

FINDING OF NO SIGNIFICANT IMPACT (FONSI)

regarding

The U.S. Fish and Wildlife Service's Proposed Issuance of an Endangered Species Act Section 10(a)(1)(B) Incidental Take Permit for the Hawaiian Petrel, Hawaiian Goose, Hawaiian Hoary Bat, and the Blackburn's Sphinx Moth to the Auwahi Wind Energy, LLC in Association with Implementation of the Auwahi Wind Farm Habitat Conservation Plan on Maui, Maui County, Hawaii

The U.S. Fish and Wildlife Service (Service) has completed an Environmental Assessment (EA) of the anticipated effects on the human environment of issuing an Incidental Take Permit (ITP), pursuant to section 10(a)(1)(B) of the Endangered Species Act (ESA), to Auwahi Wind Energy, LLC (Auwahi Wind). The ITP would authorize take of the endangered Hawaiian petrel (*Pterodroma sandwichensis*), endangered Hawaiian goose (*Branta sandvicensis*), endangered Hawaiian hoary bat (*Lasiurus cinereus semotus*), and the endangered Blackburn's sphinx moth (*Manduca blackburni*) by covered activities carried out in conjunction with implementation of Auwahi Wind's Habitat Conservation Plan (HCP) on Maui, Maui County, Hawaii. The above species are hereafter referred to as "Covered Species." The EA was prepared in accordance with the requirements of the National Environmental Policy Act.

Auwahi Wind is requesting an ITP for take of the Covered Species that may occur as a result of the construction and operation of the Auwahi Wind Farm Project facility over the next 25 years on the Ulupalakua Ranch, approximately 10 miles south of Kula, Maui. The EA describes the probable effects of this action on the human environment under three alternatives: (1) Proposed Action (issuance of a 25-year ITP to Auwahi Wind on the basis of their implementation of the proposed HCP); (2) Reduced Permit Term (issuance of a 21-year ITP to Auwahi Wind); and (3) a No Action Alternative (no ITP is issued and the wind energy generation facility would not be constructed).

Under the Proposed Action, the Service would issue an ITP and approve the HCP. The ITP would authorize incidental take of the Covered Species during construction and operation of the Auwahi Wind Project. The HCP will ensure that Auwahi Wind adequately avoids, minimizes, and mitigates the anticipated incidental take. The project consists of a 21-megawatt wind farm site, a 34.5-kV generator-tie line, and a construction access route that would result in the permanent development of a total of 39 acres, including approximately 28 acres of previously undeveloped land, located 10 miles south of Kula, in the Hana, Kula, and Kihei Districts of Maui.

Decision Rationale

Following a comprehensive review and analysis of the HCP and consideration of the findings presented in the EA and summarized below, the Service has selected the Proposed Action as the preferred alternative because it provides the most conservation value to the Covered Species in the context of Auwahi Wind complying with the requirements of the ESA.

Under the HCP, Auwahi Wind commits to avoid and minimize take of the Covered Species through the implementation of numerous avoidance and minimization measures which include, but are not limited to:

Take Avoidance

- Choosing a project site with limited forested areas to avoid potential impacts to bat roosting habitat;
- Installing temporary fencing around the native Blackburn's sphinx moth host plant, aiea (*Nothocestrum latifolium*, candidate), and moth food plants including maiapilo (*Capparis sandwichiana*) and moonflower (*Ipomea tubanoides*) that can be avoided within the project footprint to ensure the plants are not directly impacted by construction; and
- Situating construction to avoid sites containing human bone, ceremonial sites, or sites that were thought to contain human burials.

