REPORT TO THE TWENTY-EIGHTH LEGISLATURE
REGULAR SESSION OF 2016

STATUS OF THE ISSUANCE OF INCIDENTAL TAKE LICENSES FOR ENDANGERED, THREATENED, PROPOSED, AND CANDIDATE SPECIES; AND THE CONDITION OF THE ENDANGERED SPECIES TRUST FUND FOR THE PERIOD JULY 1, 2014 – JUNE 30, 2015

Prepared by:

DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF FORESTRY AND WILDLIFE
STATE OF HAWAII

In response to:
Section 195D-26, Hawai‘i Revised Statutes

Honolulu, Hawai‘i
November 2015

STATUS OF THE ISSUANCE OF
INCIDENTAL TAKE LICENSES FOR ENDANGERED, THREATENED,
PROPOSED, AND CANDIDATE SPECIES;
AND
THE CONDITION OF THE ENDANGERED SPECIES TRUST FUND
FOR THE PERIOD JULY 1, 2014 – JUNE 30, 2015

PURPOSE

Act 380, Session Laws of Hawai‘i (SLH) 1997, amended the State Endangered Species Law, Chapter 195D, Hawai‘i Revised Statutes (HRS), to provide for the preparation and implementation of habitat conservation plans (HCPs) and safe harbor agreements (SHAs), and to provide additional incentives for private landowners to recover and protect threatened and endangered species on their lands. Specifically, §195D-26, HRS, requires that an annual report be prepared by the Department of Land and Natural Resources (DLNR) on:

- The effectiveness of HCPs and SHAs issued under §195D, HRS, and the status of all species for which incidental take licenses have been issued;
- Description of the condition of the Endangered Species Trust Fund (ESTF) established under §195D-31, HRS; and
- Recommendations to further the purposes of §195D, HRS.

Incidental Take Licenses (ITLs) are issued in conjunction with an approved HCP or SHA for the legal take[1] of threatened or endangered species, if such take is incidental to an otherwise lawful activity. Habitat Conservation Plans and Safe Harbor Agreements are important management tools in the State of Hawai‘i by accomplishing the following:

- Resolves conflicts between endangered species protection and legitimate use of natural resources;
- Contributes to endangered species recovery efforts through partnerships and proactive planning; and
- Provides essential ecological information for Hawai‘i’s resource managers by requiring a strong monitoring component in all HCPs.

This annual report is submitted to fulfill the reporting requirement for Fiscal Year (FY) 2015 and provides detailed information for 11 HCPs and five SHAs approved under the ITL program. The report is organized by HCP project type, provides an overview of SHAs, describes the condition of the Endangered Species Trust Fund, and concludes with recommendations to further the purposes of §195D, HRS.

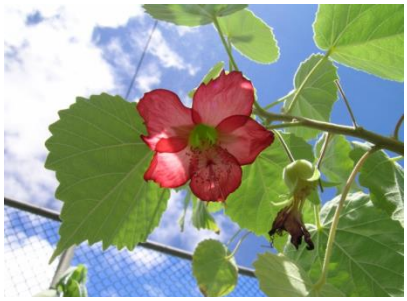
[1] “Take” means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect endangered or threatened species of aquatic life or wildlife, or to cut, collect, uproot, destroy, injure, or possess endangered or threatened species of aquatic life or land plants, or to attempt to engage in any such conduct (§195D-2, HRS).

SUMMARY OF HABITAT CONSERVATION PLANS AND ASSOCIATED INCIDENTAL TAKE LICENSES BY PROJECT TYPE

Transportation Projects

Habitat Conservation Plan for *Abutilon menziesii* at Kapolei, Oʻahu. Approved 2004.

ITL Licensee: Hawaiʻi Department of Transportation



Koʻoloaʻula (Abutilon menziesii), Island of Oʻahu.

Project: Development of 1,300-acre East Kapolei Master Plan project and construction of the North-South Road arterial highway planned to bisect the 1,300-acre property.

ITL Duration: March 18, 2005 – July 31, 2021

Take Authorization: All plant individuals of *Abutilon menziesii* within the 1,381-acre project area.

Mitigation Status:

Abutilon menziesii. The goal of the HCP is to initiate and sustain a program that will result in an overall net gain in the number of endangered *Abutilon menziesii* plants on Oʻahu. The end goal is the establishment of three protected self-sustaining populations of *A. menziesii* from the single degraded Kapolei population. Populations of *A. menziesii* have been successfully established at the following sites: 1) Diamond Head State Park; 2) Koko Crater Botanical Garden; 3) Honouliuli Refuge, part of the U.S. Fish and Wildlife Service (USFWS) Oʻahu National Wildlife Refuge Complex; 4) Pouhala Marsh on City and County property in Waipahu; and 5) Ewa Villages Golf Course in close proximity to the project site. From an original founder population of 93 plants on the project site in 2002, outplanting efforts have resulted in establishment of 344 mature *A. menziesii* plant individuals throughout the five off-site mitigation areas and an additional 39 mature *A. menziesii* plant individuals on the on-site contingency reserve area. A Division of Forestry and Wildlife (DOFAW) Horticulturist and Botanist are working to ensure successful natural regeneration of outplanted individuals. Current monitoring data indicate that a total of 141 seedlings from outplanted individuals are currently in the managed sites. The goal in the next fiscal year is to increase the survival of seedlings from natural generation through weed management, establish new mitigation areas, education, outreach, and site maintenance.

Funding Source and Status: Funding to implement mitigation activities was provided to DOFAW from the Hawaiʻi Department of Transportation. Table 1 provides the HCP summary of revenue and expenditures. Act 328, SLH 1997 established a separate appropriation (S-97-800) for transactions related to the *Abutilon menziesii* HCP. Per Act 134/SLH 2013, Section 5, all prior General Appropriation Acts, including the appropriation set-up for the *Abutilon menziesii* HCP, lapsed as of June 30, 2014. Therefore, at the end FY 2014, funds from S-97-800

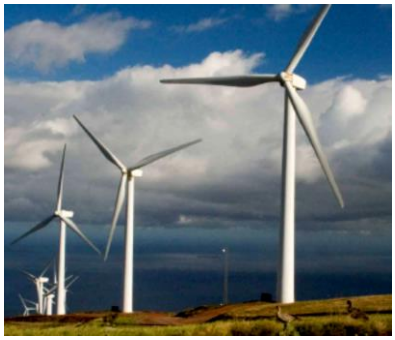
appropriation were encumbered. There were no additional revenues generated from this reporting period.

Table 1. Summary of Revenue and Expenditures for the *Abutilon menziesii* HCP at Kapolei.

Description	**Revenue**	**Expenditure**	
Beginning cash balance	$455,448.86		
Expenditures in FY15		$113,253.18	
Revenues in FY15	0		
Encumbrances in FY15		$175,925.00	
Ending cash balance			**$166,270.68**

Wind Energy Facilities and Structures

Kaheawa Pastures Wind Energy Generation Facility (KWP I) Habitat Conservation Plan, Maui, Hawai‘i. Approved 2006.



Kaheawa Wind Power project in West Maui above Ma‘alaea.

ITL Licensee: Kaheawa Wind Power, LLC; SunEdison[2]

Project: Twenty wind turbine generators (WTGs) with a total 30-megawatt (MW) energy generating capacity.

ITL Duration: January 30, 2006 – January 30, 2026

Take Authorization Over 20-year Term:

Common Name	**Scientific Name**	**Baseline Limit[3]**	**Higher Limit[2]**
‘Ua‘u or Hawaiian Petrel	*Pterodroma sandwichensis*	25	38
‘A‘o or Newell’s Shearwater	*Puffinus auricularis newelli*	4	8
Nēnē or Hawaiian Goose	*Branta sandvicensis*	60	n/a
‘Ope‘ape‘a or Hawaiian Hoary Bat	*Lasiurus cinereus semotus*	20	n/a

Status of ITL: Tables 2 and 3 provide a listing of all documented wildlife fatalities during the reporting period.

Table 2. Documented fatalities of HCP covered species and species of concern at KWP I during the reporting period.

Common Name	**Total Take**
Nēnē	4
Pueo	2
Hawaiian Petrel	2

Table 3. Documented fatalities of Migratory Bird Treaty Act (MBTA)-listed species and non-covered species at KWP I during the reporting period.

Common Name	**Total Take**
Ring-necked Pheasant	5
Gray Francolin	3
White-tailed Tropicbird	1
Eurasian Skylark	1
Black Francolin	1
Pacific Golden Plover	1

[2] Note that all SunEdison projects are listed as First Wind projects in previous annual reports. SunEdison acquired First Wind in 2015, and assumed ownership of all First Wind’s windfarms operating in Hawai´i.

[3] Take authorization is delineated by Baseline and Higher limits or in some cases Tiers. These demarcations serve as adaptive management triggers to ensure that mitigation keeps pace with take. If regulatory agencies anticipate authorized take to be exceeded, then the ITL licensee is required to seek a major amendment and provide a plan to achieve mitigation. ITL major amendments require approval from the Board of Land and Natural Resources.

Authorized incidental take includes both observed and unobserved take, as well as indirect take that occurs when an adult individual is taken during its breeding season. In order to determine the overall status of an ITL, and thus the overall impact to threatened and endangered species, most HCP applicants are required to implement the following two components as part of downed wildlife monitoring: 1) searcher efficiency (SEEF) studies to provide estimates of how effective searchers are at finding carcasses; and 2) carcass retention (CARE) studies to estimate the average time an avian or bat carcass remains detectable to searchers before being removed by scavengers or otherwise rendered undetectable due to decomposition. SEEF and CARE data are then combined with all observed documented fatalities using the best available scientific information to determine the total adjusted take of a wind energy facility. The science behind estimating take at wind energy facilities is evolving nationwide and DOFAW continues to consult with statisticians from the U.S. Geological Survey (USGS) and USFWS to ensure the best available scientific methods are used for estimating wind farm fatalities in Hawai‘i. The statistical conclusions provided throughout this report are based on the best available scientific information at the time of writing and may change as the model and search protocols are refined. Fatality estimations are determined using the Evidence of Absence[4] estimator developed by USGS biologists, and recommended by DOFAW staff. An alternate estimator that can be used by applicants is the USGS Data Series 729 Estimator[5] (pers. comm. Huso, 2014). The estimator used to calculate total adjusted take is indicated in the footnotes throughout this report.

Table 4 provides an estimate of the overall total adjusted take that has occurred since KWP I ITL issuance.

Table 4. Total observed fatalities including those from previous years and estimated total adjusted take covered under the KWP I ITL as of June 30, 2015. There have been no reported injuries or fatalities of the Newell's Shearwater. All take estimates presented below are rounded to whole numbers for mitigation and ITL compliance purposes.

