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Via Electronic and Certified Mail

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RE: Sixty-day Notice of Intent to Sue for violations of the Endangered Species Act relating to the Department of the Navy's relocation of Marines from Okinawa to Guam.

Hâfa Adai Secretary Austin, Secretary Del Toro, Secretary Haaland, and Director Williams,

In accordance with Section 11(g) of the Endangered Species Act (“ESA”), Blue Ocean Law, the Center for Biological Diversity (“Center”) and Prutehi Litekyan: Save Ritidian provide this 60-day notice of intent to sue the Department of the Navy (“DoN”) and the U.S. Fish and Wildlife Service (“Service”) for violations of the ESA in connection with the relocation of U.S. Marine Corps personnel from Okinawa to Guam and related infrastructure construction and military training activities.

Initiated in 2005, the relocation of marines to Guam continues a long history of military impacts on the people and environment of Guam. In particular, the introduction of the brown tree snake after World War II—likely as a stowaway in military cargo—has led to the extinction of 12 of Guam’s native bird species and the extirpation of several more. This catastrophic introduction in combination with habitat destruction and fragmentation by the military, which owns nearly a third of the land on Guam, has led to endangerment of many of Guam’s plants and animals and severe alteration of the natural environment.

In three biological opinions issued between 2010-2017, the Service found that marine relocation adversely affects several imperiled species, including the Mariana crow (âga throughout), Guam Micronesian kingfisher (sihek throughout), Guam rail (ko’ko’ throughout), Mariana fruit bat (fanihi throughout), the single remaining adult tree of hâyun lâgu (*Serianthes nelsonii*) on Guam,

Mariana eight-spot butterfly (abbabang throughout), three species of tree snail and six additional native plants. Impacts to these species stem from destruction and disturbance of some of the last and best remaining native limestone forest on Guam, much of which was set aside as mitigation for impacts to listed species by the Air Force and is designated as the Guam National Wildlife Refuge. This habitat was intended to support reintroduction of the sihek, ko'ko' and åga, all of which are extirpated from Guam (and, in the case of sihek, from the wild entirely). This important habitat also supports the last individual of hãyun lågu on Guam, which is immediately threatened by recently initiated construction of a machine gun firing range where the tree lives. This firing range is the only part of the relocation yet to be completed.

As mitigation for these severe impacts to Guam's endangered species, the DoN committed in the biological opinions to protect 5,234 acres of sihek habitat, to support reintroduction of the three extirpated birds through numerous actions to protect and restore habitat, to suppress brown tree snakes at a "landscape-level," and to propagate, outplant, and "maintain" outplanted seedlings to ensure their growth into adulthood of the hãyun lågu and other listed plants, including the two host plants for the abbabang.

The DoN has largely failed to meet these commitments, ignoring the requirements set forth in the biological opinions. Twelve years after completion of the first biological opinion and with the relocation nearly complete, sihek habitat remains unprotected, reintroduction of the three extirpated bird species has not occurred and appears no closer to occurring, the hãyun lågu or abbabang host plants have not been successfully outplanted, and measures to suppress brown tree snakes at a landscape level have not been taken. In the meantime, the plight of several of the species, including sihek, ko'ko', abbabang, fanihi, and hãyun lågu, has only grown more dire, while DoN continues to undertake activities that further harm these protected species.

For sihek and Guam's other highly unique species to have any chance at survival, swift action is required to reduce threats and foster recovery. However, in a clear violation of the ESA, DoN continues to fail to implement required conservation measures set forth in the biological opinions that were identified as being necessary for the DoN to comply with the ESA's mandate to prevent jeopardy.

New information also indicates that the impacts of the marine relocation are having even more devastating impacts on these imperiled species than previously anticipated. Reviews of the status of Guam's listed species show declining numbers in several cases and increased threats in all cases. In particular, Guam's endangered plants and animals face dramatic increases in the number of powerful typhoons driven by climate change. These issues must also be considered through a reinitiated Section 7 consultation.

For all of these reasons and as detailed below, the DoN and Service are in violation of the ESA for failing to ensure against jeopardy of listed species in violation of ESA Section 7, for failing to reinitiate Section 7 consultation in response to new information indicating impacts to species not previously considered, and for unlawful take of listed species without valid take coverage in violation of ESA Section 9. The DoN is also in violation of ESA Section 7 for failing to carry out a program for the recovery of listed species that are at imminent risk of extinction due, in large part, to military activities over many decades.

