



United States Department of the Interior

OFFICE OF THE SECRETARY
Washington, DC 20240

MAR 12 2024

The Honorable Cliff Bentz
Chairman
Subcommittee on Water, Wildlife, and Fisheries
Committee on Natural Resources
U.S. House of Representatives
Washington, DC 20515

Dear Chairman Bentz:

Enclosed are responses to questions submitted to U.S. Fish and Wildlife Service Director Martha Williams following her appearance before your Subcommittee at the July 18, 2023, oversight hearing on the Endangered Species Act. These responses were prepared by the U.S. Fish and Wildlife Service.

Thank you for the opportunity to respond to you on this matter.

Sincerely,

Pamela Barkin
Acting Legislative Counsel
Office of Congressional and
Legislative Affairs

Enclosure

cc: The Honorable Jared Huffman
Ranking Member

Questions from Chairman Bentz

Question 1: This year, USFWS proposed two rules to classify several species of sturgeon as endangered under the Endangered Species Act. If either of these rules moves forward, every person and company operating in the United States would be prohibited from selling, delivering, transporting and shipping any of these sturgeon species even though all foreign sturgeon species are farm-raised and have a positive effect on the wild populations.

I am informed that as a result of such a listing, the vast majority of the living members of the species, approximately 80% are estimated to exist on farms, will be destroyed because they will lose all economic value and will no longer be farmed. Assuming that such a figure is accurate, explain to me how a listing decision that results in the actual destruction of 80% of the members of a particular species that exist on earth conserves the species?

Response: As outlined in the proposed rules to list the referenced foreign sturgeon species (86 FR 47457; 87 FR 31834), and the recent sturgeon assessment by the International Union for the Conservation of Nature (Ludwin, A. 2023), these species are currently in danger of extinction in the wild and, as such, the U.S. Fish and Wildlife Service (Service) has proposed to list them as endangered species. If the endangered listings are finalized, these species, including captive members of the species in the U.S. and other countries, will be subject to the prohibitions that are established by the Endangered Species Act (ESA, Act) for endangered species of fish or wildlife. Those prohibitions include take in the United States, import, export, and interstate or foreign commerce in such species. The aquaculture industry may choose to pursue enhancement of survival permits pursuant to section 10(a)(1)(A) of the Act. This option for acquiring enhancement of survival permits is an opportunity for aquaculture operators to further efforts for conservation of these species in the wild.

The Service has met with both domestic and foreign aquaculture operators and their representatives regarding these proposed listings, and we are aware of the impact an endangered listing may have to these businesses. As the Service carries out its statutory listing duties and implements any listings, we will continue to explore every avenue available to us under the Act to work collaboratively with operators for the conservation of the species.

Question 2: As Administrator of FWS, would you support amending the ESA to ensure you had the flexibility to ensure that your listing decisions would not actually result in the destruction of the vast majority of the members of a species that you are trying to protect? It would seem to make sense to provide you the authority to draw a clear distinction between wild sturgeon populations and captive-bred or farm-raised, and hybrid species so that a listing of the wild

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population would not result in the destruction of the majority of these populations that would no longer have any economic value if they are listed as endangered?

Response: The Endangered Species Act does not allow for captive-bred populations to be assigned separate legal status from their wild counterparts on the basis of their captive state. The Service has met with both domestic and foreign aquaculture operators and their representatives regarding these proposed listings, and as the Service carries out its statutory listing duties and implements any listings, we will continue to explore every avenue available to us under the ESA to work collaboratively with operators for the conservation of the species. The Service is also available to provide technical assistance on legislation regarding this matter or any other legislation under the Service's purview.

Questions from Representative González-Colón

Question 1: According to the U.S. Fish and Wildlife Service's (the Service) website, there are 69 listed species in Puerto Rico under the Service's jurisdiction. This includes our emblematic Puerto Rican parrot. I've long commended the Service's work to protect this endangered species under its Puerto Rican Parrot Recovery Program, which is a great example of how the federal government should partner with state and private stakeholders. Whereas in the 1970s only 13 Puerto Rican parrots remained, I understand today there are approximately 690 on the Island- including both wild populations and those in captive breeding aviaries.

Could you discuss the Service's work under the Puerto Rican Parrot Recovery Program, and what challenges remain to eventually downlist and then hopefully delist this species? That is, what else is needed to achieve the Puerto Rican parrot's recovery?

Response: The Puerto Rican parrot continues to be affected by natural and human-related factors such as habitat modification, native and non-native predators (e.g., hawks and cats), catastrophic events (e.g., hurricanes), climate change, and newly discovered diseases. The most important actions for Puerto Rican parrot recovery that the Service is working on are establishing wild populations at new locations and continuing to supplement the existing wild populations at El Yunque National Forest, the Río Abajo Commonwealth Forest, and the Maricao Commonwealth Forest. Service and partner efforts have been successful as evidenced by the steadily increasing population numbers since Hurricanes Irma and María devastated the wild population at El Yunque National Forest in 2017.