Common Name	**Total Observed Take**	**Estimated Unobserved Take**	**Total Adjusted Take[6]**	**Lost Productivity / Indirect Take[7]**
Hawaiian Petrel	7	2	9	7
Nēnē	21	15	36	2
Hawaiian Hoary Bat	8	21	29	1

The total adjusted take of 29 bats exceeds the baseline permitted take of 20 bats. The HCP and ITL state that the "take authorized by the license can be increased provided that mitigation has been implemented such that benefits to the species outweigh the losses as detailed in the HCP."

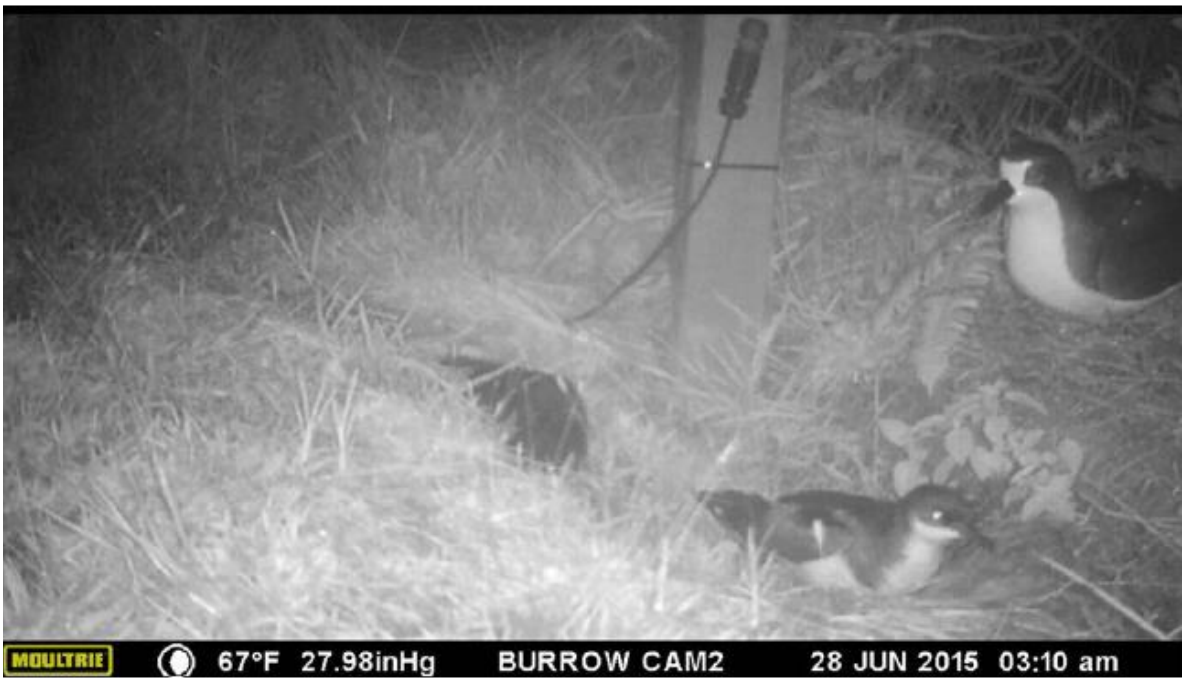
[4] Dalthorp D., M Huso, D Dail and J Kenyon. 2014. Evidence of Absence Users Guide: U.S. Geological Survey Data Series 881, 34 p., http://dx.doi.org/10.3133/ds881.
[5] Huso, M.M.P., N. Som, L. Ladd. 2012. Fatality Estimator. U.S. Geological Survey, Data Series (Draft).
[6] Total adjusted take based on the 80% credible maximum using the Evidence of Absence calculator.
[7] Assessed in addition to Total Adjusted Take.

KWP I is currently in discussions with DOFAW and the USFWS to request an increase in the authorized take under the current ITL for bats in FY 2015.

In order to improve SEEF and CARE data used to calculate total adjusted take, SunEdison hired an independent contractor in FY 2014 to proctor independent CARE trials and SEEF trials for one year at KWP I & II. The trials began in March 2014 and ended in March 2015. A six-month canine SEEF trial was also conducted, and demonstrated a great deal of success, with an overall SEEF of 93.9% as compared to the human SEEF of 72.9%.

Mitigation Status:

Hawaiian Petrel & Newell's Shearwater. Mitigation for the two seabird species (Hawaiian Petrel and Newell's Shearwater) is being implemented in conjunction with Kaheawa Wind Power II. The primary mitigation entails construction and management of two approximately 4 acre predator-free fenced enclosures (one for each species), provisioned with artificial burrows and social attraction, at the Makamakaʻole site in West Maui. Construction of both enclosures was completed on September 5, 2013. Three sets of solar panels and speakers were installed (two in Enclosure A and one in Enclosure B) and have been active since March 6, 2013. These speakers broadcast recorded Hawaiian Petrel and Newell's Shearwater calls during nighttime hours to attract birds to the site. There are currently 50 artificial burrows in each enclosure. There are also species-specific decoys present in each Enclosure. As of the end of FY 2015, game cameras had captured images of both Hawaiian Petrel and Newell's shearwater individuals within Enclosure B. While there has been no nesting activity this year, the presence of these birds, in addition to the Bulwer's petrel that was documented visiting the enclosures in FY 2014, is promising. This social attraction project is the first of its kind in Hawaiʻi and will serve to inform future seabird protection efforts worldwide. DOFAW continues to work closely in partnership with SunEdison staff and contractors to ensure the future success of the project.



Newell's Shearwater on June 28, 2015 inside Enclosure B, below speakers and next to burrow entrance.

Nēnē. Mitigation for the take of Nēnē at the Baseline level consists of providing funding to DOFAW for the construction of a release pen, and to support propagation and release of 50 Nēnē. Construction of a new release pen for Nēnē on Maui was completed and the first group of 10 birds was released on May 5, 2011. Twenty birds were released in FY 2012, seven birds were released in FY 2013, and eight birds (four adults and four fledglings) in FY 2015; totaling 45 birds released into the pen. Payments totaling $264,000 were made to DOFAW between 2008 and 2011 in accordance with the HCP. Reproductive success in the release pen between FY 2012 and FY 2014 totaled 18 fledglings. In FY 2015, two nests were found inside the pen and one outside of the pen. The nest outside the pen was trampled by cattle, and the eggs were destroyed. Inside the pen, a total of nine eggs were laid in the two nests, six of which hatched and went on to fledge, for a total of 24 fledglings produced to date.

Hawaiian Hoary Bat. Baseline mitigation for the Hawaiian Hoary Bat included providing $20,000 in support of bat research in Hawai‘i. Bats have been monitored onsite since 2008 using acoustic detection and recording instruments. In FY 2015, bats were detected at nine of nine mounted 6.5 m high detector locations for a total of 249 out of 3,203 (7.8%) detector nights. Bats were detected at five out of seven detectors mounted at nacelle height for a total of 42 of 987 (4.3%) detector nights.

Funding Status: KWP I is required to provide all funding necessary to fulfill obligations outlined in the approved HCP. Below is a breakdown of revenue and expenditures related to DOFAW's implementation of mitigation efforts associated with the KWP I HCP.

Table 5. Summary of Revenue and Expenditures for the KWP I HCP.

Description	Revenue	Expenditure	
Revenue rolled over from previous years	$141,742.98		
Total revenue in FY15	$0		
Expenditures in FY15		$1,967.82	
Ending cash balance			**$139,775.16**

Kaheawa Wind Power II Wind Energy Generation Facility (KWP II) Habitat Conservation Plan, Maui, Hawai‘i. Approved 2012.

Kaheawa Wind Power II project in West Maui above Ma‘alaea.

ITL Licensee: Kaheawa Wind Power, LLC; SunEdison

Project: Fourteen WTGs with a total 21 MW energy generating capacity. Project is makai and adjacent to KWP I.

ITL Duration: January 5, 2012 – January 30, 2032

Take Authorization Over 20-year Term:

Common Name	Scientific Name	Level of Take	5-year Limit	20-year Limit
‘Ua‘u or Hawaiian Petrel	*Pterodroma sandwichensis*	Tier 1	8 adults/ juveniles & 4 chicks/eggs	19 adults/ juveniles & 9 chicks/eggs
		Tier 2	16 adults/ juveniles & 8 chicks/eggs	29 adults/ juveniles & 14 chicks/eggs
‘A‘o or Newell’s Shearwater	*Puffinus auricularis newelli*	Tier 1	2 adults/ juveniles & 2 chicks/eggs	2 adults/ juveniles & 2 chicks/eggs
		Tier 2	5 adults/ juveniles & 3 chicks/eggs	5 adults/ juveniles & 3 chicks/eggs
Nēnē or Hawaiian Goose	*Branta sandvicensis*	Tier 1	8 adults/ juveniles & 1 fledgling	18 adults/ juveniles & 3 fledglings
		Tier 2	12 adults/ juveniles & 3 fledgling	27 adults/ juveniles & 3 fledgling
‘Ope‘ape‘a or Hawaiian Hoary Bat[8]	*Lasiurus cinereus semotus*	Tier 1	7 bats	7 bats
		Tier 2	11 bats	11 bats

Status of ITL: Tables 6 and 7 provide a listing of all documented wildlife fatalities during the reporting period.

Table 6. Documented fatalities of HCP covered species and species of concern at KWP II during the reporting period.

Common Name	Total Take
Nēnē	1

Table 7. Documented fatalities of MBTA-listed species and non-covered species at KWP II during the reporting period.

Common Name	Total Take
Gray Francolin	5
Eurasian Skylark	5

[8] Minor amendment to clarify permitted bat take processed on November 26, 2014.

Common Name	Total Take
Black Francolin	3
White-tailed Tropicbird	2
African Silverbill	1

Incidental take authorized includes both observed and unobserved take, including indirect take that occurs when an adult individual is taken during its respective breeding season. Table 8 provides an estimate of the overall total adjusted take that has occurred since KWP II ITL issuance.

Table 8. Total observed fatalities since ITL issuance and estimated total adjusted take covered under the KWP II ITL as of June 30, 2015. There have been no reported injuries or fatalities of the Newell's Shearwater or Hawaiian Petrel at the KWP II facility. All take estimates presented below are rounded to whole numbers for mitigation and ITL compliance purposes.

Common Name	Total Observed Take	Estimated Unobserved Take	Total Adjusted Take[9]	Lost Productivity / Indirect Take[10]
Nēnē	3	5	7	1
Hawaiian Hoary Bat	3	15	18	1

The total estimated take of 19 bats (with 80% statistical certainty and indirect take) exceeds both the Tier 1 and Tier 2 permitted take levels for bats. KWP II is currently in discussions with DOFAW and USFWS, and has submitted an application and amended HCP to the agencies for review and approval. The amendment went before the Endangered Species Recovery Committee (ESRC) in September 2015 for initial review and input, and will be released for public comment likely in the second quarter of FY 2016.

