STATE OF HAWAIʻI | KA MOKUʻĀINA ʻO HAWAIʻI
DEPARTMENT OF LAND AND NATURAL RESOURCES
KA ʻOIHANA KUMUWAIWAI ʻĀINA

DIVISION OF FORESTRY AND WILDLIFE
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November 25, 2025

Endangered Species Recovery Committee
State of Hawai‘i
Honolulu, Hawai‘i

SUBJECT: Request for Comments from the Endangered Species Recovery Committee regarding the revised draft *Kaheawa Wind Power I Habitat Conservation Plan for* Kaheawa Wind Power, LLC on the island of Maui

Dear Committee Members,

The Department of Land and Natural Resources, Division of Forestry and Wildlife (DOFAW), requests that the Endangered Species Recovery Committee (ESRC) review the draft *Kaheawa Wind Power I (KWP I) Habitat Conservation Plan* in accordance with the requirements outlined in Section 195D-25, Hawaii Revised Statutes. The proposed draft Habitat Conservation Plan (HCP) was prepared by KWP I as part of the obligations of the Kaheawa Wind Power Habitat Conservation Plan Application for a new State Incidental Take License on the island of Maui.

This submittal is a summary of the revised draft Habitat Conservation Plan and additional agency concerns and recommendations since the draft HCP was published on August 8, 2025, in *The Environmental Notice*.

Background:

ITL Applicant: Kaheawa Wind Power, LLC

Location: Kaheawa Pastures area of West Maui, Hawai‘i, within the Ukumehame ahupua‘a on land owned by the State of Hawai‘i.

(Note that Terraform Power/ Brookfield owns KWP I; in 2020 Brookfield Renewables merged with Terraform Power)

New Incidental Take License Proposed:

Project Proposed: Continued operation of twenty wind turbine generators (WTGs) with a total 30-megawatt (MW) energy-generating capacity.

ITL Duration Proposed: January 30, 2026 – January 2051 (25 years)

Summary of Requested Take:

The requested take is 69 nēnē, 38 ʻŌpeʻapeʻa, 28 ʻua ʻu, 10 ʻaʻo, and 10 ʻakēʻakē. The project requests impacts of up to 5 acres of suitable habitat for Assimulans yellow-faced bee.

KWP I Proposed Avoidance and Minimization Measures:

ʻŌpeʻapeʻa:

- Implement low-wind-speed curtailment at 6.5 m/s from sunset to sunrise during the bat pupping months of September and October.
- Explore redistribution of curtailment throughout the night to account for factors that increase or decrease the likelihood of bat strikes.
- Clearing trees taller than 15 feet should occur outside bat pupping season, or ensure trees are free of bat pups prior to cutting or trimming.
- Replace barbed wire with smooth wire to the greatest extent possible.
- Install five ground-based Wildlife Acoustics SM4 units with SMM-U2 microphones at the project site.

nēnē:

- Perform vegetation management twice a year to remove woody vegetation during nēnē nesting season, to increase fatality monitoring efficiency, and minimize impacts on native plants.
- Install traffic control measures, such as signage and speed bumps, to minimize vehicle conflicts.
- Implement measures to minimize canine interactions with nēnē.
- Place gosling guards on traps at mitigation sites during nesting season.
- Band and satellite track birds at the project site.

ʻuaʻu, ʻaʻo, and ʻakēʻakē:

- Mark guywires at the project site with high-visibility bird diverters.
- Collector lines at KWP I are buried, and there are no overhead transmission lines directly associated with the Project. Overhead transmission lines do occur within the project area: three Hawaiian Electric Transmission lines and a line associated with the adjacent KWP II facility that crosses Manawainui Gulch for approximately 1,225 ft (KWP II 2011). This line was historically marked with marker balls to reduce the risk to seabirds; however, wind conditions removed

the markers, and KWP II is in the process of replacing them. This line is not related to the KWP I wind farm.
- Outdoor light fixtures (unless otherwise exempt, such as FAA lighting) should limit short wavelength content to no more than 2 percent blue light.
- Equip turbines with red lights that are synchronized and comply with FAA regulations.
- All outdoor lights should be shielded so the bulb is visible only from below.
- Install automated motion-sensor switches and controls for all outdoor lights, which will turn them off when no human activity is detected in the area.
- Minimize nighttime lighting to that required for safety and security.

Assimulans yellow-faced bee:

- Limit disturbance to a total of 5 acres of assimulans yellow-faced bee habitat. This includes the area where ongoing maintenance and management of the wind farm site overlap with potential foraging and nesting areas for the assimulans yellow-faced bee.
    - These are the sections of the limits of disturbance that are vegetated. The remaining disturbance limits include existing turbine pads or roads (i.e., non-habitat), which may be surveyed during the 2026 active season.
    - Avoid direct take caused by soil compaction of occupied nest areas, which would only happen if nests were missed during surveys. High-density nest areas near turbine pads or roads may be marked with permanent signage, in coordination with DOFAW entomologists.
- Avoid removal or disturbance of native ilima, ʻuhaloa, and ʻūlei as much as possible. If work must be done, schedule it when these species are not flowering.
- Any native plants that need to be removed will be translocated and replanted in accordance with the Conservation District Use Permit Condition #37, which requires protecting native plants through removal, relocation, and replanting.
- Limit herbicide use and adhere to herbicide best management practices.
- Surveys for assimulans yellow-faced bees and their nests will be conducted by a qualified entomologist approved by DOFAW during the active bee season before major maintenance activities.