The status of the Puerto Rican parrot in the three existing populations is improving due to natural recruitment and our continued supplementation of these populations by releasing captive birds into the wild. Currently, the captive Puerto Rican parrot population holds approximately 499 individuals, and there are an additional approximately 436 wild individuals at the three locations. Approximately 307 birds are in the wild at the Río Abajo Commonwealth Forest and 60 birds are in the wild at El Yunque National Forest. This year, seven active wild nests were documented at El Yunque National Forest, marking a significant milestone in the recovery of the species. Also, at present, the wild population of Puerto Rican parrots at the Maricao Commonwealth Forest consists of approximately 68 wild individuals.

Since Hurricane Maria, the Service has focused on repairing and hardening the physical infrastructure of our support facilities at El Yunque Parrot Aviary and Río Abajo Parrot Aviary, which captively breed and care for Puerto Rican parrots. The Fiscal Year 2023 Disaster Relief Supplemental Appropriations provided resources to repair storm-damaged facilities at the El Yunque and Río Abajo Parrot Aviaries and the Maricao release site.

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In addition to promoting habitat conservation, the Service works closely with our sister agencies, the Puerto Rico Department of Natural and Environmental Resources, and non-governmental partners to recover the Puerto Rican parrot.

Question 2: Could you discuss the Service's efforts to incentivize private landowners in Puerto Rico to take conservation measures to benefit listed species? Especially through the Partners for Fish and Wildlife Program and the Coastal Program.

Response: The Service has a long history of working collaboratively with private landowners in Puerto Rico to advance the recovery of listed species and species of greatest conservation need, as well as to restore and enhance the habitats of these species. Two of the programs the Service implements to promote and incentivize recovery and restoration actions on private lands are the Partners for Fish and Wildlife (PFW) Program and the Coastal Program. Both programs are voluntary, non-regulatory programs that provide technical and financial assistance to partners who are interested in implementing habitat restoration and conservation actions on private lands. These projects aim to maintain ecosystem functionality and resiliency by increasing conservation on private lands and promoting connectivity between private and public lands.

The PFW Program assists private landowners in enhancing, restoring, and protecting ecologically important habitats for the benefit of listed, migratory, and/or at-risk species. In addition, the program recognizes the need to balance residential, tourist, commercial, agricultural, and industrial needs with the conservation of important habitats and species. The PFW Program works in close collaboration with Federal, State, non-governmental organizations, and private partners to carry out these habitat restoration efforts. In Puerto Rico, the Service obligated \$835,556 in PFW funds from 2020 to 2023 to support 12 projects that directly benefit State and Federal trust species (see Table 1). From 2020 to 2022, these projects resulted in the conservation of 153 upland acres and associated stream and river miles.

The Coastal Program is effective in restoring and protecting fish and wildlife habitat on public and private land by delivering landscape-scale conservation and implementing strategic habitat conservation. The Coastal Program also supports long-term protection and third-party land acquisitions that benefit priority species, including those listed as endangered or threatened or considered at-risk. This practice allows the Service to complement its public lands management and expand conservation efforts beyond the boundaries of the National Wildlife Refuge System. The Coastal Program's ability to work on public and private lands with a diversity of partners is necessary for implementing a coastal habitat conservation strategy, especially in coastal watersheds where land ownership is often a mosaic of private and public entities. In Puerto Rico, the Service obligated \$1,097,044 in Coastal Program funds from 2010 to 2023 to 11 projects directly benefiting State and Federal trust species (see Table 2). These efforts resulted in the conservation of 42 upland acres and associated wetland acres between 2010 and 2022.

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Table 1. PFW projects awarded in Puerto Rico between 2020-2023.

Title	Municipality
Conservation and Management Initiative of the Natural Populations of Endangered Plant Species in Sierra Bermeja	Municipalities in the southwest region of Puerto Rico (Lajas and Cabo Rojo)
Federal Trust Species Habitat Restoration Initiative in Private Lands of the Karst Region in Puerto Rico (Phase 2)	Municipalities in the north-central karst region of Puerto Rico (i.e., Lares, Utuado, Florida, Ciales, Manatí)
Federal Trust Species Habitat Restoration Initiative in Private Lands of the Karst Region in Puerto Rico (Phase 3)	Municipalities in the north-central karst region of Puerto Rico (i.e., Lares, Utuado, Florida, Ciales, Manatí)
Federal Trust Species Habitat Restoration Initiative in Private Lands of the Karst Region in Puerto Rico (Phase 4)	Municipalities in the north-central karst region of Puerto Rico (i.e., Lares, Utuado, Florida, Ciales, Manatí)
Propagation and Recovery of Endangered Plant Species in the Central Mountain Region of Puerto Rico	Municipalities in the central mountain region of Puerto Rico (i.e., Cayey, Barranquitas, Aibonito)
Wetland Restoration at Palmas Pond, Arroyo, Puerto Rico (Phase I)	Arroyo
Stream connectivity restoration initiative in priority rivers of Puerto Rico	Aguada, Arecibo, Morovis, Orocovis, Utuado, and Río Grande
Habitat restoration project for the Harlequin butterfly (<i>Atlantea tulita</i>) in privately-owned lands in Maricao and Sabana Grande, Puerto Rico	Municipalities in the western-central mountain region of Puerto Rico (i.e., Maricao and Sabana Grande)
Habitat Restoration and Outreach Strategy for the Harlequin butterfly (<i>Atlantea tulita</i>) in privately-owned lands in Maricao and Sabana Grande, Puerto Rico	Municipalities in the western-central mountain region of Puerto Rico (i.e., Maricao and Sabana Grande)
Improving Habitat Connectivity in Shade-Grown Coffee Crops and Late Successional Subtropical Forests Enhancement within Private Lands at Silla de Calderón Range in Adjuntas, Puerto Rico	Municipalities in the western-central mountain region of Puerto Rico (Adjuntas and Yauco)
Federal Trust Species Habitat Restoration Initiative in Private Lands of the Karst Region in Puerto Rico (Phase 1)	Municipalities in the north-central karst region of Puerto Rico (i.e., Lares, Utuado, Florida, Ciales, Manatí)