Mitigation Status:

Hawaiian Petrel and Newell's Shearwater. In addition to seabird mitigation activities underway in conjunction with KWP I at Makamakaʻole (see page 6), in the unlikely event that the initial five year mitigation targets at Makamakaʻole for seabirds are not met, KWP II is also required by the HCP to conduct surveys consisting of 14 to 20 survey nights, at two sites on West Maui where in-situ colony protection might be feasible. Site surveys were initiated at Kahakuloa, Maui in June

Enclosures A & B at the Makamaka´ole seabird mitigation site, West Maui.

[9] Total adjusted take based on the the 80% credible maximum when calculated using the Evidence of Absence calculator.
[10] Assessed in addition to Total Adjusted Take.

2012, but due to terrain and other access challenges, it was determined that the area was not desirable for in-situ conservation work. The Maui Nui Seabird Recovery Project (MNSRP) was contracted by SunEdison in FY 2015 to perform these surveys at new locations (expected duration May – August 2015) and has been provided with $56,062 in funding for equipment and survey costs. The survey will assess areas adjacent to Haleakalā National Park, Maui in the area below Koʻolau Gap and above Keʻanae by deploying Wildlife Acoustics SM2BAT+ ™ acoustic detectors at 60 locations in approximately 8,000 hectares between 3,000-8,000 foot altitudes

Nēnē. The KWP II HCP requires that mitigation for Nēnē occur in the form of construction of a Nēnē release pen, or expansion of the KWP I pen, by June 2015. During FY 2015, it became apparent that building or expanding a pen at one of the ranches currently under SHAs with DOFAW would not be a possibility. Instead, it was determined that a project involving predator control traps and monitoring would be implemented. KWP II is currently in discussion with USFWS and DOFAW to come up with a plan.

In accordance with the KWP II HCP, systematic visual observations of Nēnē were made at KWP II during FY 2015. Data collection of Nēnē activity at KWP II will continue for the life of the project through the Wildlife Education Observation Program (WEOP). In FY 2015, WEOP trainings were given to 22 individuals who were on-site regularly for two days or more throughout the year. A total of 190 Nēnē observations were reported, and showed that they are found throughout the site, but are more prevalent at higher elevation turbines (turbines 1-7) and a group of three turbines located about two-thirds of the way downhill (turbines 10-12).

Hawaiian Hoary Bat. In accordance with the KWP II HCP, baseline mitigation for the Hawaiian Hoary Bat must consist of implementation of bat habitat improvement measures on at least 338 acres. DOFAW developed a mitigation plan for a 340 acre project area in the Kahikinui Forest Reserve (FR). Approximately 2.8 miles of fence apron was installed in July 2014 by DOFAW Forestry Program field crews. This fence section is part of the 7.3 miles of ungulate-proof fence that installed to protect the Nakula Natural Area Reserve (NAR) and the Kahikinui FR from encroaching ungulates. The entire fence line has been surveyed 13 times in the past 11 months. Field crews immediately repaired minor damages along the fence line and stream crossings following Storm Ana and Storm Iselle. Eleven additional inspections were conducted by DOFAW staff while performing aerial control missions for feral ungulates. Since October 2014, a total of 11 aerial control missions were conducted by DOFAW staff, resulting in 649 feral goats and 18 feral pigs dispatched from within the entire Nakula NAR and Kahikinui FR unit. It is estimated that there are very few feral goats (5-10 individuals) remaining within the entire unit. Quarterly aerial control missions to dispatch these remaining individuals will continue in FY 2016.

Due to a shortage of seed stock availability and seed viability, approximately 13,000 native tree seedlings (overstory and understory) were procured from Native Nursery, LLC. DOFAW staff completed three missions to outplant the 13,000 seedlings within the project area located in the

Kahikinui FR. The outplanting work covers approximately 35 acres of the 340 total acres of the project area. Species planted include aʻaliʻi, koa, ʻōhiʻa, and pilo. The remaining 62,000 native tree seedlings will be procured in FY 2016 and outplanted in winter of 2015 and spring and fall of 2016.

In accordance with the HCP, low wind speed curtailment (LWSC) at 5 m/s was initially in effect for the months of April through November. This period was extended to begin mid-February and continue through December 15, 2014 in response to fatalities documented at KWP I and II in FY 2014. Prior to May 2014, 50% of observed fatalities at KWPI and KWPII had occurred in April and September, suggesting that collision risk was higher during these months. LWSC was therefore increased from 5 m/s to 6 m/s on April 10 through April 30, 2014, and was proposed to be raised to 6 m/s again in September. On June 6, 2014 SunEdison offered an adaptive management proposal to the USFWS and DOFAW for bats and on July 29, 2014 the LWSC was raised to 5.5 m/s between February 15th and December 15th. SunEdison continues to investigate ultrasonic bat deterrent technology, which is improving and showing great promise, but has not yet proven to be effective on a commercial scale.

Pueo. Although the Pueo is not a listed species on Maui, KWP II included Pueo in their HCP and provided mitigation compensation in the form of $25,000 paid to DOFAW in FY 2013 to be directed toward Pueo research efforts. DOFAW is currently developing a Pueo research plan by pooling several different funding sources.

Revegetation. KWP II also has revegetation goals outlined in the HCP to mitigate for loss of native habitat as a result of project development. In FY 2015, 2,761 native plants were outplanted including ʻOhiʻa (*Metrosideros polymorpha*), ʻAkia (*Wilkstroemea oahuensis*), Koʻoko ʻOlau (*Bidens micrantha*),ʻIliahi (*Santalum freycinetianum*), Naupaka kuahiwi (*Scaevola gaudichaudiana*), ʻUlei (*Pyrus anthyllidifolia*), and ʻAʻaliʻi (*Dodonaea viscosa*). This brings the total number of plants outplanted at the revegetation site up to 5,233.

Funding Status:

KWP II is required to provide all funding necessary to fulfill obligations outlined in the approved HCP. Below is a breakdown of revenue and expenditures related to DOFAW's implementation of mitigation efforts associated with the KWP II HCP.

Table 9. Summary of Revenue and Expenditures for the KWP II HCP.

Description	Revenue	Expenditure	
Revenue rolled over from previous years	$400,000.00		
Total revenue in FY15	$0		
Expenditures in FY15		$52,359.39	
Encumbrances in FY15		$20,523.75	
Ending cash balance			**$327.116.86**

Habitat Conservation Plan for the Construction and Operation of the Lanaʻi Meteorological Towers, Lanaʻi, Hawaiʻi. Approved 2008.

ITL Licensee: Castle & Cooke Resorts, LLC

Project: Install six 50-meter (165-foot) meteorological (met) towers to collect data on wind speeds and patterns throughout the northern portion of Lanaʻi Island.

ITL Duration: October 10, 2008 – March 1, 2016

Take Authorization Over 8-year Term:

Common Name	**Scientific Name**	**Level of Take Authorized Over Entire ITL Duration**	
		Tier 1	**Tier 2**
ʻUaʻu or Hawaiian Petrel	*Pterodroma sandwichensis*	7	14
ʻAʻo or Newell's Shearwater	*Puffinus auricularis newelli*	2	NA
Aeʻo or Hawaiian Stilt	*Himantopus mexicanus knudseni*	2	NA
ʻOpeʻapeʻa or Hawaiian Hoary Bat	*Lasiurus cinereus semotus*	2	NA

Status of ITL: Closed in FY 2015.

Castle & Cooke received a Board of Land and Natural Resources (BLNR) approval of the "Habitat Conservation Plan for the Construction and Operation of the Lanaʻi Meterological Towers, Lanaʻi, Hawaiʻi" and accompanying ITL on October 10, 2008. The ITL was amended twice by BLNR approval, first extending the expiration date until March 1, 2012 (approved March 11, 2010) and subsequently extending the expiration until March 1, 2016 (approved February 24, 2012).

Five of the original six towers were removed in February 2010, and the final tower was removed on April 29, 2014. In the interim, Castle & Cooke sold the property covered by the ITL and HCP to Pulama Lanaʻi (2012). In accordance with the HCP and MOA, mitigation obligations to restore habitat at Lanaʻihale were completed in 2010, with ongoing monitoring and maintenance of the restoration site continuing until the end of the ITL term. Under the MOA, DOFAW was conducting monitoring and maintenance of the restoration site until the right-of-access agreement was not reissued under the new landowner. No observed take of listed species was reported during the permit term, and mortality monitoring at the site was discontinued following the decommissioning of the final tower.

Given that all towers were decommissioned, no take occurred, all mitigation obligations were fulfilled, and the new landowners expressed no interest in continuing the HCP in the absence of a

current need for it, all parties involved agreed to terminate the agreement. A request went before the BLNR on March 13, 2015 and was unanimously approved.

Kahuku Wind Power Habitat Conservation Plan, O‘ahu, Hawai‘i. Approved 2010.

ITL Licensee: Kahuku Wind Power, LLC; SunEdison

Project: Twelve WTGs with a total 30-MW energy generating capacity.

ITL Duration: June 7, 2010 – June 7, 2030

Kahuku facility on the North Shore of O'ahu.

Take Authorization Over 20-year Term:

Common Name	Scientific Name	Level of Take	Annual Take Limit[11]	5-year Take Limit[12]	20-year Take Limit
‘Ua‘u or Hawaiian Petrel	*Pterodroma sandwichensis*	Baseline	4	8 adults/ juveniles	8 adults/ juveniles
		Higher	8	12 adults/ juveniles	12 adults/ juveniles
‘A‘o or Newell’s Shearwater	*Puffinus auricularis newelli*	Baseline	3	9 adults/ juveniles	12 adults/ juveniles
		Higher	6	12 adults/ juveniles	18 adults/ juveniles
Koloa Maoli or Hawaiian Duck	*Anas wyvilliana*	Baseline	4	12 adults/ juveniles	16 adults/ juveniles
		Higher	8	16 adults/ juveniles	24 adults/ juveniles
Ae‘o or Hawaiian Stilt	*Himantopus mexicanus knudseni*	Baseline	3	9 adults/ juveniles	12 adults/ juveniles
		Higher	6	12 adults/ juveniles	18 adults/ juveniles
‘Alae Ke‘oke‘o or Hawaiian Coot	*Fulica alai*	Baseline	3	9 adults/ juveniles	12 adults/ juveniles
		Higher	6	12 adults/ juveniles	18 adults/ juveniles
‘Alae ‘Ula or Hawaiian Moorhen	*Gallinula chloropus sandvicensis*	Baseline	4	10 adults/ juveniles	14 adults/ juveniles
		Higher	7	14 adults/ juveniles	20 adults/ juveniles
‘Ope‘ape‘a or Hawaiian Hoary Bat	*Lasiurus cinereus semotus*	Baseline	7	18 adults/ juveniles	21 adults/ juveniles
		Higher	14	21 adults/ juveniles	32 adults/ juveniles
Pueo or Hawaiian Owl	*Asio flammeus sandwichensis*	Baseline	4	12 adults	16 adults
		Higher	8	16 adults	24 adults

[11] Exceeding the Annual Take Limit (including observed and unobserved take) will require one or more of the following: adaptive management, increased mitigation, or a major ITL amendment.
[12] “5-Year” and “20-year” take limits are cumulative for the respective period of years.

