Step 3: Find the Raw Inflation Adjustment or Inflation Adjustment Before Rounding.

Raw Inflation Adjustment = CMP × COLA = $250 × 1.10903 = $277

Step 4: Round the Raw Inflation Adjustment Amount.

Recall that the increase in the CMP is rounded, according to the rounding rules.

Increase = Raw Inflation Adjustment − Original CMP = $277 − $250 = $27

Use the following rounding rule: "If the current unadjusted penalty is greater than $100 and less than or equal to $1,000, round the *increase* to the nearest multiple of $100." (Federal Civil Penalties Inflation Adjustment Act of 1990, p. 4) Multiples of $100 are $0, $100, $200.* * *

The nearest multiple of $100 is therefore $0. Rounded, the $27 increase = $0.

Step 5: Find the Inflation Adjusted Penalty After Rounding.

CMP after rounding = Original CMP + Rounded Increase = $250 + $0 = $250.

Step 6: Apply a 10% Ceiling if Necessary.

The penalty amount did not increase, so the 10% cap does not apply.

Step 7: Determine New Penalty.

The new minimum CMP = $250

With respect to hazardous materials violations, other than training violations, that occur on or after September 27, 2010, the minimum CMP remains $250.

[FR Doc. 2010–18321 Filed 7–26–10; 8:45 am]

BILLING CODE 4910–06–P

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

[FWS-R9-IA-2008-0116]
[90100-1660-1FLA B6]

RIN 1018–AW38

Endangered and Threatened Wildlife and Plants; Determination on Listing the Black-Breasted Puffleg as Endangered Throughout its Range; Final Rule

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Final rule.

SUMMARY: We, the U.S. Fish and Wildlife Service, determine endangered status under the Endangered Species Act of 1973 (Act), as amended, for the black-breasted puffleg (*Eriocnemis nigrivestis),* a hummingbird native to Ecuador.

DATES: This rule becomes effective August 26, 2010.

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 the preparation of this rule, is available for public inspection by appointment during normal business hours at: U.S. Fish and Wildlife Service, Branch of Listing, Endangered Species Program, 4401 N. Fairfax Drive, Room 400, Arlington, VA 22203; telephone 703–358–2171.

FOR FURTHER INFORMATION CONTACT: Janine Van Norman, Chief, Branch of Foreign Species, Endangered Species Program, U.S. Fish and Wildlife Service, 4401 N. Fairfax Drive, Room 420, Arlington, VA 22203; telephone 703–358–2171; facsimile 703–358–1735. If you use a telecommunications devise for the deaf (TDD), call the Federal Information Relay Service (FIRS) at 800–877–8339.

SUPPLEMENTARY INFORMATION:

Background

On May 6, 1991, we received a petition (1991 petition) from Alison Stattersfield, of the International Council for Bird Preservation (ICBP), to list 53 foreign birds under the Act, including the black-breasted puffleg (also referred to in this rule as "puffleg") that is the subject of this final rule. On December 16, 1991, we made a positive 90–day finding and announced the initiation of a status review of the species included in the 1991 petition (56 FR 65207). On March 28, 1994 (59 FR 14496), we published a 12–month finding on the 1991 petition. In that document, we announced our finding that listing the remaining 38 species from the 1991 petition, including the black-breasted puffleg, was warranted but precluded because of other listing activity.

Per the Service's listing priority guidelines (September 21, 1983; 48 FR 43098), we identified the listing priority numbers (LPNs) (ranging from 1 to 12) for all outstanding foreign species in our 2007 Annual Notice of Review (ANOR) (72 FR 20184), published on April 23, 2007. In that notice, the black-breasted puffleg was designated with a LPN 2 and we determined that listing continued to be warranted but precluded. It should be noted that "Table 1 – Candidate Review," in our 2007 ANOR, erroneously noted the black-breasted puffleg as having an LPN of 3. However, the correct LPN in 2007 was 2, as discussed in the body of the notice (72 FR 20184, p. 20197).

Previous Federal Action

On January 12, 1995 (60 FR 2899), we reiterated the warranted-but-precluded status of the remaining species from the 1991 petition, with the publication of the final rule to list the 30 African birds. We made subsequent warranted-but-precluded findings for all outstanding foreign species from the 1991 petition, including the black-breasted puffleg, as published in our annual notices of review (ANOR) on May 21, 2004 (69 FR 29354), and April 23, 2007 (72 FR 20184).

On January 23, 2008, the United States District Court ordered the Service to propose listing rules for five foreign bird species, actions which had been previously determined to be warranted but precluded: The Andean flamingo (*Phoenicoparrus andinus*), black-breasted puffleg (*Eriocnemis nigrivestis*), Chilean woodstar (*Eulidia yarrellii*), medium tree finch (*Camarhynchus pauper*), and the St. Lucia forest thrush (*Cichlherminia lherminieri sanctaeluciae*). The court ordered the Service to issue proposed listing rules for these species by the end of 2008.

On July 29, 2008 (73 FR 44062), we published in the **Federal Register** a notice announcing our annual petition findings for foreign species (2008 ANOR). In that notice, we announced that listing was warranted for 30 foreign bird species, including the black-breasted puffleg, which is the subject of this final rule.

Summary of Comments and Recommendations

In the proposed rule published on December 8, 2008 (73 FR 74427), we requested that all interested parties submit written comments on the proposal by February 6, 2009. We received six comments on the proposed rule. We received one comment from the Center for Biological Diversity supporting the proposed listing, three comments were from peer reviewers, and two other comments were received from the public that contained no substantive information. We did not receive any requests for a public hearing.

Peer Review

In accordance with our peer review policy published on July 1, 1994 (59 FR 34270), we solicited expert opinion from three knowledgeable individuals with scientific expertise that included familiarity with this species and its habitat, biological needs, and threats. We received responses from all three of the peer reviewers.

We reviewed all comments received from the peer reviewers for substantive issues and new information regarding the proposed listing of this species. The peer reviewers generally concurred with our methods and conclusions and provided additional information, clarifications, and suggestions to improve the final listing determination. Peer reviewer comments are addressed

in the following summary and incorporated into the final rule as appropriate.

Peer Reviewer Comments

(1) *Comment*: One commenter indicated that climate change, mining concessions, and competition from an Ecuadorian hummingbird, the gorgeted sunangel (*Heliangelus strophianus*), are threats that were not adequately addressed in the proposed rule.

Our Response: We agree that these issues were not adequately addressed and therefore, have addressed these potential threats in the analysis below. Climate change and interspecific competition are addressed in the Factor E analysis. Mining impacts are addressed in the Factor A analysis under *Other Anthropogenic Factors*.

(2) *Comment*: One peer reviewer indicated that while the science in our proposed rule is generally correct, more recent research had been conducted and pointed out recent research papers. The peer reviewer also provided more recent information on where the species is currently found.

Our Response: We addressed this comment in the analysis below by updating information such as the species' physical description, habitat specifics, current sightings and distribution, and food preferences. We incorporated this new research (e.g., a small number of references pertaining to life history) where appropriate.

(3) *Comment*: Two peer reviewers indicated that the population estimate used in the proposed rule is low; they suggested that the population estimate is more likely between 250 and 999 individuals.

Our Response: We agree and have addressed this in the Population Estimate section and analysis below.

(4) *Comment*: Commenters suggested that the population trends estimate used in the proposed rule is not based on current data and that the estimate should be correlated with habitat loss based on the species' current known locations.