Minimization

- Selecting a larger turbine model that requires fewer turbines and situating them in a single row to minimize wildlife strike hazard;
- Selecting a turbine with a slower rotational speed (six to 16 revolutions per minute) which makes the rotor more visible to volant wildlife (birds and bats), than other turbine models;
- Installing bird flight diverters and markings in high risk areas to decrease the risk of bird and bat collisions with the generator-tie line and the meteorological tower;
- Minimizing nighttime construction and on-site lighting and using light fixtures on the operations and maintenance building that will be shielded and directed downward and triggered by a motion detector to minimize seabird fallout;
- Installing permanent fencing around endangered red ilima (*Abutilon menziesii*, kooloaula), endangered sandalwood (*Santalum freycinetianum* var. *lanaiense*, iliahi), and aiea plants within or adjacent to disturbance areas to minimize the potential for impacts during construction and operation;
- Implementing a daytime speed limit of 25 mph and a nighttime speed limit of 10 mph to reduce possible vehicular collisions with Covered Species;
- Implementing measures to minimize and avoid the introduction of invasive plant species;
- Minimizing the risk of project-related fires and carrying insurance to cover the cost of restoration in the event habitat is impacted by a project-related fire; and
- Implementing State Historic Preservation Division (SHPD) approved preservation, data recovery, and Burial Treatment Plan procedures to minimize impacts to archaeological and cultural resources. On December 6, 2011, the Service requested SHPD concurrence with the Service's determination that the proposed action will, given implementation of cultural resource minimization and mitigation measures, have no adverse effect to cultural resources. The SHPD did not respond within the designated 30-day comment period, which the Service deems to be concurrence. Lack of objection within the 30 day period means that the agency has completed its Section 106 responsibilities (36 CFR 800.4(d)(i)).

Under the HCP, Auwahi Wind also commits to mitigate the impacts of the project through measures that include, but are not limited to, actions summarized in Table 1.

Summary of Impacts to and Mitigation for Special Status Species

| Resource | Impact | Mitigation/Conservation Measures |
|---|---|---|
| Loss of habitat for <i>Alectryon micrococcus</i> (mahoe), <i>Bonamia menziesii</i> , <i>Cenchrus agrimonoides</i> (kamanomano), <i>Colubrina oppositifolia</i> (kauila), <i>Flueggea neowawraea</i> (mehamehame), <i>Melicope adscendens</i> (alani), <i>Melicope knudsenii</i> (alani), <i>Melicope mucronulata</i> (alani), <i>Nothocestrum latifolium</i> , red ilima, and sandalwood. | Permanent loss of 28 acres of degraded native plant habitat. | Native plants will benefit from habitat restoration for Blackburn's sphinx moth and Hawaiian hoary bat mitigation on Ulupalakua Ranch (see below). Outplanting of 10 individuals of aiea, sandalwood, and red ilima; Impacts further minimized through implementation of invasive plant, revegetation, and fire management plans. |
| Direct impacts to aiea, sandalwood, and red ilima in project vicinity | Avoided: no listed plants within project footprint. | Listed plants in the vicinity of the project footprint will be fenced during construction to ensure direct impacts are avoided. Impacts further minimized through implementation of invasive plant, revegetation, and fire management plans. Outplanting of 10 individuals of aiea, sandalwood, and red ilima. Listed plants will benefit from habitat restoration for Blackburn's sphinx moth and Hawaiian hoary bat mitigation on Ulupalakua Ranch (see below). |
| Hawaiian yellow-faced bee (Candidate) mortality | Crushing of individual bees or ground nests; collision with construction equipment. Loss of foraging habitat. | Habitat restoration mitigation for Blackburn's sphinx moths and Hawaiian hoary bats on Ulupalakua Ranch (see below) will increase available habitat for candidate Hawaiian yellow-faced bees. |
| Hawaiian yellow-faced bee Habitat Loss | Removal of vegetation used for nesting and/or individual plants used for pollen and nectar collection; habitat fragmentation (but no fragmentation of intact areas of native habitat); increased risk of the invasive species and wildfire. | Impacts minimized through implementation of standard BMPs for invasive plants species, revegetating disturbed areas, and implementing the Fire Management Plan. Species will also benefit from mitigation for Blackburn's sphinx moths and Hawaiian hoary bats on Ulupalakua Ranch (see below). |
| Hawaiian Petrel Take | Tier 1: 19 adults; 7 chicks Tier 2: 32 adults; 12 chicks Tier 3: 64 adults; 23 chicks | Conducting predator control at the Kahikinui Forest Project or adjacent areas to the extent needed to offset take at each tier level. |
| Hawaiian Hoary Bat Take | Tier 1: 5 adults; 2 young Tier 2: 10 adults; 4 young Tier 3: 19 adults; 8 young | Tier 1: restore 126.5 acres of bat habitat at the Waihou Mitigation Area, including fencing, ungulate removal, and outplanting; Tier 2: radio-telemetry research project; Tier 3: activities deemed appropriate by Service and DOFAW. |
| Hawaiian Goose Take | 5 adults, young, or eggs | Funding to construct predator-proof breeding pens and conduct predator control to protect eggs and goslings at Haleakala National Park. |
| Blackburn's Sphinx Moth Take | Capture for translocation; mortality within project footprint; loss of 0.3 acre of native habitat and 27.7 acres of degraded habitat. | Restoration of 6 acres of dryland forest in the Auwahi Forest Restoration Project; outplanting of larval and adult host plants. |