<u>KWP I Proposed Mitigation Measures:</u>

ʻōpeʻapeʻa:

- **Restoration and resource enhancement of approximately 819 acres on private property in Eastern Molokaʻi (sea level to 1,460 ft) - 5 management areas.**
    - Thinning of invasive species.
    - Planting of native trees and shrubs for bat roosting and foraging.
    - Installation of ungulate fencing.
    - Monitoring of invasive vegetation and out-planting success.
    - Acoustic monitoring - nightly calls and potential supplemental thermal imaging.

  - Prey species monitoring-arthropod sampling.
- **Restore and enhance resources on about 739 acres at a different location, preferably on Maui—focus on finding Maui-based projects during the first three years.**
  - KWP I is engaging in discussions with Hawai'i Land Trust about 358 acres of land, including 277 acres in West Maui and 81 acres in East Maui.
  - Enhance or restore habitat in areas known to support bat use, foraging, and reproduction.
  - Prioritize enhancing and restoring lower-elevation sites below 1,000 meters, based on known elevations for bat breeding.
  - Improve foraging and roosting resources by increasing native vegetation.
  - Implement monitoring to evaluate the effectiveness of these mitigation efforts: Investigate trends in forest cover and insect biomass and their correlation with bat activity.

- **Adaptive management**
  Decreasing bat activity levels in Year 5 of mitigation implementation will require follow-up measurements of bat activity and the following potential actions:
  - Install water feature(s).
  - Complete supplemental out-plantings of roost trees.
  - Complete additional thinning of Formosa koa or other trees.
  - Complete supplemental outplantings of species likely to attract bat prey species.

nēnē:

- **Continued management at Halekalā Ranch Pen and new management at Pu'u Hōkū Ranch Release Pen.**
  - Predator trapping and monitoring of pens.
  - Increasing adult and fledgling survival by maintaining pens for breeding nēnē.
  - Improve adult reproductive success and fledgling survival through satellite tracking and monitoring.
  - Vegetation management to create suitable nesting habitat.

'ua'u:

- **Continued management at the Lāna'ihale nesting site at Pūlama Lāna'i.**
  - Predator control, including trapping cats and rats.
  - Monitoring burrows with motion-activated cameras.
- **Potential alternative site on east Maui, at the Alpine Wildlife Sanctuary on state land managed by DOFAW.**
  - This is approximately 328 acres, enclosed by ungulate fencing, next to the Kula Forest Reserve, Kahikinui Forest Reserve, Kamehamenui Forest Reserve, Haleakalā National Park, and the Department of Hawaiian Homelands. The scope of work for this site includes predator trapping and burrow monitoring.

ʻaʻo:

- **Continued management at Makamakaʻole Seabird Preserve.**
    - Inspections and maintenance (repair) of the fence to exclude small mammalian predators.
    - Monitoring predator activity within the exclosure.
    - Predator trapping around the perimeter and inside the exclosure near the known ʻaʻo colonies.
    - Maintaining bait boxes and evaluating rodent populations.
    - Maintaining and deploying the social attraction playback system and decoys.
    - Monitoring burrows with game cameras and burrow inspection tools.

ʻakēʻakē:

- **National Fish and Wildlife Foundation funding to manage known breeding colonies - $45,000 per seabird.**
    - Predator fencing and predator control, including possible barn owl removal.
    - Social attraction and/or translocation of Hawaiian seabirds to protected areas.
    - Removing invasive plant species.
    - Monitoring seabird reproduction.

Assimulans yellow-faced bee.

- Protecting and restoring bee nesting and foraging habitat across approximately 10 acres.
    - Remove ironwood and control non-native vegetation near known nesting sites to protect the habitat of the assimulans yellow-faced bee and enhance nesting opportunities for the species. Out-plantings of foraging resources may be added, although some may naturally occur due to the existing presence of ʻilima in the area.
    - Using habitat acres instead of take was deemed appropriate for the assimulans yellow-faced bee after detailed consultation with species experts. Direct detection and inventory of individuals to measure take is not feasible for this species. Habitat, including key foraging and nesting resources, can serve as a biologically relevant measure of the species' potential abundance and overall benefit. DOFAW entomologists validated mitigation actions based on habitat acres. These mitigation efforts will improve ecological conditions necessary for the species' long-term conservation and will be monitored using specific success criteria. Mitigation will be considered successful if ironwood remains controlled within the mitigation area and assimulans yellow-faced bees are documented to maintain or increase their baseline foraging and nesting activities within it.