Our Response: We have updated the trends estimate based on more recently available data. Therefore, the final rule incorporates the most current and best available information.

(5) *Comment*: Peer reviewers suggested that we update the information on the species' food base.

Our Response: We agree and have updated this information in the **Species Information,** *Habitat and Life History* section below.

Summary of Changes from Proposed Rule

Several changes were made to update or correct the taxonomy, biology, and life history of the species, and current areas where the species has been sighted. The taxonomy section has been corrected to indicate the correct taxonomic history for this species. Bourcier & Mulsant (1852) first described black-breasted puffleg as *Trochilus nigrivestis* rather than *Eriocnemis nigrivestis*, as erroneously indicated in the proposed rule. Additionally, one peer reviewer clarified that the species' principal habitat is not necessarily Polyleps forest. During 2007 field work mentioned in the 2008 Species Action Plan for the black-breasted puffleg (Jahn and Santander 2008), researchers only found the species in habitat other than *Polylepis* forest; therefore, we have updated this information and incorporated it into the analyses. The species' current known range has been updated to include recent sightings.

Based on new information, we also revised the threats analysis under factor A with respect to the construction of a pipeline being constructed from the Amazon basin to Esmeraldas that was thought to be in black-breasted puffleg habitat. We also updated the Factor E analysis to include synergistic effects of El Niño and deforestation.

Species Information

Species Description

The black-breasted puffleg is endemic to Ecuador and is a member of the hummingbird family (Trochilidae). It is approximately 3.25 inches (in) (8.5 centimeters (cm)) long (Fjeldså and Krabbe 1990, p. 272; Ridgely and Greenfield 2001a, p. 373; Ridgely and Greenfield 2001b, p. 280). The species is locally known as "*Calzadito pechinegro*" or "*Zamarrito pichinegro*" (United Nations Monitoring ProgrammeWorld Conservation Monitoring Centre (UNEP-WCMC) 2008b, p. 1). The Black-breasted puffleg has distinctive white leg plumage (ergo, the name "puffleg"), but is distinctive among other species of pufflegs due to a small, shiny blue "gorget" (coloration below the throat area). Males have entirely black upperparts, mostly blackish green underparts, and dark steel-blue forked tails. Females have shiny, green upper plumage, turning blue toward the tail, with golden-green underparts (BirdLife International (BLI) 2007, p. 1). As with other puffleg hummingbirds, it has a straight black bill.

Taxonomy

This species was first taxonomically described by Bourcier and Mulsant in 1852 and placed in Trochilidae as *Trochilus nigrivestis* (BLI 2009, p. 1). According to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) species database, the black-breasted puffleg is also known by the synonym, *Trichilus nigrivestis* (UNEP-WCMC 2008b). Both CITES and BirdLife International recognize the species as *Eriocnemis nigrivestis* (BLI 2007, p. 1; UNEP-WCMC. 2008b, p. 1). The Service follows the Integrated Taxonomic Information System (ITIS 2008, p. 1) which also recognizes the species as *Eriocnemis nigrivestis;* therefore, we accept the species as *Eriocnemis nigrivestis*.

Habitat and Life History

Black-breasted pufflegs prefer humid high-Andean montane forest such as elfin forests (generally forests at high elevations which contain stunted trees) and forest borders (Fjeldså and Krabbe 1990, p. 272; Jahn 2008, p. 29; Ridgely and Greenfield 2001a, p. 373; Ridgely and Greenfield 2001b, p. 280). This habitat is described as wet cloud forest: Grassy ridges surrounded by stunted montane forest with a dense understory (de Hoyo *et al.* 1999, p. 639). Altitudinal migrants, the species is found between 6,791 and 11,483 feet (ft) (2,070 – 4,570 meters (m)) (del Hoyo *et al.* 1999, p. 639; Fjeldså and Krabbe 1990, p. 272; Lyons and Santander, 2006, p. 1; Ridgely and Greenfield 2001a, p. 374). During the rainy season (November-February) the species is found mainly at higher altitudes above 10,000 ft (3,100 m). It is found at lower elevations 9,006-10,000 ft (2,745-3,100 m) primarily between April and September (Fjeldså and Krabbe 1990, p. 272; del Hoyo *et al.* 1999, p. 639). The species' preferred habitat is mixed forest and forest edges dominated by Ericacea plants at high elevations (Guevara, pers. comm., Jahn 2008, p. 34, Santander *et al.* 2004, pp. 8-9).

Most pufflegs, including the black-breasted puffleg, are considered to be generalist feeders (pollinators) (Ross and Allmon 1990, pp. 356-357). The black-breasted puffleg altitudinal migration coincides with the flowering of certain plants during the rainy season. *Palicourea huigrensis* and *Macleania rupestris* (commonly referred to as chamburo, chaquilulo, choglón, chupa lulún, colca macho, gualicón, hualicón llucho, joyapa, quereme, sagalita, and yurac joyapa (New York Botanical Garden 2009)) are commonly distributed

throughout the species' habitat. The species has been frequently observed using *Palicourea huigrensis* (no common name (NCN)) as its primary nectar source (Bleiweiss and Olalla 1983, pp. 657-658; del Hoyo *et al.* 1999, pp. 530-531; Fjeldså and Krabbe 1990, p. 272). The species also feeds on flower nectar of other shrubs and vines, including: *Thibaudia floribunda* (NCN), *Disterigma* sp. (NCN), *Rubus* sp. (NCN), *Tropaeolum* sp. (NCN), and *Psychotria uliginosa* (NCN) (Bleiweiss and Olalla 1983, pp. 657-658; Collar *et al.* 1992, pp. 516-517; del Hoyo *et al.* 1999, pp. 530-531; Phillips 1998, p. 21). The species has been observed feeding from at least 29 different plant species, including 8 species of Ericaceae (Jahn and Santander 2008, p. 21). Black-breasted pufflegs feed low in the shrubbery along forest margins, often while perched (Fjeldså and Krabbe 1990, p. 272; Ridgely and Greenfield 2001b, p. 280).

As recently as 1990, researchers were unaware of the puffleg's breeding habits (Fjeldså and Krabbe 1990, p. 272), and there continues to be little information (BLI 2007, p. 1). Del Hoyo *et al.* (1999, p. 639) reported that the species breeds from October to March, producing a clutch size of two, and that the female incubates the eggs. Based on the species' seasonal migration (del Hoyo *et al.* 1999, p. 639; Fjeldså and Krabbe 1990, p. 272), breeding presumably occurs at altitudes above 10,000 ft (3,100 m).

Historical Range and Distribution

Historically, the black-breasted puffleg inhabited the elfin forests along the northern ridge-crests of both Volcán Pichincha and Volcán Atacazo in northwest Ecuador (BLI 2007, p. 2; Fjeldså and Krabbe 1990, p. 272; Krabbe *et al.* 1994, p. 9). Habitat loss has been the primary cause of black-breasted puffleg decline (Philips 1998, p. 21, Santander 2004, pp. 10-17) (see Factor A). The number of specimens in museum collections taken in the 19th century up until 1950 is over 100, suggesting the species was once more common (Collar *et al.* 1992, p. 516). The species appears to have been extirpated from Volcán Atacazo, but this has not been verified (World Land Trust 2007, p. 3). On Volcán Atacazo, its presence has not been confirmed since 1902. There was a possible sighting of a female at treeline (11,483 ft; 3,500 m) in 1983 but it has never been confirmed (BLI 2007, 2; Collar *et al.* 1992, p. 174; del Hoyo *et al.* 1999, p. 639). Confirmation of the species on Volcán Atacazo has not been possible because there is a single landowner and access to the area has not been allowed to confirm existence of the species (Jahn 2008, pers. comm.). Following more than 13 years without any observation of the species, the black-breasted puffleg was rediscovered on Volcán Pichincha in 1993 (Jahn 2008, p. 33; Phillips 1998, p. 21).