THE ENDANGERED SPECIES ACT

Congress enacted the Endangered Species Act in 1973 to provide “a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved” and “a program for the conservation of such endangered species and threatened species.” 16 U.S.C. § 1531(b). The statute contains an array of provisions designed to afford imperiled species “the highest of priorities,” so that they can recover to the point where federal protection is no longer needed. *Tenn. Valley Auth. v. Hill*, 437 U.S. 153, 174 (1978).

Under Section 7 of the ESA, federal agencies must “utilize their authorities in furtherance of the purposes of” the ESA and carry out “programs for the conservation of endangered species and threatened species.” 16 U.S.C. § 1531(a)(1). Agencies must further “insure that any action authorized, funded, or carried out by such agency . . . is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species which is determined . . . to be critical.” 16 U.S.C. § 1536(a)(2). Agencies must discharge this obligation in consultation with the Service. 50 C.F.R. § 402.01(b). If the action agency determines its action may adversely affect listed species or critical habitat, as the DoN has for multiple species on Guam, it must initiate formal consultation. 50 C.F.R. § 402.14(a). Formal consultation concludes with the Service’s issuance of a biological opinion, which must provide “reasonable and prudent measures” (“RPMs”) necessary or appropriate to minimize take of listed species, and the “terms and conditions” that must be complied with by the action agency to implement any RPMs. 6 U.S.C. § 1536(b)(4), 50 C.F.R. § 402.14(i).

The ESA also requires that consultation be reinitiated in certain circumstances where “discretionary Federal involvement or control over the action has been retained or is authorized by law.” 50 C.F.R. § 402.16. Reinitiation of consultation is required:

- (1) If the amount or extent of taking specified in the incidental take statement is exceeded;
- (2) If new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered;
- (3) If the identified action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in the biological opinion or written concurrence; or
- (4) If a new species is listed or critical habitat designated that may be affected by the identified action. 50 C.F.R. § 402.16(a).

Furthermore, Section 7(d) of the ESA provides that once a federal agency initiates consultation on an action under the ESA, the agency “shall not make any irreversible or irretrievable commitment of resources with respect to the agency action which has the effect of foreclosing the formulation or implementation of any reasonable and prudent alternative measures which would not violate subsection (a)(2) of this section.” 16 U.S.C. § 1536(d).

Allowing or undertaking activities that harm federally-protected species may also violate Section 9 of the ESA, which makes it unlawful to engage in any activity that “takes” an endangered species.

16 U.S.C. § 1538(a)(1)(B). While incidental take can be authorized under Section 7 through the provision of and compliance with a biological opinion and incidental take statement (“ITS”),¹ it is well settled that failure to abide by the terms and conditions of a biological opinion and ITS expose ESA take liability.²

BACKGROUND

I. ESA Consultation on Marine Relocation to Guam

Based on an agreement with the Government of Japan to reduce U.S. military presence on Okinawa, the DoN originally proposed to relocate 8,000 marines and 9,000 dependents to Guam by 2014. The DoN later reduced this number to 5,000 marines with 1,300 dependents. The relocation includes among other things, construction of a large cantonment (1,213 acres), housing (510 acres), a live-fire training range, a hand grenade range, and utilities, roads, and bridges to support training. 2015 Biological Opinion at 15.

The DoN first completed consultation with the Service on the impact of the marine relocation on listed species in 2010. The Service’s 2010 biological opinion concluded that relocation would adversely affect, but not jeopardize, the continued existence of the sihek, ko’ko’ and fanihi. In each case, the determination that the species would not be jeopardized was substantially based on “development and implementation of brown tree snake eradication and control measures” by DoN. 2010 Biological Opinion at 189, 191, 192. Significantly, the DoN committed to funding and working towards “landscape-level brown tree snake suppression, interdiction and control,” with a goal of providing “areas with low snake densities.” 2010 Biological Opinion at 72. These measures were considered an essential part of reintroducing and restoring the sihek, ko’ko’ and āga on Guam.

In addition to brown tree snake eradication, the DoN committed to, among other things, supporting “re-introduction of native endangered and threatened species on DoD lands on Guam,” management and control of introduced ungulates to “improve habitat quality for special status species, reduce erosion, and reduce habitat degradation on DoD lands,” and to create several ecological reserves to “protect native limestone forest habitats” in northern and southern Guam that are “recovery habitats for the Mariana crow, Guam Micronesian kingfisher, Mariana fruit bat and *Serianthes nelsonii*.” 2010 Biological Opinion, 51-57.

