Furthermore, it is unknown to what extent the surface water patterns and quantity are essential to maintain the actual conditions of the wetland (i.e., PCEs), or if there are other water sources (e.g., groundwater) with equal or more significant impact on the wetland than surface water. Although the hills might be important for contributing to the hydrology of the wetland, they do not provide habitat for the coquí llanero. In addition, current information indicates the limestone hills will be protected in perpetuity and managed by the University of Puerto Rico for conservation because other Federal and Commonwealth listed species occur in that habitat.

Primary Constituent Elements

Under the Act and its implementing regulations, we are required to identify the physical or biological features essential to the conservation of the coquí llanero in areas occupied at the time of listing (2012), focusing on the features' primary constituent elements. Primary constituent elements are those specific elements of the physical or biological features that provide for a species' life-history processes and are essential to the conservation of the species.

Based on our current knowledge of the physical or biological features and habitat characteristics required to sustain the species' life-history processes, we determine that the primary constituent elements specific to the coquí llanero are:

(1) Primary Constituent Element 1—*Palustrine herbaceous wetland*. Palustrine emergent persistent wetlands that are seasonally to permanently flooded. Ocean-derived salts need to be less than 0.5 parts per thousand (ppt) salinity.

(2) Primary Constituent Element 2—*Vegetation and vegetation composition of the palustrine herbaceous wetland*. Emergent vegetation characterized by erect, rooted herbaceous hydrophytes usually dominated by perennial plants like ferns, *Sagittaria lancifolia*, flatsedges, spike rushes, vines, and grasses. In addition to the combination

of vegetation, at least 25 percent of the vegetation should be ferns and *S. lancifolia*.

(3) Primary Constituent Element 3—*Hydrology*. A hydrologic flow regime (i.e., the pathways of precipitation, surface run-off, groundwater, tides, and flooding of rivers and canals [manmade ditches]) that maintains the palustrine herbaceous wetland.

*Special Management Considerations or Protections*

When designating critical habitat, we assess whether the specific areas within the geographical area occupied by the species at the time of listing (2012) contain features that are essential to the conservation of the species and which may require special management considerations or protection.

We find that the essential features within the area occupied at the time of listing (2012) may require special management consideration or protection due to threats to the coquí llanero and or its habitat. The area is adjacent to roads, homes, or other manmade structures in which various activities may affect one or more of the primary constituent elements. The features essential to the conservation of this species may require special management considerations or protection to reduce the following threats or potential threats that may result in changes in the composition and abundance of vegetation inside the wetland: Fill of wetlands for development projects, degradation of water quality from underground contaminated waters and leachates from the nearby landfill, residential uses (e.g., use of pesticides and fertilizers), and road maintenance (e.g., use of herbicides).

Management activities that could ameliorate these threats or potential threats include, but are not limited to: Establishing permanent conservation easements or land acquisition to protect the species on private lands; establishing conservation agreements on private and Federal lands to identify and reduce threats to the species and its features; minimizing habitat disturbance, fragmentation, and destruction; preventing the destruction of the limestone hills that supply water to the wetland; minimizing water quality degradation of the wetland; and minimizing the effects of fires and droughts.

*Criteria Used To Identify Critical Habitat*

As required by section 4(b)(1)(A) of the Act, we used the best scientific and commercial data available to designate

critical habitat. We reviewed available information pertaining to the habitat requirements of this species. In accordance with the Act and its implementing regulation at 50 CFR 424.12(e), we considered whether designating additional areas—outside those currently occupied as well as those occupied at the time of listing—is necessary to ensure the conservation of the species. Although additional (not occupied) habitat has been recommended to be added to the actual proposed designation, we are not including additional acreage outside the geographical area occupied by the species. At this time, no scientific information is available as to whether or not adjacent upland areas are considered essential for the continued existence of primary constituent elements of the species.

We have defined occupied critical habitat as palustrine emergent persistent wetland with an herbaceous vegetation composition dominated by perennial plants like ferns, *Sagittaria lancifolia*, flatsedges, spike rushes, vines and grasses occupied by the coquí llanero at the time of listing. We used information from site visits to the area, researchers, reports from the PRDNER, and consultants to identify the specific locations occupied by the coquí llanero. All occurrence records of the coquí llanero were plotted on maps in a geographic information system as points and polygons. Once we determined which area of the wetland was occupied, we focused on aerial photographs of the area and the NWI maps to delineate the palustrine emergent persistent wetlands used by the coquí llanero. We estimated the area using the limits of the boundaries of the palustrine emergent persistent wetland.