Current Range and Distribution

Currently, the black-breasted puffleg is known to occur in definitely two, but possibly four, reserves all located north of Quito, Ecuador. The first area is the Yanacocha Reserve on the north side of Volcán Pichincha, approximately 12 miles (mi) (20 kilometers (km)) north of Quito. The second area where it is known to occur is in the Cotacachi-Cayapas Ecological Reserve (below Cayapachupa in the Cordillera (mountain range) de Toisán), which is 87 mi (140 km) north of Quito (Jahn 2008, pers. comm.). Currently the Yanacocha Reserve encompasses approximately 3,300 acres (ac) (1,300 hectares (ha) (WorldLand Trust 2009). A third area where it may occur is in a private reserve, Las Gralarias. This reserve is located in the Pichincha Province, two hours northwest of Quito, where this species was sighted in 2005 and 2006 (Lyons and Santander, 2006, pp. 1-2; Schwartz 2006, as cited in Hull 2009, p. 1). Las Gralarias is a 400ac (162ha) reserve, at an elevation of 5,873 7,776 ft (1,790 2,370 m), the lowest elevation at which a black breasted puffleg has been seen. Another sighting of this species occurred in 2007 in a fourth location, at Hacienda Verdecocha, a private reserve adjacent to the Yanacocha Reserve. Hacienda Verdecocha is approximately 2,396 ac (970 ha) and likely contains black-breasted puffleg habitat (Jahn 2008, p. 33; Jahn & Santander 2008, p. 10). It is unclear whether the birds at the Yanacocha Reserve and the Hacienda Verdecocha Reserve are the same population. The species' current existence at one other potential location (Volcan Atacazo, approximately 15 mi (25 km) southwest of Quito) has not been verified for over 100 years.

The species occurs in temperate elfin forests, generally at altitudes between 6,791 and 11,483 ft (2,070 – 4,570 m) (Fjeldså and Krabbe 1990, p. 272; Jahn & Santander 2008, p. 10; Ridgely and Greenfield 2001a, p. 373; Ridgely and Greenfield 2001b, p. 280). Volcán Pichincha, where the species is known to occur, peaks at 15,699 ft (4,785 m) (Phillips 1998, p. 21). The current extent of the species' range is believed to be between 27 mi^2 (70 km^2) and 54 mi^2 (139 km^2) (BLI 2009; Jahn & Santander 2008, p. 8). This considers the suitable habitat in two locations where the species is believed to occur based on the best available information (BLI 2009, p. 1). However, its range may be somewhat larger due to recent sightings in other protected areas, and also because it may also exist in other suitable locations where it has not been sighted (Guevara 2009 pers. comm., Jahn & Santander 2008, pp. 21-23).

Population Estimates

The black-breasted puffleg is believed to be restricted to two to three subpopulations (Hacienda Verdecocha is adjacent to the Yanacocha Reserve so that is likely one combined population). Its total population size ranges from 200 to 270 individuals, with a declining trend (BLI 2009, p. 1; Jahn 2008, p. 35). Recent research suggested that a more accurate estimate may be 250-999 individuals (Jahn and Santander 2008, p. 19); however, there are no supporting data for this estimate at this time. One additional subpopulation may exist on Volcan Atacazo (Jahn and Santander 2008, p. 35), although it has not been documented. BirdLife International, a global organization that consults with and assimilates information from species experts, estimated that the species has experienced a population decline of between 50 and 79 percent in the past 10 years, with more than 20 percent of this loss having occurred within the past 5 years. (BLI 2007, p. 4). This rate of decline is predicted to continue (BLI 2009, p. 1).

Conservation Status

The black-breasted puffleg is protected by various Federal, local, and international means. It is identified as a critically endangered species under Ecuadorian law (Rodriguez 2002, p. 91). This species is also classified as "Critically Endangered" in the 2009 International Union for Conservation of Nature (IUCN) Red List. It has an extremely small range, and the population is restricted to possibly two or three locations (BLI 2009, p. 1, Jahn and Santander 2008, p. 10). Critically endangered is IUCN's most severe category of extinction assessment, which equates to extremely high risk of extinction in the wild. IUCN criteria include rate of decline, population size, area of geographic distribution, and degree of population and distribution fragmentation. BirdLife International (BLI), which is cited throughout this document, is the authority for birds on the IUCN Red List. The black-breasted puffleg was listed on Appendix II of CITES on October 22, 1998. Additionally, in 2005, the mayor of Quito, Ecuador, designated the puffleg as its emblem. Lastly, several private reserves provide protection to this

species. Yanacocha Reserve, managed by Fundacion Jocotoco, a private nongovernmental organization in Ecuador, was established around 2001 specifically to protect this species. The Yanacocha Reserve is managed for ecotourism, environmental education, and conservation initiatives.

Factors Affecting the Species

Section 4 of the Act and its implementing regulations (50 CFR 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. The five–factor analysis under the Act requires an analysis of current and future potential impacts to the species. Listing actions may be warranted based on any of the above threat factors, singly or in combination. We evaluated the best available scientific and commercial information under the five listing factors to determine whether it met the definition of endangered or threatened. Each of these factors is discussed below.

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

The black-breasted puffleg occurs on volcanic mountain ranges restricted to elfin forests along the northern ridge-crests within 87 miles (140 km) northwest of Quito, Ecuador (BLI 2007, p. 2; Fjeldså and Krabbe 1990, p. 272; Krabbe *et al.* 1994, p. 9). The species has not been confirmed on Volcán Atacazo since 1902 (BLI 2007, 2; Collar *et al.* 1992, p. 174), although it may have been sighted there in 1983 (Jahn 2008, p. 33). The species occurs at altitudes between 6,791 and 11,483 ft (2,070 – 4,570 m) (Fjeldså and Krabbe 1990, p. 272; Jahn & Santander 2008, p. 10, Ridgely and Greenfield 2001a, p. 373; Ridgely and Greenfield 2001b, p. 280, Santander 2008, p. 33). Within the current range of the black-breasted puffleg, approximately 93 percent of the habitat has been destroyed, and the current extent of the species' range is approximately 54 mi^2 (139 km^2) ((BLI 2009, p. 1; Hirschfeld 2007, pp. 178-179; Jahn & Santander 2008, p. 8). Threats include human population pressures such as clearing for agricultural expansion and fires caused by slash-and-burn agricultural practices (Jahn and Santander 2008, p. 24).

Habitat loss due to deforestation is the primary cause of black-breasted puffleg declines (BLI 2009, p. 1; Philips 1998, p. 21). Current threats consist primarily of deforestation due to use by local people for firewood, charcoal, and agriculture (BLI 2009, p 2). Deforestation activities also include clearance of forested habitat for commercial use or grazing (Hirschfeld 2007, pp. 178-179). Habitat destruction and alteration also occur as a result of intentional fires to convert forested areas to pasture or cropland (Goodland 2002, pp. 16-17; Hirschfeld 2007, pp. 178-179; Phillips 1998, pp. 20-21).