In 2013, the DoN requested reinitiation of consultation based on changes to the project, most notably the decision to construct a live-fire training range complex (“LFTRC”) at Northwest Field on Andersen Airforce Base. The LFTRC greatly expanded the impacts of the relocation on Guam’s

¹ 16 U.S.C. § 1536(o) (“[A]ny taking that is in compliance with the terms and conditions specified in a written statement provided under subsection (b)(4)(iv) of this section shall not be considered to be a prohibited taking of the species concerned”).

² See *Bennett v. Spear*, 520 U.S. 154, 170 (1997); *Nat’l Wildlife Fed’n v. Nat’l Marine Fisheries Serv.*, 481 F.3d 1224, 1230 (9th Cir. 2007); *Mount Graham Red Squirrel v. Espy*, 986 F.2d 1568, 1580 (9th Cir. 1993) (held that violation of an ITS would remove protective coverage from take liability).

struggling endangered species, proposing to destroy or disturb more than 1,400 acres of what the Service has characterized as some of the “best remaining primary limestone forest on Guam,” in an area that was set aside as mitigation in a 2006 biological opinion for an Air Force program known as ISR Strike Force. 2015 Biological Opinion at 105, 121. The area is also part of the Guam National Wildlife Refuge. Significantly, the LFTRC presents an existential threat to the one adult individual of the *håyun lågu* on Guam, which is in the path of the machine gun range. 2015 Biological Opinion at 117. It also would destroy an ungulate fence constructed by the Air Force to help listed species.

Despite these significant, increased impacts, the Service again concluded in 2015 that the relocation was not likely to jeopardize the continued existence of *sihek*, *åga*, *ko’ko’*, *fanihi* and *håyun lågu*. This determination was based on substantial additional commitments on the part of the DoN to support recovery of these species. In particular, the DoN committed in a memorandum of agreement (“MOA”), attached to and relied upon in the Biological Opinion, to “protect and manage approximately 5,234 acres of *Sihek* habitat on DON lands in northern Guam for conservation and restoration of kingfisher habitat.” 2015 Biological Opinion at 108. This commitment was a key component of the Service’s conclusion that the relocation would not jeopardize the three extirpated bird species and the fruit bat.

As detailed in the project description of the biological opinion, the DoN also committed to a number of other RPMs to help Guam’s struggling species, including implementing a forest enhancement project by fencing and removing ungulates and invasive plants and propagating and planting native plants on approximately 1,000 acres in Finegayan, propagating, planting and maintaining a minimum of 30 individuals of *håyun lågu*, constructing a fence and maintaining a buffer of 100 feet around the one remaining adult *håyun lågu*, constructing and maintaining a fence around the LFTRC to “encompass the area within the existing *Ritidian* ungulate fence (per the ISR Strike Biological Opinion and NWF Beddown project) and the Guam adult *Serianthes* tree” and removing all ungulates from the area, and finally constructing a barrier to exclude brown tree snakes from approximately 160 acres, which if successful was to be expanded to 300 acres and eventually lead to “large-scale” control of the snakes. Construction of the fence to replace the *Ritidian* ungulate fence constructed by the Air Force was to be constructed within two years of awarding a contract for destruction of the previously constructed fence and ungulates were to then be removed within six months. More than seven years later, most of these actions have only been partially completed or not undertaken at all.

In 2015, the Service listed an additional 23 Micronesian species as endangered or threatened, all but two of which occur on Guam. In response, the DoN requested reinitiation of consultation with the Service, leading to a third biological opinion on the relocation issued in 2017. Fed. Reg. 80: 59496-59497. The 2017 biological opinion concluded that the relocation was likely to adversely affect an additional six endangered species and five threatened species, including the *fanihi* (again), *abbabang*, three species of tree snail (Guam, fragile and humped tree snails), three orchids (*Bulbophyllum guamense*, *Dendrobium guamense*, *Tuberolabium guamense*) and three additional trees (*Cycas micronesica*, *Heritiera longipetiolata*, *Tabernaemontana rotensis*). 2017 Biological Opinion at 2.