When determining critical habitat boundaries within this final rule, we made every effort to avoid including developed areas such as lands covered by buildings, pavement, and other structures because such lands lack PBFs for the coquí llanero. The scale of the maps we prepared under the parameters for publication within the Code of Federal Regulations may not reflect the exclusion of such developed lands. Any such lands inadvertently left inside critical habitat boundaries shown on the maps of this final rule have been excluded by text in the rule and are not designated as critical habitat. Therefore, a Federal action involving these lands will not trigger section 7 consultation with respect to critical habitat and the requirement of no adverse modification unless the specific action would affect the physical and biological features in the adjacent critical habitat.

We are designating as critical habitat lands that we have determined are occupied at the time of listing and contain sufficient physical or biological features to support life-history processes essential for the conservation of the species.

The critical habitat designation is defined by the map, as modified by any accompanying regulatory text, presented at the end of this document in the rule portion. We include more detailed information on the boundaries of the critical habitat designation in the preamble of this document. We will make the coordinates or plot points or both on which each map is based available to the public on <http://www.regulations.gov> at Docket No. FWS-R4-ES-2009-0022, on our Internet sites (<http://www.fws.gov/caribbean/es/Endangered-Main.html>), and at the field office responsible for the designation (see **FOR FURTHER INFORMATION CONTACT** above).

#### Final Critical Habitat Designation

We are designating one unit as critical habitat for the coquí llanero. The critical habitat area we describe below constitutes our best assessment at this time of areas that meet the definition of critical habitat. The one area we are designating as critical habitat is Sabana Seca, and it is occupied by the coquí llanero at the time of listing (2012) and contains sufficient physical and biological features to support life-history processes essential for the conservation of the species.

We present a brief description of the unit, and reasons why it meets the definition of critical habitat for the coquí llanero, below.

#### Sabana Seca Unit

The unit includes approximately 615 ac (249 ha) located south of State Road PR-867, west of Ramón Ríos Román Avenue, east of José Julián Acosta Road, and north of the limestone hills located north of Highway PR-22 in the municipality of Toa Baja, Puerto Rico. This unit contains a palustrine herbaceous wetland with emergent vegetation that includes ferns, *Sagittaria lancifolia*, flatsedges, spike rushes, vines, and grasses. This unit is known to be currently occupied (that is, occupied at the time of listing) (Ríos-López and Thomas 2005; PRDNER 2007b; Service 2011, unpublished data). All the essential physical and biological features are found within the unit. The presence of the species and the physical and biological features at the site were confirmed by the Service during site visits conducted in January and March of 2011.

The essential features within this unit may require special management considerations or protection to insure maintenance or improvement of, and to address any changes that could affect, the existing palustrine herbaceous wetland, such as filling in of the wetland to develop the land; water diversion or water withdrawal; alteration of water hydrology or degradation of water quality; and changes in vegetation composition that might be caused by changes in hydrology or development, inappropriate management practices on the farmlands, or contamination from the underground polluted waters and leachates from the landfill.

#### Effects of Critical Habitat Designation

##### Section 7 Consultation

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

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

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

section 404 of the Clean Water Act (33 U.S.C. 1251 *et seq.*) or a permit from the Service under section 10 of the Act) or that involve some other Federal action (such as funding from the Federal Highway Administration, Federal Aviation Administration, or the Federal Emergency Management Agency). Federal actions not affecting listed species or critical habitat, and actions on State, tribal, local, or private lands that are not federally funded or authorized, do not require section 7 consultation.

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

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

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

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

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

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

(3) Are economically and technologically feasible, and

(4) Would, in the Director's opinion, avoid the likelihood of jeopardizing the continued existence of the listed species and/or avoid the likelihood of destroying or adversely modifying critical habitat.

Reasonable and prudent alternatives can vary from slight project modifications to extensive redesign or relocation of the project. Costs associated with implementing a reasonable and prudent alternative are similarly variable.

Regulations at 50 CFR 402.16 require Federal agencies to reinstate consultation on previously reviewed actions in instances where we have listed a new species or subsequently designated critical habitat that may be affected and the Federal agency has retained discretionary involvement or

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

#### *Application of the "Adverse Modification" Standard*

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

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

Activities that, when carried out, funded, or authorized by a Federal agency, may affect critical habitat and therefore should result in consultation for the coquí llanero include, but are not limited to:

(1) Actions that would significantly alter the structure and function of the wetland. Such actions or activities could include, but are not limited to, the filling or excavation of the wetland. The filling or excavation of the wetland could alter the hydrology of the site and destroy or remove the vegetation where the only known population of the coquí llanero is found. The filling or excavation of wetlands could result in elimination or alteration of the coquí llanero's habitat necessary for all life stages of the species.