Deforestation rates and patterns: The conversion of habitat significantly increased between 1996 and 2001 compared with the period between 1982 and 1996. The ridge-crests within the range of the black-breasted puffleg are relatively level. Local settlers have cleared the majority of forested habitat within the species' range for timber products (charcoal production) or converted it to potato cultivation and grazing (BLI 2009, p. 2, Bleiweiss and Olalla 1983, p. 656; del Hoyo 1999, pp. 530-531). Some ridges are almost completely devoid of natural vegetation, and even if black-breasted pufflegs still occur in these areas, their numbers are most likely quite low (BLI 2009, p. 2). Within the species' range, aerial photographs of the northern and western slopes of Volcan Pichincha between 1982 and 2001 showed a continued loss of forested area, while agricultural area increased by 24 percent (Santander 2004, p. 10).

The areas outside of Reserves (see Refugia) but still within the range of the black-breasted puffleg continue to be affected by habitat loss and fragmentation. An analysis of deforestation rates and patterns using satellite imagery in the western Andean slopes of Colombia and Ecuador was conducted. Researchers found that from 1973 through 1996, a total of 82,924 ha (204,909 ac) of tropical forests within the area studied were converted to other uses (Viña *et al.* 2004, pp. 123-124). This corresponds to a nearly one-third total loss of primary forest habitat or a nearly 2 percent mean annual rate within the study area. More recent reports identified similar forest habitat losses in Ecuador. Between the years 1990 and 2005, Ecuador lost a total of 7.31 million ac (2.96 million ha) of primary forest, which represents a 16.7 percent deforestation rate and a total loss of 21.5 percent of forested habitat since 1990 (Butler 2006, pp. 1-3; FAO 2003, p. 1).

Other Anthropogenic Factors: Habitat destruction and pollution due to oil development and distribution (Goodland 2002, pp. 16-17; Hirschfeld 2007, pp. 178-179) and increased access and habitat destruction resulting from road development (Hirschfeld 2007, pp. 178-179) have been indicated as other threats to this species' habitat. In the proposed rule, we discussed that, in 2001, the Ecuadorian government agreed to construct a pipeline to transport heavy oil from the Amazon basin to Esmeraldas on the Pacific Coast (Goodland 2002, pp. 16-17). The environmental impact study (EIS) conducted in 2001 revealed that the proposed route went through black-breasted puffleg habitat (Goodland 2002, pp. 16-17). However, the EIS was done almost 10 years ago. More recent satellite mapping shows that much of the area that was previously puffleg habitat is already destroyed, with little habitat remaining above 9,186 ft (2,800 m). The puffleg is found at lower elevations 9,006-10,000 ft (2,745-3,100 m) primarily between April and September. However, the species is found mainly at higher altitudes 10,000 ft (3,100 m) above the altitude at which the pipeline was constructed. Although this pipeline was constructed, this occurred in the past and is not a current or future threat.

The pipeline may pass through suitable puffleg habitat on the northwestern slope of Volcán Pichincha (Jahn and Santander 2008, p. 17). However this pipeline, in terms of its construction, is not a significant threat impacting the black-breasted puffleg because the pipeline construction already occurred. There is no indication that any other pipelines will be constructed in the black-breasted puffleg's range. There is the potential for oil spill leaks, but the threat of this is minimal. Because the species is found mainly at higher altitudes in reserves above the altitude of the pipeline, the puffleg habitat that potential oil spill leaks would likely affect is small. Therefore, we find that neither the pipeline, nor habitat destruction and pollution due to oil development are current or future threats to this species.

Mining was suggested to be a threat to this species by a peer reviewer; however, mining has not been found to be a threat to this species (also see Factor D). Mining has been controversial in Ecuador and there has been pressure from foreign mining companies to allow mining for resources such as copper and diamonds. In March 2009, shortly after

Ecuador's new mining law was enacted, the Confederation of Indigenous Nationalities of Ecuador (CONAIE) filed a lawsuit stating that the country's new mining law is unconstitutional because it failed to consult with indigenous organizations whose territories will be affected by a proposed activity (CONAIE 2009). Although the mining law is being disputed, mining may be allowed for resources in Junín and Zamora, Ecuador, to the west and southwest of Quito (Ecuador Mining News 2009, Ecometals Ltd 2009). However, mining is not allowed in the two to three reserves where the black-breasted puffleg is currently believed to exist. CONAIE, is working diligently to ensure that mining does not occur (CONAIE 2009, Earthworks 2009). Mining does not appear to be a major factor impacting the black-breasted puffleg; therefore, we have determined that mining is not a threat to the species.

We evaluated roads as a potential threat to the species. The existing subpopulations of black-breasted puffleg appear to be concentrated in protected areas (see Refugia below), which are not currently threatened by roads. Roads can destroy habitat, facilitate invasion by exotic species, expose birds to traffic hazards, and increase human access into habitat, facilitating further exploitation and habitat destruction (Hunter 1996, pp. 158-159). However, in this case, roads do not appear to be a major factor impacting the black-breasted puffleg; therefore, we have determined that roads are not a threat to the species.

Refugia: Although reserves exist to protect species, reserves can also bring with them unintended consequences. Reserves may have repercussions, such as the potential to initiate additional road development through species' habitat, and increase pressures on species' habitat from tourism (such as the increase in pollution, trash, and other waste). Reserves may also increase pressure to surrounding habitat by locals who supplement their income through ecotourism, but who also may use the land detrimentally as described under factor A (Stem *et al*. 2003, pp. 322-347; Pitts 2010, pp. 86, 197). Reserves, with their increased tourism, can also cause an increase in invasive species (FAO 2010, p. 1).

Several reserves exist with a primary intention of protecting this species. In the proposed rule, we found that Yanacocha Reserve was negatively affected by human population pressures, including clearing for agricultural expansion and fires caused by slash-and-burn agricultural practices (Philips 1998, p. 21). Hunting, extraction of nontimber resources (such as orchids), and tourism were considered to have a minor impact within the Reserve (BLI 2007, p. 12). However, the best available information now indicates that if these practices still occur, they (1) occur outside of the reserves and (2) they do not occur to the degree that they threaten the continued or future existence of the species.

Summary of Factor A

The black-breasted puffleg prefers humid high-Andean montane forests at altitudes between 6,791 and 11,483 ft (2,070 – 4,570 m) (Jahn 2008, p. 10; Ridgely and Greenfield 2001a, p. 373; Ridgely and Greenfield 2001b, p. 280). The current populations are small and limited to a narrow elevational band in the volcanic mountains generally to the north of Quito, existing in fragmented, disjunct, and isolated habitat. Although the species' range is partly in at least two protected areas, the habitat around the reserves continues to be altered and destroyed by human activities. Further, some of the protected areas are private reserves which are not officially recognized by the Ministry of Environment (Jahn and Santander 2008, p. 9), and their long term protection is not guaranteed. Efforts are under way to restore and protect more suitable habitat for the species (Jahn 2008, p. 28). Outside of its refugia, the areas around the reserves is somewhat negatively affected by tourism, local human pressures, roads, and invasive species associated with the reserves. Nevertheless, we find that unintended consequences of refugia are not a threat to the species. However, habitat destruction, alteration, and conversion are key factors in the species' historical decline and continue to be factors negatively affecting the status of the species outside of the Reserves where this species is found. Therefore, based on the best available information, we find that the present destruction, modification, and curtailment of habitat is a significant threat to the black-breasted puffleg.