As discussed in the EA, implementation of the Proposed Action, while exempting incidental take of the Covered Species, is also likely to provide long-term benefits to the Covered Species that are directly related to their conservation needs. Conservation of the Covered Species is dependent on: (1) reducing collision risk with man-made structures; (2) increasing survival and reproduction at nesting sites; and (3) increasing the quantity and quality of foraging and breeding habitat.

Compared to the Proposed Action, implementation of the Reduced Permit Term alternative, the operational life of the project would be 21 years rather than the 25 years. The Proposed Action conservatively covers an approximately one-year construction period, a 20-year operating period of the wind farm and an additional four years of operation if the turbines persist beyond 20 years before decommissioning, whereas the Reduced Permit Term would not provide the additional four years of operation. Covered activities would be similar to the Proposed Action; however, mitigation would be reduced proportionally due to the lower take levels that would be authorized under this alternative. The Reduced Permit Term would provide Auwahi Wind with less operational flexibility than the Proposed Action during the construction, operation, and decommissioning period. Should additional years of decommissioning be required, or should Auwahi Wind choose to extend the wind farm operating period, Auwahi Wind would be required to request a major amendment to extend the term of its ITP. Because of the lack of flexibility under the Reduced Permit Term action, this alternative was not selected.

The No Action alternative or “no-build scenario” would occur if the Service did not issue an ITP and did not approve the HCP for Auwahi Wind. Under the No Action alternative, Auwahi Wind would not construct the wind energy facility due to the risk of unauthorized incidental take of listed species. There would be no changes to the project area or to existing habitats, nor any potential for bird and bat collisions with wind turbines or project infrastructure. The no-build scenario would not cause take of the Covered Species or any change to the status of the Covered Species. Covered species mitigation measures contained in the HCP would not be implemented by Auwahi Wind. The No Action alternative was not selected because it does not meet the purpose and need of the HCP.

Implementation of the Proposed Action is not expected to cause significant adverse or beneficial effects to the human environment for the following reasons:

1. In our Biological Opinion for the proposed action, the Service determined that implementation of the HCP is not likely to jeopardize the continued existence of the Covered Species or result in destruction or adverse modification of critical habitat (Service Ref. No. 2011-F-0376).
2. The HCP is likely to offset the adverse impacts of the proposed wind energy generation facility on the Covered Species to the extent that it is likely to provide a net conservation benefit to these species island-wide in accordance with Hawaii State law. However, that benefit is relatively small when considered in the context of the rangewide condition and conservation needs of each Covered Species. Under the provision of the HCP, Auwahi Wind sufficiently reduces the risk of take because of: (1) facility design; (2) facility location; (3) facility operation; (4) placement and design of lines; (5) marking guy-wires

and towers; (6) restrictions on construction activities; (7) lighting plans; (8) pre-construction surveys; (9) re-vegetation plans; and (10) enforcement of on-site vehicular speed limits.

3. The HCP provisions for adaptive management will allow for the mitigation of project impacts to be adjusted appropriately. Accordingly, the HCP includes provisions for post-construction monitoring and adaptive management to allow flexibility and responsiveness to new information over the life of the project. All monitoring and adaptive management activities will be subject to approval by the Service and Hawaii's Division of Forestry and Wildlife (DOFAW).
4. The proposed wind farm is not expected to contribute to hazardous substances or increase the risks associated with natural hazards.
5. Impacts to historical, archeological, and cultural resources will be avoided or impacts will be mitigated in accordance with plans approved by the State Historic Preservation Division.
6. Impacts to air quality, air navigation, geology, and topography are likely to be negligible. Impacts to water quality, soils, transportation, traffic, and public safety are likely to be minor and minimized through best management practices and preventive measures.
7. Impacts to visual resources are likely to be limited by siting infrastructure, including towers, as far as practical from nearby roads and towns.
8. Beneficial short-term and long-term socioeconomic benefits from construction, operation and energy production of the wind farm are anticipated. However, in the context of the economy of the Maui area, these benefits are likely to be minor.