Again, based on commitments made by the DoN and incorporated into the biological opinion, the Service concluded these additional 11 species would be adversely affected but not jeopardized. 2017 Biological Opinion at 134. The Service retained requirements from the 2015 opinion and memorandum of agreement, including the commitment to protect 5,234 acres of habitat to support reintroduction of the sihek, ko'ko' and åga and the requirement to protect 1,000 acres at Finegayan by constructing an ungulate fence, removing all ungulates, controlling non-native plants and outplanting of native plants. In addition, the opinion required, among other things, fencing of the Haputo Ecological Reserve area, pre-construction surveys, salvage and outplanting of listed plants, creation of a native plant nursery for propagation of native and listed species, annual reporting of conservation measures, and identification and use of successful technology to severely suppress or eradicate brown tree snakes. 2017 Biological Opinion at 35-41. As discussed below, a number of these conservation measures have not been achieved, even though the marine relocation is nearly complete.

II. Lack of Progress on Biological Opinion Conservation Measures

Since 2017, the DoN has produced annual reports documenting progress implementing conservation measures required by the biological opinions. These reports show that the DoN has failed to implement key aspects of the biological opinions, most notably protection of 5,234 acres of habitat for recovery of the three extirpated bird species and landscape level control of the brown tree snake that is critical for survival and recovery of nearly all of the endangered and threatened species impacted by the DoN's activities. Indeed, the annual reports completely fail to mention either requirement despite the Service's explicit reliance on both actions to find that relocation would not jeopardize listed species. In response to this notice, the DoN will undoubtedly point to actions it has taken to help Guam's endangered species impacted by their actions, but without substantial progress on these two key items, reintroduction of the sihek, ko'ko' and åga to ensure against jeopardy of these species is no closer to occurring than it was in 2010 when the first biological opinion was issued.

The annual reports also show the DoN has failed to complete a number of other key actions according to timelines prescribed in the biological opinions. In particular, the DoN was required to have built a fence to create the Northwest Field Ungulate Control Area within two years of awarding a contract to remove the "Ritidian Ungulate Fence" constructed by the Air Force. 2015 Biological Opinion at 38, 2017 Biological Opinion at 40. DoN has failed to remove all ungulates as required. According to the annual reports, the contracts were awarded in August 2017 and the fence was partially removed in 2019, but the new fence was not completed until March 2021 and ungulates have yet to be completely removed. DoN 2018 Annual Report, December 13, 2018, DoN 2021 Annual Report with Service comments December 9, 2021.

The DoN's delay in completing the fence resulted in there being no fence for two years in this important area. Guam's plants and animals did not evolve with any ungulates, including pigs (*Sus scrofa*), Philippine deer (*Rusa marianna*), and Asiatic water buffalo (*Bubalis bubalis*) that have been introduced to Guam. Delay in completion of the fence and removal of ungulates has therefore caused real harm to Guam's endangered species. Abbabang, for example, only use two host plants that are both eliminated by grazing, meaning that the continued presence of ungulates has resulted in ongoing loss of habitat and harm to the species. The delay has also contributed to the DoN's

failure to propagate and outplant 30 offspring of the sole remaining hâyun lågu, as required by the 2015 biological opinion, because seedlings of the tree cannot withstand grazing. Given the lack of success in outplanting, the DoN should not be moving forward with the machine gun range that poses an existential threat to the last hâyun lågu.

The 2015 Biological Opinion also required the DoN to install a barrier to exclude brown tree snakes from 160 acres “after the current experimental suppression activities within the Habitat Management Unit (HMU) has been determined to be successful.” 2015 Biological Opinion at 39. Once this fencing was complete and brown tree snakes controlled, the DoN was required to install a second brown tree snake barrier to exclude brown tree snakes from an additional 140 acres for a total of 300 acres. The DoN worked with and funded the U.S. Department of Agriculture Wildlife Services to test brown tree snake control in the HMU, leading to a 2016 report that unequivocally concluded brown tree snakes could be successfully suppressed.³ This report should have triggered construction of the 160-acre barrier, yet six years later it is still not built. In its 2021 annual report, the Navy represented that the contract for building this barrier has been awarded with an expected completion of 2023. This is encouraging, but such a substantial delay is of considerable concern because this measure is a very small step towards the landscape-level suppression of the brown tree snake that is needed for reintroduction of the three birds and survival and recovery of the fanihi. Without such landscape-level control, these species remain on critical life support with much more action needed if they are to survive.

In sum, the DoN’s delay in completing important conservation measures and complete failure to protect 5,234 acres or to suppress brown tree snakes as required by the Service’s biological opinions puts the sihek, ko’ko’, åga, fanihi, as well as Guam’s other threatened and endangered species in immediate jeopardy.