(2) Actions that would significantly alter the vegetation structure in and around the wetland. Such actions or activities could include, but are not limited to, removing or cutting the vegetation for expanding or maintaining roads, construction of new roads, development of new or maintenance of

residences, and development of commercial establishments. The alteration of the vegetation structure may change the wetland characteristics by changing the microhabitat (e.g., change in temperature and humidity levels) and thereby negatively affect whether the coquí llanero is able to complete all normal behaviors and necessary life functions or may allow invasion of competitors or predators.

(3) Actions that may alter the natural flow of water to the wetlands occupied by the coquí llanero. Such actions or activities could include, but are not limited to, alteration to the adjacent lands that may affect the integrity of the wetland (e.g., change in hydrology, replenishment of water, sedimentation deposition or erosion). These activities could reduce the natural cycling and functioning of the wetland; change its composition, including the vegetation types the species depends on; or result in direct or cumulative adverse effects to the species from the alteration of the wetland's hydrology.

(4) Actions that would significantly degrade water quality (for example, actions that would add contaminants and excess nutrients). Such actions or activities could include, but are not limited to, landfill discharges or leachates from landfill, heated effluents into surface water or connected groundwater, or the spill of petroleum-based products at the nearby go-kart race track. These activities could alter water conditions that can consequently alter the plant composition in the wetland and result in less suitable habitat for the coquí llanero or the opening of the wetland to the coquí llanero competitors.

#### **Exemptions**

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

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

- An assessment of the ecological needs on the installation, including the need to provide for the conservation of listed species;
- A statement of goals and priorities;
- A detailed description of management actions to be implemented

to provide for these ecological needs; and

- A monitoring and adaptive management plan.

Among other things, each INRMP must, to the extent appropriate and applicable, provide for fish and wildlife management; fish and wildlife habitat enhancement or modification; wetland protection, enhancement, and restoration where necessary to support fish and wildlife; and enforcement of applicable natural resource laws.

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

The majority of the designated critical habitat is located in a closed military installation formerly managed by the NSGA, and the land had an INRMP (Geo-Marine 2002, pp. 1–5–4), which provided for the conservation of the natural resources inside the installation. The property was declared excess to the Navy in 2001, and the installation ceased operations in 2005, before the discovery of the species. Currently, the land is being leased to a private entity by the Military Housing Privatization Initiative as part of the National Defense Authorization Act for Fiscal Year 1996, Public Law 104–106, section 2801, 110 Stat. 186 (10 U.S.C. 2871–2885), as amended. Currently there is no INRMP in place that would provide a benefit to coquí llanero occurring in habitats within or adjacent the closed NSGA of Sabana Seca.

Therefore, we are not exempting these lands from this final designation of critical habitat for the coquí llanero under section 4(a)(3)(B)(i) of the Act.

### Exclusions

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

Section 4(b)(2) of the Act states that the Secretary shall designate and make revisions to critical habitat on the basis of the best available scientific data after taking into consideration the economic impact, national security impact, and any other relevant impact of specifying any particular area as critical habitat.

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

In considering whether to exclude a particular area from the designation, we identify the benefits of including the area in the designation, identify the benefits of excluding the area from the designation, and evaluate whether the benefits of exclusion outweigh the benefits of inclusion. If the analysis indicates that the benefits of exclusion outweigh the benefits of inclusion, the Secretary may exercise his discretion to exclude the area only if such exclusion would not result in the extinction of the species.

#### Exclusions Based on Economic Impacts

Under section 4(b)(2) of the Act, we consider the economic impacts of specifying any particular area as critical habitat. In order to identify and consider these potential economic impacts, we evaluate those impacts which are determined to be probable and incremental as a result of the proposed critical habitat designation. We announced the availability our evaluation of the probable incremental impacts of the designation of critical habitat for coquí llanero in the **Federal Register** on June 16, 2012, (77 FR 36457) and opened a 30-day public comment period on the proposed rule and our evaluation.

In our evaluation, we used our October 12, 2011, Incremental Effects Memorandum to identify potential effects associated with the following activities: (1) Species and habitat management; (2) residential, commercial, or industrial development; (3) agriculture; (4) construction of new, or maintenance of, roads and highways; (5) maintenance (including vegetation removal or alteration) of drainage ditches; (6) construction or maintenance of recreational facilities; (7) construction and maintenance of telecommunication towers; (8) renewable wind power energy; (9) gas pipeline; (10) closure of landfill; and (11) transfer of Federal lands (Navy).

The intent of the economic evaluation was to consider the potential economic impacts of all reasonably likely

conservation efforts for the coquí llanero. The economic impact of the critical habitat designation is analyzed by comparing scenarios both “with critical habitat” and “without critical habitat.” The “without critical habitat” scenario represents the baseline for the analysis, considering protections already in place for the species (e.g., under the Federal listing and other Federal, State, and local regulations). The baseline, therefore, represents the costs incurred regardless of whether critical habitat is designated. The “with critical habitat” scenario describes the incremental impacts associated specifically with the designation of critical habitat for the species. The incremental conservation efforts and associated impacts are those not expected to occur absent the designation of critical habitat for the species. In other words, the incremental costs are those attributable solely to the designation of critical habitat above and beyond the baseline costs; these are the costs we consider when evaluating the potential economic impacts resulting from the final designation of critical habitat.