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Continue the on-going monitoring efforts of the Cooperative Recovery Initiative in southwest Puerto Rico	Municipalities in southwest Puerto Rico (i.e., Cabo Rojo, Lajas, Gúanica)
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Table 2. Coastal Program projects awarded in Puerto Rico between 2010-2023.

Title	Municipality
Coastal and Wetland Restoration of the Papayo Coastal Lagoon Wetland in Lajas, Puerto Rico	Lajas
Preventing habitat loss of the endangered cactus <i>Leptocereus grantianus</i> by increasing the wave attenuation capability of seagrass beds and coral reefs in Culebra, Puerto Rico	Culebra Island
Coastal Habitat Restoration in Guánica, PR	Guánica
Stream connectivity restoration initiative in priority rivers of Puerto Rico	Aguada, Arecibo, Morovis, Orocovis, Utuado, and Río Grande
Coastal and Wetland Restoration in two priority areas of the Northeast Ecological Corridor Nature Reserve, Puerto Rico (Phase I)	Luquillo
Invasive Species' Management on Offshore Coastal Islets of Culebra Island for the Recovery of Federal Listed Species	Culebra Island
Ecological Restoration of Multiple Sites of Degraded Coastal Dunes on the North Coast of Puerto Rico	Municipalities in the northern region of Puerto Rico (i.e., Isabela, Camuy, Hatillo, Dorado Loíza, Río Grande)
Forest management and habitat recovery of an important endemic shrub: <i>Chamaecrista glandulosa</i> var. <i>mirabilis</i>	Vega Baja
Development of a comprehensive management plan for the long-term restoration of Kiani Lagoon mangrove ecosystem and implementation of recovery actions for the threatened Cóbana Negra	Vieques Island
Implementation Strategy- Black Rats (<i>Rattus rattus</i>) eradication on Berbería Cay, Santa Isabel, Puerto Rico	Santa Isabel
Coastal and Wetland Restoration of the Papayo Coastal Lagoon Wetland in Lajas, Puerto Rico	Lajas

Question 3: Could you submit a status report on the following listed species found in Puerto Rico under the Service's jurisdiction, including, if available, how much the Service has spent to support each species' recovery and conservation on the Island since Fiscal Year 2018?

a. Amphibians: Puerto Rican rock frog (coqui guajón), coqui llanero, golden coqui, Puerto Rican crested toad

Response: Coquí guajón (*Eleutherodactylus cooki*) – The coquí guajón, also known as Puerto Rican rock frog, was listed as a threatened species in 1997 and critical habitat designated in 2007. The species is limited to seven municipalities in southeastern Puerto Rico and has very specific habitat requirements (i.e., forested areas that contain large boulder granite rock formations and patches of rocks near streams and drainages). The species occurs primarily within private lands and only three protected areas are known to harbor guajón populations. Surveys in 2012 to 2014 suggested that some populations seemed stable, and a few may be declining or even extirpated. Previous genetic analysis suggested certain populations are isolated and others well connected through streams and forest corridors. In 2017, Hurricane María crossed through the species' range and a post-hurricane anecdotal report suggested a potential decrease in the number of calling frogs. Studies in 2021 suggested that the guajón may be experiencing a downward population trend. The main threats to the species continue to be anthropogenic habitat modification and fragmentation, erosion, agricultural practices that degrade the species' habitat, and climate change. The amphibian pathogenic chytrid fungus and a parasitic tick are now well documented to affect the coqui guajón and are likely to impact the species throughout its range. The most recent species 5-year status review was completed in 2022 and concluded that the guajón continues to meet the definition of a threatened species.