B. Overutilization for commercial, recreational, scientific, or educational purposes

In 1987, the black-breasted puffleg was listed on Appendix II of CITES. CITES is an international agreement between governments to ensure that the international trade of CITES-listed plant and animal species does not threaten species' survival in the wild. There are currently 175 CITES Parties (member countries or signatories to the Convention). Under this treaty, CITES Parties (signatories to the Convention) regulate the import, export, and re-export of CITES-protected plants and animal species (also see Factor D). Trade must be authorized through a system of permits and certificates that are provided by the designated CITES Scientific and Management Authorities of each CITES Party (CITES 2007). In the United States, the U.S. Fish and Wildlife Service serves as the Scientific and Management Authorities.

CITES provides varying degrees of protection to more than 32,000 species of animals and plants that are traded as whole specimens, parts, or products. Under CITES, a species is listed at one of three levels of protection (i.e., regulation of international trade), which have different permit requirements (CITES 2007). Appendix II includes species requiring regulation of international trade in order to ensure that trade of the species is compatible with the species' survival. International trade in specimens of Appendix-II species is authorized when the permitting authority has determined that the export will not be detrimental to the survival of the species in the wild and that the specimens to be exported were legally acquired (UNEP-WCMC 2008a, p. 1).

At times a species may be listed as endangered under the U.S. Endangered Species Act, and concurrently listed under Appendix II of CITES, rather than the more restrictive Appendix I, which does not allow commercial trade of wild specimens. Although CITES Appendix II allows for commercial trade, in order for specimens of this species to be traded internationally (i.e., exported from its country of origin), a determination has to be made that (1) The export will not be detrimental to the survival of the species in the wild and (2) the specimen was legally acquired. In this case, it is unlikely that a determination could be made that the export would not be detrimental to the survival of the species in the wild.

Between the time the puffleg was listed in CITES in 1987 and 2010, there were 5 CITES-permitted international shipments containing 17 specimens of the black-breasted puffleg. These shipments occurred between 1996 and 2002 (UNEP-WCMC 2008c, p. 1). According to the World Conservation Monitoring Centre trade data (UNEP-WCMC 2008c, p. 1), all of the CITES transactions involved the transport of dead specimens. Nine were traded for scientific purposes, six for commercial purposes, and two were for personal use. Trade involving the United States included three specimens that were imported into the United States and seven that were reexported from the United States.

Even though this species is listed under Appendix II of CITES, and commercial trade is allowed, we believe that international trade controlled via valid CITES permits is not a threat to the species. CITES adequately regulates international trade because the export of Appendix II species requires the determination that the export will not be detrimental to the survival of the species in the wild. Therefore, we find that international trade does not pose a threat to the species.

We are unaware of any other information currently available that addresses the occurrence of overutilization for commercial, recreation, scientific, or education purposes that may be affecting the black-breasted puffleg. There is no known historic or cultural use of this species by local populations. As such, we do not consider overutilization to be a threat to the species.

C. Disease or predation

We are not aware of any occurrence of disease or predation that may be causing a decline of the black-breasted puffleg. As a result, we do not consider disease or predation to be a threat to the black-breasted puffleg.

D. The inadequacy of existing regulatory mechanisms

The black-breasted puffleg is identified as a critically endangered species under Ecuadorian law and Decree 3,516 of 2003–Unified Text of the Secondary Legislation of the Ministry of Environment (Ecolex 2003b, p. 36). Decree 3,516 summarizes the law governing environmental policy in Ecuador and provides that the country's biodiversity be protected and used primarily in a sustainable manner. Appendix 1 of Decree No. 3,516 lists the Ecuadorian fauna and flora that are considered endangered. Species are categorized as critically endangered (En peligro critico), endangered (En peligro), or vulnerable (Vulnerable) (Ecolex 2003b, p. 17). Resolution No. 105 of January 28, 2000, and Agreement No. 143 of January 23, 2003, regulate and prohibit commercial and sport hunting of all wild bird species, except those specifically identified by the Ministry of the Environment or otherwise permitted (Ecolex 2000, p. 1; Ecolex 2003a, p. 1). The Ministry of the Environment does not permit commercial or sport hunting of the black-breasted puffleg because of its status as a critically endangered species (Ecolex 2003b, p. 17). However, we do not consider hunting (Factor B) to be a current threat to the black-breasted puffleg, so this law does not reduce any threats to the species.

Ecuador has numerous laws and regulations pertaining to forests and forestry management. These include: The Forestry Act (comprised of Law No. 74 of 1981 Forest Act and conservation of natural areas and wildlife (Faolex 1981, p. 1-54), and Law No. 17 of 2004 Consolidation of the Forest Act and conservation of natural areas and wildlife (Faolex 2004, pp. 1-29)); a Forestry Action Plan (1991-1995); the Ecuadorian Strategy for Forest Sustainable Development of 2000 (Estrategia para el Desarrollo Forestal Sostenible); and, Decree 346, which recognizes that natural forests are highly vulnerable (ITTO 2006, p. 225). However, the International Tropical Timber Organization considered ecosystem management and conservation in Ecuador, including effective implementation of mechanisms that would protect the black-breasted puffleg and its habitat, to be lacking (ITTO 2006, p. 229).

The governmental institutions responsible for oversight appear to be under-resourced, and there is a lack of law enforcement on the ground. Despite the creation of a national forest plan, there appears to be a lack of capacity to implement this plan due to insufficient political support. There appears to be unclear or unrealistic forestry standards, inconsistencies in application of regulations, discrepancies between actual harvesting practices and forestry regulations, the lack of management plans for protected areas, and high bureaucratic costs. All these inadequacies have failed to prevent ongoing habitat destruction, such as widespread unauthorized logging (ITTO 2006, p. 229), forest clearing for conversion to agriculture or grazing (Bleiweiss and Olalla 1983, p. 656; del Hoyo 1999, pp. 530-531; Hirschfeld 2007, pp. 178-179), habitat destruction and alteration as a result of fire caused by slash-and-burn agriculture (Goodland 2002, pp. 16-17; Hirschfeld 2007, pp. 178-179; Phillips 1998, pp. 20-21); and increased access and habitat destruction resulting from road development (Hirschfeld 2007, pp. 178-179). In addition, most of Ecuador's forests are privately owned or owned by communities (ITTO 2006, p. 224). The management and administration of Ecuador's forest resources and forest harvest practices is insufficient and unable to protect against unauthorized forest harvesting, degradation, and conversion (ITTO 2006, p. 229). Thus, Ecuadorian forestry regulations have not mitigated the threat of habitat destruction (Factor A).

The Ecuadorian government recognizes 31 different legal categories of protected lands (e.g., national parks, biological reserves, geo-botanical reserves, bird reserves, wildlife reserves, etc.). As of 2006, the amount of protected land (both forested and non-forested) in Ecuador totaled approximately 11.5 million ac (4.67 million ha) (ITTO 2006, p. 228). However, only 38 percent of these lands have appropriate conservation measures in place to be considered protected areas according to international standards. The standards define these areas as areas that are managed for scientific study or wilderness protection, for ecosystem protection and recreation, for conservation of specific natural features, or for conservation through management intervention (IUCN 1994, pp. 17-20). Moreover, only 11 percent have management plans, and less than 1 percent (13,000 ha (32,125 ac)) have implemented those management plans (ITTO 2006, p. 228).