Status of ITL: There was one fatality of an HCP covered species at Kahuku Wind Power during FY 2015. Tables 10 and 11 provide a listing of all documented wildlife fatalities at the Kahuku Wind Power facility during the FY 2015 reporting period.

Table 10. Documented fatalities of HCP covered species and species of concern at Kahuku Wind Power facility during the reporting period.

Common Name	**FY 2015 Take**
Hawaiian Hoary Bat	1

Table 11. Documented fatalities of MBTA-listed species and non-covered species at Kahuku during the reporting period.

Common Name	**FY 2015 Take**
Zebra Dove	3
Great Frigatebird	2
Wedge-tailed Shearwater	2
Nutmeg Mannikin	1
Spotted Dove	1
Red-vented Bulbul	1
Ring-necked Pheasant	1

Table 12 provides an estimate of the overall total adjusted take that has occurred since Kahuku Wind ITL issuance.

Table 12. Total observed fatalities since ITL issuance and estimated total adjusted take covered under the Kahuku Wind Power ITL as of June 30, 2015. There have been no reported injuries or fatalities of the seven other protected species covered under the ITL. All take estimates presented below are rounded to whole numbers for mitigation and ITL compliance purposes.

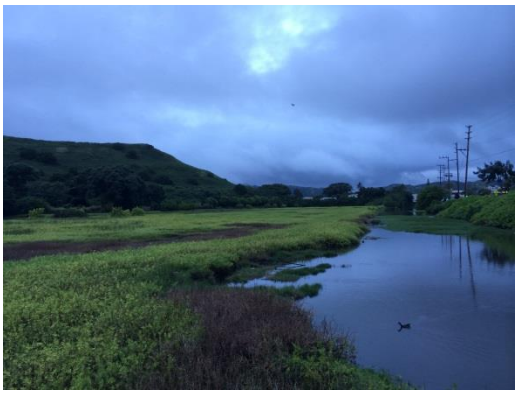
Common Name	**Total Observed Take**	**Estimated Unobserved Take**	**Total Adjusted Take[13]**	**Lost Productivity / Indirect Take[14]**
Hawaiian Hoary Bat	4	6	10	3

Mitigation Status:

Hawaiian Petrel & Newell's Shearwater. In accordance with the Kahuku Wind HCP, the seabird mitigation plan for Newell's Shearwater and Hawaiian Petrel requires SunEdison to fund seabird colony-based protection and management measures on the island of Kauaʻi. Staff from the DOFAW Kauaʻi Endangered Seabird Recovery Project (KESRP) identified six sites to implement Barn Owl control as a form of seabird colony protection. DOFAW began to implement work in the fourth quarter of FY 2015 at the six sites: (1) Nualolo Aina; (2) Nualolo Kai; (3) Honopu; (4) Kalaheo/Kahili; (5) Lehua Islet; and (6) the back of Hanalei Valley. It is expected that these six areas hold significant potential for shearwater conservation through barn owl-specific predator control actions.

[13] Total adjusted take based on the 80% credible maximum when calculated using the Evidence of Absence calculator.
[14] Assessed in addition to Total Adjusted Take.

Hawaiian Stilt, Hawaiian Coot, Hawaiian Moorhen, and Hawaiian Duck. Baseline mitigation for the four waterbird species covered under the ITL consists of payments to DOFAW to conduct predator control and wetland restoration at Hamakua Marsh, part of the State's Kawainui-Hamakua Marsh Complex, for four years. Predator control and vegetation maintenance have been ongoing since 2011 in order to maintain and increase waterbird productivity.



ʻAlae ʻUla or Hawaiian Moorhen swimming at Hamakua Marsh

Survey results documented five Hawaiian Coot, 26 Moorhen, and three Stilt fledglings at Hamakua Marsh during FY 2015.

Hawaiian Hoary Bat. In accordance with the Kahuku Wind HCP, baseline bat mitigation consisted of a $150,000 payment to DOFAW (procured on May 31, 2012) for preserving or enhancing foraging and/or roosting habitat by constructing an ungulate-proof fence around a roughly 280 acre section of the State Kahikinui Forest Reserve and State Nakula Natural Area Reserve. In FY 2015, approximately 2,500 meters of fence were installed to enclose the unit. Ungulates were then removed, a planting area prepared, and over 28,000 plants, including Koa, ʻAʻaliʻi, Māmane, ʻŌhiʻa, ʻIliahi, and Pilo were installed. The Kahuku mitigation funds were pooled with other funding sources to contribute to collaborative, concentrated management in the region.

In accordance with the avoidance and minimization measures described in the HCP, curtailment of all turbines up to a wind speed of 5 m/s is being implemented between sunset and sunrise from April through November.

Pueo. Payments have been completed to initiate the first Pueo research on Oʻahu aimed at determining population status and management priorities. DOFAW is currently developing a Pueo research plan for Oʻahu by pooling several different funding sources.

Funding Status: Kahuku Wind Power, LLC is required to provide all funding necessary to fulfill obligations outlined in the approved HCP. Below is a breakdown of revenue and expenditures related to DOFAW's implementation of mitigation efforts associated with the Kahuku HCP.

Table 13. Summary of Revenue and Expenditures for the Kahuku HCP

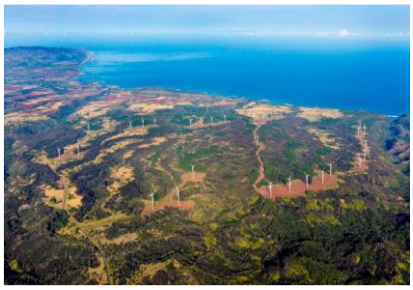
Description	Revenue	Expenditure	
Revenue rolled over from previous years	$564,116.79		
Total revenue in FY15	$21,778.75		
Expenditures in FY15		$286,352.28	
Encumbrances in FY15		$228,143.89	
Ending cash balance			$71,399.37

Kawailoa Wind Power Habitat Conservation Plan, O‘ahu, Hawai‘i. Approved 2012.

ITL Licensee: Kawailoa Wind Power, LLC; SunEdison

Project: Thirty WTGs with a total 69 MW energy generating capacity.

ITL Duration: January 6, 2012 – January 6, 2032



Kawailoa Wind Power, O‘ahu

Take Authorization Over 20-year Term:

Common Name	Scientific Name	Level of Take	5-year Take Limit[15]	20-year Take Limit
‘A‘o or Newell’s Shearwater	*Puffinus auricularis newelli*	Tier 1	3 adults/ juveniles & 2 chicks/eggs	3 adults/ juveniles & 2 chicks/eggs
		Tier 2	6 adults/ juveniles & 3 chicks/eggs	6 adults/ juveniles & 3 chicks/eggs
Koloa Maoli or Hawaiian Duck	*Anas wyvilliana*	Tier 1	4 adults/ juveniles & 4 ducklings	4 adults/ juveniles & 4 ducklings
		Tier 2	6 adults/ juveniles & 6 ducklings	6 adults/ juveniles & 6 ducklings
Ae‘o or Hawaiian Stilt	*Himantopus mexicanus knudseni*	Tier 1	6 adults/ juveniles & 3 fledglings	8 adults/ juveniles & 4 fledglings
		Tier 2	8 adults/ juveniles & 4 fledglings	12 adults/ juveniles & 6 fledglings
‘Alae Ke‘oke‘o or Hawaiian Coot	*Fulica alai*	Tier 1	6 adults/ juveniles & 3 fledglings	8 adults/ juveniles & 4 fledglings
		Tier 2	8 adults/ juveniles & 4 fledglings	12 adults/ juveniles & 6 fledglings
‘Alae ‘Ula or Hawaiian Moorhen	*Gallinula chloropus sandvicensis*	Tier 1	6 adults/ juveniles & 3 fledglings	8 adults/ juveniles & 4 fledglings
		Tier 2	8 adults/ juveniles & 4 fledglings	8 adults/ juveniles & 4 fledglings
‘Ope‘ape‘a or Hawaiian Hoary Bat[16]	*Lasiurus cinereus semotus*	Tier 1	20 bats	20 bats
		Tier 2	40 bats	40 bats
		Tier 3	60 bats	60 bats
Pueo or Hawaiian Owl	*Asio flammeus sandwichensis*	Tier 1	4 adults & 4 owlets	4 adults & 4 owlets
		Tier 2	6 adults & 6 owlets	6 adults & 6 owlets

Status of ITL: Tables 14 and 15 provide a listing of all documented wildlife fatalities at the Kawailoa Wind Power facility during FY 2015.

Table 14. Documented fatalities of HCP covered species and species of concern at Kawailoa Wind Power during the reporting period.

Common Name	Total Take
Hawaiian Hoary Bat	10

[15] “5-Year” and “20-year” take limits are cumulative for the respective period of years.
[16] Minor amendment to clarify permitted bat take processed on November 26, 2014.

Table 15. Documented fatalities of MBTA-listed species and non-covered species at Kawailoa during the reporting period.

Common Name	Total Take
Spotted Dove	18
Common Myna	16
Nutmeg Mannikin	6
Common Waxbill	5
White-tailed Tropicbird	3
Red-crested Cardinal	3
Zebra Dove	3
Java Sparrow	2
Japanese White-eye	1
House Finch	1
Pacific Golden Plover	1
Orange-cheeked Waxbill	1

Table 16 provides an estimate of the overall total adjusted take that has occurred since Kawailoa Wind ITL issuance.

Table 16. Total observed fatalities since ITL issuance and estimated total adjusted take covered under the Kawailoa Wind Power ITL as of June 30, 2015. There have been no reported injuries or fatalities of the six other protected species covered under the ITL. All take estimates presented below are rounded to whole numbers for mitigation and ITL compliance purposes.

Common Name	Total Observed Take	Estimated Unobserved Take	Total Adjusted Take[17]	Lost Productivity / Indirect Take[18]
Hawaiian Hoary Bat	24	16	40	2.48

A total of ten Hawaiian Hoary Bat fatalities were observed during FY 2015. No incidental take of the other six covered species under the ITL occurred during the reporting period. The total estimated take of 42 bats (with 80% statistical certainty and indirect take) exceeds both the Tier 1 and Tier 2 permitted take for bats. SunEdison submitted a letter of intent to the agencies on July 10, 2014 stating that they would be seeking an amendment to their license, and have been in consultation with the agencies since that time. It is expected that the amendment will be submitted for review before the end of the 2015 calendar year.