Coquí llanero (*Eleutherodactylus juanariveroi*) – The coquí llanero was listed as an endangered species in 2012 and critical habitat was designated in a Sabana Seca wetland, the only known population at that time. The most recent species 5-year status review was completed in 2019, where the species was described as stable. Although long-term population trends are lacking for the Sabana Seca population, the species population and its habitat have persisted since the species was first collected in 2005 and persisted through Hurricanes Irma and María in 2017. Recently, two additional populations were reported: one in the municipality of Arecibo (2020) and another at Carolina (2023). Since there are now three known populations, in general, the overall viability of this species has increased. Current recovery efforts are focused on protecting the three known populations, conducting genetics and climate-related research, and searching for other populations and introduction sites since the species probably had a more extensive geographic distribution in the past. Factors that continue to affect the species are habitat destruction/modification, predation, climate change, sea-level rise, and exposure to natural and human-induced catastrophic events, such as fires.

Golden coquí (*Eleutherodactylus jasperi*) – The golden coquí, also known as coquí dorado was listed as a threatened species in 1977 and critical habitat was designated within its extremely limited habitat in the Sierra de Cayey, including certain areas of the Carite Forest. This species has not been recorded since 1981, thus it is thought to be extinct. A significant amount of effort has been invested in searching for the golden coquí since it was listed in 1977. Habitat destruction/modification was the main threat to this species, although climate change and disease

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probably also contributed to its decline. The last cooperative effort to search for the golden coquí was completed between 2016-2017 and 2019, but no individuals were detected. In the most recent 5-year status review from 2022, the Service concluded that the golden coquí is extinct and recommend delisting the species due to extinction.

Puerto Rican crested toad (*Peltophryne lemur*) – The Puerto Rican crested toad, also known as sapo concho puertorriqueño, is the only endemic toad to Puerto Rico. It was listed as threatened in 1987. Since then, the Service and several other partners, including the Puerto Rico Department of Natural and Environmental Resources, Puerto Rican Crested Toad Conservancy (formerly known as the AZA Species Survival Program), local organizations, universities, and volunteers have worked together on the recovery of species, including the development of a captive-breeding and reintroduction program. The Puerto Rican crested toad has three natural subpopulations in southern Puerto Rico (Guánica Commonwealth Forest, Punta Ventana in Guayanilla and Ciénaga wetland in Yauco). The species five-year status review completed in 2022 indicates the Puerto Rican crested toad population at the Guánica forest is stable, but the status of the species in the subpopulations of Punta Ventana and the Cienaga wetland is unknown. Since 1992, the species has been introduced in six locations along its historical range: El Tallonal in Arecibo, La Esperanza in Manatí, Río Encantado in Florida, Manglillo Grande in Guánica, Cueva El Convento in Guayanilla, and Gabia in Coamo. To date, over 600,000 tadpoles and 1,700 toadlets have been released in those six areas. However, the species continues to be threatened by development, non-native predators, habitat modification by catastrophic events including climate change, severe drought seasons, sea-level rise, seismic events, salinization of breeding ponds, and invasive species. Based on new information, sea level rise and changes in salinity levels in the species' natural breeding ponds could be significantly detrimental to the persistence of the Puerto Rican crested toad in the Guánica Commonwealth Forest and Punta Ventana.

b. Birds: Puerto Rican parrot, yellow-shouldered blackbird, Puerto Rican broad-winged hawk, Puerto Rican nightjar, Puerto Rican plain pigeon, Puerto Rican sharp-shinned hawk, elfin woods warbler

Response: Puerto Rican Parrot (*Amazona vittata*) – The Puerto Rican parrot (PRP), also known as cotorra puertorriqueña, was listed as an endangered species in 1967 under the Endangered Species Preservation Act of 1966. The most recent species five-year status review was completed in 2022, indicating the species still warrants endangered status. The PRP currently consists of three wild populations (El Yunque National Forest, Río Abajo Commonwealth Forest, and Maricao Commonwealth Forest). In 2017, the Puerto Rican parrot wild populations suffered from a major reduction due to the impacts from hurricanes Irma and María. The status of the PRP in the three existing populations is improving due to natural recruitment and the continued supplementation of these populations by releasing captive birds into the wild. A population-viability analysis was recently completed for this species, providing guidance about how to maximize the use of available parrot individuals and resources. Currently, the captive Puerto Rican parrot

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population holds approximately 499 individuals, and there are an additional 399 wild individuals at the three locations indicated above. The Puerto Rican parrot continues to be affected by natural and human related factors such as habitat modification, native and non-native predators (e.g., hawks and cats), catastrophic events (hurricanes and climate change), and newly discovered diseases.

