

LINDA LINGLE  
GOVERNOR OF HAWAII



**STATE OF HAWAII**  
**DEPARTMENT OF LAND AND NATURAL RESOURCES**  
DIVISION OF FORESTRY AND WILDLIFE  
1151 PUNCHBOWL STREET, ROOM 325  
HONOLULU, HAWAII 96813  
TEL (808) 587-0166 FAX (808) 587-0160

LAURA H. THIELEN  
CHAIRPERSON  
BOARD OF LAND AND NATURAL RESOURCES  
COMMISSION ON WATER RESOURCE MANAGEMENT

RUSSELL Y. TSUJI  
FIRST DEPUTY

KEN C. KAWAHARA  
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES  
BOATING AND OCEAN RECREATION  
BUREAU OF CONVEYANCES  
COMMISSION ON WATER RESOURCE MANAGEMENT  
CONSERVATION AND COASTAL LANDS  
CONSERVATION AND RESOURCES ENFORCEMENT  
ENGINEERING  
FORESTRY AND WILDLIFE  
HISTORIC PRESERVATION  
KAHOOLAWE ISLAND RESERVE COMMISSION  
LAND  
STATE PARKS

August 28, 2009

Chairperson and Members  
Board of Land and Natural Resources  
State of Hawaii  
Honolulu, Hawaii

Land Board Members:

**SUBJECT:** Request for Approval to Release the "Kahuku Wind Power Draft Habitat Conservation Plan," Island of O'ahu, Hawai'i.

**SUMMARY:**

Submitted for your approval to release for public review is the draft "Kahuku Wind Power Draft Habitat Conservation Plan," Island of O'ahu, Hawai'i (Attachment I). The purpose of this draft Habitat Conservation Plan (HCP) is to mitigate for potential injury and death to eight listed threatened and endangered species: ae'o (Hawaiian stilt), 'alae ke'oke'o (Hawaiian coot), koloa maoli (Hawaiian duck), 'alae 'ula (Hawaiian moorhen), a'o (Newell's shearwater), ua'u (Hawaiian petrel), 'ōpe'ape'a (Hawaiian hoary bat), and the pueo (Hawaiian owl) on O'ahu, caused by project construction and operation. The draft HCP outlines provisions for net benefit to the species and environment, and contributes to the recovery of each of these species.

**BACKGROUND:**

**Project Area:** Kahuku Wind Power LLC proposes to construct and operate a new 30 megawatt (MW), 12-turbine commercial wind energy generation facility in the Kahuku area on the northeaster portion of O'ahu. The proposed Kahuku Wind Project is situated on approximately 578 acres of privately owned land near U.S. Army Kahuku Training Range.

**Facilities:** Kahuku Wind power proposes 12 Clipper 2.5 MW wind turbine generators, an operations and maintenance building, one permanent unguyed meteorological (met) tower, a microwave tower, and an electrical substation. The project would supply wind-generated electricity to the Hawaiian Electric Company (HECO). Unpaved service roadways will also be created to connect the new turbines to other project components. A more detailed description of

the proposed infrastructure for the project will be provided in the Environmental Assessment (EA).

**Potential Impacts:** It is anticipated that construction and operation of Kahuku Wind Power has the potential to result in the incidental take of eight listed threatened and endangered species: ae'o (Hawaiian stilt), 'alae ke'oke'o (Hawaiian coot), koloa maoli (Hawaiian duck), 'alae 'ula (Hawaiian moorhen), a'o (Newell's shearwater), ua'u (Hawaiian petrel), 'ōpe'ape'a (Hawaiian hoary bat), and the pueo (Hawaiian owl) on O'ahu. No other listed, proposed, or candidate species have been found or are known or expected to be present in the project area.

These eight listed species are known to, or considered to have potential to fly in the vicinity of the project area and could be injured or killed if they collide with turbines or other project components. Adjusted take estimates for all listed species take into account both direct and indirect take. Direct take comprises individuals that are killed or injured colliding with structures, equipment, or other project components, or through other form of take. Indirect take considers that it is possible that listed adults that are killed or injured by project components could have been tending to eggs, nestlings, or dependent young.

Kahuku Wind Power is seeking an incidental take license in accordance with Hawai'i Revised Statute 195-D. The Habitat Conservation Plan is a required component of an ITL, and describes how they will avoid, minimize, mitigate and monitor incidental take, reporting, funding and other requirements.