If a Federal action may affect a listed species or its designated critical habitat, the action agency is required pursuant to section 7(a)(2) of the Act, and its implementing regulations, to enter into consultation with the Service. In consultation, the Service must analyze whether the proposed action is likely to jeopardize the continued existence of the species or adversely modify or destroy critical habitat. Many conservation efforts for listed species result from this consultation process and we, therefore, focus our efforts on estimating costs on this process. We clarified the difference between the jeopardy and adverse modification standards for the coquí llanero critical habitat. Because the designation of critical habitat for coquí llanero is being proposed concurrently with the listing, it is more difficult to discern which conservation efforts are attributable to the species being listed and those which will result solely from the designation of critical habitat. However, the following specific circumstances in this case help to inform our evaluation: (1) The essential physical and biological features identified for critical habitat are the same features essential for the life requisites of the species; (2) the current range of the coquí llanero is limited to the specific area identified as critical habitat; and (3) any actions that may affect the species or its habitat would also affect designated critical habitat. The Incremental Effects Memorandum

outlines our rationale concerning this limited distinction between baseline conservation efforts and incremental impacts of the designation of critical habitat for this species. This evaluation of the incremental effects has been used as the basis to evaluate the potential incremental economic impacts of this designation of critical habitat.

Following the close of the comment period, we re-evaluated the potential economic impacts of the designation taking into consideration the public comments and any new information. On the basis of our further evaluation, public comment and new information we confirmed that potential incremental impacts resulting from the designation are anticipated to be limited due to the reasons stated above. We identified that as a result of the listing and designation of critical habitat, there may be an increase in the number of technical reviews and informal and formal consultations with Federal agencies under section 7 of the Act, specifically an increase of 23 technical reviews and consultations in Toa Baja. However, based on the consultation history associated with other listed species, the majority of the reviews were technical assistance and only a minority resulted in informal or formal consultations. We anticipate that the situation for coquí llanero will be comparable and that most effects (e.g., project modifications) would result from the species listing as an endangered species. Therefore, we expect that the incremental impacts due to the designation would be limited to administrative costs to address an adverse modification analysis in these reviews and consultations with Federal action agencies.

On the basis of our evaluation of potential economic impacts that may result from the designation of critical habitat for coquí llanero, we have found that incremental impacts and therefore costs would be limited to administrative costs to address adverse modification in technical reviews, informal and formal consultations. If we assume approximately the cost to address critical habitat in a technical review or consultation to be \$10,000 (an approximate average for a comparable situation) and an increase of 23 technical reviews and consultations resulting from the listing and critical habitat, then the upper bound of potential economic impacts resulting from the designation would be approximately \$230,000. This cost would be borne primarily by the Federal action agencies involved in the technical review or consultation and with the Service and would be spread across the reviews and consultations. As

a result, we do not find that there would be disproportionate economic impacts resulting from this designation or that effects of this designation approach the \$100 million threshold for being an economically significant rule under Executive Order 12866. Consequently, the Secretary is not exerting his discretion to exclude any areas from this designation of critical habitat for the coquí llanero based on potential economic impacts.

#### Exclusions Based on National Security Impacts

Under section 4(b)(2) of the Act, we consider whether there are lands owned or managed by the Department of Defense where a national security impact might exist. In preparing this final rule, we have determined that most of the lands within the designation of critical habitat for the coquí llanero are owned by the Department of Defense. These lands are no longer used by the Department of Defense and are for sale through a property management agency. Therefore, we anticipate no impact on national security. Consequently, the Secretary is not exerting his discretion to exclude any areas from this final designation based on impacts on national security.

#### Exclusions Based on Other Relevant Impacts

Under section 4(b)(2) of the Act, we consider any other relevant impacts, in addition to economic impacts and impacts on national security. We consider a number of factors, including whether the landowners have developed any habitat conservation plans (HCPs) or other management plans for the area, or whether there are conservation partnerships that would be encouraged by designation of, or exclusion from, critical habitat. In addition, we look at any tribal issues, and consider the government-to-government relationship of the United States with tribal entities. We also consider any social impacts that might occur because of the designation.