Yellow-shouldered blackbird (*Agelaius xanthomus*) – The Yellow-shouldered blackbird, also known as mariquita, is endemic to Puerto Rico and the adjacent Mona and Monito islands. The Yellow-shouldered blackbird was listed as endangered in 1976, along with a critical habitat designation that includes area in the municipalities of Cabo Rojo, Ceiba, Guánica, Lajas, San Germán, and Mona and Monito islands. Currently, the Yellow-shouldered blackbird is mainly limited to four areas: Mona and Monito islands, and three small disjunct populations in eastern, southern, and southwestern Puerto Rico. The size of these populations continues to remain relatively low. According to the most recent surveys, the greatest numbers of Yellow-shouldered blackbirds occur in the southwestern population, ranging annually between approximately 100-500 individuals. This is followed by the Mona Island population, with approximately 100 individuals. The southern and eastern populations have approximately 55 and 12 individuals, respectively. In addition, results of a rapid assessment of the southwestern population following Hurricane Fiona, suggests that Yellow-shouldered blackbirds survived this catastrophic natural event. However, accurate estimates of post-hurricane numbers have yet to be obtained, particularly for the three other populations (Mona Island, southern, eastern Puerto Rico). Since the 1980s the Puerto Rico Department of Natural and Environmental Resources has implemented actions to improve the breeding success of the Yellow-shouldered blackbird, which have helped the species to persist. However, it continues to be threatened by habitat loss and degradation, invasive species, nest parasitism by the invasive shiny cowbird, climate change, hurricanes, a restricted distribution, as well as low population numbers. Because of ongoing threats and the current population status, the species continues to meet the definition of an endangered species.

Puerto Rican broad winged hawk (*Buteo platypterus brunncescens*) – The Puerto Rican broad-winged hawk, also known as guaraguao de bosque, is a subspecies endemic to Puerto Rico. It was federally listed as endangered in 1994. This species occurs in moist karst forests, elfin woodland, sierra palm, caimitillo-granadillo, and tabonuco forest types at the Río Abajo Commonwealth Forest, Carite Commonwealth Forest, and El Yunque National Forest, as well as within hardwood plantations, shade-grown coffee plantations, and mature secondary forests. The healthiest population of the species is found in the Río Abajo Commonwealth Forest. Habitat destruction or modification are the primary factors threatening the broad-winged hawk. Based on the latest species 5-year status review in 2019, the overall broad-winged hawk population appears to be stable to slightly declining, with an estimate of about 117 individuals on the island.

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Puerto Rican nightjar (*Caprimulgus noctitherus*) – The Puerto Rican nightjar, or guabairo, is an endemic bird species that occurs in the coastal dry and lower montane forests in southern and southwestern Puerto Rico. It was federally listed in 1973. Since 2017, new sightings of nightjars have occurred in the municipalities of Ponce and Guayama and the Cabo Rojo National Wildlife Refuge. These new sightings support past suggestions that the species is more widespread than previously documented. The species continues to be threatened by habitat fragmentation and modification, as well as other factors. Only 14% of the lands where the species occurs are protected.

Puerto Rican plain pigeon (*Patagioenas inornata wetmorei*) – The Puerto Rican plain pigeon, also known as paloma sabanera, was federally listed as an endangered species in 1970. A captive-breeding program was established after listing and it was discontinued in the late 1990s. Observations since 1989 indicated that the Puerto Rican plain pigeon had increased its range into the east-central region of Puerto Rico. However, hurricanes have caused Puerto Rican plain pigeon population fluctuations, with a decline in 1990 following Hurricane Hugo in 1989, and an overall population increase between 1991 and 1998, but a decline again after Hurricane Georges in 1998. The Puerto Rican plain pigeon has not been able to recover to pre-hurricane densities, although an increase in population density was observed from 2008-2010. In 2011, the Puerto Rican plain pigeon population was estimated to be 5,578 individuals, in 2017 there were estimated to be 4,257 individuals, and then a notable decline to 660 individuals was documented in 2018 after Hurricane María. Thus, it is believed the species is at risk of extinction, particularly if another hurricane similar to María strikes Puerto Rico. Moreover, predation has been identified as one of the main causes of Puerto Rican plain pigeons' nest failure, with predation, particularly from rats, accounting for 79% of Puerto Rican plain pigeon nest losses during 1988-1999. Post-hurricane reproduction also has been largely unsuccessful. During 2021, only 9 active Puerto Rican plain pigeon nests were found, of which only two were successful. The Service has been working with an NGO since 2020 to monitor the breeding of the species and implement predator-control measures in order to increase its nesting success, as well as implementing an outreach campaign to increase public awareness about this species.

Puerto Rican sharp-shinned hawk (*Accipiter striatus venator*) – The Puerto Rican sharp-shinned hawk, also known as gavilán de sierra, is a subspecies endemic to Puerto Rico, occurring in montane forests of the Cordillera Central, Sierra de Cayey, and Sierra de Luquillo. This subspecies was listed as endangered in 1994. Surveys conducted between 2013 and 2017 indicate the island-wide sharp-shinned hawk population declined to about 100 individuals, and that the species has mostly disappeared from its former center of distribution at the Maricao Commonwealth Forest. However, post-Hurricane María assessments conducted in 2018 found the island-wide sharp-shinned hawk population had decreased to about 20 individuals. Habitat destruction or modification throughout the range of the sharp-shinned hawk has been identified as one of the major threats to this species. Although this threat is low within El Yunque National Forest and