III. Decline in the Status of Listed Species Since Conclusion of Consultation

As discussed above, despite the DoN having completed nearly all the construction for the marine relocation, it has not implemented many of the key conservation measures set forth in the biological opinions. As a result, several of Guam’s endangered species are in worse shape now than they were before. In 2020, the Service completed five-year reviews for all of the species impacted by the relocation, detailing the current status of populations, threats, and progress towards recovery. In every case, the species face unmitigated or worsening threats with little progress towards recovery. DoN’s ongoing construction and training activities have increased imperilment of Guam’s endangered species, particularly the three extirpated birds and fanihi, and have demonstrated the DoN’s lack of conservation action for the species, thereby affecting the species in a manner not previously considered. In the following discussion, we detail the status of all the species found to be adversely affected by the marine relocation.

Sihek. These beautiful birds were extirpated in the wild by 1988 and are currently maintained in captivity based on capture of 29 birds in 1986. Between 1990 and 2003, the captive population

³ Dorr, Brian S., Clark, Craig S., and Savarie, Peter. 2016. Aerial Application of Acetaminophen-treated Baits for Control of Brown Treesnakes. USDA/Wildlife Services/National Wildlife Research Center, Starkville, MSUSDA/Wildlife Services, Honolulu, HI.

hovered around 61 birds due to “high mortality and poor reproductive success.” 2020 Sihek Five-year Review, Short Form Summary at 1. The population reached a peak of 157 birds in 2014, but has since declined to 135 birds because of lack of space in the 25 institutions where they are housed. This number is well below what is considered a minimum viable population and inbreeding depression is considered likely, with the five-year review concluding: “suggested inbreeding depression reinforces the need to increase the captive population size to reduce the rate of increase in inbreeding and loss of genetic diversity into the future.” 2020 Sihek Five-year Review, Short Form Summary at 3. The sihek also continues to face unmitigated threats, with the five-year review concluding that remaining habitat is “still threatened by development, military activities, and ungulate impacts,” that “techniques for large-scale control of BTS are still under development,” and that recovery goals “have not been met.” 2020 Sihek Five-year Review, Short Form Summary at 3. Finally, the five-year review noted that in 2015, the taxonomic status of sihek had been elevated from a subspecies to a full species (*Todiramphus cinnamominus*), 2020 Sihek Five-year Review, Short Form Summary at 2, meaning that birds from other islands in Micronesia will not be able to support the recovery of the species on Guam.

Ko’ko’. Extirpated on Guam by 1985, ko’ko’ survives as a captive population and two populations established on Rota and Cocos Island. The captive population stands at 116 birds, the population on Rota is estimated at 200 birds, which is an increase over previous years, and the population on Cocos Island is estimated at 24 birds and considered “stable, but not growing.” 2020 Guam Rail 5-year Review, Short Form Summary at 2. According to the 5-year review, population goals for ko’ko’ “have not been met, but the population is at full capacity in captivity.” Given that these populations are well under what is considered the minimum to be viable, the lack of ability to grow the captive population is of concern.⁴ This concern is heightened by the fact that ko’ko’ “is still threatened by human disturbance, predation, and other factors” and “remains in danger of extinction.” 2020 Guam Rail 5-year Review, Short Form Summary at 3.

Since the 2020 review was completed, a substantial new threat was documented with discovery of brown tree snakes on Cocos Island. See: [Invasive brown tree snake found on Cocos Island](#), Staff Reports, Pacific Daily News USA Today Network, November 6, 2020. Given the threat posed by brown tree snakes to ko’ko’ and other species, their interdiction on Guam is a requirement of all three biological opinions. The DoN’s failure to keep brown tree snakes from spreading to Cocos Island constitutes new information showing impacts of relocation not previously considered and represents a major new threat to the species. In addition, the 5-year review identified mortality of “at least one adult Guam rail and one nest on Cocos” to vehicle strikes from the one resort on the island as a new threat. These two new threats in combination with new information that the captive population has reached capacity in the facility where it is housed all provide a grim outlook for the species if no immediate action is taken.

Åga. The last known åga born on Guam was observed in 2001. An attempt to reintroduce the species from birds captive-reared on Rota failed when the population declined from 10 birds in 2006 to three in 2008 and then one male last seen in 2012. 2020 Mariana crow 5-year Review,

⁴ Traill, Lochran W., Bradshaw, Corey J.A. and Brook, Barry W. 2007. Minimum viable population size: A meta-analysis of 30 years of published estimates. *Biological Conservation*, 139: 159-166.

