

**Written Public Comments during the 60-day
public comment period for the
Draft Kaheawa Wind Power I Habitat
Conservation Plan**

Earthjustice Amended Comments from October 7, 2025:

Submitted written comments from Earthjustice from September 17, 2025 are contained within these amended comments



October 7, 2025

Via Electronic Mail

Department of Land and Natural Resources,
Division of Forestry and Wildlife
1151 Punchbowl Street #325, Honolulu, HI 96813
Blnr.testimony@hawaii.gov

cc:

Kinsley McEachern
DOFAW Protected Species Habitat
Conservation Planning Associate
Laurinda.k.meachern@hawaii.gov

Jason Omick
Department of Land and Natural Resources
Wildlife Biologist
Jason.d.omick@hawaii.gov

Molly Stephenson
Kaheawa Wind Power, LLC,
Molly.stephenson@terraformpower.com

Troy Rahmig
Tetra Tech
Troy.rahmig@tetrattech.com

Leslie McClain
Tetra Tech
Leslie.mcclain@tetrattech.com

Re: Comment on Proposed Draft Habitat Conservation Plan for
Kaheawa Wind Power I on the Island of Maui

To Whom It May Concern,

On behalf of the Center for Biological Diversity and Conservation Council for Hawai'i, Earthjustice submits this comment on the Draft Kaheawa Wind Power I ("Kaheawa I") Habitat Conservation Plan ("Draft HCP"). While we fully support wind energy as a non-fossil-fuel alternative, it is vital that Hawai'i wind farms adhere to the requirements set forth in the Endangered Species Act ("ESA") and Hawai'i state law to ensure that such renewable energy production avoids take of Hawai'i's critically imperiled species to the "maximum extent practicable." To comply with both state and federal law, Kaheawa I's HCP must require implementation of low wind speed curtailment ("LWSC") with cut-in speeds of 6.5 meters per second ("m/s") or higher, as recommended by the Endangered Species Recovery Committee's guidance for minimizing 'ōpe'ape'a take.¹ Kaheawa I's HCP must also require that the project

¹ See Endangered Species Recovery Committee ("ESRC") and State of Hawai'i DLNR, Division of Forestry and Wildlife, *Hawaiian Hoary Bat Guidance for Wind Energy Project Habitat*

use lighting that minimizes seabird and bat light distraction and install bird diverters on any transmission lines that are part of the project. Additionally, we share the concerns expressed in the Division of Forestry and Wildlife's ("DOFAW's") staff submittal that (1) the draft HCP fails to include a fully-developed 'ōpe'ape'a mitigation plan and (2) Kaheawa I is currently lagging in complying with the nēnē mitigation requirements of its existing HCP.² Furthermore, Kaheawa I's HCP should require daily searches with a 20% buffer beyond the 70 meter radius ("m") searcher area in the initial years of the new permit term to ensure the accuracy of the project's fatality monitoring and take estimates. Overall, the draft HCP fails to ensure that the cumulative impacts of Kaheawa I's proposed activities will provide a "net environmental benefit," as HRS § 195D-4(g)(8) mandates.

I. CUT-IN SPEEDS SHOULD BE INCREASED TO AT LEAST 6.5 M/S.

The ESA and Hawai'i law both provide that incidental take authorization can be issued only if an HCP, among other things, minimizes and mitigates the impacts of any incidental take of endangered and threatened species to the "maximum extent practicable." 16 U.S.C. § 1539(a)(2)(B)(ii); *see also* Haw. Rev. Stat. § 195D-4(g). The ESRC's bat guidance provides, based on the best available science, that "a cut-in speed of 6.5 m/s may be the most effective" in minimizing 'ōpe'ape'a take.³ The guidance further provides that "higher cut-in speeds up to or exceeding 6.5 m/s [are] necessary when the cumulative take of bats poses a risk to island populations."⁴ Due to the cryptic nature of the 'ōpe'ape'a and the corresponding difficulty in monitoring them, it is generally accepted that it is not feasible to determine an actual population estimate.⁵ While ESRC guidance suggests assuming that the population of 'ōpe'ape'a on Maui is not more than 1,500, the accuracy of this population assessment is questionable as it is based on "extremely limited information."⁶ Furthermore, there has been no island-wide survey conducted for 'ōpe'ape'a on Maui, and estimates of population size and trends are unknown. Draft HCP at 29.