The black-breasted puffleg occurs in only a few reserves (BLI 2009, p. 2; Jahn and Santander 2008, p. 33; Santander, *et al.* 2004, p. 1; World Land Trust 2007, p. 1) in the Pichincha mountain range. Some of the area is being managed for ecotourism, environmental education, and conservation initiatives, including restoration (Fundacion Jocotoco 2006, p. 1). However, outside of the Reserves, there are ongoing human population pressures from expanding agriculture, along with slash-and-burn agricultural practices (BLI 2009, pp. 1-2) (Factor A). Thus, while black-breasted puffleg habitat is being protected in several relatively small government and privately owned reserves, regulatory mechanisms associated with protected land do not mitigate the impact of threats to the species' habitat from habitat loss and destruction.

The black-breasted puffleg is listed on Appendix II of CITES. CITES, an international treaty among 175 nations, including Ecuador and the United States, entered into force in 1975. In the United States, CITES is implemented through the U.S. Endangered Species Act (ESA). The Secretary of the Interior has delegated the Department's responsibility for CITES to the Director of the U.S. Fish and Wildlife Service (USFWS) and established the CITES Scientific and Management Authorities to implement the treaty. Under this treaty, member countries work together to ensure that international trade in animal and plant species is not detrimental to the survival of wild populations by regulating the import, export, and re-export of CITES-listed animal and plant species (USFWS 2008, p. 1). As discussed under Factor B, we do not consider international trade to be

a threat impacting the black-breasted puffleg. Therefore, protection under this Treaty is an adequate regulatory mechanism.

Summary of Factor D

Ecuador has adopted numerous laws and regulatory mechanisms to administer and manage its wildlife, such as the black-breasted puffleg and its habitat. Under Ecuadorian law, the black-breasted puffleg is listed as endangered and ranges partly within two to three protected areas. As discussed under Factor A, habitat destruction, degradation, and fragmentation continue throughout the existing range of the black-breasted puffleg. With respect to CITES, we found that CITES is an adequate regulatory mechanism with respect to international trade or overutilization (Factor B), and is not a threat to this species. However, on-the-ground enforcement of Ecuador's laws and oversight of the local jurisdictions implementing and regulating activities destructive to the species' habitat are insufficient in conserving the black-breasted puffleg or its habitat. Therefore, we find that the existing regulatory mechanisms, as implemented, are inadequate to either eliminate or mitigate the primary threat of habitat destruction to the black-breasted puffleg.

E. Other natural or manmade factors affecting the continued existence of the species

Interspecific Competition: One peer reviewer suggested that another species of hummingbird, the gorgeted sunangel (*Heliangelus strophianus*), may be a potential threat (Jahn 2008, pp. 34, 36-37) to the black-breasted puffleg. This species occupies a similar ecological niche and may be moving northward into the black breasted puffleg's habitat due to loss of suitable habitat. The gorgeted sunangel consumes similar plant species and is slightly larger in size than the black-breasted puffleg. Only one aggressive interaction between the species has been observed; however, they both aggressively defend their territories (Guevara 2009, pers. comm.). Loss of the gorgeted sunangel's habitat may exacerbate the threat posed to the puffleg in the form of competition from the gorgeted sunangel moving upward in altitude into the black-breasted puffleg's range.

Small, Declining Population Size: The black-breasted puffleg population has declined primarily as a result of habitat loss (Bleiweiss and Olalla 1983, pp. 656-661; BLI 2009, p. 1; Collar *et al.* 1992, pp. 516-517) (Factor A). A collection of over 100 museum specimens suggests that the species was more common and more widespread than the currently known populations (BLI 2004, p. 2; Collar *et al.* 1994, p. 121). The black-breasted puffleg inhabits a narrow elevational strip between 6,791 and 11,483 ft (2070 - 4570 m) (BLI 2010, p 1; Fjeldså and Krabbe 1990, p. 272; Krabbe *et al.* 1994, pp. 8-9). Within the species' range, aerial photographs of the northern and western slopes of Volcan Pichincha between 1982 and 2001 showed a continued loss of forested area while agricultural area increased by 24 percent (Santander, et. al. 2004, p. 10). As indicated above, the current extent of the species' range is believed to be between 27 mi^2 (70 km^2) and 54 mi^2 (139 km^2). The total population is currently estimated to be 200-270 individuals, and believed to be in decline (BLI 2010, p. 1).

Rare species (i.e., species with small population sizes or restricted ranges) may be vulnerable to a variety of stochastic processes that can affect their risk of extinction on various timescales. Whether a rare species may meet the definition of a threatened or an endangered species under the Act depends on the potential threats involved, the probable timescale of the potential threat, and the characteristics of the species and its habitat. Factors can include the species' dependence on a specific habitat type and its inability to move away from a stressor or habitat degradation. Although the Trochilinae hummingbirds tend to be food generalists (Ross and Allmon 1990, pp. 356-357), the black-breasted puffleg is restricted to a small geographic range. Rare species such as this puffleg that are experiencing declining populations and threats are particularly vulnerable to risks such as inbreeding depression, loss of genetic variation, and accumulation of new mutations. Inbreeding can have individual or population-level consequences, either by increasing the phenotypic expression (the outward appearance or observable structure, function, or behavior of a living organism) of recessive, deleterious alleles or by reducing the overall fitness of individuals in the population (Charlesworth & Charlesworth 1987, p. 231; Shaffer 1981, p. 131). Small, isolated populations of wildlife species are also susceptible to demographic problems (Shaffer 1981, p. 131), which may include reduced reproductive success of individuals and skewed sex ratios. Once a population is reduced below a certain number of individuals, it can tend to rapidly decline towards extinction (Franklin 1980, pp. 147-148; Gilpin and Soulé 1986, p. 25; Holsinger 2000, pp. 64-65; Soulé 1987, p. 181).

The black-breasted puffleg's restricted range, combined with its small, declining population (BLI 2009, unpaginated; del Hoyo *et al.* 1999, p. 639; Fjeldså and Krabbe 1990, p. 272; Krabbe *et al.* 1994, p. 9), makes the species particularly vulnerable to the threat of adverse natural (e.g., genetic, demographic, or environmental) and manmade (e.g., deforestation, habitat alteration, fire) events that destroy individuals and their habitat (Harris and Pimm, 2008, p. 164; Holsinger 2000, pp. 64-65; Primack 1998, pp. 279-308; Young and Clarke 2000, pp. 361-366). Due to lack of short- and long term viability of its existing population, we consider the black-breasted puffleg to be at risk of extinction.

Climate Change: The Intergovernmental Panel on Climate Change (IPCC) was established in 1988 by the World Meteorological Organization and the United Nations Environment Program in response to growing concerns about climate change and, in particular, the effects of global warming. Although the extent of warming likely to occur is not known with certainty at this time, the IPCC has concluded that warming of the climate is unequivocal, and that continued greenhouse gas emissions at or above current rates will cause further warming (Meehl *et al.* 2007, p. 749). Eleven of the 12 years from 1995 through 2006 rank among the 12 warmest years in the instrumental record of global surface temperature since 1850 (IPCC 2007). Climate-change scenarios estimate that the mean air temperature could increase by more than 3 °C (5.4 °F) by 2100 (IPCC 2007, p. 46). We recognize that there are scientific differences of opinion on many aspects of climate change, including the role of natural variability in climate. We rely primarily on synthesis documents (e.g., IPCC 2007) that present the consensus view of a very large number of experts on climate change from around the world. We have found that these synthesis reports, as well as the scientific papers used in those reports or resulting from those reports, represent the best available scientific information we can use to inform our decision.