Short Form Summary at 2. The Service noted that brown tree snake predation played a significant role in this decline and eventual loss, as did habitat destruction and disturbance from military activities and other development. 2020 Mariana crow 5-year Review, Short Form Summary at 4.

The population on Rota has also declined from 1,318 birds in 1982 to 592 in 1995 to 234 in 1999 and finally to 50-60 breeding adults in 2008, where its population has remained ever since. 2020 Mariana crow 5-year Review, Short Form Summary at 3. This critically low population leaves åga on the brink of extinction.

The 5-year review identifies human development, persecution, and cat predation as factors in declines on Rota, but also recognizes a new threat that is limiting recovery. The disease known as Aga Eucaryote X (“AEX”) “causes illness and death through systemic inflammation, anemia, and pneumonia” and “was recently identified as a major mortality factor.” 2020 Mariana crow 5-year Review at 3, 5. Among other recommendations, the 5-year review identifies the need for “support for current, ongoing investigations” into what is causing AEX, which is killing so many åga, and highlights the need to “set aside and protect recovery areas for Mariana crow on Guam.” 2020 Mariana crow 5-year Review at 6. While the cause of AEX is unknown, its emergence underscores the need for urgency in increasing åga’s population size by providing and protecting habitat on Guam as set forth in the biological opinions. This new threat also provides yet another basis for reinitiation of consultation.

Fanihi. The fruit bat is found across the Mariana Islands, but only Rota currently supports a substantial population that can be considered “to meet recovery criteria.” 2020 Mariana fruit bat 5-year review, Short Form Summary at 5. Through the 1980s, Guam supported 400-800 fanihi found in a single colony in northern Guam, which has since been abandoned—likely due to military training activities. 2017 Biological Opinion at 90. Although there are currently no colonies, the most recent survey found roughly 82 bats on Guam. 2020 Mariana fruit bat 5-year review, Short Form Summary at 4.

Like sihek, the taxonomy of fanihi has changed with bats outside the Mariana Islands now considered a separate species, making the species even more imperiled. Fanihi also continues to face threats from development. On both points, the 5-year review concludes:

Although the species is stable overall, its range is contracting due to development, and if the subspecies is considered to be a new species the range will naturally change from that as well to only encompass the Mariana islands. In addition, all threats are not being sufficiently managed throughout all of the populations.

2020 Mariana fruit bat 5-year review, Short Form Summary at 5.

Håyun lågu. Among the largest trees in limestone forests of the Marianas, håyun lågu could not be any more endangered on Guam, with just one mature tree left and no successful reproduction due to ungulate grazing unmitigated by the DoN. The DoN has begun construction on the live-fire machine gun range that will clear the forest near this tree, leaving it vulnerable to typhoons and stray bullets. During construction, an equipment fire very near the tree had to be extinguished on

May 15, 2022, highlighting the degree of threat to the tree (See: https://www.youtube.com/watch?v=FZz_B8faVdE).

According to the Service’s 5-year review, recent genetic studies “showed a clear genetic differentiation between” h̄ayun l̄agu populations on the two islands where they are found. 2020 5-Year review, Short Form Summary, *Serianthes nelsonii*. This is significant new information that provides added importance to ensuring the survival of the last h̄ayun l̄agu on Guam, as it is unique and irreplaceable.

Abbabang, fragile, Guam and humped tree snails, three orchid species, three additional tree species. The remaining 10 listed species on Guam, as well as the species discussed above, are all threatened by increased frequency and intensity of typhoons related to climate change. The three biological opinions recognized typhoons as a threat to the remaining forest on Guam in which all the listed species are found, but only gave passing consideration of the increased severity of this threat related to climate change, relying on models from 2008. The Service’s 2020 five-year reviews for Guam’s listed species in almost all cases recognized increased typhoons related to climate change as a major threat. The five-year review for the orchid *Bulbophyllum guamense*, for example, concludes in a section on “[t]yphoons and climate change degradation or loss of habitat”:

The Mariana Islands lie in the world’s most prolific typhoon basin. Typhoons cause a number of impacts to native species and native ecosystems. Disturbed or destroyed vegetation due to typhoons modifies light availability and creates space for invasion by nonnative pest species and nonnative plant species that compete for space, water, and nutrients, and alter basic water and nutrient cycling processes (USFWS 2015). The impacts of climate change on *B. guamense* are not well understood but climate change has had impacts in the tropical Pacific generally. Anticipated weather regime changes are likely to be one of the direct climate change impacts to *B. guamense* as well as possibly exacerbating the effects of other threats.