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forests managed by the Puerto Rico Department of Natural and Environmental Resources, the species is still threatened by the habitat fragmentation in the Cordillera Central. The additive effects on the overall mortality due to external parasites in nestlings, natural events such as hurricanes, human-induced disturbances (e.g., human-induced fires), and the undetermined potential effects of changes in climate are considered main causes for the reduction in the overall sharp-shinned hawk population in Puerto Rico. Ongoing conservation efforts implemented by The Peregrine Fund since 2018 with support from the Service and the Puerto Rico Department of Natural and Environmental Resources include maximizing nest success given the substantial impact of Hurricane María on the species. Work included removing clutches of eggs from nests, which were raised and released back into the wild. The most recent assessments conducted between 2018-2023 have documented an increase to 41 adults across the subspecies range. Nonetheless, during this breeding season that is just ending, only two nests out of twelve have been successful, mostly due to predation and inclement weather, supporting the species' continued designation as critically endangered under the *Regulation to Govern the Management of Vulnerable and Endangered Species on the Commonwealth of Puerto Rico*. The Service's August 2023 5-Year Status Review recommended no change in the species' endangered status under the ESA.

Elfin-woods warbler (*Setophaga angelae*) – The elfin-woods warbler is a small bird endemic to Puerto Rico, listed as threatened in 2016, with approximately 27,488 acres of land designated as critical habitat in 2020, that includes Maricao, El Yunque National Forest, and the Carite Commonwealth Forest. The species has a limited distribution, with only two known populations, one occurring within El Yunque National Forest and one at the Maricao Commonwealth Forest (MCF) and adjacent private lands. The historically known population from the Carite Commonwealth Forest is considered extirpated. Past studies (2010) by BirdLife International estimated the island-wide elfin-woods warbler population to be approximately 1,800 individuals. However, this survey was conducted before the extirpation of the Carite population. Current information indicates that elfin-woods warbler populations appear to be stable in MCF but shows a declining trend at the El Yunque National Forest. The elfin-woods warbler also uses habitat extending to shade-grown coffee plantations adjacent to the MCF, indicating that the species may tolerate some degree of habitat disturbance. Threats to the elfin-woods warbler include habitat loss, fragmentation, and degradation. Other factors including hurricanes, climate change, human-induced fires and invasive species also have been identified as threats to the species.

c. Puerto Rican harlequin butterfly

Response: The Puerto Rican harlequin butterfly, also known as mariposa arlequín de Puerto Rico or mariposa Quebradillana, is endemic to Puerto Rico, occurring only in the western portion of the island. The species was listed as threatened in 2022, with a designation of 41,266 acres of land as critical habitat. This butterfly is known to occur in

six general areas: among the municipalities of Isabela, Quebradillas, and Camuy (IQC); (2) Guajataca Commonwealth Forest (Guajataca); (3) Río Abajo Commonwealth Forest (Río Abajo); (4) Río Encantado; (5) Maricao Commonwealth Forest (Maricao); and (6) Susúa Commonwealth Forest (Susúa). The estimated number of Puerto Rican harlequin butterflies is based on observation records per population, which is characterized by a perennially low number of individuals (less than 100 adult individuals observed per year). The species is threatened by habitat modification, fragmentation and loss, human-induced fires, pesticides, insufficient enforcement of existing regulatory mechanisms, small population size, and climate changes. In addition, the species' highly specialized ecological requirements exacerbate the potential threats posed by these factors.

d. Antillean manatee

Response: The West Indian manatee listed entity includes the Florida and the Antillean manatee subspecies, and it was reclassified from endangered to threatened in 2017. At that time, the population trend for the Antillean manatee population in Puerto Rico was described as stable. The most recent population estimate for the Puerto Rico Antillean manatee population is based on several island-wide surveys completed between 2010-2014, resulting in a minimum population estimate of 386 manatees. The Service has continued to gather new information for an updated status review of the species. The most significant threats to the manatee population in Puerto Rico are coastal habitat destruction/modification and watercraft collisions and injuries. In the past 5 years watercraft-related mortality has increased in Puerto Rico. Current recovery efforts are focused on working through a cooperative agreement to install new no-wake zones; support for the rescue, rehabilitation, and release of manatees through the Prescott Grant program; and implementing conservation measures through technical assistance and consultations for projects. The Service published a substantial 90-day finding on a petition that requested the Puerto Rico population of the Antillean manatee be identified as a distinct population segment and the distinct population segment be uplisted to endangered. Additionally, the Service has entered into an agreement to submit to the Office of the Federal Register for publication of a proposed revision of critical habitat for the Florida manatee by September 12, 2024.

e. Reptiles: green sea turtle, leatherback sea turtle, hawksbill sea turtle, Mona ground iguana, Mona boa, Puerto Rican boa

Response: Green sea turtle (*Chelonia mydas*) – The green sea turtle, or peje blanco, was listed under the ESA in 1978. The most recent status review for this species was completed in 2016, which listed the species into 11 distinct population segments (DPS) that occur around the world. The population that occurs in Puerto Rico was included under the North Atlantic DPS, which is listed as threatened and occupies the waters of Puerto Rico year-round. From 2011 to 2022, the species averaged approximately 200 nests per year in Puerto Rico. The most important nesting areas in Puerto Rico occur in the beaches of Mona, Guayama, Maunabo, and Vieques. Sea turtles are jointly managed by the Service and NOAA's National Marine Fisheries Service (NMFS).