Kaheawa I's draft HCP fails to comply with the mandate to minimize take to the maximum extent practicable. Any take of 'ōpe'ape'a poses a "risk to island populations," especially when population sizes and trends are completely unknown. The draft HCP proposes

Conservation Plans ("Bat Guidance"), Third Edition Draft, at 29 (Feb. 2024), *available at* https://dlnr.hawaii.gov/wildlife/files/2024/03/Draft-HHB-Guidance_Revised_2024-ESRC-for-comment.pdf (last visited Sep. 16, 2025).

² David Smith, *Division of Forestry and Wildlife Evaluation of the Draft New Kaheawa Wind Power I Habitat Conservation Plan* at 6 (Aug. 20, 2025), *available at* <https://dlnr.hawaii.gov/wildlife/files/2025/08/ESRC-submittal-draft-HCP-KWP.pdf> (last visited Sep. 15, 2025).

³ ESRC, *supra* note 1, at 29.

⁴ *Id.*

⁵ *Id.* at 9-10.

⁶ *Id.* at 21.

implementing LWSC cut-in speeds of 5.5 m/s annually, from February 15 through December 15, as the facility has done since 2014. Draft HCP at 34, 72. It is well established, however, that a 5.5 m/s cut-in speed results in significant harm to ‘ōpe‘ape‘a at Kaheawa I, with five documented ‘ōpe‘ape‘a fatalities at the facility since it implemented that cut-in speed. *See* Draft HCP at 33-34. Additional fatalities and other take undoubtedly have occurred but have not been documented.⁷

Rather than maintain the status quo with cut-in speeds that continue to cause ‘ōpe‘ape‘a take, Kaheawa I’s cut-in speeds must be raised to 6.5 m/s or higher to comply with the ESA and HRS chapter 195D. Nowhere in its draft HCP has Kaheawa I carried its burden to establish that raising its cut-in speed would not be practicable.⁸ That other wind facilities on Maui have implemented higher cut-in speeds strongly supports the conclusion that increasing the LWSC to minimize take of ‘ōpe‘ape‘a is, in fact, practicable. For example, another Maui wind farm, Auwahi Wind, has implemented LWSC with a cut-in speed of 6.9 m/s since 2018.⁹

To comply with the ESA and HRS chapter 195D, Kaheawa I must likewise implement LWSC with cut-in speeds of 6.5 m/s or higher to minimize its ‘ōpe‘ape‘a take to the maximum extent practicable. Insisting that Kaheawa I implement the maximum practicable minimization of ‘ōpe‘ape‘a take is particularly vital given the uncertainties regarding the effectiveness of take mitigation measures.¹⁰ Far better to avoid take whenever practicable in the first place than to try to offset harm to this critically imperiled species using measures of questionable efficacy.

II. USE LIGHTING THAT MINIMIZES LIGHT DISTRACTION.

The draft HCP does not include all best management practices (“BMPs”) for minimizing seabird and bat take caused by artificial lighting. Artificial lights are known to attract and disorient nocturnal seabirds,¹¹ causing fallout and putting seabirds at risk of predation, vehicle

⁷ ESRC, *supra* note 1, at 15 (“Fatality monitoring may not detect all bats killed or wounded at wind farms as some individuals may: 1) fall outside the searched area; 2) be removed by scavengers before being detected; 3) deteriorate beyond recognition prior to detection; or 4) remain undiscovered by searchers even when present.”)

⁸ The ESRC’s guidance requires that wind facilities include in their HCPs “a detailed description of all considerations used (including economic) to develop a cut-in speed for curtailment.” *Id.* at 29.

⁹ Tetra Tech, *Auwahi Wind Farm Habitat Conservation Plan Final Amendment*, at 1-1 (2019), available at https://dlnr.hawaii.gov/wildlife/files/2020/01/Auwahi-Wind-HCP-Amendment-FINAL_7-29-2019-BLNR-Amendment.pdf (last visited Aug. 20, 2025).