Mitigation Status:

Newell's Shearwater. Baseline mitigation for Newell's Shearwater as described in the HCP consists of (1) providing funding for adapting a resetting trap for use in Hawai'i, (2) field testing traps at a suitable location where predators are known to occur, and (3) supporting a one-year

[17] Total adjusted take based on the 80% credible maximum using the Evidence of Absence calculator.
[18] Assessed in addition to Total Adjusted Take.

pilot study to provide localized predator control in an area where Newell's Shearwater are known to be breeding. Components (1) and (2) were completed and reported on in FY 2013. In FY 2014, a scope of work was developed and an MOU between SunEdison and DOFAW was signed to deploy song meters at six known Newell's colonies on Kaua´i. Seabird colony activity assessment on Kaua'i was completed for the breeding season in the first quarter of FY 2015, and a summary report was delivered in the third quarter. This assessment is part of a predator control project co-funded by Kahuku Wind Power and completes the seabird mitigation as described in the HCP for Kawailoa.

Hawaiian Duck, Hawaiian Stilt, Hawaiian Moorhen, & Hawaiian Coot. As part of baseline mitigation for waterbirds, in July 2013 contractors completed a 4-foot high fence to completely enclose 135 acres of 'Uko'a Wetland for the protection of waterbirds and bats that are known to forage in the area. As outlined in the HCP, waterbird mitigation at 'Uko'a Wetland will consist of fencing, predator control, vegetation management, and monitoring in a 40-acre portion of the wetland. A plan was developed in May 2014, and the early stages of implementation began in May and June, including selection of contractors and removal of predators including pigs, cats, mongooses, and rats. Predator trapping, insect assessment, and fence maintenance continued through FY 2015, but vegetation management has ceased pending results of negotiations regarding conditions of the lease agreement between SunEdison and the 'Uko'a Wetland landowner.

Hawaiian Hoary Bat. The restoration portion of Tier 1 mitigation for Kawailoa includes managing 80 acres of the nearby 'Uko'a Wetland area to increase its habitat value for bats, and managing 40 acres surrounding the wetland to create feeding lanes and increase native tree species favorable to bat roosting. Bat activity assessments began at 'Uko'a on June 20, 2013 and will continue for the next several years. A plan was developed in May 2014, and the early stages of implementation began in May and June of 2014, including selection of contractors and removal of predators including pigs, cats, mongooses, and rats. Predator trapping, bat monitoring, insect assessment, and fence maintenance continued through FY 2015, but vegetation management has ceased pending results of negotiations regarding conditions of the lease agreement between SunEdison and the 'Uko'a Wetland landowner.

Female Hawaiian Hoary Bat caught at ´U´koa Wetland, Oahu.

Challenges with getting a landowner agreement in place for the original agency-approved Tier 2 mitigation plan led to a need to find a new location to conduct Tier 2 mitigation. As of yet, the proposals put forth have not been approved by the agencies. SunEdison is working on putting together a proposal for Tier 3 mitigation, pending review and approval of a Hawaiian Hoary Bat mitigation guidance document currently in development by DOFAW staff and the ESRC.

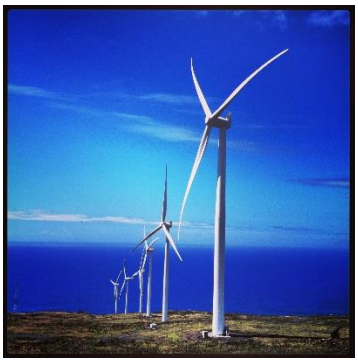
Pueo. Baseline mitigation for Pueo consisted of Kawailoa SunEdison providing $12,500 to the Hawai‘i Wildlife Rehabilitation Center on Hawai‘i Island in FY 2013, and $25,000 for research in FY 2014. DOFAW is currently developing a Pueo research plan by pooling several different funding sources.

Funding Status: Kawailoa Wind Power, LLC is required to provide all funding necessary to fulfill obligations outlined in the approved HCP. Below is a breakdown of revenue and expenditures related to DOFAW's implementation of mitigation efforts associated with the Kawailoa HCP.

Table 17. Summary of Revenue and Expenditures for the Kawailoa HCP.

Description	Revenue	Expenditure	
Revenue rolled over from previous years	$18,069.50		
Total revenue in FY 2015	$43,069.50		
Expenditures in FY 2015		$15,975.15	
Encumbrances in FY 2015		$2,094.33	
Ending cash balance			**$43,069.52**

Auwahi Wind Energy Habitat Conservation Plan, Maui, Hawai‘i. Approved 2012.



Auwahi Wind Power, Maui

ITL Licensee: Auwahi Wind Energy, LLC; Sempra U.S. Gas & Power

Project: Eight WTGs with a total 21-MW energy generating capacity.

ITL Duration: February 9, 2012 – February 9, 2037

Take Authorization Over 25-year Term:

Common Name	Scientific Name	Level of Take	25-year Limit[8]
‘Ua‘u or Hawaiian Petrel	*Pterodroma sandwichensis*	Tier 1	19 adults/ immatures & 7 chicks/eggs
		Tier 2	32 adults/ immatures & 12 chicks/eggs
		Tier 3	64 adults/ immatures & 23 chicks/eggs
Nēnē or Hawaiian Goose	*Branta sandvicensis*	Length of permit	5 adults/ immatures
‘Ope‘ape‘a or Hawaiian Hoary Bat	*Lasiurus cinereus semotus*	Tier 1	5 adults/ immatures & 2 juveniles
		Tier 2	10 adults/ immatures & 4 juveniles
		Tier 3	19 adults/ immatures & 8 juveniles
Blackburn’s Sphinx Moth	*Manduca blackburni*	Not applicable	28-acres permanently disturbed habitat is an index of take

Status of ITL: Tables 17 and 18 provide a listing of all documented wildlife fatalities at the Auwahi Wind Energy facility during FY 2015.

Table 17. Documented fatalities of HCP covered species and species of concern at Auwahi during the reporting period.

Common Name	Scientific Name	FY15 Fatalities
Hawaiian Hoary Bat	*Lasiurus cinereus semotus*	4
Hawaiian Petrel	*Pterodroma sanwichensis*	1

Table 18. Documented fatalities of MBTA-listed species and non-covered species at Auwahi during the reporting period.

Common Name	Scientific Name	FY15 Fatalities
African Silverbill	*Lonchura cantanus*	5
Great Frigatebird	*Fregata minor*	4
Gray Francolin	*Francolinus pondicerianus*	3
Common House Sparrow	*Passer domesticus*	2
Skylark	*Alauda arvensis*	2
Zebra Dove	*Geopelia striata*	1

Common Name	Scientific Name	FY15 Fatalities
White-tailed Tropicbird	*Phaethon lepturus*	1
Wedge-tailed Shearwater	*Ardenna pacifica*	1

Table 19 provides an estimate of the overall total adjusted take that has occurred since Auwahi Wind ITL issuance.

Table 19. Total observed fatalities since ITL issuance and estimated total adjusted take covered under the Auwahi Wind Energy ITL as of June 30, 2015. There has been no reported take of the three other protected species covered under the ITL. All take estimates presented below are rounded to whole numbers for mitigation and ITL compliance purposes.

Common Name	Total Observed Take	Estimated Unobserved Take	Total Adjusted Take[19]	Lost Productivity / Indirect Take[20]
Hawaiian Hoary Bat	5	12	17	0

Mitigation Status:

Hawaiian Petrel. Mitigation for take of Hawaiian Petrels in FY 2015 consisted of continued petrel burrow monitoring at Kahikinui Forest Reserve to obtain an estimate of the number of active petrel burrows and reproductive (fledging) success. As in previous years, all monitoring protocols followed methods used by the National Park Service. New burrows located were marked, mapped, and added to the monitoring dataset. In the most recent breeding season, 63 petrel burrows were being monitored, 29 of which showed signs of consistent activity. Six burrows successfully fledged a chick.

Auwahi Wind worked with Island Conservation and Tetra Tech to develop a predator control strategy for Kahikinui based on site-specific conditions and Island Conservation's expertise. The predator control strategy will allow predator control to be adaptively managed over time. Auwahi Wind deployed tracking tunnels to assess rat and mongoose activity across the entire management area, and then set 138 traps which were checked and baited every 2 weeks for a total of 36 weeks. Trapping resulted in the removal of 161 predators, including mice, rats, and mongoose.

Hawaiian Hoary Bat. Tier 1 mitigation for the Hawaiian Hoary Bat consists of the restoration of approximately 130 acres of pastureland in the Waihou Mitigation Area (the Puʻu Makua parcel) to create roosting and foraging habitat for the Hawaiian Hoary Bat. Restoration of this area includes a completed perimeter fence, the removal of ungulates and invasive plant species, and the ongoing reforestation of native species (19 acres planted in FY 2015).

[19] Total adjusted take based on the 80% credible maximum using the Evidence of Absence calculator.
[20] Assessed in addition to Total Adjusted Take.

For Tier 2 mitigation, Auwahi worked with Frank Bonaccorso of the US Geological Survey (USGS) to develop a research project combining radio telemetry and acoustic monitoring to track the success of mitigation efforts at Waihou, as well as to provide more information on the ecology of the Hawaiian Hoary Bat as part of their Tier 2 mitigation requirements. Implementation of the plan began in March 2015 with the deployment of six acoustic detectors. Monitoring will continue for one year.

Auwahi has initiated planning for Tier 3 mitigation and is expected to submit a proposal to DOFAW/USFWS in fall 2015.

Auwahi has seen a higher than expected take of Hawaiian Hoary Bats since the start of operations (2.5 years). For take of this listed species, Auwahi is expected to submit a major amendment of the ITL to DOFAW and USFWS for evaluation in FY 2016.

Blackburn's Sphinx Moth. Baseline mitigation for Blackburn's Sphinx Moth consisted of a payment of $144,000 to the Leeward Haleakala Watershed Restoration Partnership (LHWRP) on April 17, 2012, to restore dryland forest by planting the equivalent of 6 acres of native endangered ʻAiea (*Nothocestrum latifolium*) throughout the Auwahi Forest Restoration Project. ʻAiea is known to serve as a host plant for the endangered Blackburn's Sphinx Moth. In FY 2015, 788 `Aiea were planted in an 11 acre section of the Auwahi III enclosure, with an additional 200 nursery grown seedlings awaiting outplanting.

Funding Status: Auwahi Wind Energy, LLC is required to provide all funding necessary to fulfill obligations outlined in the approved HCP. In FY 2015, Auwahi Wind Energy used their own procurement processes to fulfill HCP obligations.

Other Development Projects

A Conservation Plan for Hawaiian Stilt at Cyanotech Aquaculture Facility, Keahole Point, Hawai'i. Approved 2003.

ITL Licensee: Cyanotech Corporation

Project: Commercial microalgae farming operation.

ITL Duration: December 24, 2003 – March 17, 2016

Take Authorization Over 13-year Term:

Common Name	**Scientific Name**	**Total Authorized Over ITL Duration**
Ae'o or Hawaiian Stilt	*Himantopus mexicanus knudseni*	The greater of, 45 or the number of chicks produced to offset losses[21]

Status of ITL: Table 21 provides a listing of all documented wildlife fatalities during the reporting period.

Table 21. Documented wildlife fatalities at the Cyanotech Aquaculture Facility during the reporting period.