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NMFS declared the waters surrounding Culebra Island as critical habitat for the green sea turtle in 1998. In July 2023, both the Service and NMFS proposed a new critical habitat designation for several of the DPSs including additional beaches and waters of Puerto Rico. The Puerto Rico Department of Natural and Environmental Resources leads the survey and recovery efforts for sea turtles in Puerto Rico. Current Service recovery efforts are focused mostly on coastal habitat restoration and implementing conservation measures through technical assistance and consultations for projects.

Leatherback sea turtle (*Dermochelys coriacea*) – The leatherback, or tinglar, is the largest of all sea turtles and was listed as an endangered species in 1978. From 2011 to 2022, the species averaged approximately 1,500 nests per year in Puerto Rico. They migrate to the Caribbean to nest and do not stay year-round. Leatherbacks nest in several beaches along Puerto Rico, Culebra and Vieques, but the most the important nesting areas occur in the beaches of Añasco, Arcibo, Dorado, Loíza, the Northeast Ecological Corridor Nature Reserve (Luquillo and Fajardo), and Maunabo. Sea turtles are jointly managed by the Service and NMFS. There are no beaches or waters of Puerto Rico currently designated as critical habitat for this species. The only designated critical habitat for the leatherback is in the Sandy Point National Wildlife Refuge in St. Croix, U.S. Virgin Islands. The Puerto Rico Department of Natural and Environmental Resources leads the survey and recovery efforts for sea turtles in Puerto Rico. Current Service recovery efforts are focused mostly on coastal habitat restoration and implementing conservation measures through technical assistance and consultations for projects.

Hawksbill sea turtle (*Eretmochelys imbricata*) – The hawksbill sea turtle, or carey, was listed as an endangered species in 1978. In 1982, critical habitat was designated for the beaches on Mona Island and some around Culebra Island. From 2011 to 2022, the species averaged approximately 2,000 nests per year in Puerto Rico. Hawksbill sea turtles may nest and occur in the waters of Puerto Rico year-round. The most important nesting beaches occur on Mona Island, although the species may nest in several beaches throughout Puerto Rico as well. Sea turtles are jointly managed by the Service and NMFS. The Puerto Rico Department of Natural and Environmental Resources leads the survey and recovery efforts for sea turtles in Puerto Rico. Current Service recovery efforts are focused mostly on coastal habitat restoration and implementing conservation measures through technical assistance and consultations for projects.

Mona ground iguana (*Cyclura stejnegeri*) – The Mona ground iguana, also known as the iguana de mona, was listed as threatened in 1978, and the entire Mona Island was designated as critical habitat for the species. The most recent species 5-year status review was completed in 2022, and indicates the species continues to have an overall wide distribution throughout Mona Island and are found most abundantly in the plateau forest, followed by coastal and depression forests. The most recent surveys were completed in 2019 and 2021. Based on the 2021 results, the current estimated abundance of Mona iguanas is 3,520. The main identified threat that continues affecting the Mona iguana is nest loss due to feral pig predation within nesting areas and feral cat predation of neonates and juveniles across the island. The Puerto Rico Department of Natural and Environmental Resources has documented and captured a non-native green iguana species

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on Mona Island that could compete with the Mona ground iguana for habitat and food resources. The non-native green iguana species also poses a hybridization threat to the Mona ground iguana. Current recovery efforts are focused on actions related to control/eradication of invasive mammals and plants in Mona Island.

Mona boa (*Epicrates monensis monensis*) – The Mona boa was listed as a threatened species in 1978, and the entire Mona Island designated as critical habitat for the species. The most recent species 5-year status review was completed in 2020. The Mona boa is known to be more common and widely distributed than when listed, and its population status is considered stable. The species continues to be affected mostly by feral cat predation and to a lesser degree, by habitat degradation caused by feral goats and pigs, and hurricanes. The most important recovery action for this species is minimizing or removing the feral cat predation threat. Moreover, the species is at higher risk of threats because of its small range (a single island population).