¹⁰ ESRC, *supra* note 1, at 34.

¹¹ *See* Xuebing Zhao, et al., *Blue light attracts nocturnally migrating birds*, 122 THE CONDOR: ORNITHOLOGICAL APPLICATIONS (May 5, 2020) available at <https://academic.oup.com/condor/article/122/2/uaa002/5780833> (last visited Sep. 23, 2025).

collisions, and starvation.¹² These types of lights may also attract insects and thereby attract ‘ōpe‘ape‘a, which feed on these light-attracted insects.¹³ The draft HCP provides that the project will “continue to implement best management practices regarding lighting at facilities.” Draft HCP at 73. These BMPs include fully shielding outdoor lights, installing automated motion sensors, integrating polytape on fences for visibility, and avoiding nighttime construction. *Id.* These BMPs, however, do not include using specific types of lighting to minimize wildlife attraction.¹⁴

In addition to the BMPs for lighting discussed in the draft HCP, Kaheawa I’s HCP must require use of outdoor night-time lighting with less than 2% spectral content between 400 & 500 nanometers. As discussed by seabird experts, this type of lighting would help minimize ESA-listed seabird take caused by light attraction.¹⁵ Maui County’s lighting ordinance also mandates the use of outdoor lighting fixtures with low-blue-light content.¹⁶

III. TRANSMISSION LINES MUST BE EQUIPPED WITH BIRD DIVERTERS.

Transmission lines are known to cause take of ESA-listed seabird on Maui.¹⁷ Kaheawa I’s HCP must include measures to minimize seabird take caused by transmission lines on the project property. The draft HCP provides that the project area includes “Hawaiian Electric transmission lines that cross through the lease area[.]” Draft HCP at 12. As part of minimization efforts, the draft HCP provides that the project has located itself in proximity to existing electrical transmission lines to eliminate the need for an overhead transmission line, placed new power collection lines underground, and designed its site substation to connect to Maui Electric Company (“MECO”) transmission lines to reduce the possibility of wildlife electrocutions. Draft HCP at 70. Diverters can and should be installed on powerlines to minimize seabird take, and MECO, for example, is installing diverters on its powerlines located in seabird flyways across

¹² Department of Land and Natural Resources (“DLNR”), *Help Protect Hawai‘i’s Seabirds – Turn Off Unneeded Night Lights and Look Out for Downed Seabirds* (Nov. 15, 2017) <https://dlnr.hawaii.gov/dofaw/fw-announcements/nr17-183f/> (last visited Oct. 1, 2025).

¹³ See ESRC, *supra* note 1, at 43.

¹⁴ For example, DLNR recommends yellow “bug” lights be used in residential homes to avoid attracting wildlife. See, e.g., DLNR, *Wildlife Lighting*, available at <https://dlnr.hawaii.gov/wildlife/files/2016/03/DOC439.pdf> (last visited Oct. 1, 2025).

¹⁵ See Jay Penniman, Maui Nui Seabird Recovery Project, *Testimony regarding the Publication of the Draft Environmental Impact Statement for the Kaheawa Wind 1 Continued Use Project (Proposed Action)* (Sep. 22, 2025).

¹⁶ See Maui Cnty. Code § 20.35.060(D).

¹⁷ Hawaiian Electric, *Hawaiian Electric to install bird diverters using drones in Launiupoko* (Dec. 13, 2024) <https://www.hawaiianelectric.com/hawaiian-electric-to-install-bird-diverters-using-drones-in-launiupoko> (last visited Oct. 7, 2025).

Maui.¹⁸ If the powerlines in the project area are a part of the project, the draft HCP must be revised to include the installation of diverters on transmission lines located on the Kaheawa I property to minimize seabird take.

IV. DELAYED 'ŌPE'APE'A MITIGATION.

Kaheawa I's draft HCP proposed bat mitigation is incomplete because the project has not yet determined its final locations for bat mitigation. Draft HCP at 20. Instead, all we know at this point is that Kaheawa I's anticipated proposed bat mitigation will occur somewhere "within the geographic region of Maui Nui."¹⁹ Draft Environmental Impact Statement ("DEIS") at 32-33. Locations on Moloka'i and Lāna'i are likely mitigation sites, as the project has established the presence of bats with acoustic detectors and has established a relationship with landowners on these islands, but what mitigation will happen and where, is still unknown. *See* Draft HCP at 20; DEIS at 36.