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

#### Required Determinations

##### *Regulatory Planning and Review (Executive Orders 12866 and 13563)*

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

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

##### *Regulatory Flexibility Act*

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

According to the Small Business Administration (SBA), small entities include small organizations, such as independent nonprofit organizations; small governmental jurisdictions, including school boards and city and

town governments that serve fewer than 50,000 residents; as well as small businesses (13 CFR 121.201). Small businesses include manufacturing and mining concerns with fewer than 500 employees, wholesale trade entities with fewer than 100 employees, retail and service businesses with less than \$5 million in annual sales, general and heavy construction businesses with less than \$27.5 million in annual business, special trade contractors doing less than \$11.5 million in annual business, and agricultural businesses with annual sales less than \$750,000. To determine if potential economic impacts 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., residential, commercial or industrial development, along with the accompanying infrastructure associated with such projects, including construction and maintenance of roads and drainage ditches, development of renewable wind power energy, gas pipeline, closure of landfill and transfer of Federal lands). We apply the "substantial number" test individually to each industry to determine if certification is appropriate. However, the SBREFA does not explicitly define "substantial number" or "significant economic impact." Consequently, to assess whether a "substantial number" of small entities is affected by this designation, this analysis considers the relative number of small entities likely to be impacted in an area. In some circumstances, especially with critical habitat designations of limited extent, we may aggregate across all industries and consider whether the total number of small entities affected is substantial. In estimating the number of small entities potentially affected, we also consider whether their activities have any Federal involvement.

Designation of critical habitat only affects activities authorized, funded, or carried out by Federal agencies. Some kinds of activities are unlikely to have any Federal involvement and so will not be affected by critical habitat designation. In areas where the species is present, Federal agencies already are required to consult with us under section 7 of the Act on activities they

authorize, fund, or carry out that may affect the coquí llanero. Federal agencies also must consult with us if their activities may affect critical habitat. Designation of critical habitat, therefore, could result in an additional economic impact on small entities due to the requirement to reinstate consultation for ongoing Federal activities (see *Application of the "Adverse Modification" Standard* section).

In our evaluation of the potential economic impacts that may result from the proposed designation of critical habitat for the coquí llanero, first we identified, in an Incremental Effects Memorandum dated October 12, 2011, potential incremental costs associated with the following categories of activity: (1) Species and habitat management; (2) residential, commercial, or industrial development; (3) agriculture; (4) construction of new, or maintenance of, roads and highways; (5) maintenance (including vegetation removal or alteration) of drainage ditches; (6) construction or maintenance of recreational facilities; (7) construction and maintenance of telecommunication towers; (8) renewable wind power energy; (9) gas pipeline; (10) closure of landfill; and (11) transfer of Federal lands (Navy).

Because the designation of critical habitat for the coquí llanero is occurring concurrently with the listing, it is more difficult to discern which conservation efforts are attributable to the species being listed and those which will result solely from the designation of critical habitat. However, the following specific circumstances in this case help to inform our evaluation: (1) The essential physical and biological features identified for critical habitat are the same features essential for the life requisites of the species, (2) the current range of the coquí llanero is limited to the specific area identified as critical habitat, and (3) any actions that may affect the species or its habitat would also affect designated critical habitat. The Incremental Effects Memorandum outlines our rationale concerning this limited distinction between baseline conservation efforts and incremental impacts of the designation of critical habitat for this species. This evaluation of the incremental effects has been used as the basis to evaluate the potential incremental economic impacts of the designation of critical habitat.

On the basis of our evaluation of the potential incremental effects, we have determined that almost all conservation-related efforts and activities will result from the protections afforded the species through State and Federal law

once the species is federally listed. In other words, specific actions or efforts, or project modifications that may be recommended to conserve the species or its habitat, will be recommended because the species is protected under both State and Federal law. While it has been suggested (Vermont Law School, 2012) that the proposed Via Verde pipeline would adversely affect the coquí llanero and its critical habitat, at this time the proposed alignment is not anticipated to cross or affect the habitat of the coquí llanero. Only in those cases where an action may affect the designated critical habitat and there is a Federal nexus (i.e., a Federal agency that is authorizing, funding, or permitting the action) will there be the additional requirement that the Federal action agency evaluate whether the action may adversely modify the designated critical habitat. This additional analysis by the Federal action agency is considered to be an incremental effect of the designation. While this additional analysis will require time and resources by both the Federal action agency and the Service, it is believed that, in most circumstances, these costs will predominantly be administrative in nature and also will not be significant. Because, in this circumstance, we believe that the incremental impacts of the designation, and therefore the potential economic impacts, will be limited to these administrative actions, we have determined that this rule will not result in a significant economic impact in any given year or result in a disproportionate economic impact to any particular sector.

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

#### *Energy Supply, Distribution, or Use*

Executive Order 13211 (Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use) requires agencies to prepare Statements of Energy Effects when undertaking certain actions. OMB has provided guidance for implementing this Executive Order that

outlines nine outcomes that may constitute “a significant adverse effect” when compared to not taking the regulatory action under consideration.