However, climate change models that are currently available are not yet able to make meaningful predictions of climate change for specific, local areas (Parmesan and Matthews 2005, p. 354). We do not have models to predict how the climate in the range of this bird species will change, and we do not know how any change that may occur would affect these species. However,

models and research suggest that climate change is an additional stress for species such as the black breasted puffleg that are already threatened by other environmental changes to their habitats (McCarty 2001, p. 325; Brook *et al* 2008, pp. 453-454). Warming has been predicted to occur to a greater degree in the higher altitudes than in the lower altitudes (Bradley 2006, p. 1). Although we do not find that climate change, in and of itself, is a threat to the species, a discussion of the synergistic effects of El Niño, deforestation, and drought follows.

Regional and localized models are less prevalent and sometimes absent with respect to climate change. Research has been conducted with respect to the interactions between El Niño and deforestation and how it affects montane cloud forests (Laurance 1998, p. 413, Laurance and Williamson 2001, p. 1529; Still 1999, p. 608). From this research, we can predict how increases in temperature due to climate change may subsequently interact with other stressors. In ecosystems such as the one where the black breasted puffleg exists, mountains are frequently shrouded in trade wind clouds and mist in combination with rainfall. This habitat type is termed tropical montane cloud forest. Many features of these ecosystems, such as vegetation morphology, are related to cloud formation. One of the most significant characteristics is horizontal precipitation, where frequent cloud cover is the deposition of cloud droplets on vegetation (Laurance and Williamson 2001, p. 1529; Still 1999, p. 608). Fragmented forests, such as the one where the black breasted puffleg exists, are more susceptible to droughts in El Niño years (Laurance and Williamson 2001, p. 1529). With increased deforestation, plant evapotranspiration is reduced, subsequently causing a decrease in rainfall, which could in turn increase the vulnerability of the forest to fire. Researchers suggest that there may be a deforestation threshold (Laurance and Williamson 2001, p. 1529). All of these stressors act synergistically, and warming climate could exacerbate the likelihood of drought and subsequent forest fire (Foden *et al.* 2008, pp. 1-4). The relationship between El Niño (and increased El Niño events), deforestation, drought, and forest fires all interacting synergistically increase the likelihood of increased severity in drought and forest fires (Laurance 1998, p. 413).

Research suggests that birds are moving northward to cooler climates in response to climate change (Sorte and Jetz 2008, pp. 865, 866). In part, because the black breasted puffleg's habitat is at high elevations, it has been suggested there may no longer be habitat for this species. The higher elevations could potentially be affected by the synergistic effects of drought, El Niño, and forest fires as discussed above. Plant nectar and other food sources upon which the black-breasted puffleg depends may require a particular humidity level that is associated with cloud forest conditions. Conditions associated with this shift in elevation include possible physiological changes and changes in species assemblages in part due to phenology (when plants bloom based on temperature and daylight), all of which could potentially affect the black breasted puffleg's fitness (Foden *et al* 2008, pp. 1-5). These potential changes act in concert with other threats to the species such as habitat loss and degradation, magnifying the synergistic effects on this species. However, several reserves exist for the explicit protection of black breasted puffleg habitat. Because these reserves exist and contain large swaths of protected forested habitat (believed to be at least 6,096 ac/ 2,467 ha), the threat of drought and forest fires is ameliorated. Therefore, we do not consider the synergistic effects of drought, El Niño, and forest fires to have a significant impact on the species' habitat now or in the foreseeable future.

Invasive species. An increase in the atmospheric concentration of carbon dioxide (CO2) has implications beyond those associated with warming temperatures. The change in CO2 may increase the ability of invasive plant species to outcompete native plant species on which the black-breasted puffleg feeds. Higher concentrations of CO2 may be favorable to invasive plant species (Smith *et al.* 2000, pp. 79-82). Emissions of CO2, considered to be the most significant anthropogenic greenhouse gas, increased due to human activities by approximately 80 percent between 1970 and 2004 (IPCC 2007, p. 36). CO2 emissions from energy use have been projected to increase by 40 to 110 percent between 2000 and 2030 (IPCC 2007, p. 44). We therefore expect continuing production of atmospheric CO2, at or above current levels, as predicted, to contribute to the spread of invasive plant species and have a detrimental impact on the species' habitat.

Summary of Factor E

Projected climate change and its associated consequences (change in species composition, distribution, and elevation) has the potential to affect the black-breasted puffleg. Warmer temperatures may interact with other stressors such as habitat degradation and loss (Brook *et al.* 2008, p. 1). Competition with other species and an increase in invasive plant species, which could outcompete the black-breasted puffleg's food sources, are other potential stressors. Warmer temperatures and greater concentrations of atmospheric carbon dioxide will likely cause changes in the plant species composition in this species' habitat, as well as likely shift the black-breasted puffleg altitudinal distribution (Jahn 2008). However, this species is a generalist feeder and has been seen in lower elevations in reserves and protected areas. We believe that the above stresses to the species are buffered by the establishment of reserves and protected areas for this species.

The black-breasted puffleg is currently restricted to possibly three small and declining populations within a small geographic range. The limited availability of suitable habitat makes it vulnerable to genetic and demographic risks that negatively impact the species' short- and long-term viability. The species' population size has declined considerably within the past 10 years (50-79 percent), and this rate of decline is expected to continue. Other threats to the species include possible competition and displacement by the Gorgeted sunangel, displacement of the black-breasted puffleg's food sources by nonnative invasive plant species, and genetic isolation due to habitat fragmentation and isolation of small populations.

Based on the best available information, we have determined that the species is particularly vulnerable to the threat of adverse natural (e.g., genetic, demographic) and manmade events (introduction of invasive species and drought and fires caused by habitat loss and destruction) that destroy individuals and their habitat. The genetic and demographic risks are exacerbated by the manmade factors. Therefore, we find that other natural or manmade factors are threats to the continued existence of the black-breasted puffleg.

Conclusion and Determination

We have carefully assessed the best scientific and commercial information available regarding the past, present, and future threats to the black-breasted puffleg. The extreme lack of data for this species makes it difficult to discern a trend in population numbers with statistical confidence. We believe it is reasonable to infer that the trend is downward; the best available scientific and commercial data suggest that over the past two decades, this species has

likely significantly declined in abundance.

There are three primary factors impacting the continued existence of the black-breasted puffleg: (1) Habitat destruction, fragmentation, and degradation (factor A); (2) limited, declining population size and isolation of remaining subpopulations (factor E); and (3) inadequate regulatory mechanisms (factor D). The black-breasted puffleg, a small hummingbird with two to three subpopulations, occupies a narrow range of distribution, preferring temperate elfin forests at altitudes of between 6,791 and 11,483 ft (2,070 and 4,570 m). The species is an altitudinal migrant, spending the breeding season (November-February) in the humid elfin forest and the rest of the year at slightly lower elevations based on available food sources.

The primary threat to this species, widespread deforestation, has led to habitat loss. Conversion of primary forests to human settlement and agricultural uses has led to the fragmentation of habitat throughout the range of the black-breasted puffleg and isolation of the remaining populations. Its habitat, which is already disturbed and fragmented, continues to be altered by anthropogenic factors such as habitat alteration, introduction of invasive species, and habitat destruction and fragmentation as a result of local sustenance use, particularly agriculture. Although the puffleg is listed as a critically endangered species under Ecuadorian law and part of its range occurs within a protected area, implementation of existing regulatory mechanisms are inadequate to protect the species (Factor D), as they have been ineffective in curbing the primary threat to the black-breasted puffleg, which is habitat loss or alteration (Factor A).