Common Name	**Take Observed during FY 2015**	**ITL Covered Species (Yes/No)**
Hawaiian Stilt	1	Yes

In accordance with the Cyanotech HCP, surveys for incidental take are conducted twice per week during the nesting season and once per week during the non-nesting season. However, monitoring for injured wildlife is conducted daily as part of normal operations of the production raceways.

Table 22 provides an estimate of the overall total adjusted take that has occurred since Cyanotech ITL issuance.

Table 22. Total observed fatalities since ITL issuance and estimated total adjusted take covered under the Cyanotech ITL as of June 30, 2015. All take estimates presented below are rounded to whole numbers for mitigation and ITL compliance purposes.

Common Name	**Total Observed Take**	**Total Adjusted Take[22]**
Hawaiian Stilt	19	41

[21] From 1999-2003, 66 Ae'o were found injured or killed at the facility due to the basin tanks also being used as foraging habitat. The tanks were netted in 2004, resulting in a significant decline in Ae'o fatalities.
[22] Total adjusted take based on the survival rate of 2.17 fledglings with respect to incidental take of adult as described in the 2006 Cyanotech Amendment.

Mitigation Status:

Hawaiian Stilt. According to the 2006 minor amendment, Cyanotech mitigation obligations include funding and implementing predator control at an off-site location. ʻOpaeʻula pond is a 3.24 hectare coastal wetland located in the North Kona district of Hawaiʻi Island and has been identified as a viable location for predator control efforts. In accordance with the Cyanotech ITL, take must not exceed "the greater of, 45 or the number of chicks produced to offset losses." Cyanotech is currently working with the private landowner to fund predator control efforts at ʻOpaeʻula pond to meet mitigation obligations.

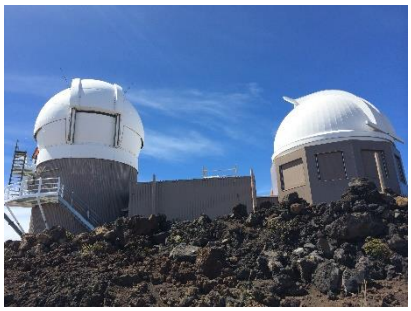
Funding Status: Cyanotech Corporation is required to provide all funding necessary to fulfill obligations outlined in the approved HCP. In FY 2015, Cyanotech used their own procurement processes to fulfill HCP obligations.

Habitat Conservation Plan for Construction of the Daniel K. Inouye Solar Telescope[23] at the Halekalā High Altitude Observatory Site, Maui, Hawai‘i. Approved 2011.

ITL Licensee: National Science Foundation

Project: Construction of the Daniel K. Inouye Solar Telescope (DKIST) within the 18-acre University of Hawai‘i Institute for Astronomy Haleakalā High Altitude Observatory site at the summit of Haleakalā.

ITL Duration: December 1, 2011 – December 1, 2021



DKIST Facility on Haleakalā summit.

Take Authorization Over 10-year Term:

Common Name	Scientific Name	Total Authorized Over ITL Duration
‘Ua‘u or Hawaiian Petrel	*Pterodroma sandwichensis*	30 fledglings and 5 adults

Status of ITL: A total of four Hawaiian Petrel carcasses or remains were discovered within the project site and Conservation Area during the reporting period. After agency review of documents, photos, and video footage of mortality incidents, staff determined that there was insufficient evidence to definitively state that these mortalities were associated with project activities, and are therefore not counted against DKIST’s ITL.

Birdstrike monitoring has occurred annually during seabird nesting season, February 1 to November 30, since 2011. In accordance with the HCP, areas around the two Federal Aviation Administration (FAA) towers, the telescope construction site, and the conservation fence are monitored. No collision events associated with the towers or conservation fence have been detected since birdstrike monitoring began in 2011. Noise and vibration monitoring is also conducted to determine if the burrows nearest the construction site are impacted by construction activities. As of June 30, 2015, no construction activity has produced vibrations meeting or exceeding the threshold of 0.12 in/sec established in the HCP, and noise levels have averaged 56 dBA which is not above ambient environmental levels.

Mitigation Status:

Hawaiian Petrel. In accordance with the HCP, DKIST constructed a 4.23 km ungulate-proof fence enclosing a 313 acre Conservation Area adjacent to Haleakalā National Park. As a result of the fence construction process and the intensive monitoring activities that were being implemented during the fence construction, all ungulates left the area before the fence was completed in November 2013. Based on footage from camera traps, no ungulates have been detected within the Conservation Area since September 12th, 2013.

[23] Formerly the Advanced Technology Solar Telescope; name officially changed on December 15, 2013.

Predator control has been ongoing since September 2012 using A-24 automatic traps (targeting mongoose) and Havahart traps (targeting cats). In June 2014 the traps were rearranged to a more unified grid pattern, and supplemented with additional traps to cover the entirety of the Conservation Area. Traps are baited during Petrel season (February-November) each year. No predators were caught in FY 2015.

The 2015 Petrel season is ongoing. The 2014 season noted 165 active burrows in the conservation area, with 44 of those burrows successfully producing a fledgling.

Funding Status: DKIST is required to provide all funding necessary to fulfill obligations outlined in the approved HCP. In FY 2015, DKIST used their own procurement processes to fulfill HCP obligations.

Kauaʻi Lagoons Habitat Conservation Plan, Kauaʻi, Hawaiʻi. Approved 2012.

Kauaʻi Lagoons, Kauaʻi.

ITL Licensee: Kauaʻi Lagoons, LLC

Project: Oceanfront resort encompassing approximately 600 acres.

ITL Duration: April 11, 2012 – April 11, 2042

Take Authorization Over 30-year Term:

Common Name	Scientific Name	Type of Take	Total Authorized Over ITL Duration
ʻAʻo or Newell's Shearwater	*Puffinus auricularis newelli*	Life of permit	29*
Koloa Maoli or Hawaiian Duck	*Anas wyvilliana*	Mortality or Non-Lethal	36
Aeʻo or Hawaiian Stilt	*Himantopus mexicanus knudseni*	Mortality or Non-Lethal	38
ʻAlae Keʻokeʻo or Hawaiian Coot	*Fulica alai*	Mortality	110
		Non-Lethal	180
ʻAlae ʻUla or Hawaiian Moorhen	*Gallinula chloropus sandvicensis*	Mortality	40
		Non-Lethal	30
Nēnē or Hawaiian Goose	*Branta sandvicensis*	Mortality or Non-Lethal	17
ʻUaʻu or Hawaiian Petrel	*Pterodroma sandwichensis*	Life of Permit	1
ʻAkēʻakē or Band-rumped Storm Petrel	*Oceanodroma castro*	Life of Permit	1

*Authorized level of take changed from 27 to 29 as processed under the September 2013 Minor Amendment

Status of ITL: Table 23 provides a listing of all documented incidental take during the reporting period.

Table 23. Documented incidental take at the Kauaʻi Lagoons site during the reporting period.

Common Name	Take Observed during FY 2015	ITL Covered Species (Yes/No)
Hawaiian Moorhen	3	Yes
Hawaiian Coot	3	Yes
Nēnē	2	Yes

Table 24 provides the observed mortalities that have occurred since Kauaʻi Lagoons ITL issuance.

Table 24. Total observed incidental take since ITL issuance under the Kauaʻi Lagoons ITL as of June 30, 2015.

Common Name	Total Observed Take	Total with Adjusted Take
Newell's Shearwater	2	2
Nēnē	2	2.72
Hawaiian Moorhen	4	4.325
Hawaiian Duck	1	1

Common Name	Total Observed Take	Total with Adjusted Take
Hawaiian Stilt	0	0
Hawaiian Coot	6	6

In accordance with the Kauaʻi Lagoons HCP, the Kauaʻi Lagoons Resort (Resort) implemented the following minimization measures during this reporting period:

- On-site predator control;
- Comprehensive endangered species awareness training to all Resort employees;
- Deployment of construction monitors and biological monitors during construction operations to prevent harm to ITL covered species;
- Education program to inform golfers of the presence of endangered species and implement measures to avoid harm to such species while golfing; and
- Program to minimize light-induced attraction of seabirds to Resort facilities by installing appropriate lighting fixtures, and implementing appropriate seasonal restrictions and practices.

Over the past ten years, the Resort has assisted in efforts to increase the Nēnē population. However, due to the close proximity of the Resort to Lihue Airport, Nēnē from the Resort pose a bird-strike hazard to aircraft. In 2009, wildlife agencies determined that the Kauaʻi Lagoons HCP would solely address endangered species impacts from Resort construction and operation, as applicable FAA regulations require that the airport operator address aircraft-wildlife hazards. Thus, this HCP does not include or cover any specific Nēnē management measures designed to address aircraft safety issues. Instead, this HCP explicitly identifies and acknowledges aircraft safety issues, and commits the Resort to cooperate with the airport agencies and the wildlife agencies in their separate efforts to address these concerns in accordance with applicable FAA regulations. DOFAW will continue to work with the Resort and other state and federal agencies on the best approaches to minimize impact to wildlife while maintaining public safety.

On September 11, 2013, DOFAW processed a Minor Amendment to address seabird mitigation and authorized take levels. During the 2013 fiscal reporting period, two Newell's Shearwaters were found downed in the vicinity of the Kauaʻi Lagoons existing Kalanipuʻu buildings. The original Kauaʻi Lagoons HCP/ITL authorized take of listed Hawaiian seabirds due to light attraction expected with the completion of new buildings, anticipated to occur in 2015. In order to include take associated with light attraction on existing infrastructure, a minor amendment was processed to change the authorized take from 27 Newell's Shearwaters to 29 Newell's Shearwater beginning in 2013.

Mitigation Status:

Nēnē, Hawaiian Stilt, Hawaiian Coot, Hawaiian Moorhen, & Hawaiian Duck. Baseline mitigation for waterbirds consists of providing and maintaining approximately 35 acres of lagoons on the property that are an important habitat for endangered waterbird species, including predator control trapping and wildlife monitoring. Predator control efforts during this reporting period resulted in 13 cats, nine dogs and 1,725 chickens removed from the property. In addition, Kauaʻi Lagoons has provided DOFAW with $85,000 to be used to conduct predator control and/or manage Nēnē at a translocation site(s) after the completion of the State's five-year translocation project ending in 2016.

Newell's Shearwater, Hawaiian Petrel, & Band-rumped Storm Petrel. The Minor Amendment also directed mitigation funding for seabird take, in the amount of $10,000 annually, to the National Fish and Wildlife Foundation account, to be held until such time a Kauaʻi seabird island-wide HCP (currently in the planning stages) is finalized and approved.

Funding Status: Kauaʻi Lagoons is required to provide all funding necessary to fulfill obligations outlined in the approved HCP. Below is solely a breakdown of revenue and expenditures related to DOFAW's implementation of mitigation efforts associated with the Kauaʻi Lagoons HCP.

Table 25. Summary of Revenue and Expenditures for the Kauaʻi Lagoons HCP.