We do not expect the designation of this critical habitat to significantly affect energy supplies, distribution, or use. The Sabana Seca unit is located approximately 1.4 mi (2.3 km) away from the proposed alignment of a natural gas pipeline project. Thus, possible construction and operation of the proposed energy project will not be affected by the designation of critical habitat. Therefore, this action is not a significant energy action, and no Statement of Energy Effects is required.

#### *Unfunded Mandates Reform Act*

In accordance with the Unfunded Mandates Reform Act (2 U.S.C. 1501 *et seq.*), we make the following findings:

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

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

(2) We do not believe that this rule will significantly or uniquely affect small governments because it 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. In addition, adjacent upland properties are owned by private entities or State partners. Therefore, a Small Government Agency Plan is not required.

#### *Takings—Executive Order 12630*

In accordance with Executive Order 12630 (Government Actions and Interference with Constitutionally Protected Private Property Rights), we have analyzed the potential takings implications of designating critical habitat for the coquí llanero in a takings implications assessment. As discussed above, the designation of critical habitat affects only Federal actions. Although private parties that receive Federal funding, assistance, or require approval or authorization from a Federal agency for an action may be indirectly impacted by the designation of critical habitat, the legally binding duty to avoid destruction or adverse modification of critical habitat rests squarely on the Federal agency. According to the economic analysis and the taking implication assessment, the costs associated with the critical habitat designation are insignificant because virtually all of the costs associated are confined to an increase in workload (additional analysis) by the Federal

action agency. The takings implications assessment concludes that this designation of critical habitat for the coquí llanero does not pose significant takings implications for lands within or affected by the designation.

#### *Federalism*

In accordance with Executive Order 13132 (Federalism), this rule does not have significant Federalism effects. A federalism impact summary statement is not required. In keeping with Department of the Interior and Department of Commerce policy, we requested information from, and coordinated development of, this critical habitat designation with appropriate State resource agencies in Puerto Rico. We received no comments responsive to the listing and critical habitat designation from a State agency except for a response from one of the peer reviewers who is employed by the State agency. The peer reviewer’s comments were incorporated in this final rule (see *Summary of Comments and Recommendations*). The designation of critical habitat in areas currently occupied by the coquí llanero may impose nominal additional regulatory restrictions to those currently in place and, therefore, may have little incremental impact on State and local governments and their activities. The designation may have some benefit to these governments in that the areas that contain the physical or biological features essential to the conservation of the species are more clearly defined, and the elements of the features of the habitat necessary to the conservation of the species are specifically identified. This information does not alter where and what federally sponsored activities may occur. However, it may assist local governments in long-range planning (rather than having them wait for case-by-case section 7 consultations to occur).

Where State and local governments require approval or authorization from a Federal agency for actions that may affect critical habitat, consultation under section 7(a)(2) will be required. While non-Federal entities that receive Federal funding, assistance, or permits, or that otherwise require approval or authorization from a Federal agency for an action, may be indirectly impacted by the designation of critical habitat, the legally binding duty to avoid destruction or adverse modification of critical habitat rests squarely on the Federal agency.

*Civil Justice Reform—Executive Order 12988*

In accordance with Executive Order 12988 (Civil Justice Reform), the Office of the Solicitor has determined that the rule does not unduly burden the judicial system and that it meets the applicable standards set forth in sections 3(a) and 3(b)(2) of the Order. We are designating critical habitat in accordance with the provisions of the Act. This final rule uses standard property descriptions and identifies the elements of physical or biological features essential to the conservation of the coquí llanero within the designated areas to assist the public in understanding the habitat needs of the species.

*Paperwork Reduction Act of 1995*

This rule does not contain any new collections of information that require approval by OMB under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*). This rule will not impose recordkeeping or reporting requirements on State or local governments, individuals, businesses, or organizations. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

*National Environmental Policy Act (NEPA)*

We have determined that environmental assessments and environmental impact statements, as defined under the authority of the National Environmental Policy Act (NEPA; 42 U.S.C. 4321 *et seq.*), need not be prepared in connection with listing a species as endangered or threatened under the Act. We published a notice outlining our reasons for this determination in the **Federal Register** on October 25, 1983 (48 FR 49244).

It is our position that, outside the jurisdiction of the U.S. Court of Appeals for the Tenth Circuit, we do not need to prepare environmental analyses as defined by NEPA in connection with designating critical habitat under the Act. We published a notice outlining our reasons for this determination in the **Federal Register** on October 25, 1983 (48 FR 49244). This position was upheld by the U.S. Court of Appeals for the Ninth Circuit (*Douglas County v. Babbitt*, 48 F.3d 1495 (9th Cir. 1995), cert. denied 516 U.S. 1042 (1996)).