Public Involvement and Review

The public was involved in the development of the HCP and the EA. The Draft Hawaii State HCP was published by the Hawaii Office of Environmental Quality Control on July 23, 2011. The public comment period closed on September 23, 2011; two comments were received during the public comment period. A public meeting was held on August 31, 2011; no comments were received during the public meeting. The draft HCP was reviewed by the State Endangered Species Recovery Committee (ESRC) in September, 2011, and the final State HCP was approved on December 15, 2011. The ESRC is composed of representatives from the Service, DOFAW, the U.S. Geological Survey Biological Resources Discipline, the University of Hawaii Environmental Center, and other professionals with expertise in the area of conservation biology. Issuance of the State Incidental Take License is expected in February 2012.

The Draft EA and Draft HCP for the Service was made available for public review through publication of a Notice of Availability of a Draft EA and HCP and receipt of an application for a Permit published in the Federal Register on October 5, 2011 (76 FR 61735). The notice and supporting documents were also mailed to agencies and private organizations with interest in the

proposed action. Publication of the notice initiated a 45-day comment period. The Service received no comments during the public review period.

The public was also able to provide feedback on the project through Maui County's Special Management Areas Permit process, the State's Environmental Impact Statement process, and Auwahi Wind's community outreach efforts. Auwahi Wind conducted meetings and site visits with members of the public, including members from the Kahikinui community, Makena Homeowners Association, Wailea Community Association, Kula Community Association, Maui Tomorrow, Sustainable Living Institute of Maui, Maui Cultural Lands, Leeward Haleakala Watershed Partnership, Maui Chamber of Commerce, Maui Hotel and Lodging Association and Ulupalakua Ranch. Outreach efforts also included other residents and interested parties as identified in the Final EA. Auwahi Wind also met with local, State, and Federal agencies and non-governmental field biologists during the development of the proposed project. This includes coordination and consultation with the Service, DOFAW, ESRC, National Park Service, Office of Conservation and Coastal Lands, Office of Hawaiian Affairs, Department of Hawaiian Home Lands, State Historic Preservation Division, and Maui/Lanai Island Burial Council. The ESRC met to discuss the proposed project in February 2010, May 2010, October 2010, December 2010, April 2011, and September 2011.

Conclusions

Based on review and evaluation of the information contained in the supporting references, I have determined that the preferred alternative is not a major Federal action that would significantly affect the quality of the human environment, within the meaning of section 102(2)(c) of the National Environmental Policy Act of 1969, 42 U.S.C. §§ 4321-70 (NEPA). Accordingly, the Service is not required to prepare an environmental impact statement for this action. Furthermore, I have found that implementing the preferred alternative will have no significant impact on any of the environmental resources identified in the EA.

This Finding of No Significant Impact and supporting references are on file and are available for public inspection, by appointment, at the following Service offices:

Pacific Islands Fish and Wildlife Office
300 Ala Moana Blvd., Room 3-122
Honolulu, Hawaii 96850
Contact: Dawn Greenlee

Pacific Regional Office
911 NE 11th Avenue
Portland, Oregon 97232
Contact: John Nuss

Interested and affected parties are being notified of our decision.

Documents Incorporated by Reference

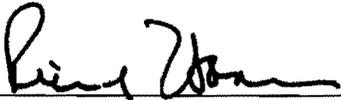
Habitat Conservation Plan for the Auwahi Wind Farm Project, Ulupalakua Ranch, Maui, Hawaii. (Tetra Tech, November 2011)

Final Environmental Assessment for Issuance of an Endangered Species Act Section 10(a)(1)(B) Permit for Incidental Take of Listed Species for the Auwahi Wind Farm Project. (Service, February 2011).

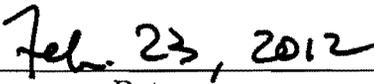
Intra-Service Biological Opinion on the Auwahi Wind Habitat Conservation Plan and Incidental Take Permit Application. (Service, File No. 1-2-2011-F-0376, February 2012).

Findings and Recommendations on the Issuance of an Incidental Take Permit to Auwahi Wind Energy, LLC, Maui, Hawaii. (Service, February 2012).

Final State Environmental Impacts Statement for the Auwahi Wind Farm Project, Ulupalakua Ranch, Maui, HI. Prepared for Maui County Planning Commission. (Tetra Tech, August 2011).



Deputy Regional Director



Date