We share the concerns expressed in DOFAW's staff submittal that, without a developed mitigation plan and designated mitigation site(s) prior to HCP approval, take of 'ōpe'ape'a could occur before mitigation can be implemented.²⁰ To satisfy the minimum requirements for issuance of incidental take authorization, Kaheawa I's HCP must have a fully developed bat mitigation plan. The Board may issue a temporary license as part of an HCP only if the plan "increase[s] the likelihood that the species will survive and recover" and "the cumulative impact of the activity, which is permitted and facilitated by the license, provides net environmental benefits." HRS § 195D-4(g)(4), (8). Without a complete mitigation plan, the HCP would authorize take of 'ōpe'ape'a with no guarantee that such take will be mitigated, which fails to provide the requisite "net environmental benefit" for the species.²¹

To address the acknowledged absence of a complete mitigation plan, the draft HCP provides that, if mitigation actions have not been initiated by January 2028, the acreage of mitigation will increase by 5% each year until mitigation actions are initiated. Draft HCP at 107. Even if deferring the mitigation plan's completion until after HCP approval were legal (and it is not), the draft HCP fails to take into account that Kaheawa I's mitigation duties commence as soon as its incidental take authorization takes effect. Under no circumstances should Kaheawa I be given a grace period to take 'ōpe'ape'a without mitigation efforts in place. Even if the Board were inclined to approve Kaheawa I's HCP in the absence of a complete mitigation plan (and it should not), the final HCP must provide that the 5% per year increase in mitigation acreage

¹⁸ *See id.*

¹⁹ "Maui Nui" includes the islands of Maui, Moloka'i, Lāna'i, and Kaho'olawe.

²⁰ Smith, *supra* note 2, at 6.

²¹ "Net benefit to Covered Species means achieving mitigation that result[s] in a net increase in individuals compared to the permitted amount of take of the Covered Species (i.e., mitigation offset is greater than permitted take)." DEIS at 6 n.15; ESRC, *supra* note 1, at xiii, n.3.

penalty applies for *every year* mitigation actions have not been initiated, beginning at the start of the permit term.

Kaheawa I must also revise its HCP to prioritize mitigation initiatives on the island of Maui. The draft HCP contains no data or other information establishing that ‘ōpe‘ape‘a travel between the islands of Maui Nui. There is likewise nothing in the draft HCP to indicate that mitigation initiatives that occur on Moloka‘i or Lāna‘i—even if beneficial to ‘ōpe‘ape‘a populations on those islands—would mitigate take inflicted on ‘ōpe‘ape‘a populations on Mauna Kahālāwai, where the project is located.

Finally, the uncertainty in the development and implementation of Kaheawa I’s bat mitigation plan provides further support for requiring implementation of all practicable take minimization measures, including increasing cut-in speeds to at least 6.5 m/s. As noted above, it is better to avoid take in the first place, rather than rely on uncertain mitigation measures to offset it.

V. LAGGING NĒNĒ MITIGATION.

The draft HCP acknowledges that Kaheawa I is lagging in its mitigation obligations for nēnē, having achieved only 50.3 mitigation credits, short of its mitigation obligation of 60 under the current permit. Draft HCP at 165.²² Pursuant to HRS § 195D-21(d)(1), the Board is required to “suspend or revoke the approval of any habitat conservation plan approved under this section if the board determines that . . . [a]ny parties to the plan . . . have breached their obligations under the plan . . . and have failed to cure the breach in a timely manner, and the effect of the breach is to diminish the likelihood that the plan will achieve its goals within the time frames or the manner set forth in the plan.” Moreover, “[a]ny person whose license has been revoked shall not be eligible to apply for another license until the expiration of two years from the date of revocation.” HRS § 195D-4(h).