The total population size of the black-breasted puffleg is estimated to range from 200 to 270 adult individuals, with a declining trend. The black-breasted puffleg's restricted range, combined with its small population size, makes the species particularly vulnerable to the threat of adverse natural (e.g., genetic, demographic, or environmental) and manmade (e.g., deforestation, habitat alteration, fire) events that destroy individuals and their habitat.

The population of this species has declined between 50 and 79 percent in the past 11 years. More than 20 percent of this loss occurred within the past 6 years, including the possible local extirpation of the species from Volcán Atacazo. These rates of decline are expected to continue. Habitat destruction, alteration, conversion, and fragmentation (Factor A) have been and continue to be factors in the black-breasted puffleg's decline. The impacts of habitat loss are exacerbated by the inadequacy of existing regulatory mechanisms (Factor D) and the species' already small and declining population size, making the black-breasted puffleg particularly vulnerable to natural and human factors (e.g., genetic isolation and possible inbreeding, and the introduction of invasive species) (Factor E). We consider the threats to the black-breasted puffleg to be equally present and of the same magnitude throughout the species' current range. Based on the best available scientific and commercial information regarding the past, present, and potential future threats faced by the black-breasted puffleg, this species warrants protection under the Act, and we determine that the black-breasted puffleg is endangered throughout its range.

Available Conservation Measures

Conservation measures provided to species listed as endangered or threatened under the Act include recognition, requirements for Federal protection, and prohibitions against certain practices. Recognition through listing results in public awareness, and encourages and results in conservation actions by Federal and State governments, private agencies and groups, and individuals.

Section 7(a) of the Act, as amended, and as implemented by regulations at 50 CFR part 402, requires Federal agencies to evaluate their actions within the United States or on the high seas with respect to any species that is proposed or listed as endangered or threatened, and with respect to its critical habitat, if any is being designated. However, given that the black-breasted puffleg is not native to the United States, no critical habitat is being proposed for designation with this rule.

Section 8(a) of the Act authorizes limited financial assistance for the development and management of programs that the Secretary of the Interior determines to be necessary or useful for the conservation of endangered and threatened species in foreign countries. Sections 8(b) and 8(c) of the Act authorize the Secretary to encourage conservation programs for foreign endangered species and to provide assistance for such programs in the form of personnel and the training of personnel.

The Act and its implementing regulations set forth a series of general prohibitions and exceptions that apply to all endangered and threatened wildlife. As such, these prohibitions would be applicable to the black-breasted puffleg. These prohibitions, pursuant to 50 CFR 17.21, make it illegal for any person subject to the jurisdiction of the United States to "take" (take includes: Harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or to attempt any of these) within the United States or upon the high seas, import or export, deliver, receive, carry, transport, or ship in interstate or foreign commerce in the course of a commercial activity, or sell or offer for sale in interstate or foreign commerce, any endangered wildlife species. It also is illegal to possess, sell, deliver, carry, transport, or ship any such wildlife that has been taken in violation of the Act. Certain exceptions apply to agents of the Service and State conservation agencies.

Permits may be issued 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 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.

Required Determinations

National Environmental Policy Act (NEPA) (42 U.S.C. 4321 et. seq.)

We have determined that Environmental Assessments and Environmental Impact Statements, as defined under the authority of the National Environmental Policy Act of 1969, need not be prepared in connection with regulations adopted pursuant to section 4(a) of the Act. A notice outlining our reasons for this determination was published in the **Federal Register** on October 25, 1983 (48 FR 49244).

References Cited

A complete list of all references cited in this proposed rule is available on the Internet at *http://www.regulations.gov* or upon request from the Endangered Species Program, Branch of Listing, U.S. Fish and Wildlife Service (see **FOR FURTHER INFORMATION CONTACT**).

Author(s)

The primary authors of this final rule are the staff of the Endangered Species Program, Branch of Foreign Species, U.S. Fish and Wildlife Service (see **ADDRESSES** section).

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 a new entry for "Puffleg, black-breasted" in alphabetical order under BIRDS, to the List of Endangered and Threatened Wildlife, to read as follows:

§ 17.11 Endangered and threatened wildlife.

* * * * *

Species		Historic range	Vertebrate population where endangered or threatened	Status	When listed	Critical habitat	Special rules
Common name	Scientific name						
*	*	*	*	*		*	*
BIRDS							
*	*	*	*	*		*	*
Puffleg, black-breasted	*Eriocnemis nigrivestis*	Ecuador, South America	Entire	E	767	NA	NA
*	*	*	*	*		*	*

Dated: June 29, 2010

Jeffrey L. Underwood,

Acting Director, U.S. Fish and Wildlife Service.

[FR Doc. 2010–18018 Filed 7–26–10; 8:45 am]

BILLING CODE 4310–55–S

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

[Docket No. FWS-R9-IA-2008-0108]

[90100-1660-1FLA B6]

RIN 1018-AW01

Endangered and Threatened Wildlife and Plants; Final Rule to List the Medium Tree-Finch (*Camarhynchus pauper*) as Endangered Throughout Its Range

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Final rule.

SUMMARY: We, the U.S. Fish and Wildlife Service (Service), determine endangered status for the medium tree-finch (*Camarhynchus pauper*) under the Endangered Species Act of 1973, as amended (Act). This species is native to Floreana Island, one of the Galapagos Islands in Ecuador. This rule implements the protections of the Act for this species.

DATE: This final rule is effective August 26, 2010.

ADDRESSES: The supporting file for this rule is available for public inspection, by appointment, during normal business hours, Monday through Friday, in Suite 400, 4401 N. Fairfax Drive, Arlington, Virginia 22203.

FOR FURTHER INFORMATION CONTACT: Janine Van Norman, Chief, Branch of Foreign Species, Endangered Species Program, U.S. Fish and Wildlife Service, 4401 N. Fairfax Drive, Room 420, Arlington, VA 22203; telephone 703-358-2171; facsimile 703-358-1735. If you use a telecommunications device for the deaf (TDD), call the Federal Information Relay Service (FIRS) at 800-877-8339.

SUPPLEMENTARY INFORMATION:

Background

In this final rule, we determine endangered status for the medium tree-finch (Camarhynchus pauper) under the Act.

Previous Federal Actions

Section 4(b)(3)(A) of the Act requires us to make a finding (known as a "90–day finding'') on whether a petition to add, remove, or reclassify a species from the list of endangered or threatened species has presented substantial information indicating that the requested action may be warranted. To the maximum extent practicable, the finding shall be made within 90 days following receipt of the petition and published promptly in the **Federal Register**. If we find that the petition has presented substantial information indicating that the requested action may be warranted (a positive finding), section 4(b)(3)(A) of the Act requires us to commence a status review of the species if one has not already been initiated under our internal candidate assessment process. In addition, section 4(b)(3)(B) of the Act requires us to make a finding within 12 months following receipt of the petition on whether the requested action is warranted, not warranted, or warranted but precluded by higher-priority listing actions (this finding is referred to as the "12–month finding''). Section 4(b)(3)(C) of the Act requires that a finding of warranted but precluded for petitioned species should be treated as having been resubmitted on the date of the warranted but precluded finding, and is therefore subject to a new finding within 1 year and subsequently thereafter until we take action on a proposal to list or withdraw our original finding. The Service publishes an annual notice of resubmitted petition findings (annual notice) for all foreign species for which listings were previously found to be warranted but precluded.

On May 6, 1991, we received a petition (hereafter referred to as the 1991 petition) from the International Council for Bird Preservation (ICBP), to add 53 species of foreign birds to the list of Threatened and Endangered Wildlife