*Government-to-Government Relationship with Tribes*

In accordance with the President's memorandum of April 29, 1994 (Government-to-Government Relations with Native American Tribal Governments; 59 FR 22951), Executive Order 13175 (Consultation and Coordination With Indian Tribal Governments), and the Department of the Interior's manual at 512 DM 2, we readily acknowledge our responsibility to communicate meaningfully with recognized Federal Tribes on a government-to-government basis. In accordance with Secretarial Order 3206 of June 5, 1997 (American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act), we readily acknowledge our responsibilities to work directly with tribes in developing programs for healthy ecosystems, to acknowledge that tribal lands are not subject to the same controls as Federal public lands, to remain sensitive to Indian culture, and to make information available to tribes.

We determined that there are no tribal lands occupied by the coquí llanero at the time of listing (2012) that contain the features essential for conservation of the species, and no tribal lands unoccupied by the coquí llanero that are essential for the conservation of the

species. Therefore, we are not designating critical habitat for the coquí llanero on tribal lands.

**References Cited**

A complete list of all references cited is available on the Internet at <http://www.regulations.gov> and upon request from the Caribbean Ecological Services Field Office (see **FOR FURTHER INFORMATION CONTACT**).

**Author**

The primary author of this document is the Caribbean Ecological Services Field Office (see **FOR FURTHER INFORMATION CONTACT**).

**List of Subjects in 50 CFR Part 17**

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

**Regulation Promulgation**

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

**PART 17—[AMENDED]**

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

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

■ 2. Amend § 17.11(h) by adding an entry for “Coquí llanero,” in alphabetical order under “AMPHIBIANS,” to the List of Endangered and Threatened Wildlife to read as follows:

**§ 17.11 Endangered and threatened wildlife.**

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

Species		Historic range	Vertebrate population where endangered or threatened	Status	When listed	Critical habitat	Special rules
Common name	Scientific name						
*	*	*	*	*	*	*	*
AMPHIBIANS							
*	*	*	*	*	*	*	*
Coquí llanero .....	<i>Eleutherodactylus juanariveroi</i> .	U.S.A. (PR) .....	Entire .....	E	810	17.95(d)	NA
*	*	*	*	*	*	*	*

■ 3. In § 17.95, amend paragraph (d) by adding an entry for “Coquí Llanero (*Eleutherodactylus juanariveroi*)” in the same alphabetical order that this species

appears in the table at § 17.11(h), to read as follows:

**§ 17.95 Critical habitat—fish and wildlife.**  
\* \* \* \* \*

(d) *Amphibians.*

\* \* \* \* \*

Coquí Llanero (*Eleutherodactylus juanariveroi*)

(1) Critical habitat unit is depicted for Toa Baja, Puerto Rico, on the map below.

(2) Within this area, the primary constituent elements of the physical or biological features essential to the conservation of coqui llanero consist of three components:

(i) *Palustrine herbaceous wetland.* Palustrine emergent persistent wetlands that are seasonally to permanently flooded. Ocean-derived salts need to be less than 0.5 parts per thousand (ppt) salinity.

(ii) *Vegetation and vegetation composition of the palustrine herbaceous wetland.* Emergent vegetation characterized by erect, rooted herbaceous hydrophytes usually dominated by perennial plants like ferns, *Sagittaria lancifolia*, flatsedges, spike rushes, vines, and grasses. In addition to the combination of vegetation, at least 25 percent of the vegetation should be ferns and *S. lancifolia*.

(iii) *Hydrology.* A hydrologic flow regime (i.e., the pathways of

precipitation, surface run-off, groundwater, tides, and flooding of rivers and canals [manmade ditches]) that maintains the palustrine herbaceous wetland.

(3) Critical habitat does not include manmade structures (such as buildings, aqueducts, runways, roads, and other paved areas) and the land on which they are located existing within the legal boundaries on November 5, 2012.

(4) *Critical habitat map units.* Data layers defining map units were created by delineating habitats that contain at least one or more of the primary constituent elements defined in paragraph (2) of this entry, over a base of USGS digital topographic map quadrangle (Bayamón) and a USDA 2007 digital ortho-photo mosaic, in addition to the National Wetland Inventory maps. The resulting critical habitat unit was then mapped using State Plane North American Datum (NAD) 83 coordinates. The maps in this entry, as modified by any accompanying regulatory text, establish the boundaries