Because it is biologically impossible for Kaheawa I to fulfill its nēnē mitigation obligations before the expiration of its current incidental take license, Kaheawa I has violated its duty to achieve its current HCP’s mitigation goals in a timely manner. *See* Draft HCP at 165; DEIS at 153. Despite this violation, which should trigger its ineligibility to apply for another license, Kaheawa I now seeks 23 more years of take coverage for nēnē. Draft HCP at 165. Even if the Board were inclined to ignore HRS § 195D-21(d)(1) and approve a new HCP and incidental take license for Kaheawa I—notwithstanding its failure timely to achieve its nēnē mitigation credits for the current permit term—the Board should insist that the new HCP impose a penalty in the form of an increased mitigation responsibility for every year that Kaheawa I fails to fulfill its mitigation obligation from its current permit term. The new HCP must also include adequate

²² *See also* Smith, *supra* note 2, at 6.

assurances that Kaheawa I will not fall behind in achieving mitigation credits in its new permit term.

VI. ENSURE ACCURACY OF FATALITY ESTIMATES

To ensure the accuracy of its fatality estimates, Kaheawa I's HCP must be revised to ensure that fatality monitoring is conducted more frequently, in a wide enough search area, and using the best available science. The draft HCP provides that fatality monitoring will include an "approximately 7 day search interval . . . searching the graded, cleared, and maintained turbine pads and access roads that fall within a 70-m radius circle centered on each of the 20 turbines." Draft HCP at 96. This is not adequate monitoring frequency, and the monitored area should be expanded to ensure the accuracy of the search radius for Kaheawa I's postconstruction fatality monitoring.

First, Kaheawa I's HCP should require fatality monitoring to occur daily. 'Ōpe'ape'a are very small in size and weight, weighing "between 14 to 24 grams" and with "a wingspan of about 30 to 35 centimeters." Draft HCP at 28. Given the small size of 'ōpe'ape'a and the strength of the winds on Mauna Kahālāwai, searches must be conducted daily to ensure carcasses are not being scavenged by predators or carried away in strong winds. Kaheawa I's HCP should thus require daily searches around each turbine.

Second, Kaheawa I should extend its search area for the first few years of its permit term to verify that its search area coverage is adequate. The ESRC's bat guidance provides that "[a] 20% buffer can be added to the outer extent of search areas around turbines and searched during the initial few years of monitoring to ensure coverage is adequate."²³ Regardless of whether Kaheawa I implemented a 20% buffer in the early years of its previous permit term, its new HCP must include a 20% buffer in the initial few years of the new permit term to ensure that coverage is adequate and the project's take estimates are accurate. These changes are important for calculating more accurate incidental take numbers and overall take estimates.

Lastly, it is unclear whether Kaheawa I is using the best available scientific data to calculate its fatality estimates. HRS chapter 195D requires that an approved HCP "shall be based on the best available scientific and other reliable data available at the time the plan is approved." HRS § 195D-21(b)(1). Kaheawa I uses its own model, based on site-specific data, to calculate its fatality estimates. Draft HCP at 97-98. The U.S. Geological Survey ("USGS"), however, developed a widely accepted model for calculating accurate mortality estimates, known as the Generalized Mortality Estimator ("GenEst").²⁴ Kaheawa I should disclose the level

²³ ESRC, *supra* note 1, at 16.

²⁴ USGS, *GenEst – A Generalized Estimator of Mortality*, (Oct. 19, 2018) available at <https://www.usgs.gov/software/genest-a-generalized-estimator-mortality> (last viewed Oct. 7, 2025).


of take that the GenEst model would predict and justify why using the site-specific model instead provides the best scientific data for calculating fatality estimates for the project.

VII. CONCLUSION

While we recognize the importance of promoting renewable energy to end Hawai'i's dependence on fossil fuels, achieving Hawai'i's energy independence need not—and legally cannot—come at the expense of our imperiled native species. Before Kaheawa 1 receives a new permit authorizing it to kill and injure imperiled species, it must first comply fully with the ESA and Chapter 195D. The draft HCP falls short of the mark and must be revised to meet minimum legal standards.

Mahalo nui for the opportunity to submit testimony on this matter.

Respectfully submitted,



Harley M. Broyles
EARTHJUSTICE