2020 *Bulbophyllum guamense*, Five-year Review, Summary and Evaluation at 9.

Five-year reviews for several of the other Guam endangered species have similar language. There is substantial new information on the threat posed by climate change driven increases in typhoon occurrence and severity. In a recent study, for example, Bloemendaal et al. (2022) found that the probability of intense tropical cyclones “more than doubles” between 2015 and 2050. This new information requires increased urgency on the part of the DoN to mitigate its activities and affect recovery of Guam’s severely endangered plants and animals.

VIOLATIONS

I. DoN is jeopardizing listed species in violation of ESA Section 7

Section 7 of the ESA makes it unlawful for any agency to take action that would jeopardize the continued existence of any listed species. Through Section 7 consultation with the Service, agencies must “insure that any action authorized, funded, or carried out by such agency . . . is not likely to jeopardize the continued existence of any endangered species or threatened species or

result in the destruction or adverse modification of habitat of such species which is determined . . . to be critical.” 16 U.S.C. § 1536(a)(2). Here, DoN committed to, and the Service identified and relied on, specific mitigation measures that were necessary to prevent jeopardy, including: the protection of 5,234 acres of sihek habitat on DoN lands in northern Guam to support reintroduction of the species; construction of a fence to replace the Ritidian ungulate fence constructed by the Air Force within two years of awarding a contract for destruction of the previously constructed fence and completing ungulate removal within six months; and to propagate, outplant, and “maintain” outplanted seedlings to ensure their growth into adulthood of the hâyun lãgu and other listed plants, including the host plants for the abbabang; and the removal of brown tree snakes and installation of a barrier to exclude the same.

However, DoN has failed to implement these vital measures, and has thereby violated the commitments relied on by the Service and/or the terms and conditions of the biological opinions, resulting in ongoing harm to protected species that are adversely affected by DoN’s development and military activities. As discussed herein, DoN’s delay in completing important conservation measures that it committed to, and complete failure to protect 5,234 acres or to suppress brown tree snakes as required by the Service’s biological opinions puts the sihek, ko’ko’, åga, fanihi, and Guam’s other threatened and endangered species in immediate jeopardy. By ignoring the measures that the Service found necessary to comply with the agency’s duty pursuant to Section 7, DoN has failed to ensure against jeopardy of these species, which constitutes a clear violation of the ESA. 16 U.S.C. § 1531(a)(2). Furthermore, DoN’s inability to implement these required measures shows that it does not have a program in place for the conservation of endangered species and threatened species, as Section 7 requires. 16 U.S.C. § 1531(a)(1).

In addition, we were recently informed that clearing has commenced on the machine gun range in the vicinity of the last hâyun lãgu on Guam. This poses a severe risk of jeopardizing the continued existence of the species. And as discussed above, DoN has not successfully outplanted hâyun lãgu, and does not appear to have measures in place to ensure the continued existence of the very last mother tree for this species on the entire island. The clearing of sacred and pristine forest land—for a machine gun range—therefore directly jeopardizes hâyun lãgu in violation of Section 7 of the ESA.

II. DoN is in violation of ESA Section 9

Pursuant to ESA Section 9, it is unlawful to engage in any activity that causes the “take” of an endangered or threatened species. While DoN was provided with incidental take coverage through Section 7 consultation, it is well settled that failure to comply with the terms and conditions of a biological opinion open up the offending agency to ESA take liability.⁵ Courts have found that a violation of an ITS’s terms “abrogates the safe harbor provision of the ITS.”⁶ Thus, if the covered

⁵ See *Bennett v. Spear*, 520 U.S. 154, 170 (1997); *Nat’l Wildlife Fed’n v. Nat’l Marine Fisheries Serv.*, 481 F.3d 1224, 1230 (9th Cir. 2007); *Mount Graham Red Squirrel v. Espy*, 986 F.2d 1568, 1580 (9th Cir. 1993) (held that violation of an ITS would remove protective coverage from take liability).