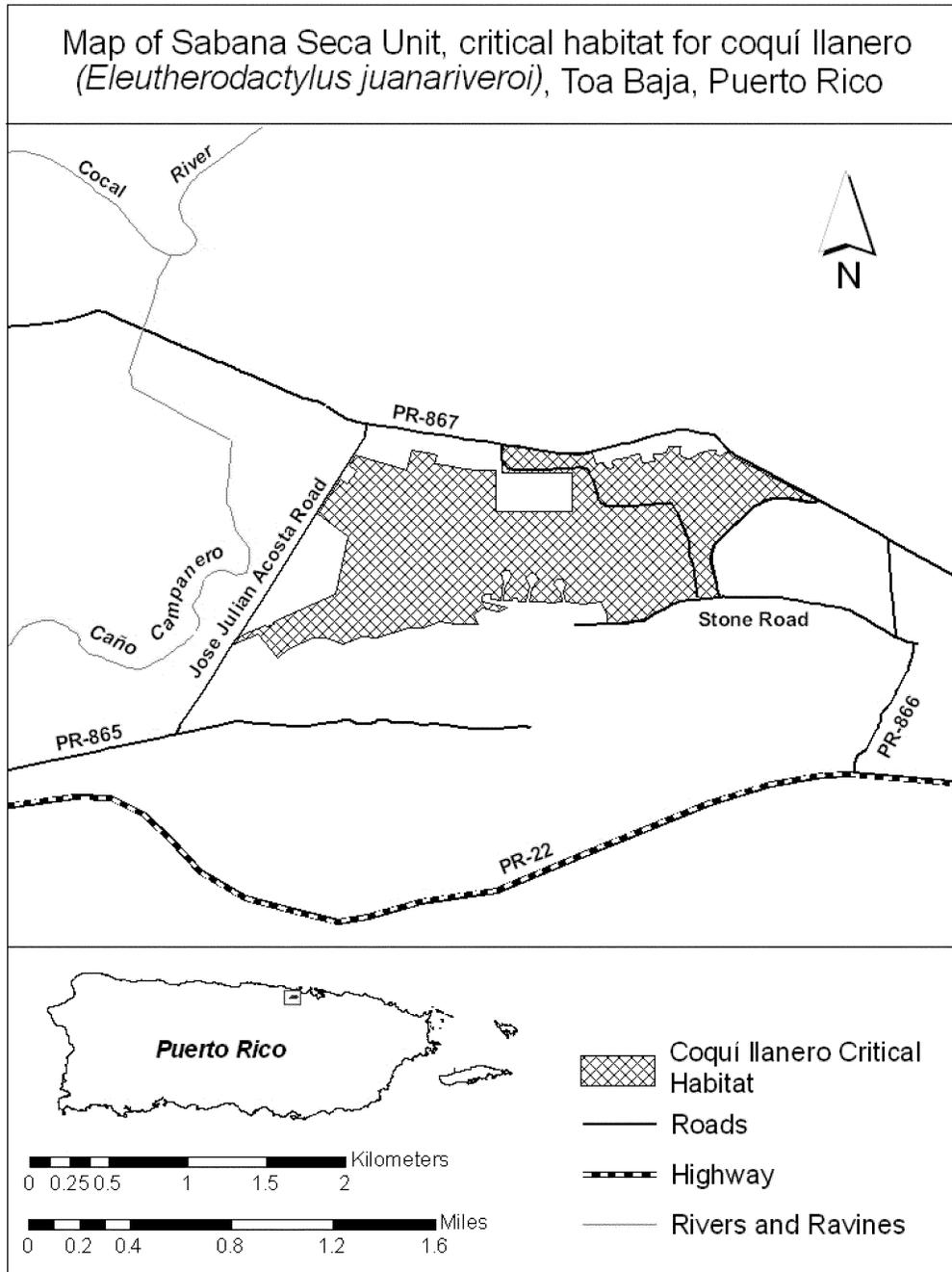
of the critical habitat designation. The coordinates or plot points or both on which each map is based are available to the public at the Service's Internet site, (<http://www.fws.gov/caribbean/es/Endangered-Main.html>), (<http://www.regulations.gov> at Docket No. FWS-R4-ES-2009-0022 and at the field office responsible for this designation. You may obtain field office location information by contacting one of the Service regional offices, the addresses of which are listed at 50 CFR 2.2.

(5) Sabana Seca Unit, Toa Baja, Puerto Rico.

(i) *General Description:* The Sabana Seca Unit consists of approximately 615 ac (249 ha) located south of State Road PR-867, west-southwest of Ramón Ríos Román Avenue, east of José Julián Acosta Road, and north of the limestone hills located north of Highway PR-22 in the municipality of Toa Baja, Puerto Rico.

(ii) Map of Sabana Seca Unit follows:

**BILLING CODE 4310-55-P**



\* \* \* \* \*

Dated: September 19, 2012.  
**Rachel Jacobson,**  
*Principal Deputy Assistant Secretary for Fish and Wildlife and Parks.*  
[FR Doc. 2012-23999 Filed 10-3-12; 8:45 am]  
**BILLING CODE 4310-55-C**