Lost Productivity.
If mitigation for ʻōpeʻapeʻa, ʻuaʻu, or ʻaʻo lag exceeds the time frames specified in the HCP (e.g., 7 years for ʻōpeʻapeʻa, 17 years for ʻuaʻu, or 11 years for ʻaʻo), mitigation obligations will increase by 5 percent for each additional year of delay beyond that period. The 5 percent figure is based on 20.5 years of operations, considering that one year roughly represents 5 percent of the operational lifespan.

Issues & Concerns:

ʻōpeʻapeʻa:
KWP I recommends increasing wind speed curtailment to 6.5 m/s during September and October. However, implementing curtailment year-round may prevent about 2 bat deaths annually (KWP I 2025).

Currently, in the draft HCP KWP I, the mitigation plan for ʻōpeʻapeʻa on Maui has not been fully developed, and it is suggested that a site-specific mitigation plan for ʻōpeʻapeʻa will be presented to USFWS and DOFAW in the future. DOFAW HCP would like to see the mitigation plan for ʻōpeʻapeʻa on Maui fully outlined in the final HCP. Failure to do so could result in the species being taken before the corresponding mitigation measures are implemented.

nēnē:
KWP I is behind on mitigation credits for nēnē, and it is infeasible to make up the necessary credits before the State ITL expires on January 29th, 2025. Mitigation and net benefit for covered species in Habitat Conservation Plans are intended to be completed before the take of those species. While KWP I plans to fulfill the nēnē mitigation for the current ITL, it will do so after the ITL expires, as KWP I seeks an additional 23 years of take coverage before fulfilling ITL mitigation for the covered species (See Appendix H).

ʻuaʻu:
Currently, mitigation for ʻuaʻu is proposed on Lānaʻi, despite feedback from the public and the ESRC. DOFAW wants to see the mitigation plan for ʻuaʻu developed for a site like the Alpine Wildlife Sanctuary on Maui before the ITL is issued, to prevent delays in implementing mitigation measures to offset the take of this species. DOFAW also wants to ensure that the mitigation costs are sufficient to cover the necessary work, including monitoring burrows, controlling predators, and managing the colony fence. These efforts are essential to support adequate adult survival and fledgling production to achieve a net benefit.

Assimulans yellow-faced bee:
Estimating the expected take for Assimulans' yellow-faced bee is difficult and may underestimate the potential take, due to the species' small size and the challenge of recovering carcasses. The full extent of impacts on the species, including possible collisions with turbines, could also be significantly underestimated. Currently, understanding the complete range of impacts is hard because no survey has been done

to count the nests at the site. The survey window for this species isn't until spring. Additionally, KWP I did not include turbine strike research in their avoidance and minimization measures for this species.

Agency Recommendations:

ʻōpeʻapeʻa:
To prevent and reduce ʻōpeʻapeʻa take as much as possible, DOFAW recommends that KWP I implement a wind speed curtailment of 6.5 m/s year-round.

ʻuaʻu:
DOFAW requests a review of the mitigation plan for ʻuaʻu, developed for a site like Alpine Wildlife Sanctuary on Maui, before issuing the ITL. This is to prevent delays in implementing mitigation measures to offset the take of this species. DOFAW also wants to confirm that the mitigation budget is sufficient to cover necessary activities, including monitoring burrows, controlling predators, and managing the colony fence. These efforts are essential to support adequate adult survival and fledgling production to achieve a net benefit.

Assimulans yellow-faced bee:
DOFAW would like to see the Assimulans Yellow-Faced Bee Avoidance Package include turbine strike research to ensure the full potential risk of take to the species is thoroughly studied and minimized.

DOFAW also wants to see the mitigation success criteria for the assimulans yellow-faced bee more developed and detailed in the HCP, including the number of yellow-faced bee nesting aggregations or burrows, as well as foraging availability and presence. KWP I's proposed budget of $367,000 for the mitigation of this species is based on scientific literature, but because of the species' nature and the limited understanding of its long-term viability, DOFAW requests that KWP I further consult with species experts, including DOFAW entomologists, to develop a more refined estimated cost for the mitigation project and to ensure the project can achieve a net environmental benefit.

Fatality Search Area:
DOFAW and the ESRC both recommended that KWP I compare model assumptions to current ballistics models to develop the discovery rate parameter and calculate cumulative take over the license term. DOFAW, in conjunction with the ESRC, recommends that KWP I consider wind direction for fatality monitoring and adjust the search area accordingly.

Statutory Requirements:

DOFAW recommends:

- That the ESRC review the HCP in accordance with the requirements set forth in Section 195D-25 of the Hawaii Revised Statutes, and make any further suggestions to KWP I regarding the draft HCP before KWP I requests a vote from the committee for approval of the HCP to the Board of Land and Natural Resources.

If you have any questions, please contact Habitat Conservation Planning Program Associate, Kinsley McEachern, at laurinda.k.mceachern.researcher@hawaii.gov

Respectfully submitted,

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Administrator