Description	Revenue	Expenditure	
Revenue rolled over from previous years	$85,000		
Total revenue in FY 2015	$0		
Expenditures in FY 2015		$0	
Ending cash balance			**$85,000**

Round-leaved Chaff Flower (*Achyranthes splendens* var. *rotundata)* Habitat Conservation Plan, Kenai Industrial Park, Kapolei, O‘ahu, Hawai‘i. Approved 2014

ITL Licensee: CIRI Land Development Company[24]

Project: Industrial development on a 0.75-acre parcel

ITL Duration: February 10, 2014 – February 9, 2024

Achyranthes splendens var. *rotundata*.

Take Authorization Over 10-year Term:

Common Name	**Scientific Name**	**Total Authorized Over ITL Duration**
Round-leaved Chaff Flower	*Achyranthes splendens* var. *rotundata*	3 individuals and their seed bank

Status of ITL: All plants at the site were removed during this reporting period under supervision of the State botanist.

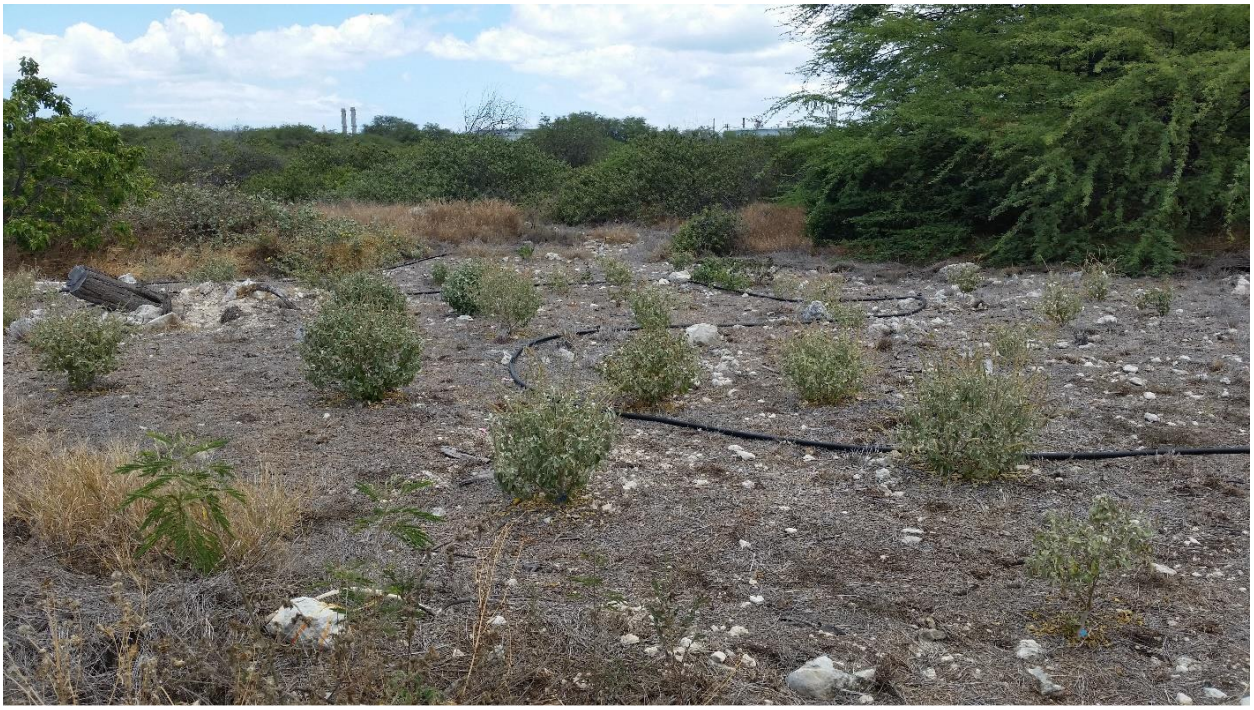
Approximately 23,000 seeds were collected in 2014. Roughly 400 of the seeds collected were used to germinate plants at Hui Ku Maoli Ola native plant nursery, the remainder are in storage at the Lyon seed facilities. The seeds at Hui Ku Maoli Ola were propagated during the reporting period and were used for outplanting at the mitigation site.

Mitigation Status:

Round-leaved Chaff Flower. In accordance with the HCP, seeds were collected from the project site and were either stored or propagated for future out-planting at the mitigation site located at the Kalaeloa Unit of the Pearl Harbor National Wildlife Refuge.

A total of 155 plants were installed in four plots within the Kalaeloa Unit in December 2014 (see example, Plot 1). In April 2015, at the end of the establishment period, 148 plants were living. Plants received supplemental water to reduce drought stress during hot and dry summer months. Minimal hand-clearing of weeds was needed to maintain a 2-foot buffer around each plant. Mealy bugs were treated as needed. All year-one success criteria have been met: there are at least 120 living plants (139) and there are no mature kiawe (*Prosopis pallida*) within the four plots.

[24] In September of 2014, CIRI Land Development Company sold the property under the ITL to AKC Leasing Corporation



Plot 1 outplants on 6/25/2015

Funding Status: In September of 2014, CIRI Land Development Company (original owner of the property under the ITL) sold the property to AKC Leasing Corporation. AKC Leasing corporation has acknowledged and understands that ownership of the property is subject to conditions under the approved Incidental Take License Number ITL-18 and the associated Round-Leaved Chaff Flower *(Achyranthes splendens* var. *rotundata)* Habitat Conservation Plan, Kenai Industrial Park. AKC Leasing Corporation is required to provide all funding necessary to fulfill obligations outlined in the approved HCP including funding assurances. In FY 2015, AKC Leasing Corporation used their own procurement processes to fulfill HCP obligations.

SUMMARY OF SAFE HARBOR AGREEMENTS AND ASSOCIATED INCIDENTAL TAKE LICENSES

Safe Harbor Agreement for Puʻu o Hōkū Ranch, Molokaʻi. Approved 2001.

ITL Licensee: Puʻu o Hōkū Ranch, Limited

Project: Reintroduce Nēnē (*Branta sandvicensis*) to Puʻu o Hōkū Ranch, Molokaʻi.

ITL Duration: September 4, 2001 – September 3, 2008[25]

Take Authorization: Incidental take of Nēnē on lands owned or otherwise controlled by Puʻu o Hōkū Ranch, Limited.

Baseline Condition[26]: No wild Nēnē on Puʻu o Hōkū Ranch property or documented use of suitable habitat. At the time of agreement execution, there was no wild Nēnē on Molokaʻi.

Status of ITL: This SHA allows for the reintroduction of Nēnē on Puʻu o Hōkū Ranch property, construct a release pen, provide habitat for Nēnē grazing and breeding, and control predators in the release pen and breeding areas. A total of 74 birds were translocated to the Puʻu o Hōkū Ranch from 2002-2005. Table 26 provides survey data over the past 13 years for the original 74 birds translocated to the Puʻu o Hōkū Ranch. The percentage of the original 74 birds that were re-sighted is a factor of survey effort and does not account for any unknown mortality or emigration from the ranch, and may not necessarily be a measure of translocation success.

Table 26. Record of Nēnē translocated to Puʻu o Hōkū Ranch from 2002-2015, including fate and re-sighting information.

Year	No. of Birds Translocated	No. of Known Fatalities	No. of Birds Sighted	Percentage (%) of Translocated Birds (minus known fatalities) Sighted
2015	0	0[27]	4	5
2014	0	0	6	9
2013	0	0	6	9
2012	0	0	6	9
2011	0	0	7	11
2010	0	0	8	13
2009	0	0	18	28
2008	0	1	33	52
2007	0	0	38	58
2006	0	5	29	45

[25] DOFAW is currently in discussion with Puʻu o Hōkū Ranch to enter into a new agreement in the next Fiscal Year.
[26] Baseline Conditions describe endangered or threatened species population estimates and distribution, or the habitat characteristics that sustain seasonal or permanent use by such species. Safe Harbor Agreements must achieve a net conservation benefit above Baseline Conditions.
[27] Five adult Molokaʻi-born Nēnē mortalities occurred in the open top release pen during this reporting period (two from trauma and three due to predation events).

Year	No. of Birds Translocated	No. of Known Fatalities	No. of Birds Sighted	Percentage (%) of Translocated Birds (minus known fatalities) Sighted
2005	11	2	47	67
2004	8	1	42	69
2003	41	1	54	100
2002	14	0	14	100

Observations from surveys throughout the reporting period resulted in a total of 54 banded birds and six unknown birds were seen. Annual data and survey observations indicate a population of 78 individual Nēnē, including those from the original

Nēnē, official bird of the State of Hawai'i, resting in the foreground.

During the August – April nesting season, a total of two nests were recorded within the open-top release pen at the Puʻu o Hōkū Ranch. Of the two nests, one was abandoned and one was depredated. Neither nest was successful in producing any goslings.

Three acres within the open-top release pen were maintained monthly and an additional 303 acres within the Puʻu o Hōkū Ranch was mowed during this reporting period. A total of 63 mongooses and one cat were removed around the open-top release pen at the Puʻu o Hōkū Ranch. No rats or dogs were trapped this year.

Programmatic Safe Harbor Agreement for Nēnē on the Island of Molokaʻi, Hawaiʻi. Approved 2003.

ITL Licensee: DOFAW to issue Certificates of Inclusion under authority of §195D-22, HRS, to landowners signing Cooperative Agreements.

Project: Encourage private landowner management activities to benefit Nēnē and provide regulatory assurances if Nēnē occupy or breed on their property.

ITL Duration: April 7, 2003 – April 6, 2053

Take Authorization: Any Nēnē or Nēnē habitat above Baseline Conditions, as defined in respective landowner Cooperative Agreements

Baseline Condition: Not Applicable

Status of ITL: During the reporting period and to date, there are no landowners enrolled under this SHA; however discussions with interested landowners are ongoing.

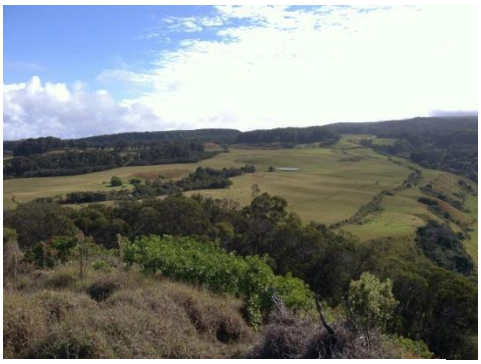
Safe Harbor Agreement for the Introduction of Nēnē to Piʻiholo Ranch, Maui. Approved 2004.

ITL Licensee: Piʻiholo Ranch, LLC

Project: Establish a Nēnē population on Piʻiholo Ranch.

ITL Duration: September 21, 2004 – September 20, 2054

Take Authorization: Incidental take of Nēnē on lands owned or otherwise controlled by Piʻiholo Ranch, LLC.



Piʻiholo Ranch on Maui.