⁶ *Or. Natural Desert Ass’n v. Tidwell*, 716 F. Supp. 2d 982, 995 (D. Or. 2010); see also *South Yuba*, 629 F. Supp. 2d at 1132.

party does “not comply with all of the terms of the Biological Opinion, they would not be protected by the Biological Opinion’s safe harbor” and would be subject to take liability.⁷ This includes the action agency, which disregards an ITS “at its own peril (and that of its employees).”⁸ Here, as set forth above, DoN has failed to comply with several vital conservation measures set forth in the biological opinions. As such, DoN has invalidated its take coverage, and is liable for any ongoing harm to listed species. This includes, for example, the construction of the machine gun range that poses a threat to the last hâyun lâgu by exposing it to fires, typhoons and stray bullets, among other things, and the take of abbabang from DoN’s construction activities and failure to construct the ungulate fencing.

III. DoN and the Service are required to reinitiate consultation

ESA consultation must be reinitiated when “new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered,” or where the action is “subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in the biological opinion.” 50 C.F.R. § 402.16. As discussed above, there are several reasons why reinitiation is required here. This includes DoN’s failure to comply with the conservation commitments it made to the Service as part of the agency action and the conditions set forth in the biological opinions, which indicates that the action has been modified in a manner that causes effects to listed species that were not considered in the biological opinion. This requires that DoN reinitiate consultation to consider the current status of the marine relocation, the impacts that occurred due to DoN’s failure to comply with the required conservation measures while undertaking the relocation, and what additional measures are now necessary to address such failures.⁹

Furthermore, new information from the 2020 5-year reviews for the listed species on Guam requires reinitiation of consultation. This includes the declining status of several listed species discussed above, which shows that new information bears on the impacts of the relocation on the ability of such species to recover. Indeed, the latest information on these species shows that several are well below what is considered a minimum viable population.

There are also new threats, including the impacts of AEX on âga, increased typhoons that devastate listed species’ habitat, new information regarding DoN’s failure to keep brown tree snakes from spreading to Cocos Island, and new information regarding genetic differentiation between populations on different islands, such as hâyun lâgu, showing that individuals on Guam

⁷ *Dow AgroSciences LLC v. Nat’l Marine Fisheries Serv.*, 637 F.3d 259, 260 (4th Cir. 2011).

⁸ *Bennett v. Spear*, 520 U.S. at 170.

⁹ Importantly, courts have found that a violation of a biological opinion is not merely a violation of a permit; it is also a violation of a statutory provision. *See South Yuba River Citizens League v. Nat’l Marine Fisheries Serv.*, 629 F. Supp. 2d 1123, 1133 (E.D. Cal. 2009) (“[w]hen an agency violates the terms of an ITS, a private party may bring a citizen suit alleging that by virtue of this violation, the agency’s failure to reinitiate consultation violates the agency’s statutory duty under ESA section 7(a)(2).”). Courts have therefore held that a violation of the terms and conditions obligates the action agency to reinitiate consultation. *Id.* at 1132-33.

are unique and irreplaceable. This constitutes new information showing impacts of relocation not previously considered and represents significant new threats to the species, necessitating reinitiation of consultation.

IV. No further activities can occur until DoN complies with Section 7 of the ESA

Allowing activities that may affect listed species, including land-clearing, to occur absent compliance with the requirements of Section 7(a)(2) of the ESA is in direct violation of Section 7(d), which prevents any irreversible or irretrievable commitment of resources that would foreclose the formulation or implementation of any reasonable and prudent measures to minimize take of listed species prior to completion of Section 7 consultation.¹⁰ Allowing such activities would harm and even eradicate the habitats that protected species depend upon for survival, and potentially limit available measures to minimize take of the species, such as the preservation of specific areas as buffers. DoN must therefore not engage in any land clearing or other activities resulting in loss or impairment of habitat for listed species, in particular the area associated with the machine gun range that poses an immediate threat to the last hãyun lãgu, in order to preserve the current habitat status quo, until it complies with its duties pursuant to Section 7 of the ESA as discussed herein.

IV. Conclusion

In sum, DoN's failure to complete key mitigation measures to compensate for the harm of relocation of 5,000 marines and related construction on Guam's remaining limestone forests and the many endangered and threatened species that depend on them is resulting in the unlawful take of listed species and constitutes a failure of the DoN to meet its duties to avoid jeopardy and carry out a program for the conservation of listed species in violation of the ESA. The DoN is also in violation of the ESA for failing to reinitiate consultation in response to considerable new information regarding the status of species harmed by its activities. If the DoN does not remedy these violations in the next 60 days, we intend to file suit in federal court.

Sincerely,

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¹⁰ 16 U.S.C. § 1536(d).

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