**Avoidance and Minimization:** Kahuku Wind Power has proposed a number of measures minimize the risk of collisions and light attraction. For example, they have proposed to use monopole, slower turning turbine, and a new unguyed met tower, rather than lattice or guyed towers to minimize take; avoiding guy wires, lattice, and higher rotational speeds greatly reduces the risk to birds and bats. Guy wires on existing meteorological towers will be marked by flagging and bird diverters. Power collection lines will be placed underground to avoid risk of collision with new wires. Outside lights will be shielded, and night-time construction avoided whenever possible, to lower risk of light attraction for seabirds. In addition, Kahuku Wind Power will enforce a speed limit of 10 mph in the project area to minimize potential for vehicular strike for birds on the ground.

**Mitigation:** Complete avoidance of risk to the covered listed wildlife species is not possible for the project; therefore, Kahuku Wind Power has proposed mitigation measures to provide net benefit and contribute to the recovery of each of the covered species, and to provide net benefit to the environment. Mitigation proposed for each of the four listed species is designed to not only compensate for take that may occur as a result of collision with met towers, but also provide a net conservation benefit for the species addressed, as summarized in Table 1 below.

Table 1. Summary of Proposed Mitigation Measures.

Species	Proposed Mitigation by Measured Take Level		
	Lower	Baseline	Higher
<b>Seabirds</b>	3 years of baseline mitigation for seabirds	Mitigation for Newell's shearwater and Hawaiian petrel at Makamaka'ole or other suitable seabird nesting sites on Maui or Kauai or elsewhere	Increased mitigation efforts at the same site or additional mitigation measures at one or more additional sites on Maui or Kauai or elsewhere
<b>Waterbirds</b>	Same as Baseline for first 3 years then fence maintenance	Fencing of Hamakua Marsh and 3 years of funding for fence maintenance, predator control and monitoring; subsequent mitigation efforts to be commensurate with take, plus maintenance of fencing	Additional mitigation efforts at Hamakua Marsh or fencing, predator control and monitoring at additional wetlands
<b>Hawaiian short-eared owl</b>	Same as Baseline	Upfront contribution of \$25,000 for research and rehabilitation and \$25,000 up to a maximum of \$50,000 for management as it becomes available	Additional funding of \$15,000 for research and rehabilitation and \$15,000 up to a maximum of \$30,000 to implement management strategies
<b>Hawaiian hoary bat</b>	Same as Baseline	Upfront contribution of \$25,000 for research and \$25,000 up to a maximum of \$50,000 for management as it becomes available	Additional funding of \$15,000 for research and \$15,000 up to a maximum of \$30,000 for management

**Endangered Species Recovery Committee (ESRC) Recommendations:** The ESRC has reviewed the draft "Kahuku Wind Power Draft Habitat Conservation Plan" during its meeting on July 16, 2009. The ESRC has provided its recommendation for release for public review (attached). The ESRC has no objections to the substance of the HCP and agree that the HCP will provide a net conservation benefit to the covered species.

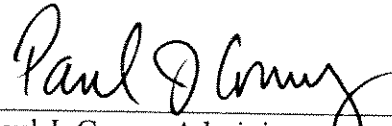
**Outcome:** With Board approval, a notice of the availability of the draft HCP would be published in the OEQC Bulletin. The Department would solicit public input and hold a public hearing on the Island of O'ahu during the next 60 days. Following the public review process, the applicant, DOFAW, US Fish and Wildlife Service, and ESRC would discuss and make any changes necessary before submission to the Endangered Species Recovery Committee for their final review. The ESRC will then provide a recommendation to the Board to accept, amend, or reject the proposal. The HCP will then be resubmitted to the Board for final consideration.

RECOMMENDATION:

That the Board approve for public release the "Kahuku Wind Power Draft Habitat Conservation Plan ."

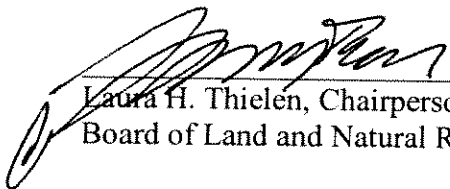
Board of Land and Natural Resources  
August 28, 2009  
Page 4

Respectfully submitted,



Paul J. Conry, Administrator  
Division of Forestry and Wildlife

APPROVED FOR SUBMITTAL:



---

Laura H. Thielen, Chairperson  
Board of Land and Natural Resources

- Attachment I. Kahuku Wind Power Draft Habitat Conservation Plan.
- Attachment II. Draft Incidental Take License.
- Attachment III. ESRC recommendation.