Puerto Rican boa (*Chilabothrus inornatus*) – The Puerto Rican boa was listed as an endangered species in 1970, and does not have any designated critical habitat. The most recent species status review was completed in 2022, resulting in the Service issuing a proposed rule in July 2022 to remove the Puerto Rican boa from the Federal list of Endangered and Threatened Wildlife due to recovery. The Puerto Rican boa is likely more abundant today than at the time of listing, particularly in the karst region of the northern Puerto Rico, and considered less abundant in the dry southern region of the island. Cave ecosystems and their surrounding forests are identified as particularly important for the Puerto Rican boa. Although the species is considered widely distributed, it is not uniformly abundant across Puerto Rico. The species continues to be affected by multiple threats such as: habitat destruction/modification, vehicle collisions, poaching and intentional killings, predation from nonnative species such as cats, competition from nonnative snakes, hurricanes, disease, and climate change. Current recovery efforts are focused on research regarding snake fungal disease and implementing conservation measures through technical assistance and consultations for projects.

f. Sea turtles: green sea turtle, leatherback sea turtle, hawksbill sea turtle

Response: Please see response to e above.

g. Nassau grouper

Response: NMFS administers the Endangered Species Act for the Nassau grouper.

h. Corals: elkhorn coral, staghorn coral, boulder star coral, mountainous star coral, lobed star coral, rough cactus coral, and pillar coral

Response: NMFS administers the Endangered Species Act for the elkhorn coral, staghorn coral, boulder star coral, mountainous star coral, lobed star coral, rough cactus coral, and pillar coral.

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Table 1: Amount of money expended by the Caribbean Ecological Services Field Office between 2018 and 2022 on the species listed above in a through e.

Species	2018	2019	2020	2021	2022	Total
Puerto Rican Rock Frog (coqui guajón)	6,300	9,000	61,000	21,000	22,500	119,800
Coqui llanero	4,400	68,400	3,100	63,000	39,000	177,900
Golden coqui	7,900	3,500	3,200	2,100	6,000	22,700
Puerto Rican Crested Toad	5,000	4,400	11,000	8,000	21,000	49,400
Puerto Rican Parrot	1,512,500	1,502,000	1,621,500	1,405,500	1,449,000	7,490,500
Yellow shouldered blackbird	14,500	5,500	6,000	9,000	18,000	53,000
Puerto Rican Broad-wing hawk	15,500	55,500	75,000	51,000	40,000	237,000
Puerto Rican nightjar	8,500	5,000	9,000	13,000	13,000	48,500
Puerto Rican plain pigeon	37,500	15,500	75,000	48,500	233,000	409,500
Puerto Rican sharp-shinned hawk	117,000	200,000	181,800	448,500	142,500	1,089,800
Elfin woods warbler	7,100	5,500	4,100	5,100	4,000	25,800
Puerto Rico harlequin butterfly	N/A	N/A	N/A	N/A	8,500	8,500
Antillean manatee	14,500	10,500	139,500	55,500	26,000	246,000
Green sea turtle	2,900	4,000	3,100	2,800	3,000	15,800
Leatherback sea turtle	11,000	8,000	11,000	14,000	24,000	68,000
Hawksbill sea turtle	16,000	8,500	11,000	15,000	29,000	79,500
Mona ground iguana	4,900	8,600	38,000	3,100	14,000	68,600
Mona boa	2,900	31,600	6,100	31,600	9,000	81,200
Puerto Rican boa	35,500	100,500	208,500	210,000	175,500	730,00

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Table 2. Federal funding transferred by the Service to the Puerto Rico Department of Natural and Environmental Resources (PRDNER) between 2018 and 2022 for the recovery of the species listed above through a Cooperative Agreement under Section 6 of the Endangered Species Act between the two agencies.

Species	2018	2019	2020	2021	2022	Total
Puerto Rican Rock Frog (coqui guajón)	N/A	N/A	N/A	N/A	N/A	N/A
Coqui llanero	N/A	N/A	N/A	N/A	N/A	N/A
Golden coqui	N/A	N/A	N/A	N/A	N/A	N/A
Puerto Rican Crested Toad	14,473	17,270	23,099	12,603	12,603	73,196
Puerto Rican Parrot	N/A	N/A	N/A	N/A	N/A	N/A
Yellow shouldered blackbird	61,088	73,088	81,088	110,588	112,588	438,440.
Puerto Rican Broad-wing hawk	N/A	N/A	38,500	N/A	N/A	38,500
Puerto Rican nightjar	N/A	N/A	N/A	N/A	N/A	N/A
Puerto Rican plain pigeon	N/A	N/A	N/A	N/A	N/A	N/A
Puerto Rican sharp-shinned hawk	29,930	N/A	31,562	N/A	38,000	97,930
Elfin woods warbler	N/A	N/A	N/A	N/A	N/A	N/A
Puerto Rico harlequin butterfly	N/A	N/A	N/A	N/A	N/A	N/A
Antillean manatee	2,000	17,270	N/A	140,000	12,603	171,874
Green sea turtle	10,131	N/A	N/A	N/A	N/A	10,131
Leatherback sea turtle	37,631	25,000	N/A	N/A	N/A	62,631
Hawksbill sea turtle	37,631	25,000	N/A	N/A	N/A	62,631
Mona ground iguana	20,000	N/A	N/A	N/A	31,000	51,000

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Mona boa	N/A	N/A	N/A	N/A	21,000	21,000
Puerto Rican boa	N/A	N/A	N/A	N/A	N/A	N/A