Baseline Condition: Following Nēnē reintroduction efforts on Maui that began at Haleakalā National Park in 1962, DOFAW began establishing a population in west Maui through a reintroduction program at Hanaʻula in 1995. However, prior to the development of the SHA, there had been no known Nēnē sightings at Piʻiholo Ranch premises by DOFAW staff or Ranch personnel. Therefore the baseline condition was determined to be zero.

Status of ITL: Under this SHA, Piʻiholo Ranch is maintaining or improving approximately 600 acres of Nēnē habitat for a period of 10 years. In cooperation with DOFAW, Piʻiholo Ranch is undertaking the following activities: (1) construction of a Nēnē release pen; (2) predator control activities around Nēnē nesting and breeding sites; and (3) out-planting native plant species known to be Nēnē food sources.

Nēnē monitoring was performed on a weekly basis by Ranch and DOFAW personnel throughout the reporting period. A total of 48 birds were released to the Ranch from 2005-2008.There were no additional birds released from the Maui Bird Conservation Center after 2008. A total of 10 of the original released birds were sighted on Piʻiholo Ranch during the reporting period. Observational survey monitoring for Nēnē on Piʻiholo Ranch throughout the reporting period resulted in a population estimate of 34 birds. Table 27 provides survey data over the past 10 years for the original 48 birds released to the Ranch. The percentage of the original 48 birds that were re-sighted is a factor of survey effort and does not account for any unknown mortality or emigration from the ranch, and may not necessarily be a measure of release success.

Table 27. Record of Nēnē translocated to Pi‘iholo Ranch from 2005-2015, including fate and re-sighting information.

Year	No. of Birds Translocated	No. of Known Fatalities	No. of Birds Sighted	Percentage (%) of Translocated Birds (minus known fatalities) Sighted
2015	0	0	10	23
2014	0	0	10	23
2013	0	0	11	25
2012	0	0	11	25
2011	0	1	16	36
2010	0	0	23	51
2009	0	1	26	58
2008	10	0	30	65
2007	25	2	26	72
2006	8	0	12	92
2005	5	0	5	100

Annual data and survey observations indicate an estimated population of 34 individual Nēnē at Pi‘iholo Ranch, including those from the original translocation efforts. Additionally, six birds (two adults and four goslings) were relocated to the Pi‘iholo Ranch pen from the HC&S field during this reporting period as a measure to increase gosling survival.

Five nests were observed in the open-top release pen at Pi‘iholo Ranch during the reporting period. None of the nests were successful in producing any fledglings. Three nests were abandoned, two nests hatched a total of three goslings but none fledged. All three goslings were found dead after a storm event.

At Pi‘iholo, a total of 10.5 acres were mowed annually both in and around the open-top release pen. Predator control efforts resulted in a total of 14 mongooses and three rats trapped and removed around the open-top release pen at Pi‘iholo Ranch. No cats or dogs were trapped during the reporting period.

Safe Harbor Agreement for the Reintroduction of Nēnē to Haleakalā Ranch, Island of Maui. Approved 2012.
ITL Licensee: Haleakalā Ranch Company

Project: Establish a Nēnē population on Haleakalā Ranch, Maui.

ITL Duration: May 22, 2012 – May 21, 2062

Take Authorization: Incidental take of Nēnē on lands owned or otherwise controlled by Haleakalā Ranch.

Baseline Condition: There had been no Nēnē sightings at Haleakalā Ranch by DOFAW staff or ranch personnel, prior to execution of the SHA. Therefore the baseline condition was determined to be zero.

Status of ITL: Haleakalā Ranch is creating or improving approximately 1,600 acres of Nēnē habitat for a period of 10 years. In cooperation with DOFAW, Haleakalā Ranch is undertaking the following activities: (1) construction of a Nēnē release pen; (2) predator control activities around Nēnē nesting and breeding sites; and (3) maintenance of access roads leading to the Nēnē release pen.

DOFAW conducted weekly monitoring during the reporting period at Haleakalā Ranch. Data and observations indicate an estimated population of 63 individual birds. Table 28 provides survey data over the past 5 years for the original 45 birds translocated to the Ranch. Eight Nēnē (four adults and 4 goslings) were translocated to Haleakalā Ranch from Kauaʻi during this reporting period. The percentage of the original 37 birds that were re-sighted is a factor of survey effort, and may not necessarily be a measure of translocation success.

Table 28. Record of Nēnē translocated to Haleakala Ranch from 2010-2015, including fate and re-sighting information.

Year	No. of Birds Translocated	No. of Known Fatalities	No. of Birds Sighted	Percentage (%) of Translocated Birds (minus known fatalities) Sighted
2015	8	1	25	64
2014	0	2	23	84
2013	7	1	31	91
2012	20	2	30	100
2011	10	0	10	100

A total of 45 birds were translocated to Haleakalā Ranch between 2011 – 2015. Annual data and survey observations indicate an estimated population of 63 individual Nēnē at Haleakalā Ranch, including those from the original translocation efforts and released birds. During this reporting

period, one mortality was reported outside of the property at a golf resort from the original birds translocated to the Haleakalā Ranch pen.

In FY 2015, two nests were found inside the Haleakalā Ranch open-top release pen and one nest was found outside the pen but on Haleakalā Ranch property. The two nests inside the pen were successful with six goslings which successfully fledged. The nest outside of the pen was destroyed from being trampled by cattle.

Table 29. Documented incidental take at the Haleakalā Ranch site during the reporting period.

Common Name	Observed Date	Condition Notes	ITL Covered Species (Yes/No)
Hawaiian Goose Nest	12/8/14	Nest trampled by cattle.	Yes

Satellite transmitters are being placed on selected Nēnē from Kauaʻi prior to release at Haleakalā Ranch. The satellite transmitters will be used to track Nēnē movement and habitat use on Maui to better inform management approaches. Currently, three Kauaʻi translocated birds have active transmitters and no new satellite telemeters were placed on birds this year.

The two-acre pen was mowed monthly and an additional 23 acres around the open-top release pen were mowed this reporting period. Predator control efforts resulted in a total of four mongooses, 12 rats, and five mice trapped and removed around the open-top release pen. No cats or dogs were trapped during the reporting period.

Safe Harbor Agreement and Habitat Management Plan for the Koloa Maoli or Hawaiian Duck (*Anas wyvilliana*) and the Nēnē or Hawaiian Goose (*Branta sandvicensis*) on Umikoa Ranch, Island of Hawaiʻi. Approved 2001.

Koloa Maoli or Hawaiian Duck, endemic to the Hawaiian Islands.

ITL Licensee: Umikoa Ranch

Project: Establish a Koloa and Nēnē population on privately owned lands of Umikoa Ranch in the Hamakua District of Hawaiʻi Island.

ITL Duration: December 5, 2001 – December 4, 2100

Take Authorization: Incidental take of Nēnē and Koloa, including their progeny, on lands owned or otherwise controlled by Umikoa Ranch, provided that such take is above established baseline conditions.

Baseline Condition: The Baseline Conditions for Koloa and Nēnē were determined from monthly biological surveys conducted between January and October 2000. During this time there were five existing ponds ranging from 0.12 to 0.30 acres, providing approximately one acre of

open water habitat, in addition to 5 acres of adjacent upland habitat. Surveys indicated that the Umikoa wetland area was frequented by a single pair of wild Koloa. Therefore, the baseline for Koloa was determined to be two individuals, 1 acre of open water habitat, and 5 acres of adjacent upland habitat. The baseline for Nēnē was determined to be zero.

Status of ITL: Umikoa Ranch is creating or managing up to two acres of wetland ponds and 150 acres of riparian and associated upland habitat. Ten individual ponds, totaling 2.01 acres and an additional 151.3 acres of ponds and upland habitat have been fenced, and are being managed to support Koloa and Nēnē conservation efforts. DOFAW will continue to work with Umikoa Ranch in the next fiscal year.

CONDITION OF THE ENDANGERED SPECIES TRUST FUND

Act 144, SLH 2004 established the Endangered Species Trust Fund, with purposes set forth in §195D-31, HRS.

Description	Expenditure	Revenue	
Beginning Cash Balance		$1,497,908.00	
Outstanding Encumbrances FY 2015	$1,740,563.14		
Expenditures in FY 2015	$407,529.60		
Total in Encumbrances from previous years	$166,156.18		
Funds to Implement Obligations of a Habitat Conservation Plan		$1,180,197.39[28]	
Private Contributions for the Management and Recovery of Hawaii's Native Wildlife		$932,082.28	
Subtotal Ending Cash Balance			**$1,462,094.93**
Total in Encumbrances			**$1,906,719.32**
Total in ESTF in FY 2015 (including encumbrances)			**$3,368,814.25**
Funds rolled over from previous years HCP Technical Assistance Program		$33,870.29	
Funds Received as Payment for the Use of the HCP Technical Assistance Program		$17,979.29	
Total in ESTF (including encumbrances)			**$3,420,663.83**

[28] 95% of this amount was provided to DOFAW to implement certain obligations under the federally-approved Kauaʻi Island Utility Cooperative Short-term Seabird Habitat Conservation Plan, to conduct seabird protection activities on Kauaʻi.

RECOMMENDATIONS TO FURTHER THE PURPOSES OF CHAPTER 195D, HRS

Habitat Conservation Plans and Safe Harbor Agreements are a necessary tool in Hawai'i to achieve endangered species protection while balancing growth and addressing the need for energy independence. Fiscal Year 2015 marks the seventeenth year since implementation of Chapter 195D, HRS, to include the issuance of Incidental Take Licenses (ITLs); and while the program has demonstrated successes over the last sixteen years, the following are recommendations to further improve implementation of Chapter 195D.

- Increase staff capacity statewide (currently at three staff members in administration managing statewide projects, plus additional staff supported by grants to produce standalone HCPs) in DLNR / DOFAW by providing for a fully funded State civil service position to effectively track and monitor funds and expenditures related to each Habitat Conservation Planning project. Additional staff capacity would allow further consistency in issuing ITLs and conducting follow-up monitoring for development projects.

- Conduct a comprehensive cumulative effects analysis on the ITL program to further understand the costs and benefits of issuing ITLs and the cumulative effects of ITLs on endangered species.

- Continue fostering partnerships between DLNR / DOFAW, other State and Federal agencies, and private landowners to ensure program success.

- Conduct additional outreach to further educate private landowners and developers on the benefits of Habitat Conservation Planning and Safe Harbor Agreements.

- Provide resources to establish a habitat/conservation banking system as authorized under Chapter 195D-21(b)(1)(C).

- Establish administrative rules under Chapter 195D to provide guidelines, limitations, and parameters specific to the authority provided under Chapter 195D.

- Remove the sunset date of June 30, 2017 and make permanent the use of new safe harbor agreements, habitat conservation plans, and incidental take licenses

For information on DLNR's Endangered Species Recovery Committee, please go to http://dlnr.hawaii.gov/wildlife/esrc/

Or for further information and a full listing of the State's Habitat Conservation Plans and Safe Harbor Agreements, contact:

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